CITY OF REDMOND
PLANNING DEPARTMENT
PERMIT CENTER
15670 NE 85TH STREET
PO BOX 97010
REDMOND WA 98073-9710

LETTER OF TRANSMITTAL

DATE 9/28/09	PROJECT NO.
ATTENTION:	
RE: Redmond 2009 Shoreline Master Program	

RECEIVED
SEP 30 2009
DEPT OF ECOLOGY

TO: David Pater
Shorelands & Environmental Assistance Program
Department of Ecology
3190 160th Ave. SE
Bellevue, WA 98008

WE ARE SENDING YOU:

- ☐ Architectural Plans
- ☐ Structural Plans
- ☐ Calculations
- ☐ Specifications
- ☐ Scope of Work
- ☐ Revised Plans

COPIES	DATE	DESCRIPTION
1	9/21/09	Copy of required public notice for SMP adoption
	9/15/09	SMP Adopting Ordinance
1	9/15/09	2009 Redmond Shoreline Master Program

REMARKS:

COPY TO:

SIGNED: Catherine A Beam

PHONE #: 425-556-2429

E-MAIL ADDRESS: cbeam@redmond.gov

If enclosures are not as noted, please notify us at once.

CITY OF REDMOND
ORDINANCE NO. 2486

AN ORDINANCE OF THE CITY OF REDMOND, WASHINGTON, ADOPTING THE REDMOND SHORELINE MASTER PROGRAM UPDATE; AMENDING AND REPLACING THE SHORELINE MASTER PROGRAM SECTION IN THE REDMOND COMPREHENSIVE PLAN; AMENDING PARK AND RECREATION POLICIES IN THE REDMOND COMPREHENSIVE PLAN; ADOPTING SHORELINE MAPS; ADOPTING AND AMENDING SHORELINE DEFINITIONS IN CHAPTER 20A.20 OF THE REDMOND COMMUNITY DEVELOPMENT GUIDE; AMENDING DEVELOPMENT REGULATIONS RELATING TO SHORELINES IN TITLES 20C AND 20D OF THE REDMOND COMMUNITY DEVELOPMENT GUIDE; ADDING A NEW CHAPTER 20D.45 RELATING TO DREDGING; AMENDING AND REPLACING CHAPTER 20D.150, SHORELINE REGULATIONS; AMENDING SHORELINE RELATED PRODEDURES IN CHAPTER 20F.10, 20F.30, AND 20F.40; PROVIDING FOR SEVERABILITY AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, the City of Redmond (City) had adopted by Ordinance the 2007 Shoreline Master Program; and

WHEREAS, the City formally filed the 2007 Shoreline Master Program Update with the Department of Ecology on September 25, 2008; and

WHEREAS, the Washington State Department of Ecology (Department of Ecology) verified receipt of a complete Shoreline Master Program amendment submittal package on November 3, 2008; and

WHEREAS, the Department of Ecology conducted their public notice process from January 14, 2009, to February 16, 2009; and

WHEREAS, the Department of Ecology held a public hearing in Redmond on January 22, 2009; and

WHEREAS, the Department of Ecology sent all oral and written comments it received to the City on February 24, 2009; and

WHEREAS, the City submitted to the Department of Ecology its responses to issues raised during the state comment period on March 31, 2009; and

WHEREAS, the Department of Ecology issued an approval letter on the proposed Shoreline Master Program subject to the City's agreement to make certain required changes on July 7, 2009; and

WHEREAS, the Redmond Planning Commission held a public hearing on these Department of Ecology changes on August 12, 2009, and at the conclusion of the hearing forwarded a recommended Shoreline Master Program Update to the City Council; and

WHEREAS, after discussion, the City Council has determined to adopt the Shoreline Master Program Update in the form established by this ordinance.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF REDMOND, WASHINGTON, DO ORDAIN AS FOLLOWS:

Section 1. Shoreline Master Program Policies. The Shoreline Master Program Element in the City of Redmond

Comprehensive Plan is hereby amended to read as set forth on Exhibit 1 attached to this ordinance and incorporated by this reference as if set forth in full.

Section 2. Shoreline Maps. The following maps attached in Exhibit 1 to this ordinance and incorporated herein by this reference as if set forth in full, are hereby adopted and made a part of the Shoreline Master Program Element of the City of Redmond Comprehensive Plan:

Shoreline Environments Map
Shoreline Public Access System Map
Preferred Locations: Water-enjoyment Uses Map
Shoreline Views Map

Section 3. Shoreline-related Parks and Recreation Policies. Policies PR-19, PR-28, PR-31, PR-43, and PR-52 of the Parks and Recreation Element in the City of Redmond Comprehensive Plan are hereby amended to read as set forth on Exhibit 4 attached to this ordinance and incorporated herein by this reference as if set forth in full.

Section 4. Shoreline-Related Definitions. Chapter 20A.20 of the Redmond Municipal Code and Community Development Guide is hereby amended to revise the shoreline-related definitions set forth on Exhibit 3 attached to this ordinance and incorporated herein by this reference as if set forth in full to read as set forth on said Exhibit.

Section 5. Shoreline Development Regulations. Chapter 20D.150 of the Redmond Municipal Code and Community Development Guide is hereby amended to read as set forth on Exhibit 2 attached to this ordinance and incorporated herein by this reference as if set forth in full.

Section 6. Shoreline-related Regulations. Those provisions of Chapters 20C.20, 20C.30, 20C.40, 20C.50, and 20C.60 of the Redmond Municipal Code and Community Development Guide set forth on Exhibit 5 attached to this ordinance and incorporated herein by this reference as if set forth in full are hereby amended to read as set forth on said Exhibit.

Section 7. Dredging. A new Chapter 20D.45 entitled, "Dredging," is hereby added to the Redmond Municipal Code and Community Development Guide to read as set forth on Exhibit 6 attached to this ordinance and incorporated herein by this reference as if set forth in full.

Section 8. Shoreline-related Design Standards. Those shoreline-related design standards in Chapter 20D.40 of the Redmond Municipal Code and Community Development Guide set forth on Exhibit 7 to this ordinance and incorporated herein by this reference as if set forth in full are hereby amended to read as set forth on said Exhibit.

Section 9. Shoreline-related Special Use Regulations. Those shoreline-related special use regulations in Chapter 20D.170 of the Redmond Municipal Code and Community Development Guide set forth on Exhibit 8 attached to this ordinance and incorporated herein by this reference as if set forth in full are hereby amended to read as set forth on said Exhibit.

Section 10. Shoreline-related Permit Procedures. Those shoreline-related permit procedures in Chapters 20F.10, 20F.30 and 20F.40 of the Redmond Municipal Code and Community Development Guide set forth on Exhibit 9 attached to this ordinance and incorporated herein by this reference as if set forth in full are hereby amended to read as set forth on said Exhibit.

Section 11. Severability. If any section, sentence, clause or phrase of this ordinance or any code or comprehensive plan section adopted or amended hereby should be held to be invalid or unconstitutional by a court of competent jurisdiction, such invalidity or unconstitutionality shall not affect the validity of any other section, sentence, clause or phrase of this ordinance or the adopted or amended code or comprehensive plan section.

Section 12. Effective Date. This ordinance shall take effect and be in full force five days after its passage and publication of a summary as provided by law.

ADOPTED by the Redmond City Council this 15th day of September, 2009.

CITY OF REDMOND

JOHN MARCHIONE, MAYOR

ATTEST:

MICHELLE M. MCGEHEE, CMC, CITY CLERK (SEAL)

APPROVED AS TO FORM:

JAMES E. HANEY, CITY ATTORNEY

FILED WITH THE CITY CLERK:	September 9, 2009
PASSED BY THE CITY COUNCIL:	September 15, 2009
PUBLISHED:	September 21, 2009
EFFECTIVE DATE:	September 26, 2009
ORDINANCE NO. 2486	

APPROVED 5-1, YES: Carson, Margeson, McCormick, Myers and Vache; NO: Cole

REDMOND SHORELINE MASTER PROGRAM
Table of Contents

I. Shoreline Master Program Policies (Ord. 2410, Exhibit 1)

II. Shoreline Maps adopted as part of Policies
   a. Shoreline Environments Map
   b. Public Access System Map
   c. Preferred Locations: Water-Enjoyment Uses map
   d. Shoreline Views Map

III. Shoreline Related Parks and Recreation Policies (Ord. 2410, Exhibit 4)

IV. Shoreline-Related Definitions (Ord. 2410, Exhibit 3)

V. Shoreline Development Regulations (Ord. 2410, Exhibit 2)

VI. Shoreline-Related 20C Regulations (Ord. 2410, Exhibit 5)

VII. Dredging 20D.45 Regulations (Ord. 2410, Exhibit 6)

VIII. Shoreline-Related 20D.40 Design Standards (Ord. 2410, Exhibit 7)

IX. Shoreline-Related 20D.170 Special Use Regulations (Ord. 2410, Exhibit 8)

X. Shoreline-Related 20F Permit Procedures (Ord. 2410, Exhibit 9)

Appendix A SMP Critical Areas Ordinance

Redmond Shoreline Master Program Update

Shoreline Master Program Policies

2009

Preamble

The purpose of the Shoreline Master Program is to implement the Shoreline Management Act of 1971, which is based on the philosophy that the shorelines of the state are among the most valuable and fragile of its natural resources, and there is great concern throughout the state relating to their utilization, protection, restoration, and preservation. Coordinated planning is necessary in order to protect the public interest associated with the shorelines of the state while, at the same time, recognizing and protecting private property rights.

The shorelines of the state are defined by state law and in Redmond include: all lands extending landward 200 feet of the ordinary high water mark on the Sammamish River; Lake Sammamish, its underlying land, associated wetlands and all areas within the one percent numerical probability floodplain (100-year floodplain) as defined by the most recent Federal Emergency Management Agency map or study, together with those lands extending landward 200 feet from the ordinary high water mark; Bear Creek and Evans Creek where the mean annual flow is 20.0 cubic feet per second or greater and the land underlying the creek in those areas, associated wetlands, and all lands extending landward 200 feet from the ordinary high water mark on both sides of Bear Creek west of Avondale Road; all lands extending landward 200 feet from the ordinary high water mark on the south sides of Bear Creek east of Avondale Road and Evans Creek; and all lands extending landward 200 feet from the ordinary high water mark on the north side of Bear and Evans Creek plus all areas within the one-percent numerical probability floodplain (100-year floodplain) as defined by the most recent Federal Emergency Management Agency map or study.

It is acknowledged that Marymoor Park, although surrounded by the City of Redmond, lies in unincorporated King County. Although the City has no jurisdictional authority over the park, the City continues to remain interested and will coordinate with King County on future shoreline environment designations and uses.

A. Shoreline Environment Designations

Introduction

There are five shoreline environments. These designations are applied to homogenous areas and include policies to guide development of shoreline areas.

These shoreline environments, as shown on the "Shoreline environments" Map, incorporated as part of this paragraph, will be applied to the following areas:

- *Sammamish River North of the Puget Sound Energy Right-of-Way*: Designate the 200 feet of shoreline jurisdiction immediately along the river and associated wetlands Urban Conservancy on both sides of the river.
- *Sammamish River South of the Puget Sound Energy Right-of-Way to Lake Sammamish:* Designate the King County Sammamish River Park as Urban Conservancy and designate the balance of the adjacent property within the 200 foot shoreline jurisdiction as High Intensity/Multi-Use. This designation shall be coincidental with the King County park property, which is approximately 100 feet in width, as of January 1, 2008. The area south of Marymoor Park (west side of river) is designated as Urban Conservancy
- *Lake Sammamish*: Designate the shoreline as Shoreline Residential and the water surface as Aquatic. Associated wetlands at the north end of the Lake should be designated Urban Conservancy.
- *Bear and Evans Creek:*
    - *West of Avondale Road*: Designate a 150-foot wide Urban Conservancy strip with the balance (outer 50 feet) of the shoreline designated as High Intensity/Multi-Use. This should be modified to reflect the SR 520 right-of-way south of Bear Creek.
    - *East of Avondale Road:* Designate a 150-foot strip Natural along both sides of the creeks, with the balance of the wetland and 100-year floodplain outside of this 150-foot corridor on the north side of the creeks as Urban Conservancy environment.
        - The area designated for residential density transfers near Avondale Green (near Avondale Road) should be designated Shoreline Residential.
        - South of Bear Creek the remainder (outer 50 feet) of the shoreline jurisdiction outside of the 150-foot Natural designation should be High-Intensity/Multi-Use.
        - Evans Creek south of Union Hill Road should be entirely Natural. Provided however, that for the heavily developed Reach 2 of Evans Creek, extending east from 188th Avenue NE, then south to NE Union Hill Road, designate a 25 foot wide strip Natural along both sides of the creek, and designate the remainder 175 foot wide strip as High Intensity/Multi-Use. Where the Shoreline Jurisdiction extends beyond 200 feet, on the north (or east) side of the Creek, the Shoreline Jurisdiction shall be designated as High Intensity/Multi-Use where, as of January 1, 2008, the land is disturbed by clearing or grading (not associated with agriculture but associated with the business operations at the site), industrial uses,

commercial uses, structures, or pavement and Natural for all distance beyond the line of development.

Policies

SF-1 Provide a comprehensive shoreline environment designation system to categorize Redmond's shorelines into similar shoreline areas to guide the use and management of these areas.

Shoreline environments are designations applied to similar shoreline areas to guide the use and management of these areas. The following policies describe the purpose of each environment, the criteria used to designate the environment, and some management policies specific to the environment. Redmond has five different environments: Aquatic, Natural, Urban Conservancy, Shoreline Residential, and High-Intensity/Multi-Use.

SL-1 Aquatic Environment.

Purpose. The purpose of this designation is to protect, restore, and manage the unique characteristics of the aquatic environment by managing use activities and by assuring compatibility between upland and aquatic uses and ensuring that shoreline ecological functions are protected and restored over time. It is designed to promote the wise use of the natural features and resources of water areas that are substantially different in character from those of adjoining uplands. Allowed uses are those that require an open water location.

Designation Criteria. Aquatic areas apply to all lakes subject to this program waterward of the ordinary high water mark. This designation does not apply to rivers and creeks subject to this program.

Management Policies.

1. Provisions for aquatic environment shall be directed towards maintaining and restoring shoreline ecological functions.
2. Uses that cause significant ecological impacts to critical freshwater habitats shall not be allowed.
3. Uses and modifications shall be designated and managed to prevent degradation of water quality and alteration of natural hydrographic conditions.
4. Structures that are not water-dependent and uses that will substantially degrade the existing character of the area are prohibited.
5. New over-water structures for water-dependent uses or public access are allowed provided they will not preclude attainment of ecological restoration.

6. Limit the size of new over-water structures to the minimum necessary to support the structures intended use.
7. Multiple use over-water facilities are encouraged in order to reduce the impacts of shoreline development and increase effective use of water resources.
8. Developments within the aquatic environment shall be compatible with the adjoining upland environment.
9. Diverse public access opportunities to water bodies should be encouraged and developed and shall be compatible with the existing shorelines and water body uses and environment.
10. In appropriate areas, fishing and recreational uses of the water should be protected against competing uses that would interfere with these activities.
11. All developments and activities using navigable waters or their beds should be located and designed to minimize interference with surface navigation, to minimize adverse visual impacts, and to allow for the safe, unobstructed passage of fish and animals, particularly those whose life cycles are dependent on such migration.
12. Fills shall be prohibited except for shoreline restoration.
13. Underwater pipelines and cables shall not be allowed unless they are the best location due to the nature of the facility and the adverse environmental impacts are not significant or can be shown to be less than the impact of upland alternatives. When allowed, such facilities shall include adequate provisions to insure against substantial or irrevocable damage to the environment.

SL-2 Natural Environment.

Purpose. The natural environment shall preserve and restore those natural resource systems existing relatively free of human influence and those shoreline areas possessing natural characteristics intolerant of human use or unique historical, cultural, or educational features. These systems require severe restrictions on the intensities and types of uses permitted so as to maintain the integrity of the ecological functions and ecosystem-wide processes of the shoreline environment.

Designation Criteria. Areas to be designated Natural shall reflect one or more of the following criteria:

1. Wildlife habitats.
    a. A shoreline area that provides food, water, or cover and protection for any rare, endangered, or diminishing species, or

for significant populations of flora or fauna during critical stages of their life cycle.

b. The shoreline is especially sensitive to human disturbance and important for the conservation and recovery of threatened and endangered species.

c. A seasonal haven for concentrations of native animals, fish or fowl, such as a migration route, breeding site, larval rearing grounds, or spawning site. This shall include:

(i) Salmon and steelhead spawning areas.

(ii) Salmon and steelhead migration routes and rearing areas that have not been significantly modified by human activities.

d. 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. Areas of scientific and educational value.

a. Areas considered to best represent basic ecosystems and geologic types that are of particular scientific and educational interest.

b. Shoreline areas that best represent undisturbed natural areas.

c. Shoreline areas with established histories of scientific research.

3. Areas of scenic or recreational value.

a. Those shoreline areas having an outstanding or unique scenic feature in their natural state.

b. Areas having a high value in their natural states for low-intensity recreational use.

4. Other criteria.

a. Areas where human influence and development are minimal.

b. Areas that have been degraded but which are capable of easily being restored to a natural or near natural condition or are capable of natural regeneration if left undisturbed.

c. Other unique natural features relatively intolerant of human use or development, such as: marshes, bogs and swamps, white water rapids, and waterfalls.

d. The shoreline is unable to support new development or uses without significant ecological impacts to ecological functions or risk to human safety.

Management Policies.

1. Any use or development that would potentially degrade the ecological functions and natural value or significantly alter the natural character of the shoreline area shall be severely limited or prohibited.
2. The following new uses are **not** allowed in the natural environment:
   a. Residences, except limited single-family residential development may be allowed as a conditional use provided an equal or greater level of ecological functions result.
   b. Commercial uses.
   c. Industrial uses.
   d. Agriculture.
   e. Nonwater-oriented recreation. Foot trails may be permitted so long as they create no significant adverse impacts on the environment.
   f. Roads and utility corridors that can be located outside of natural designated shorelines. Roads and their associated bridge crossings that must perpendicularly cross a Natural designated shoreline shall be processed through a Shoreline Conditional Use.
3. New development or significant vegetation removal that would reduce the capability of vegetation to perform normal ecological functions is prohibited.
4. Limited access may be permitted for scientific, historical, cultural, educational, and low-intensity water-oriented recreational purposes, provided that no significant adverse ecological impact on the area will result on-site.
5. Uses that are consumptive of physical, visual, biological, historic and cultural resources shall be prohibited.
6. Physical alterations should only be considered when they serve to protect or restore a significant, unique, or highly valued feature that might otherwise be degraded or destroyed.
7. Uses and activities permitted in locations adjacent to shorelines designated natural shall be compatible and shall insure that the integrity of the natural environment will not be compromised.
8. Developments within the natural environment should be compatible with uses and activities in adjacent (including aquatic) environments.

SL-3 Urban Conservancy Environment.

Purpose. The purpose of the Urban Conservancy environment is to protect and restore their historic ecological functions. The Urban Conservancy environment shall protect, conserve, and manage existing natural resources and valuable historic and cultural areas in order to achieve sustained resource use and provide recreational opportunities. The Urban Conservancy environment shall also protect environmentally sensitive areas that are not suitable for intensive use, such as salmon and steelhead habitats, riparian corridors, and wetlands. Examples of uses that are appropriate in a conservancy environment include dispersed outdoor recreation activities, environmental restoration and enhancement, and similar low-intensity uses and activities.

Designation Criteria. Areas designated Urban Conservancy should generally reflect one or more of the following criteria:

1. Areas subject to severe biophysical limitations or that play an important part in maintaining the regional ecological balance, such as:
    a. Salmon and steelhead migration routes and rearing areas that have been significantly modified by human activities.
    b. Riparian corridors.
    c. Areas within shoreline jurisdiction subject to severe erosion.
    d. Unstable banks or bluffs within shoreline jurisdiction.
    e. Floodplains.
2. Areas where intensive development or uses would interfere with natural processes and result in significant damage to other resources.
3. Areas that retain important ecological functions, even though partially developed.
4. Areas that have potential for ecological restoration.
5. Areas that have potential for development that incorporates ecological restoration.
6. Areas suitable for a mix of water-related or water-enjoyment uses with other uses that allow a substantial number of people to enjoy the shoreline.
7. Areas of significant passive recreational value.
8. Areas with extensive or very important historic or cultural resources.

Management Policies.

1. Preferred uses in the Urban Conservancy environment are those that are nonconsumptive of the physical and biological resources of the area and activities and uses of a nonpermanent nature that do not substantially degrade or alter the existing character of the area. Nonconsumptive uses are those uses that use resources on a sustained-yield basis while minimally reducing opportunities for other existing and future uses of the resources of the area. Shoreline habitat restoration and environmental enhancement is a preferred use.
2. Activities and uses that would substantially degrade or permanently deplete the physical or biological resources of the area shall be prohibited.
3. New development and redevelopment shall be limited to that which is compatible with the natural and biological limitations of the land and water and will not require extensive alteration of the shore.
4. Development in the Conservancy environment shall be designed to protect the shoreline corridor and its biological systems.
5. Activities or uses that would strip the shoreline of vegetative cover, cause substantial erosion or sedimentation, or adversely affect wildlife or aquatic life are prohibited.
6. Agricultural and recreational activities that will not be detrimental to the shoreline character, scenic quality, and natural systems such as sediment transport and geohydraulic processes should be encouraged.
7. Commercial, manufacturing, and industrial uses other than low-intensity agricultural and commercial practices shall be prohibited.
8. Limited single family residential development may be allowed as a conditional use provided an equal or greater level of ecological functions result. Mitigation should be on-site.
9. Public access and public recreation objectives should be implemented whenever feasible provided significant ecological impacts can be mitigated.
10. Preservation of natural resources, the natural environment, and natural processes shall have priority over public access, recreation, and development objectives whenever a conflict exists.

SL-4 Shoreline Residential Environment

Purpose: The purpose of the Shoreline Residential environment is to accommodate residential development and appurtenant structures that are consistent with this chapter and the protection and restoration of ecological functions and properly functioning condition for threatened

and endangered species. An additional purpose is to provide appropriate public physical access and recreational uses.

Designation Criteria: Areas that are predominantly single-family or multi-family residential development or are planned and platted for residential development.

Management Policies:

1. Development should be permitted only in those shoreline areas where adequate setbacks or buffers are possible to protect ecological functions, where there are adequate access, water, sewage disposal, and utilities systems and public services available, and the environment can support the proposed use in a manner which protects or restores the ecological functions.

2. Densities or buffers/setbacks in the "shoreline residential" environment shall be set to protect the shoreline ecological functions, taking into account the environmental limitations and sensitivity of the shoreline area, the level of infrastructure and services available, and other comprehensive planning considerations.

3. Development standards for setbacks or buffers, shoreline stabilization, vegetation conservation, critical area protection, and water quality shall be established to protect and, where significant ecological degradation has occurred, contribute to the restoration of properly functioning condition and other ecological functions over time.

4. Multi-family and multi-lot residential greater than nine lots and recreational developments should provide joint use for public physical access and community recreational facilities where possible on adjacent lots.

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

6. Industrial, non-water enjoyment commercial, wholesale, retail development, churches, and other institutional uses shall be prohibited. Small scale retail such as pedestrian-oriented carts/kiosks, produce or handcrafts stands up to 120 square feet, and cartop boat rentals (as noted in Table 1 of RCDG 20D.150.50-030) are permitted in city-owned parks.

SL-5 High-Intensity/Multi-Use Environment.

Purpose. The High-Intensity/Multi-Use environment is an area of moderate to high-intensity land uses, including residential, commercial, and manufacturing development. The purpose of this environment is to insure optimum use of shorelines that are either presently urbanized or planned for intense urbanization while providing no net loss of existing ecological functions and restoring ecological functions in areas that have been previously degraded. Development in high-intensity–multi-use areas should be managed 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. Measures should be taken to minimize adverse environmental impacts.

Designation Criteria. Areas to be designated High-Intensity/Multi-Use should generally reflect all of the criteria:

1. Shorelines used or designated in the Comprehensive Land Use Plan Map for high-intensity commercial, manufacturing or recreational use, mixed-use, or for residential development at four or more housing units per acre.
2. Shorelines of lower intensity use within the urban growth area where surrounding land uses are urban and urban services are available or planned.
3. If the area is undeveloped, the area shall not have severe biophysical limitations to development such as steep slopes, salmon and steelhead spawning or rearing habitats, landslide side of Bear Creek east of Avondale Road.
4. The shorelines along the following waterbodies shall not be designated High Intensity/Multi-Use environment:
    a. The Sammamish River north of the Puget Sound Energy right-of-way.
    b. The north side of Bear Creek east of Avondale Road.
    c. Bear Creek north of its confluence with Evans Creek.
    d. The north and east sides immediately adjacent to Evans Creek and both sides of Evans Creek south of Union Hill Road.

Management Policies.

1. Because shorelines are a finite resource and because urban use tends to preclude other shoreline uses, emphasis should be given to directing new development into already developed areas consistent with this master program and the Redmond Comprehensive Plan.
2. New development shall cause no net loss of shoreline ecological functions.

3. Where feasible, visual and physical access to the shoreline should be required.
4. Aesthetic objectives shall be actively implemented by means such as sign control regulations, appropriate development siting, screening and architectural standards, and maintenance of natural vegetative buffers.
5. Full use of existing High Intensity areas shall be achieved before further expansion of the environment is allowed. Environmental cleanup of previously developed shorelines and redevelopment of underutilized areas shall be encouraged.
6. Reasonable long-range projections of regional economic need shall guide the amount of shoreline designated High-Intensity/Multi-Use.
7. First priority shall be given to water-dependent uses. Second priority shall be given to water-related and water-enjoyment uses. Non-water oriented uses should not be allowed except:

   (a) as part of a mixed use development; or

   (b) in limited situations where they do not conflict with or limit opportunities for water-oriented uses and non-mixed uses or on sites where there is no direct access to the shoreline or the waterbody in not navigable; or

   (c) where the site is physically separated from the shoreline by another property or public right-of-way.

   In High Intensity/Multi-Use Environment areas that are physically separated from the shoreline by other property or public right-of-way and there is thus no direct access from such areas to the shoreline, (a) water-dependent, water-related, and water-enjoyment uses, while encouraged, are unlikely to be conducted in the High Intensity/Multi-Use Environment areas and (b) nonwater-oriented development shall be allowed without such water-oriented uses. Existing industrial, commercial and light manufacturing uses may continue to operate and expand even if located within the required stream buffer, provided the expansion will create no net loss of shoreline ecological functions and will not extend any structure containing the use closer to the shoreline. Where the land is actively being used as part of a legitimate business operation in the shoreline buffer, such land including either structures or active operational areas, established prior to January 1, 2003, may continue to operate. New structures, pavement, and other improvements are permitted within this area so long as incremental

environmental benefit is provided and no net loss of shoreline ecological functions is demonstrated.

B. The Shoreline Environment

Redmond's shoreline areas provide some of the most valuable natural amenities and resources found in the community. They provide corridors of vegetation and open space in otherwise highly urbanized areas, and habitat for fish and wildlife. In addition, shoreline areas and their associated floodplains, aquifers and wetlands fulfill a vital function in the management of storm water and water quality. Although not within the City of Redmond corporate limits, Marymoor Park provides an environmental asset to the City and the Lake Sammamish shoreline ecosystem. The value of this area of the lake as wildlife habitat is readily apparent in light of conditions elsewhere around the lake. Comprised of a variety of natural systems contained within relatively narrow corridors of land, shoreline areas are particularly vulnerable to development pressures. As a result, shoreline uses must be carefully designed and located to respect the development limitations presented by each natural system, which may be minimal or severe, depending on the type of system or "hazard" present and on the community's goals for environmental protection.

The Sammamish River, Lake Sammamish, Bear Creek and Evans Creek are important fish habitats. All four water bodies have fish that reside year-round, and that are classified by the Washington State Department of Fish and Wildlife as Priority Species. Bear Creek and Evans Creek provide critical spawning habitat for resident fish, and salmon and steelhead. The Sammamish River, Lake Sammamish, Bear Creek, and Evans Creek all are important migration routes for salmon and steelhead.

Lake Sammamish supports salmon, rainbow and cutthroat trout, along with kokanee, yellow perch, small mouth bass, carp and catfish. The entire lake is an important link in the salmon and steelhead migration route, while the south end of the lake is an important salmon rearing area.

As a result of the channel and bank alterations, fish habitat in the Sammamish River and its tributaries north of downtown has been almost totally eliminated. While the main channel of the Sammamish River is not considered quality habitat, it has value as a "fish freeway" for tens of thousands of salmonids that use the Sammamish watershed and larger Lake Washington basin. The Sammamish River, however, does provide for feeding and rearing, and some limited, but significant, spawning areas. Among the fish that use the river are several State Priority Species,

including the Federally listed Puget Sound Chinook, and anadromous and resident fish.

Bear Creek is one of the most important spawning and rearing habitats, particularly for Coho salmon, in the Lake Washington basin, and one of the most important salmon streams in King County. **For its size, Bear Creek is considered by the State to be *the* most important salmon-spawning stream in Washington.** Bear Creek supports Coho, Chinook and sockeye salmon, and steelhead trout. Resident fish in the creek consist of cutthroat trout, rainbow trout, and kokanee. The State considers all of Bear Creek a "critical spawning area" for these resident fish. All of the creek's salmon and steelhead stocks are considered wild (non-hatchery).

Despite certain areas of degraded habitat, salmon have been observed in both Evans Creek and its tributaries. A section of Evans Creek near 196th Avenue NE is a major spawning area for Coho, and is considered a Priority Habitat by the Washington State Department of Fish and Wildlife.

SF-2 Protect and restore the natural resources and ecological functions of the shoreline, including wildlife habitat, fisheries and other aquatic life, natural hydrologic processes, and shoreline vegetation consistent with the planned uses of the shorelines. Ensure no net loss of shoreline ecological functions.

SL-6 Use the City's established permit tracking program to periodically evaluate the effectiveness of the Shoreline Master Program update for achieving no net loss of shoreline ecological functions with respect to shoreline permitting and exemptions. Prepare an evaluation report every seven years when the SMP is required to be updated under RCW 90.58.080(4).

SL-7 Protect habitats critical to the lifecycle of salmon and steelhead, such as migration, rearing, feeding and spawning areas.

SL-8 Prohibit re-alignment or channelization of streams, clearing of adjacent native vegetation or large woody debris, and water withdrawals and diversions in salmon and steelhead habitats, except for the purpose of habitat restoration and enhancement. Allow and encourage restoration that reconstructs a meandered channel or channel diversity.

SL-9 Locate over-water structures when allowed outside of salmon and steelhead spawning areas and design these structures to achieve no net loss of shoreline ecological functions. Use open piling structures that minimize disruption of spawning beds and

underwater shading rather than floating structures, landfills or solid structures.

SL-10 Design and construct bulkheads or other shoreline protective structures on Lake Sammamish in the vicinity of sockeye salmon spawning beds to minimize erosion of the beach in front of the bulkhead and to achieve no net loss of shoreline ecological functions. Encourage strongly the use of alternatives to bulkheads.

SL-11 Encourage joint use and shared use docks over single use docks to reduce adverse impacts on salmon and steelhead. Encourage alternatives to docks, such as floats or lifts.

SL-12 Design and construct new and replacement docks and piers on Lake Sammamish to minimize adverse impacts on salmon and steelhead and to achieve no net loss of shoreline ecological functions.

Habitat Restoration and Enhancement

The extent of natural fish and wildlife habitat in shoreline areas has been greatly reduced by inadequately planned development, as has the quality of remaining habitat areas. When the Sammamish River and lower Bear Creek were channelized, much of the habitat in the river and creek was lost. Aspects of fish and wildlife habitat that have been impacted by development include fragmented vegetation buffers, exotic and invasive species dominating buffers, lack of large trees and other habitat features, and water quality degradation due to high temperatures and sedimentation.

Public and private efforts are needed to restore habitat areas. Opportunities include public-private partnerships, partnerships with other agencies and tribes, capital improvement projects, and incentives for private development to restore and enhance fish and wildlife habitat.

SL-13 Identify the key role of the City's Shoreline Restoration Plan as improving shoreline ecological functions over time.

SL-14 Continue to acquire shoreline areas, particularly those areas with vulnerable or fragile natural features, for the purpose of protection, restoration and study.

SL-15 Include provisions for shoreline vegetation restoration, fish and wildlife habitat enhancement and, where feasible, retrofitting of existing capital improvements (e.g. outfalls) with habitat

improvements in City capital improvement projects. Design these projects to achieve no net loss of shoreline ecological functions.

SL-16 Reintroduce, as opportunities become available, the natural channel characteristics of the Sammamish River by moving levee embankments away from the channel, removing barriers to connect streams and wetlands to the river, changing in-stream channel cross-sections, revegetating the riverbank, and placing complex large woody debris.

Tree Protection and Landscaping

The original conifer forests covering the Redmond planning area consisted mainly of Douglas fir, western hemlock, Sitka spruce, and western red cedar. Big leaf maple was common in well-drained stream bottomlands; in wetland and riparian areas western red cedar followed the fast-growing species, such as red alder and black cottonwood. Due to extensive logging and urbanization, much of the conifer forests in the area are gone. Stream valleys, providing the most fertile and productive land, were among the first to be cleared. Reconstruction of stream channels, particularly the Sammamish River, followed. As a result, many sections of Redmond's shoreline are sparsely vegetated and lack large stands of trees that provide critical shade.

Riparian, or stream bank, vegetation is a critical component of quality fish and wildlife habitat. Vegetation provides food and cover for wildlife; it contributes the organic matter and large woody debris (e.g. fallen logs) that fish need. Larger trees provide perching and nesting places for herons and raptors. Riparian vegetation also plays a vital role in water quality. It not only moderates water temperatures, it reduces the potential for bank erosion and the subsequent sedimentation that can clog streams. Side benefits are self-evident in the enhanced aesthetic and recreational value of clear, tree-lined streams.

SL-17 Encourage incorporation of substantial internal and perimeter landscaping in shoreline development. Encourage consolidation of open space and building setbacks to provide landscaped corridors, clustering development, use of native plants, and perimeter tree plantings.

SL-18 Protect and preserve significant trees within the shoreline jurisdiction to the maximum extent possible. Replace the ecological functions of significant trees removed, such as habitat and shading functions, when removal becomes necessary. Give preference, where safe, to creation of upland snags over removal of the entire tree.

SL-19 Minimize the area used for lawns and non-native vegetation in the Sammamish Watershed. Minimize the use of herbicides, fertilizers and pesticides. Apply herbicides, fertilizers and pesticides, if used, in a manner that minimizes their transmission into the lake.

SL-20 Retain or replant native vegetation along shorelines to reduce the flow of herbicides, fertilizers and pesticides into the water bodies and to provide for improved fish and wildlife habitat.

Shoreline Buffers

Continuous buffers of riparian and lakeshore vegetation are essential to protecting wildlife, water quality, and critical fish habitat. Buffers reduce water quality impacts by providing for filtering of sediments and pollutants from runoff, and by reducing dust deposition from parking areas and other actively used areas. In addition to providing essential food and shelter, the trees and shrubs in buffers also screen fish and wildlife from noise, glare, and other adverse impacts of development and nearby human activity. Of the remaining wildlife corridors in the community, most are along shoreline buffers. For humans, the green corridors of shoreline vegetation provide areas for physical, mental and emotional rejuvenation. Redmond's shorelines would not be the valuable natural and cultural amenities that they are without vegetated shoreline buffers.

Not all of Redmond's shorelines are equally developed, nor equally vulnerable to the pressures of development. For example, semi-rural areas along upper Bear Creek contrast sharply with the intense commercial development that characterizes the creek's path through downtown. The Sammamish River and Lake Sammamish, with their greater area and volume, are less sensitive to development impacts than are the diminutive Bear and Evans Creeks. Because Lake Sammamish's shoreline is largely developed, there are no buffer requirements along the lake. There is, however, a lakefront building setback. Redmond's shoreline buffer policies reflect these variations between shoreline areas. Given the local and regional significance of Redmond's shorelines for fish and wildlife habitat, shoreline buffer policies are based on the recommendations of fish and wildlife habitat managers and scientists throughout western Washington. At the same time, Redmond's buffer policies balance the evolving knowledge of habitat managers with local development conditions. Where shorelines have already been intensely developed, Redmond's buffer policies generally reflect existing setbacks and anticipated levels of growth, while maintaining most natural functions of the shoreline corridor.

SL-21 Provide native vegetated buffers on the Sammamish River, Bear Creek, and Evans Creek sufficient to protect the water body and its fish and wildlife resources from the adverse effects of development adjacent to the water body, with the goal of achieving a mixed mature riparian forest.

SL-22 Allow development flexibility where private development incorporates the restoration of shoreline buffers and habitat features, through such incentives as reduced building setbacks, or other modifications of site development standards that do not reduce buffer widths.

SL-23 Remove invasive species from the shoreline buffer area from multi-family residential, commercial, office, research and development, manufacturing, industry or similar uses where the uses are located adjacent to the Sammamish River, Bear Creek or Evans Creek. Replant the buffer area with native trees and understory vegetation upon development or redevelopment.

SL-24 Use the shoreline variance process for review of development of shoreline property that is largely encumbered by shoreline regulations in order to achieve reasonable use.

SL-25 <u>Sammamish River:</u>

North of the Puget Sound Energy powerline crossing the shoreline buffer shall consist of a 150-foot inner buffer plus a 50-foot outer buffer, measured from the ordinary high water mark.

South of the Puget Sound Energy powerline crossing to Lake Sammamish the shoreline buffer shall be a minimum of 150 feet, measured from the ordinary high water mark.

Trails and other public access features may be located in the Sammamish River buffers, but should generally be no closer than 75 feet to the ordinary high water mark. View points, spur trails, boat launches and similar public access features that provide visual access and direct water contact may be allowed closer than 75 feet.

SL-26 <u>Bear and Evans Creeks:</u>

West of Avondale Road the shoreline buffer shall be a minimum of 150 feet, measured from the ordinary high water mark.

East of Avondale Road the shoreline buffer consist of a 150-foot inner buffer plus a 50-foot outer buffer, measured from the ordinary high water mark.

Trails and other public access features may be located in the Bear and Evans Creeks buffers but shall be no closer than 100 feet to the ordinary high water mark. View points, spur trails, multi-use non-motorized trails and trail crossings as identified on an adopted City plan, and similar low-impact public access features that provide visual or controlled access to the creeks may be allowed closer than 100 feet.

One of the most damaging, long-term impacts to Redmond's salmon and steelhead habitat has been the loss of vegetated shoreline buffers. In addition to the on-going efforts by the City and other agencies to restore buffers, private development that impacts buffers must also play a role in their restoration. Shoreline provisions require the restoration of a minimum buffer. This will help eliminate on-going gaps in the protection of the shoreline natural environment within specified, near-term time period.

SL-27 Encourage the establishment of 50-foot wide vegetated buffers along the Sammamish River, Bear Creek and Evans Creek where no buffer or a buffer of less than 50 feet now exists. Encourage this on a cooperative, incentive-based approach, fostering partnerships with the City, property owners, and other organizations if appropriate. Periodically evaluate for success in achieving this goal in a ten year planning horizon.

SL-28 Establish the setback on Lake Sammamish as 35 feet wide measured from the Ordinary High Water Mark. Allow reduction of building setbacks if the setback area is revegetated with primarily native vegetation. Establish uses within the setback in the Shoreline Regulations.

C. Natural Environment

The adopted Conservation and Natural Environment Element of the City of Redmond Comprehensive Plan contains a comprehensive set of critical areas and tree preservation and landscape enhancement policies. These policies, NE-12 through NE-113, shall also be a part of the City of Redmond Shoreline Master Program.

D. Public Access

SF-3 Provide a comprehensive and focused system of physical, visual and cultural access to Redmond's shorelines.

SF-4 Enhance physical, visual and cultural access where existing access is inadequate.

SF-5 Maintain shoreline views.

SF-6 Acquire shoreline lands for the purposes of providing public access.

SF-7 Minimize impacts on adjacent uses and the natural environment through the appropriate design of public access.

Providing Physical Access

In general, Redmond is rich in opportunities for physical public access to the shoreline, through existing shoreline trails and parks. However, there are gaps and deficiencies in this system. For example, along the Sammamish River Trail access through existing developments to the trail corridor is often unavailable.

Developments near or just outside shoreline areas are often cut off from existing parks and the trail by a phalanx of buildings, parking lots and busy arterials. Redmond's shorelines are part of a larger system of community amenities and open space. The trail systems also need to be completed. Where access is provided, amenities that may be needed to make it convenient and functional, such as a bench or parking area, may be absent.

Outside of single-family residential areas, the need to address public physical access increases as shoreline areas develop. Bringing residents, employees, and customers into the shoreline area increases demand for public physical access. If adequate physical access is not provided, this demand may result in informal trails that are unsafe, destructive of private property (e.g. by trampling landscaping), and hazardous to important plants and animals. Shoreline developments can also interfere with visual access by blocking views, and can interfere with informal existing public physical access. In these cases, when public physical access is allowed, it shall be designed and located to minimize or prevent these potential adverse impacts.

At the same time, shoreline development directly benefits from public physical access, because it attracts customers, tenants, employees and other users. A continuous, community and regional-wide system of public physical access is even more beneficial. For example, residents and businesses located along the Sammamish River Trail and the Bear Creek

and Evans Creek trails will benefit from a major amenity that provides for recreation, visual access and connections to other areas of the city.

Shoreline Public Access System Map

Figure S-1, Public Access System, identifies Redmond's regional shoreline public access system. The improvements shown on the map have been located to provide for a variety of recreational and educational opportunities while protecting the native plants, fish, and animals that depend on Redmond's shorelines. Each type of access provided for on the map is described in the following sections.

Linear Trails

Linear trails parallel a river, creek, or lakeshore. The trail provides access along shorelines, although it may setback from the shore to protect the natural environment. In addition to the trail, supporting facilities will be provided at appropriate locations. The supporting facilities include benches, interpretive signs and parking lots. Linear trails will be provided on the Sammamish River, parts of Bear Creek, and parts of Evans Creek.

Shoreline Access Trails

Shoreline access trails provide connections to linear trails or other shoreline features from a public street. Shoreline access trails will be provided every one-eighth mile to half mile depending on the location, intensity of nearby uses, and the environmental sensitivity of the area. Shoreline access trails shall be designed to protect the shoreline environment. Public access would occur only on publicly-owned lands and shall be designed to discourage potential trespass onto adjacent private properties. Parking for shoreline users may be located near the street where shoreline access trails are located.

Accesses for In-Water Recreation

On the Sammamish River, direct access to the river will be allowed at designated locations for in-water activities such as hand launching boats, fishing and other recreational activities. In-water activities must be located and managed to protect the native plants, fish and wildlife that use the river. Figure S-1 identifies general areas where in-water recreational access facilities may be located. Several types of access may occur at each designated location. Where the designation is shown in the middle of the river, in-water access may occur on either or both sides of the river. Where an approved King County or City of Redmond Park Master Plan provides for in-water access to the Sammamish River, in-water access facilities may also be located in that park. Where consistent with the

policies in this chapter, in-water accesses are allowed in any access point or park on Lake Sammamish.

To protect the important native plants, fish and wildlife on Bear and Evans Creeks, direct contact with the water for in-water recreation is discouraged.

View Points

On the Sammamish River, Lake Sammamish, Bear Creek and Evans Creek, water viewpoints that are designed and located to protect the natural environment should be provided.

Access Points

On the west and east shores of Lake Sammamish access points will be provided. Access points consist of streets, trails, and parks that connect a public street with the lakeshore. Parking for shoreline users may be located near the street where shoreline access trails are located. As it is now, the vast majority the lakeshore will be privately owned. The access points will be designed to protect the privacy and quiet of neighboring residences. The access points will be connected by sidewalks and bikeways along West Lake Sammamish Parkway and along East Lake Sammamish Parkway and the proposed East Lake Sammamish Trail. On Lake Sammamish, direct water access, including swimming docks, boat launches, and fishing areas, is encouraged.

SL-29 Require public and private developments to provide the type of physical public access to the shoreline as shown on Figure S-1, the Shoreline Public Access System Map. This requirement shall apply to all public projects. It shall also apply to any private development of:

- *Ten or more housing units;*
- *Divisions of land creating ten or more lots or any number of lots to be occupied by ten or more housing units or non-residential uses of any size;*
- *Non-residential developments or non-residential redevelopments of any size.*

These public access requirements shall be subject to the nexus and proportionality tests laid out by the U.S Supreme Court.

SL-30 Provide access for project occupants to the shoreline in residential developments of nine or fewer housing units or lots. Public access in not required.

SL-31 Design shoreline developments to include safe pedestrian linkages through the site to existing or planned shoreline public access facilities adjacent to the site, when required. Where required by the Shoreline Public Access System Map, Figure S-1, links shall be dedicated for public use. These public access requirements shall be subject to the nexus and proportionality tests laid out by the U.S. Supreme Court.

While existing trail corridors along Redmond's shorelines provide many outstanding opportunities for public access, there are few places within Redmond that allow one to get safely to the water's edge. Along the Sammamish River, for example, steep, blackberry-covered banks make it difficult to get to, or even see the water. Recreational activities that involve direct contact with the water, such as swimming and boating are a highly valued part of the shoreline recreational experience. These areas should be located, designed, and managed to protect the native plants, fish, and wildlife that depend on Redmond's shorelines. Access points should not be located in particularly vulnerable areas. Providing properly located access to the water's edge can discourage the creation of unsafe paths by shoreline users. Controlled, limited access to the water can also help minimize potential disturbance of fragile areas by shoreline visitors.

SL-32 Allow access to the water's edge where designated on the Shoreline Public Access System Map, Figure S-1. Locate these access points and other access points where no significant impact on native plants, fish, and wildlife will occur. Locate these access points in areas where safe access can be provided.

In some shoreline locations, land use patterns limit opportunities to provide large-scale public access. Infrastructure corridors, such as utility easements, fire lanes, or stormwater detention areas, in appropriate locations, can serve a secondary purpose as pathways, or vegetated open space, as well as amenity areas for pedestrians or cyclists. Containing access in designated corridors may help also reduce the potential for trespass on private property in popular areas. However, this does not include creating a lakefront trail along the existing sewer or utility easement along Lake Sammamish's waterfront. Similarly, other set-aside areas in a development, with no or limited improvements, might provide small-scale links to the larger shoreline access system. Open space buffers or native growth protection areas along ravines might provide private or public trail connections between upland residences and the shoreline.

SL-33 Require public access only on publicly-owned land. This includes new publicly-owned utility corridors and street rights-of-way. Design these elements within shoreline areas to incorporate public

access appropriate to the size and function of the corridor or area. This requirement does not apply to utilities in easements on private property nor does it imply creating a lakefront trail along the existing sewer line easements along Lake Sammamish's waterfront.

The City's undeveloped street ends that abut Lake Sammamish, the Sammamish River, or Bear or Evans Creek have the potential to provide physical, visual and cultural access to the shoreline. They should be retained and used for public access.

SL-34 Do not vacate public street right-of-ways that abut shorelines or that connect to shoreline trail corridors where they are or can be used for shoreline public access unless an alternative corridor that affords better and safer public access is provided and permanently dedicated for public access.

Construction or improvements to transportation facilities within and adjacent to shorelines can diminish opportunities for public access. For example, street widenings may result in high-traffic corridors that are significant barriers between residences and the shoreline. However, transportation improvement projects can also improve public access. For example, a bridge may provide view opportunities, steps to the water's edge, "gateway" design elements or interpretive signs. Both the Redmond Way Bridge and NE 90th Street Bridge across the Sammamish River have a river viewpoint built into them.

SL-35 Design street improvement projects to minimize potential adverse impacts to shoreline public access and, to the extent feasible, incorporate public access features, such as safe pedestrian and equestrian crossings, viewpoints, rest stops for bicycles, "gateway" design elements or interpretive features. Encourage access to the water's edge where designated on the Shoreline Public Access System Map, and where adverse impacts on native plants, fish, or wildlife will not result.

Many sections of Redmond's shorelines contain older development that does not take advantage of a shoreline location. Redevelopment of existing development presents an opportunity to provide an on-site amenity for new employees, tenants or customers, and a community benefit, by providing public access where none exists or enhancing existing public access features. Policy SL-29 requires public access when new development or redevelopment occurs. Policy SL-36 provides for improvements to existing public access as properties redevelop or when new or improved public facilities are provided.

SL-36 Encourage public and private shoreline development and redevelopment to enhance physical, visual and cultural access, where designated public access already exists, by incorporating measures that serve users and minimize impacts on the natural environment and nearby uses. Such measures may include enhanced trail linkages, pedestrian furniture, shared parking, landscape screening, separating accesses and buildings by elevation differences and interpretive signs.

Capital improvements refer to public investments such as streets, bridges, stormwater facilities, and utility corridors. These facilities provide an opportunity to add public access and supporting amenities such as benches, interpretive displays, and viewpoints.

SL-37 Provide physical, visual, and cultural access to the shoreline on existing public capital improvements where practicable and compatible with natural shoreline features.

Protection of Visual Access

Lake Sammamish views, the open and pastoral vistas in the northern Sammamish River valley, and the distant views of Mount Rainier along Bear and Evans Creeks, are valuable community amenities. This is readily apparent in community goal statements, recreational use patterns, and property values. Where physical access to the shoreline is unavailable, employees, residents, and visitors may still enjoy the visual and open space characteristics of the shoreline. Visual access is a high priority in the Shoreline Management Act.

Visual access to Redmond's shoreline areas is mainly provided by existing parks and trails adjacent to the shorelines, and, in a few places, view corridors from major arterials or bridges. Developments can be designed to provide shoreline views and maintain existing view corridors. This may be accomplished by orienting windows and lobbies to the shorelines, using staggered building setbacks or breezeways, reducing building heights or widths, or other design strategies. Trees should not be removed to provide views "after the fact." Restoration of the "natural" slope of the shoreline bank, such as the RiverWalk habitat restoration projects located at City Hall, can provide views of the water from the Sammamish River Trail and adjacent buildings. Acquisition of land for open space uses can increase the frequency of view corridors.

Redmond's development regulations and the Shoreline Management Act restrict building heights in the shoreline jurisdiction in order to minimize intrusion into view corridors. However, tall buildings just outside the shoreline can block views from a number of residences and other

development. A tiered system of building height limits can extend the visual benefits of the shoreline to a wider range of users.

SL-38 Maintain public view corridors as identified in 20D.42.50, Identification of Citywide Public View Corridors, where required, within the shoreline and from upland areas to the shoreline in shoreline developments, through appropriately-designed building setbacks, height and bulk, clustering of structures, density bonuses where allowed, or similar design strategies.

SL-39 Encourage shoreline development to provide views of the water from the development, using appropriate building location and design, thoughtful selection and location of landscaping, and other design strategies.

Policies LU-61 and LU-62 in the Redmond *Comprehensive Plan* lists requirements for future development of the Semi-Rural land north of Bear and Evans Creeks and east of Avondale Road. One requirement, for the protection of scenic view corridors, shall be part of the *Shoreline Master Program*, as follows:

SL-40 Maintain view corridors from Avondale Road and Union Hill Road in the Bear Creek Design District land north of Bear and Evans Creeks and east of Avondale Road, subject to the nexus and proportionality tests laid out by the U.S. Supreme Court.

Provision of Cultural Access

"Cultural access" to shorelines means opportunities for educational or cultural activities that promote interaction with, understanding of, and stewardship of shorelines. Cultural access can take place within or outside of shoreline areas. Examples include signs along shoreline trails explaining the habitat values of the river or stream, signs at historic sites, or a walking trail in a preserved wetland with signs or displays on plants and wildlife. Cultural access to shorelines enriches the shoreline recreational experience and allows an off-site "connection" to the shoreline, extending the educational, recreational and social benefits of shoreline areas. It also has the potential to promote understanding of shoreline issues, shoreline stewardship and protection amongst a large, diverse audience.

The City of Redmond, residents, business owners and other agencies participate in numerous programs that provide cultural access to shorelines, such as river stewardship programs, interpretive signs at stream outfalls and stormwater facilities, habitat restoration activities, river ecology classes, city-wide celebrations of the salmon, water quality public

service announcements, and public artwork. Providing cultural access can be a no- to low-cost amenity for a shoreline development. However, it is intended that cultural access be provided as an adjunct to physical access. Where the natural environment is vulnerable, providing cultural access only may be appropriate

SL-41 Encourage shoreline developments to provide cultural access to the shoreline, where appropriate to the type and scope of development.

SL-42 Include provisions for shoreline cultural access commensurate with the scale of the project for City Capital improvement projects within the shoreline.

Design of Public Access

When properly located and well-designed, public access minimizes trespass and damage to waterfront properties. Controlled public access corridors direct shoreline users into designated areas where otherwise they might trespass and damage landscaping or fences, generate litter, or otherwise damage private waterfront property. Through design strategies; such as screening, fencing, grade separations, signs, adequate maintenance, and appropriate siting; public access can be designed to address site security needs, privacy concerns and crime prevention objectives. Through appropriate designs and locations, public access can be directed away from, or excluded from, unsafe areas or shorelines with fragile natural resources.

SL-43 Design public access to be consistent with the privacy, site security and public safety requirements of nearby uses and the community.

SL-44 Design public access to be compatible with fragile shoreline resources, such as vulnerable streambeds, sensitive wildlife areas, and perching trees.

SL-45 Design public access to be safe and convenient, and encourage inclusion of pedestrian/equestrian/bicycle-oriented amenities such as benches, drinking fountains, public parking, handicapped access, or lighting as appropriate to the type, location and scale of the development.

SL-46 Incorporate crime prevention principles in the design of public access to make facilities safe and easy to patrol and supervise.

E. Economic Development in the Shoreline

The Redmond Comprehensive Plan includes a citywide economic development chapter that calls for protecting Redmond's high quality of life, Redmond's role in economic development, and how to encourage the type of economic development preferred by the city and the region. These policies apply within the shorelines and address encouraging development in shoreline areas. The policies below focus on economic development issues raised by the Shoreline Management Act.

Certain shoreline uses are more dependent on, or have a more direct relationship with the shoreline than others. The Shoreline Management Act requires that shoreline master programs give preference to water-dependent uses, water-related uses, water-enjoyment uses (i.e. uses that provide an opportunity for substantial numbers of people to enjoy the shoreline), single family residential uses, and shoreline recreation. Policies in the Shoreline Master Program give preference to such uses.

A "water-dependent" use is dependent on the water by reason of the intrinsic nature of its operations, and cannot exist in any other location. Examples include swimming beaches, boat launches, boat docks, marinas, and industries that need waterfront locations, such as ship building facilities. A "water-related" use is not intrinsically dependent on a waterfront location, but relies to a significant degree on water or water-dependent activities in its operations. Examples include boat outfitters and manufacturers that transport goods by water. Due to the location and physical limitations of Redmond's shorelines, it is not practical to locate most types of water-dependent or water-related uses in Redmond. For example, the narrowness and shallowness of the Sammamish River would preclude a port facility or large boat commercial marina. However, small-scale water-dependent uses, such as boat launches, docks for small craft, or stormwater outfalls, can be accommodated. Shoreline Master Program policies give preference to such uses on the Sammamish River and Lake Sammamish, where compatible with the constraints of the natural environment and surrounding land uses.

A "water-enjoyment" use is a use that draws substantial numbers of people to the shoreline and that provides opportunities, through its design location or operation, for the public to enjoy the physical and aesthetic benefits of the shoreline. Consistent with the goal of enhancing public access, Redmond's Shoreline Master Program policies encourage water-enjoyment uses in appropriate locations. Examples of recreational water-enjoyment uses include parks and trails; examples of commercial water-enjoyment uses include museums, restaurants, aquariums, and some mixed-use commercial development. These uses often incorporate direct access to the shoreline, such as trails and viewing platforms. Along the Sammamish River in high intensity areas already zoned for commercial or

office uses, shoreline policies encourage water-enjoyment uses. Such uses complement Redmond's long-range plans for high-density commercial and residential uses in the downtown area. "Nodes" of water-enjoyment use along the river will also complement the City's master plan for RiverWalk, a 1.5-mile shoreline corridor in the downtown that envisions some pedestrian-oriented re-development of the river with small-scale retail, entertainment and cultural attractions, and public access features.

Bear Creek, along with Evans Creek, is one of the most productive salmon streams in the region. It is considered a critical spawning area for resident fish species and one of the last urban refuges for freshwater mussels. On Bear and Evans Creeks, direct contact with the water can damage fragile salmon spawning areas and freshwater mussel beds. These areas should be limited to non-water contact and cultural access only. On lower Bear Creek, water-enjoyment uses are encouraged, but limited to non-water-contact uses. Due to the proximity of critical spawning areas, the need for adequate buffers, and site area limitations, water-enjoyment uses on upper Bear and Evans Creeks are discouraged.

Another preferred shoreline use, single-family residential, is the predominate land use around Lake Sammamish. Under Redmond's Shoreline Master Program, this single-family land use pattern is expected and encouraged to continue.

SF-8 Give preference to shoreline uses that are unique to or dependent on shoreline areas, that protect the resources and ecology of the shoreline, and maintain no net loss of shoreline ecological functions.

SL-47 Lake Sammamish: Single-family residential uses and parks should be the preferred uses along Lake Sammamish.

SL-48 Sammamish River: Water-enjoyment uses and parks should be encouraged near major streets in the Downtown and designated business park areas as shown on Figure S-2, Preferred Locations - Cultural Access and Water-Enjoyment Uses.

SL-49 Bear and Evans Creeks: Downstream of Avondale Road, non-water-contact water-enjoyment uses are encouraged near major streets in areas shown on Map S-2, Preferred Locations - Cultural Access and Water-Enjoyment Uses. Upstream of Avondale Road, in-water uses are not allowed.

SL-50 Avoid location of non-water dependent and non-water related uses, activities, and development, except for essential transportation and utilities facilities, waterward of the ordinary high water mark.

Transportation and utilities facilities may be allowed where no feasible alternative exists and negative impacts to salmon and steelhead habitat are mitigated.

F. Managing Shoreline Uses and Activities

Redmond's shorelines are home to a wide variety of land uses and activities, from long-established single-family neighborhoods ringing Lake Sammamish, manufacturing and industrial zones on the Sammamish River and Evans Creek, agricultural and recreational uses in the northern Sammamish Valley, to intense commercial and office development in the downtown portions of the Sammamish River and Bear Creek. In addition, shoreline areas are essential links in the community's network of natural and open space features, providing a place for fishing, swimming, boating, wildlife viewing and other recreational and educational activities. Redmond's shorelines also contain a bounty of valuable natural amenities, critical habitat for fish and wildlife, significant trees, and wetlands. Most of Redmond's shoreline areas are seismic hazard areas, flood plains, and wellhead protection zones one and two. Squeezed into the relatively narrow shoreline corridor, often with limited connections to other corridors, these important functions of shorelines are particularly vulnerable to the pressures of development.

To protect valuable shoreline resources, the Shoreline Master Program limits the extent and character of a number of land uses and activities. Policies are designed to protect water quality, shoreline vegetation and buffers, fish habitat, open space, wildlife habitat, and shoreline hydrology. Physical and visual access to shoreline open space are also important objectives of the Shoreline Master Program. Land use policies are also designed to minimize impacts to visual access, aesthetic qualities, scenic view corridors, and physical public access. Shoreline policies provide for a range of reasonable uses within the shoreline, while establishing limits to protect these shoreline resources and adjacent uses.

Shoreline policies focus on those land uses and activities that are unique to, or dependent on shorelines, or that may significantly conflict with Redmond's goals for protecting the natural environment or providing public access. These policies relate to shoreline land use, include policies for providing public access, protecting the natural environment from adverse impacts of shoreline uses, and shoreline environment designations. In addition, Shoreline Master Program policies and regulations address the character, density and quality of shoreline development.

SF-9 Manage shoreline development to avoid or minimize significant adverse impacts to the natural, aesthetic, and recreational

resources of the shoreline, and to maintain no net loss of shoreline ecological functions.

SF-10 Promote respect of private property rights while implementing Shoreline Management Act requirements.

In deciding whether to allow uses and activities in shorelines areas, the shorelines environment should be protected from avoidable impacts. This can be done by carefully selecting allowed uses, providing policies and standards to prevent or minimize adverse impacts, and carefully reviewing development proposals to prevent or minimize adverse impacts.

SL-51 Design, locate, and manage shoreline uses to prevent and mitigate significant adverse impacts on water quality, fish and wildlife habitats, the environment and other uses. Prohibit uses where such impacts cannot be adequately managed. Ensure uses maintain no net loss of shoreline ecological functions.

SL-52 Design, locate, and manage shoreline uses to minimize impacts to existing and future planned public access and visual access and water-oriented uses.

SL-53 Encourage redevelopment of abandoned or obsolete buildings and sites and encourage redevelopment to be consistent with the policies for those areas, to ameliorate impacts to the shoreline, to restore degradation of shoreline habitat, and to provide for economic uses at those sites. Consider special allowances for restoration and adaptive re-use of historic buildings and sites.

Landfills, Excavation and Dredging

Landfills, excavation and dredging in the shoreline can destroy the natural character of the shoreline, remove native shoreline vegetation, introduce invasive plants, create unnaturally heavy erosion and siltation problems, and reduce the existing water surface area. The result is often significant damage to water quality and fish and wildlife habitat. However, in some instances these activities may be necessary on a limited basis for implementing desired or necessary shoreline objectives. For example, dredging may be the only immediate means to restore the natural functions of a degraded stream area, or to accommodate a water-dependent use. For these reasons, Shoreline Master Program policies allow only limited landfill, excavation and dredging activities.

SL-54 Design and locate new shoreline development to avoid the need for dredging.

SL-55 Allow dredging only when necessary for habitat or water quality restoration, or for maintaining the flood capacity of the floodplain in the flood fringe, and where impacts to habitat are minimized and mitigated.

SL-56 Permit landfills and excavations only in predominately upland areas outside of important habitat areas. Allow landfills and excavations in aquatic areas for the purpose of habitat enhancement. Limit all landfill and excavation activities, where allowed, to the minimum extent necessary to accommodate the proposed use, and prohibit long-term degradation of shoreline hydrology or water quality.

Marinas

Due to the nature of Redmond's shorelines, marinas in Redmond are located only on Lake Sammamish. The other shorelines are too small to accommodate them. Boat ramps and launching sites for small boats may be located on the Sammamish River or Lake Sammamish. Care is needed to locate these facilities in areas that will not affect the natural environment and nearby uses.

SL-57 Design and locate marinas, boat ramps and launching sites so as to not interfere with existing in-water recreational activities, significantly damage fish and wildlife habitats, and be aesthetically and functionally compatible with the shoreline area and nearby uses. Prohibit such facilities on Bear and Evans Creeks.

SL-58 Use, store, and dispose of fuels and waste materials associated with recreational boating in a manner which minimizes the potential for pollutants to enter the water.

Piers and Docks

Piers and docks can have significant impacts on the natural features and scenic values of the shoreline, navigation, water-dependent recreation and public access, native plant, fish, and wildlife habitat and water quality. However, residential piers and docks are long-established uses on Lake Sammamish, and a preferred shoreline use under the Shoreline Management Act, and as such, may continue to be utilized and located on the lake.

SL-59 Locate residential piers and docks so they do not interfere with public swimming beaches, public fishing areas, and boating corridors. Design and construct piers and docks to minimize impacts on native fish and wildlife and their habitat. Prohibit such facilities on Bear and Evans Creeks.

SL-60 Encourage sharing of new piers and docks within new developments. Encourage the consolidation and multiple use of residential docks.

SL-61 Locate floatplane facilities so they do not interfere with public swimming beaches, public fishing areas, and boating corridors. Limit these to facilities accessory to a residential use. Design and construct floatplane facilities to minimize impacts on native fish and wildlife and their habitat. Encourage minimization of their impact on shoreline views. Limit these facilities to parcels large enough to safely accommodate them. Protect adjacent development and uses as well as human safety from these facilities, including limiting noise and other impacts on residential uses.

Outdoor Signage

Outdoor signage refers to signs used to identify a business, and excludes directional, traffic, and interpretive signs, and other similar informational signs. Outdoor signs in the shoreline, if not carefully designed, located and illuminated, can degrade the aesthetic values of the shoreline, view corridors, and impact fish and wildlife.

SL-62 Design and locate outdoor signs in the shoreline jurisdiction to avoid intrusion into and minimize glare into fish and wildlife habitats, buffers, shoreline views and public access areas.

Outdoor Storage

Outdoor storage (i.e., storage not contained within a building) in the shoreline can introduce potentially harmful materials into the water, such as through spills or flooding. This can have serious effects on fish habitat, wildlife, and aquifers. The operation of outdoor storage areas can generate noise and dust impacts on the shoreline environment. Outdoor storage can also conflict with goals for protecting shoreline aesthetics, particularly if public trails or views are nearby.

SL-63 Design and locate outdoor storage incidental to other uses to avoid potential flood and water quality hazards, and screen them from public access areas and shoreline view corridors. Direct lighting of outdoor storage areas, where allowed, away from or screened from the shoreline. Prohibit outdoor storage as a primary use in the shoreline area.

Shoreline Recreation

Shoreline recreation is a preferred shoreline use under the Shoreline Management Act and Redmond's Shoreline Master Program. Shoreline recreation may be water-dependent, such as canoeing or swimming, water-related, such as bird watching, or a water-enjoyment use, such as an interpretive center. These and other recreational uses can be well suited to shoreline areas if they are properly designed and maintained.

SL-64 Give preference to shoreline recreational development related to access to, enjoyment and use of the water and shorelines of the state.

SL-65 Design parks and other recreational developments to be compatible with adjacent preferred shoreline uses, and to protect fish and wildlife habitats. Encourage maintenance activities to protect water quality and minimize fish and wildlife and vegetation disturbance.

SL-66 Include both active and passive recreation areas, and facilities that are designed to encourage use of the shoreline by all members of the community, regardless of physical ability in Redmond's system of shoreline recreation.

Shoreline Protective Structures

Shoreline protective structures (e.g. bulkheads, rip rap, revetments) have major adverse impacts. Their impacts are especially significant along salmon spawning areas such as streams, rivers, and lakes used by Sockeye salmon, such as Lake Sammamish. On these areas, bulkheads and riprap can cover spawning beds. They increase water velocities, eroding spawning beds. They also remove vegetation that shades water and provides food for fish and wildlife. These facilitates can shift erosion downstream and increase downstream flooding impacts. Structural reinforcement of a shoreline or stream bank encourages reliance on "last resort" solutions, instead of promoting more effective methods such as setting back away from potentially eroding streams. Consequently, Shoreline Master Program policies discourage shoreline protective structures and encourage designs that avoid erosion hazards. However, limited bank reinforcement is allowed for habitat enhancement projects, public access, public roads, and protecting existing structures from floods. The Shoreline Management Act requires that shoreline master programs give preference to erosion protection measures for single-family residences occupied before January 1, 1992. Redmond's shoreline policies address the issue of protection for single-family homes while minimizing impacts to the natural environment.

SL-67 Encourage design and location of new shoreline development to avoid the need for shoreline modification or protective structures. Allow shoreline protective structures only as necessary for:

- *Supporting or protecting an allowed primary structure or a legally existing shoreline use that is in danger of loss or substantial damage;*
- *Reconfiguring the shoreline for mitigation or enhancement purposes; or*
- *Shoreline modifications that are appropriate to the specific type of shoreline and environment conditions for which they are proposed.*

SL-68 Design shoreline modification, where allowed, to minimize impacts on shoreline hydrology, navigation, habitat and public access. Design shoreline protective structures for the minimum height, bulk and extent necessary to address an identified hazard to an existing structure. Encourage use of vegetative and biotechnical solutions rather than structural bank reinforcement.

Transportation and Circulation

Transportation and circulation patterns to a great degree shape the location and character of shoreline land uses. Transportation facilities have the potential to diminish shoreline views, reduce public access and remove vegetation. For example, major roadway expansions can become significant barriers between upland residences and the shoreline. Large projects can bring undesirable impacts to residential neighborhoods. On Lake Sammamish, in particular, major roadways or bridges in the shoreline would severely degrade views and could introduce noise and air pollution at levels incompatible with residential uses. Parking facilities for shoreline development can cause spillover of excessive noise, glare and pollutants into fish and wildlife habitat areas. The design of shoreline transportation and circulation projects should address such impacts by avoiding locating in the shoreline. Alternatively, impacts should be mitigated. For example, pedestrian crossings should be provided where shoreline access is needed. Streets, bridges, bikeways and sidewalks should be designed to provide shoreline views and incorporate attractive gateway design elements and pedestrian amenities. Landscaping and re-establishment of large trees and shoreline vegetation should be included in mitigation plans. Well-designed circulation facilities promote public access and views of the shoreline. Good design can also reduce the presence of auto-oriented development in shoreline (along with associated impacts). Including pedestrian and bike facilities in transportation projects complements region-wide goals for enhancing non-motorized transportation.

SL-69 Encourage location of transportation facilities and parking facilities away from the water body, unless no feasible alternative exists. Discourage parking as a primary use along the shoreline.

SL-70 Design and landscape transportation and parking facilities within the shoreline jurisdiction to avoid or minimize impacts to existing land uses, shoreline views, public access, and the natural environment.

SL-71 Require transportation and parking plans to be consistent with the Shoreline Master Program public access policies and public access plan, including circulation, planning for pedestrians, bicycles, and public transportation where appropriate.

SL-72 Prohibit construction of bridges across Lake Sammamish.

Utilities

Telecommunications facilities and utilities can infringe on the scenic value of shorelines and interrupt shoreline view corridors. They often bring undesirable side effects such as noise, glare, use of herbicides, etc. If not designed and located appropriately, such facilities can become unwanted neighbors for residential and water-enjoyment uses. At the same time, undergrounding and tunneling of essential utilities under the river and creeks is sometimes necessary. Regional transmission lines, limited to one corridor, should continue to locate within the same corridor.

SL-73 Locate regional utilities outside of the shoreline. Locate such facilities away from public access areas and view corridors and away from the shoreline to the farthest location possible where a non-shoreline location is not feasible.

SL-74 Locate utilities, where feasible, within existing utility corridors. Locate above-ground utilities away from fish and wildlife habitat, public access areas, and view corridors.

Vegetation Management

Vegetation management in the shoreline can involve removal of vegetation to maintain structures, rights-of-way or trails, removal of invasive or exotic weeds, aquatic weed control or restoration of native vegetation for habitat enhancement. Excessive or improper control of vegetation can degrade shoreline habitat, aesthetics and water quality.

SL-75 Practice vegetation management through preventive measures, such as proper siting of structures and appropriate landscaping.

Minimize removal of native vegetation to achieve the permitted use, maintain existing structures and public safety, or to achieve habitat restoration objectives. Discourage the use of herbicides, pesticides and fertilizer in the shoreline.

SL-76 Encourage restoration of native shoreline vegetation and other habitat restoration activities.

G. Shoreline Design Quality

High quality architectural design and site planning are particularly important in shoreline areas. The unique natural characteristics and "public resource" status of shorelines under the Shoreline Management Act demand that development in the shoreline responds to a wider range of issues than development elsewhere. In addition, shoreline development has a greater burden to respond to and respect the aesthetic qualities of the shoreline, which requires well-designed buildings, signs and graphics, landscaping and open space, and views of the water or wildlife. This is required of all types of shoreline development, whether a large commercial development, City street project, or subdivision. Past non-residential development patterns have "turned their back" on the shoreline, orienting dumpsters and service areas toward the water, or blocking enjoyment of shoreline features by blank walls or parking lots.

In high quality shoreline developments, architectural design, site design and landscaping include such features as buildings or architectural elements oriented to the shoreline, shoreline views, outdoor gathering places, trees and buffers, incorporation of natural features as amenities, trail connections to the shoreline, pedestrian amenities, interpretation of historic sites and graphics and public art. Well-designed shoreline development brings value to surrounding uses and enhances the recreational experience.

SF-11 Promote high quality architectural design, site design and landscaping that reflect the aesthetic, recreational, and natural resource values of a shoreline location.

Development located in the shoreline has the advantage of a unique location and close proximity to a network of natural, aesthetic and recreational amenities. Accordingly, shoreline developments should be designed to respond to their shoreline location, through architectural or site design elements that connect visually or physically to the waterbody. While virtually all development in Redmond is now required to exhibit high quality design principles, shoreline development should strive to achieve an even greater level of design harmony with shoreline resources.

SL-77 Encourage design of shoreline development to reflect the natural, aesthetic, and recreational values of the shoreline, paying special attention to:

- *Designing architectural and site design elements to connect visually or physically to the shoreline where consistent with the natural environment of the shoreline.*
- *Orienting views and windows to the shoreline.*
- *Orienting some entries, sight lines, buildings, pathways and other design elements toward the shoreline.*
- *Incorporating interpretation of on-site archaeological and historic sites or themes in the development.*
- *Keeping bulk and scale of buildings in proportion to shoreline features.*
- *Locating service areas away from the shoreline and screening incompatible activities.*
- *Incorporating native landscaping and open space.*
- *Respecting and reflecting significant natural features, such as large or valuable trees or landforms.*
- *Providing outdoor seating or gathering places along the shoreline, where appropriate.*
- *Providing well-designed public access from the site to the shoreline where consistent with the natural environment of the shore.*
- *Connecting to pedestrian paths to other nearby amenities.*
- *Designing signs to be compatible with surrounding public uses and aesthetic quality of the shoreline.*
- Maintaining aesthetic quality of areas visible from public *trails to the extent feasible.*

Water-enjoyment uses bring substantial numbers of people to the shoreline, and provide opportunities for the public to enjoy shoreline amenities. These uses are encouraged in high-density areas, such as Redmond's downtown area. To achieve their "enjoyment" aspect, water-enjoyment uses, in addition to meeting good urban design principles, should incorporate a higher proportion of window areas, pedestrian amenities, and shoreline connections to ensure that development takes advantage of the recreational and aesthetic opportunities presented by a shoreline location.

SL-78 Encourage design of water-enjoyment uses to provide significant opportunities for public enjoyment of the aesthetic, natural and recreational amenities of the shoreline, through large areas of windows, outdoor seating areas, street furniture, views from public areas and pedestrian connections to the shoreline.

Service areas, such as loading docks and dumpsters, tend to generate more glare, noise and other pollutants than other activity areas. Typically these areas are located away from the public street, which means they are often located adjacent to wildlife habitat and public access areas along the shoreline.

SL-79 Encourage location of service areas and outdoor storage areas in non-single-family residential developments upland of, or beside buildings, and adequately screen these from the shoreline.

SL-80 Encourage design of surface stormwater facilities located within the Urban Conservancy or Natural environments to enhance wildlife habitat, shade the water, and integrate into the overall landscaping theme.

The Redmond Comprehensive Plan designates the Sammamish River, Bear Creek and Evans Creeks as open space and wildlife corridors. Shoreline areas are much more vulnerable than other urban areas to impacts of noise, glare, dust, vibrations, etc. To protect the scenic value, views, and fish and wildlife habitat value of shoreline areas, excessive lighting is discouraged. "Dark skies" policies are in place for the river and both creeks.

SL-81 Prohibit outdoor lighting levels for security, building and parking lot lighting, and intensive recreational uses in the shoreline that exceed the minimum necessary for safe and effective use. Screen all lighting, except for minimum pedestrian lighting, from the shoreline through landscaping, shields or other design measures.

Transportation and circulation facilities can have significant impacts on shoreline uses and resources. For example, bridges and freeway ramps can obscure shoreline views, access, and historic sites. At the same time, these facilities present opportunities for improved urban design and enhanced shoreline aesthetics. In Redmond, shoreline aesthetics are enhanced by trails along the Sammamish River and Bear Creek, banners on downtown streets, and decorative lighting on the Leary Way Bridge, and other amenities. Many of the residential subdivisions along Lake Sammamish have identified themselves by unique community signs. The design of streets and other transportation improvements in the shoreline should incorporate measures to protect and enhance shoreline aesthetics, and to incorporate design amenities such as gateway design elements, neighborhood signs or mailbox graphics to help define neighborhoods or landmarks, street tree plantings, public art, and decorative lighting.

SL-82 Encourage the design, where feasible, of transportation and circulation facilities in the shoreline to protect and complement shoreline aesthetics, provide view corridors, and to incorporate attractive design features such as gateway design elements, decorative lighting, attractive landscaping, public art and street graphics.

H. Historic and Cultural Uses

Redmond's shorelines have played a significant role in the development of the area. The Sammamish River and Lake Sammamish, for example, were essential transportation routes for Native Americans and early settlers and their products. Logs from surrounding hillsides were floated to processing plants and markets on Lake Sammamish, the Sammamish River, and the creeks. Several sites associated with this early history have been identified along Redmond's shorelines. Of these sites, the Conrad Olson Farm on Bear Creek and the Red Brick Road (Yellowstone Trail) along Evans Creek are the only remaining structures identified to date. The Red Brick Road is on the National Register of Historic Places. These historic resources are important to the region, the Redmond community, and may provide amenities and attractions for shoreline developments. An understanding of the rich history associated with Redmond's shorelines can help promote river stewardship.

These valuable aspects of Redmond's past should be preserved. Since few structures exist, this effort will typically involve documentation of historic sites or events and, in some cases, the incorporation of historic features in site design. For example, historic sites along Lake Sammamish, such as those of early lumber mills, might be reflected in street graphics or interpretive signs. Historic structures should be restored where feasible. Other historic sites should be evaluated for possible incorporation as amenities, themes or interpretation in new development proposals.

The Land Use chapter of the Redmond Comprehensive Plan contains policies protecting historic and cultural resources throughout the city. To ensure the level of protection envisioned by the Shoreline Management Act, supplemental policies for shoreline areas are included in the Shoreline Master Program.

SF-12 Require shoreline development to identify potential development impacts to, and to protect and respect valuable archaeological and historic sites and cultural resources.

SL-83 Identify and protect valuable archaeological and historic sites and resources in shoreline development.

SL-84 Encourage acquisition of shoreline sites with major archaeological, historic or cultural value to the community by the City where feasible.

SL-85 Try to incorporate the interpretation of on-site archaeological and historic resources into the design of shoreline development, transportation improvements, and recreational developments.

SL-86 Require developers and property owners to immediately stop work and notify the City, the state Office of Archaeology and Historic Preservation, and affected Indian tribes if archaeological resources are uncovered during excavation.

SL-87 Require a site inspection or evaluation by a professional archaeologist in coordination with affected Indian tribes for permits issued in areas documented to contain archaeological resources.

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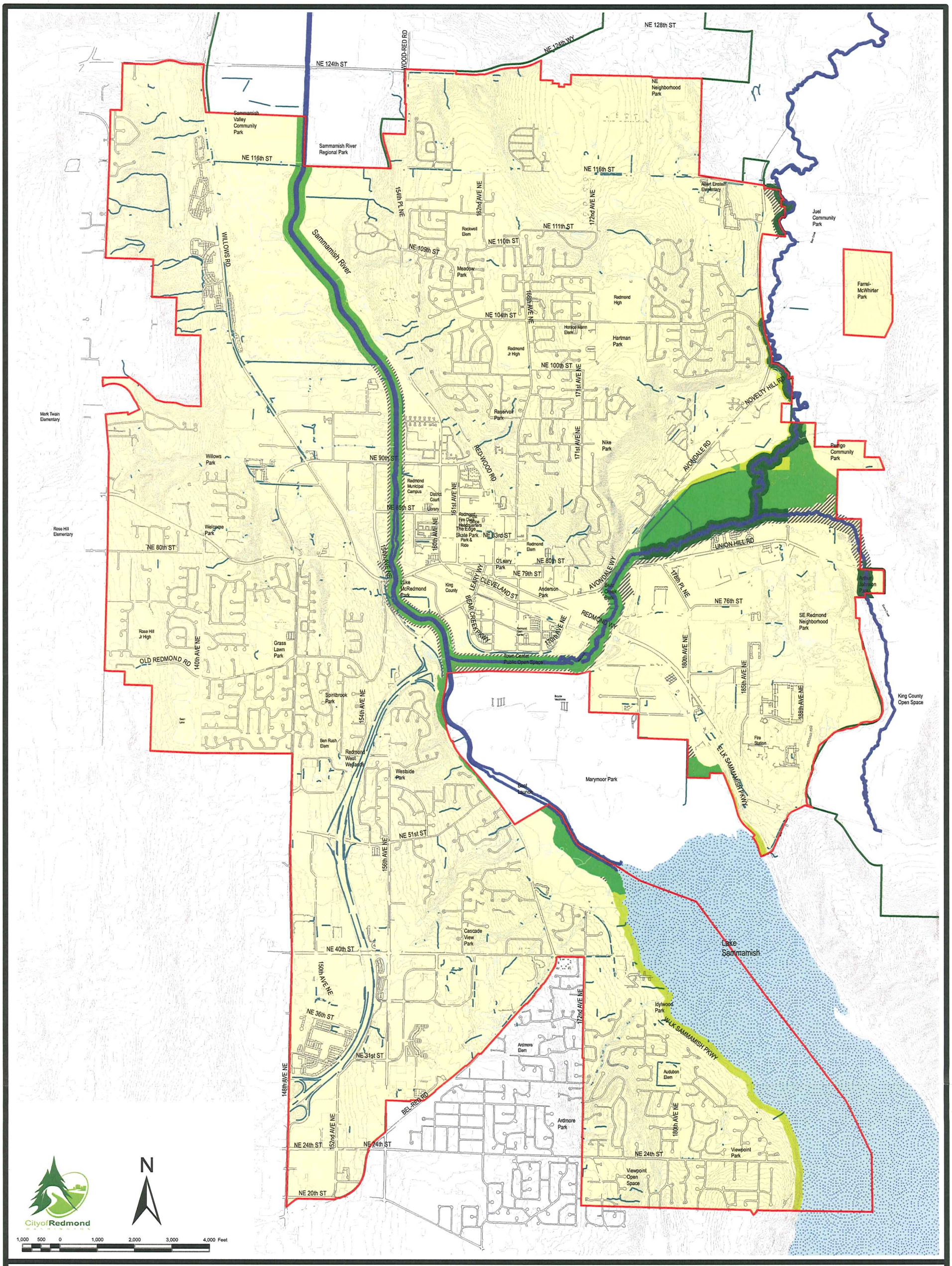

SHORELINE MASTER PROGRAM

Shoreline Environments

This map was funded in part through a cooperative agreement with the National Oceanic and Atmospheric Administration. The views expressed herein are those of the author(s) and do not necessarily reflect the views of NOAA or any of its sub-age

City of Redmond Grant No. G9600303 Effective: 09/26/2009 Revision: __/__/____

These maps shall be used as a general guide; boundaries and classifications are approximate. Consult the Redmond Community Development Guide for procedures, definitions and criteria for determining actual boundaries and classifications.

LEGEND

- Redmond City Limit
- 2004 Urban Growth Boundary
- Other Streams
- Shoreline Master Program Water Bodies
- Street Right of Way
- Contours

Shoreline Environments

- Aquatic
- High Intensity/Multi-Use
- Natural
- Shoreline Residential
- Urban Conservancy

Sources: City of Redmond Planning Department
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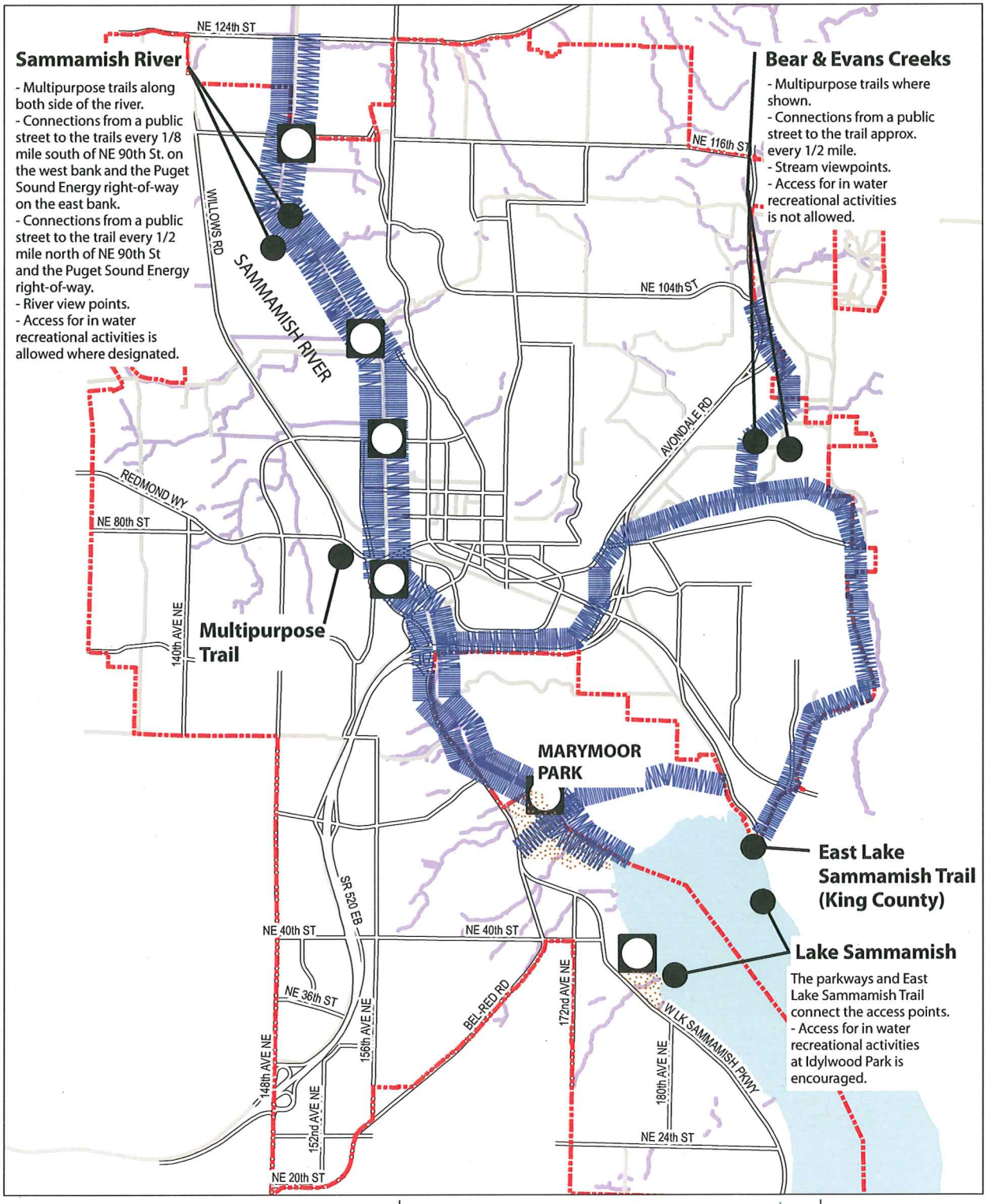

LEGEND

- Redmond City Limits
- Shoreline Trail
- Access Points
- Public access for in-water recreation allowed

Figure S-1: Shoreline Public Access System

Notes:
Map to be used in association with Shoreline Policies
Watershed park not shown

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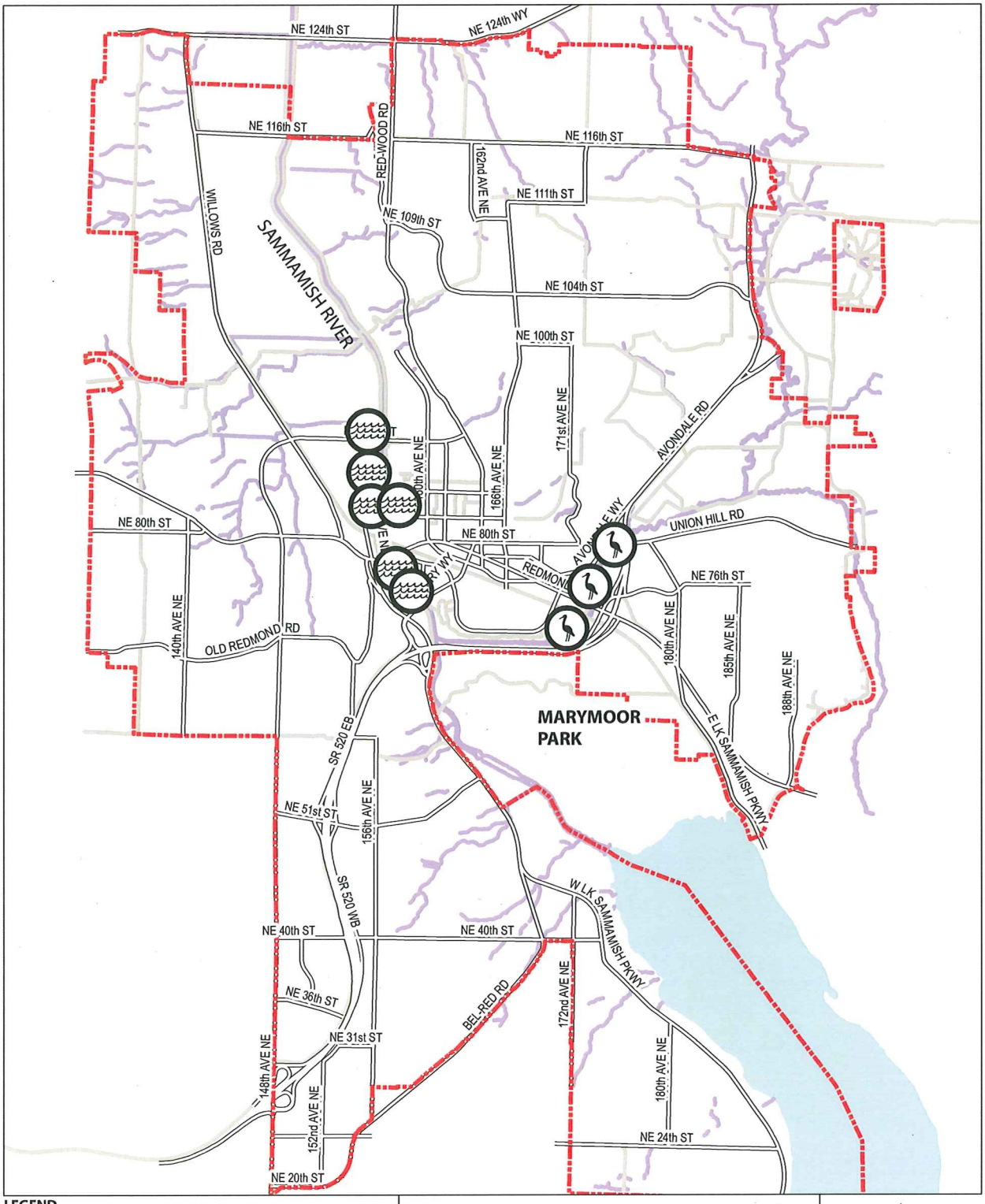

LEGEND

- Redmond City Limits
- Water-Enjoyment Uses
- Non-Water-Contact Water-Enjoyment Uses

Figure S-2: Preferred Locations Water-Enjoyment Uses

Notes:
Map to be used in association with Shoreline Policies
Watershed park not shown

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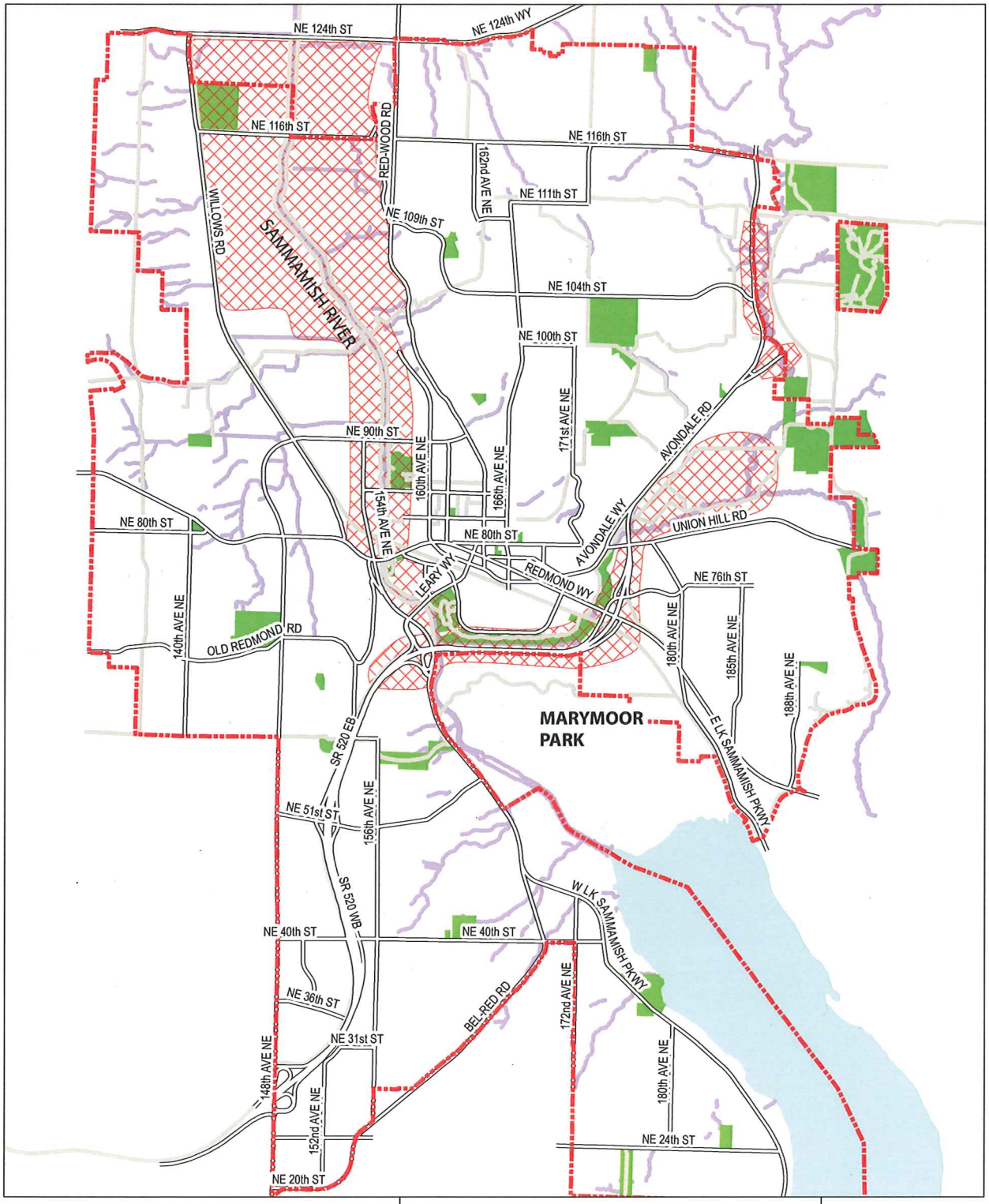

LEGEND

- Redmond City Limits
- SMP Views
- Parks

Figure S-3: Shoreline Views

Notes:
Map to be used in association with
Shoreline Policies
Watershed park not shown

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EFFECTIVE: 09/26/2009

Redmond Shoreline Master Program Update

Policy Revisions to Comprehensive Plan
2009

Parks and Recreation

B. Developing a Parks, Trails and Opens Space System

PR-43 As a complement to the city-wide pedestrian pathway system, the City should develop a visual system for enhancing connections to the shoreline and identifying shoreline areas, considering such elements as street graphics, landscaping, street furniture or artwork. (SMP)

PR-31 Encourage the acquisition of property which will provide access to shorelines and local streams, with emphasis on areas where current and anticipated development patterns are unlikely to provide access, or where there are significant access needs. Promote the creation of open space corridors along these water resources to provide for passive recreation and wildlife habitat. (SMP)

C. Recreation and Cultural Program Policies

PR-19 Create a balanced system of recreation opportunities for all ages by providing:

1. A community center or centers for indoor and outdoor recreation programs including provisions for the following programs: youth or teen center, meeting rooms, social services, facilities to serve special populations, recreation classes, athletics and gymnasiums.
2. Athletic facilities for competitive, organized sports (e.g. practice and tournament regulations softball, practice and regulation baseball fields, soccer fields, and tennis courts). When impacts on adjacent properties can be minimized, fields and courts should be lighted to provide for extended hours or use.
3. Facilities for competitive or non-competitive, non-organized, active recreations (e.g. rollerblading, skateboarding, bicycling). Consideration should be made to provide safe, legal facilities for recreation enjoyed by youths and teens (and where such needs have been demonstrated).

4. Facilities to support the cultural arts (e.g. program rooms, performing arts theater, and outdoor concert space). Additionally, designated facilities to encourage freedom of artistic expression should be City sponsored (e.g. graffiti art wall).
5. Facilities and land for contemplative and sensory recreation (e.g. picnicking, benches for sitting, views for enjoying).
6. A linkage system (e.g. bicycle lanes and multi-use trails which connect the park system, schools, and other important public facilities in the City).
7. Outdoor plazas and squares within the City Center neighborhood for community and civic events, public gatherings, programmed activities and entertainment.

PR-28 Develop facilities and acquire land for environmental education, including a Citywide interpretative sign program for shorelines, streams, native growth areas, aquifers, and other important natural systems, by the appropriate agencies or City departments. (SMP)

PR-52 Design and renovate all parks and recreational facilities in a manner that will, where feasible, provide safe and accessible use by the physically impaired.

O:\Cathy\Shoreline Master Program Update\2009\Comprehensive Plan Policy Revisions (2009)

Redmond Shoreline Master Program Update

Definitions
(2009)

20A.20 Definitions

Adaptive Management: The modification of management practices to address changing conditions and new knowledge. Adaptive management is an approach that incorporates monitoring and research to allow projects and activities, including projects designed to produce environmental benefits, to go forward in the face of some uncertainty regarding consequences. The key provision of adaptive management is the responsibility to change adaptively in response to new understanding or information after an action is initiated. (SMP)

Aquaculture: The cultivation of fish, shellfish, and/or other aquatic animals or plants, including the incidental preparation of these products for human use. (SMP)

Aquatic: Those areas waterward of the ordinary high water mark. (SMP)

Appurtenance: For the purposes of the Shoreline Master Program, uses typically associated with single family residences, such as a garage, deck, driveway, utilities, fences, installation of a septic tank and drainfield, and grading which does not exceed two hundred fifty cubic yards and which does not involve placement of fill in any wetland or waterward of the ordinary high water mark. An appurtenance is necessarily connected to the use and enjoyment of a single-family residence and is located landward of the ordinary high water mark and the perimeter of a wetland. (SMP)

Arterial: A right-of-way that serves as a distributor of traffic. Arterials are delineated as principal and minor depending upon intensity of use. Principal arterials, for example, connect major activity areas and move traffic from community to community. (SMP)

Average Grade Level: 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. (SMP)

Basin (or watershed): The area of land drained by a particular creek or river, a geographic unit defined by the flows of rainwater and melting snow, in which all land drains to a common outlet. (SMP)

Bioswale: A constructed, linear depression lined with vegetation, designed to filter pollutants from storm water runoff prior to discharge to a catch basin or receiving waters. (SMP)

Building Height: The height measured from average grade level to the highest point of a structure; provided, that television antennas, chimneys, and similar appurtenances shall not be used in calculating height, except where such appurtenances obstruct the view of the shoreline of a substantial number of residences on areas adjoining such shorelines, or the applicable master program specifically requires that such appurtenances be included; provided further, that temporary construction equipment is excluded in this calculation. (SMP)

Channel Migration Zone: 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. (SMP)

Diameter at Breast Height: The diameter of any tree trunk, measured at four and one-half feet above average grade. For species of trees whose normal growth habit is characterized by multiple stems (e.g. hazelnut, vine maple) diameter shall mean the average diameter of all stems of the tree, measured at a point six inches from the point where the stems digress from the main trunk. In no case shall a branch more than six inches above average grade be considered a stem. (SMP)

Dock: A structure that floats on the surface of the water, without piling supports, but which is attached to land. Typically used for boat moorage, swimming, public access, and other activities that require access to deep water. (SMP)

Dredging: The removal of earth, sand and/or gravel from the bottom of a stream, river, lake or other water body for the purposes of deepening or constructing a navigational channel or marina, increasing or maintaining flood conveyance capacity of a channel, installing submarine pipelines, or similar purposes, or to obtain the use of the bottom materials for landfill. (SMP)

Ecological Functions or Shoreline Functions: 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. (SMP)

Ecologically Intact Shoreline: Those shoreline areas that retain the majority of their natural shoreline functions, as evidenced by the shoreline configuration and the presence of native vegetation. Generally, but not necessarily, ecologically intact shorelines are free of structural shoreline modifications, structures, and intensive human uses. This term is intended to delineate those shoreline areas

that provide valuable functions for the larger aquatic and terrestrial environments which could be lost or significantly reduced by human development. (SMP)

Ecosystem-wide Processes: The suite of naturally occurring physical and geologic processes of erosion, transport, and deposition, and specific chemical processes that shape landforms within a specific shoreline ecosystem and determine both the types of habitat that are present and the associated ecological functions. (SMP)

Equestrian Facility: A facility used to board, train or exercise more than six adult horses at any one time for commercial purposes, which may be private or public and may include facilities for spectators and competitions. (SMP)

Fill: For the purposes of the Shoreline Master Program, the addition of soil, sand, rock, gravel, sediment, earth-retaining structure, or other material to an area waterward of the ordinary high water mark, in wetland, or on shorelands in a manner that raises the elevation or creates dry land. (SMP)

Finger Float: A finger-like floating structure typically attached perpendicular to a main walkway that provides direct pedestrian access to and from a boat and provides for secure mooring of a boat. (SMP)

Finger Pier: A small narrow pier that projects at right angles from a larger pier perpendicular to the main pier, often parallel to the shoreline. (SMP)

Float: A structure that floats on the surface of the water, which is not attached to the shore but that may be anchored to submerged land. Floats are typically used for swimming, diving and similar recreational activities. (SMP)

Floodplain: Synonymous with the one hundred year floodplain and means the land susceptible to inundation with a one percent chance of being equaled or exceeded in any given year. The limit of this area shall be based upon flood ordinance regulations maps or a reasonable method which meets the objectives of the Shoreline Management Act. (SMP)

Gabions: Structures composed of masses of rocks or rubble held tightly together by wire mesh (typically) so as to form upright blocks or walls. Often constructed as a series of overlapping blocks or walls. Used primarily in retaining earth, steep slopes or embankments, to retard erosion or wave action, or as foundations for breakwaters or jetties. (SMP)

Geotechnical Report or Geotechnical Analysis: A scientific study or evaluation conducted by a qualified expert that includes a description of the ground and surface hydrology and geology, the affected land form and its susceptibility to mass wasting, erosion, and other geologic hazards or processes, conclusions and recommendations regarding the effect of the proposed

development on geologic conditions, the adequacy of the site to be developed, the impacts of the proposed development, alternative approaches to the proposed development, and measures to mitigate potential site-specific and cumulative geological and hydrological impacts on the proposed development, including the potential adverse impacts to adjacent and down-current properties. Geotechnical reports shall conform to accepted technical standards and must be prepared by qualified professional engineers (or geologists) who have professional expertise about the regional and local shoreline geology and processes. (SMP)

Grading: For the purposes of the Shoreline Master Program, 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. (SMP)

Hard Armoring Solutions: Structural shoreline stabilization and reinforcement measures that are solid with hard surfaces, such as concrete, pilings, rock revetments, gabions, concrete groins, retaining walls, bulkheads and the like – typically non-natural approaches to shoreline stabilization. (SMP)

Incidental (use): Subordinate and minor in significance and bearing a reasonable relationship with the primary or principal use. (SMP)

Infiltration: The flow of water into soil material. It is also used to describe the process of storm water inflow into a sanitary sewer system. (SMP)

In-Water Structure: A structure that is typically associated with water dependent uses and activities or that, by its nature, requires a location waterward of the ordinary high water mark of a stream, river, wetland or lake. Examples of in-water structures include: a marina, residential dock, fishing pier, boat house, public boardwalk, car-top boat launch, motorized boat launch, swimming float, fish weir or ladder, and culvert. (SMP)

Large Woody Debris (LWD): Trunks and branches of trees that have fallen into a stream or have been placed in a stream, stabilizing the streambed and providing for fish and aquatic insects. This definition includes any piece of wood that is at least 10 cm in diameter (midpoint) and is at least 2 meters in length. (SMP)

Littoral Drift: The mud, sand, or gravel material moved parallel to the shoreline in the nearshore zone by waves and currents. (SMP)

Littoral Zone: The zone in a body of fresh water where light penetration is sufficient for the growth of plants. (SMP)

Live-Aboard Vessel: A vessel principally used as an overwater residence in a single location for a period exceeding two months in a calendar year. (SMP)

Livestock Facility: A facility used for housing, raising, boarding, training or showing livestock, such as cattle, horses, llamas, goats and swine, excluding kennels and feed lots. A livestock facility may be used for agricultural, commercial or recreations purposes. (SMP)

Marina, Recreational: A private or public facility for storing, servicing, fueling, berthing and securing of more than four motorized boats or watercraft, that includes accessory facilities for providing incidental services to users of the marina, such as fuel, food services, waste collection, etc. This does not include commercial marinas, which may provide repair services, in addition to the above services, for commercial and industrial watercraft. (SMP)

May: Means the action is acceptable, provided it conforms to the provisions of the Shoreline Management Act. (SMP)

Native Vegetation: Those plants which are indigenous to the coastal Pacific Northwest. It does not include lawns, but does include native grasses, such as bunchgrass. (Resource for identifying native plants: Pojar, Jim and Andy MacKinnon. *Plants of the Pacific Northwest Coast: Washington, Oregon, British Columbia and Alaska*. Redmond, WA: Lone Pine Publishing, 1994). (SMP)

Nonconforming Use or Development: A shoreline use or development which was lawfully constructed or established prior to the effective date of the act or the applicable master program, or amendments thereto, but which does not conform to present regulations or standards of the program. (SMP)

Non-Water-Oriented Use: Those uses that are not water-dependent, water-related, or water-enjoyment. (SMP)

Ordinary High Water Mark(OHWM): The mark that will be found on all lakes and streams 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; provided, that in any area where the ordinary high water mark cannot be found, the ordinary high water mark adjoining fresh water shall be the line of mean high water. (SMP)

Outfall: A structure used for the discharge of a stormwater or sewer system into a receiving water. (SMP)

Physical Access: The ability of the general public to reach the water's edge. (SMP)

Pier: A structure supported by pilings that projects over, and is raised above the water but is attached to land, and that is used for boat moorage, swimming, fishing, public access, float plane moorage, or similar activities requiring access to deep water. (SMP)

Piling: The structural supports for piers, usually below the pier decking and anchored in the water. (SMP)

Preferred Shoreline Use: A single-family residence or appurtenance, a water-dependent, water-related, or water-enjoyment use, and shoreline recreation. (SMP)

Public Access: The ability of the general public to reach, touch, and enjoy the water's edge, to travel on the waters of the state, and to view the water and the shoreline from adjacent locations. (SMP)

Public Access Facility: A water-oriented structure, such as a trail, pier, pedestrian bridge, boat launch, viewing platform, fishing pier, that provides access for the public to or along the shoreline. (SMP)

Regional Light Rail Transit System: A public rail transit line that operates at grade level, above grade level, or in a tunnel and that provides high-capacity, regional transit service owned and operated by a regional transit authority authorized under Chapter 81.112 RCW. A light rail transit system may be designed to share a street right-of-way although it may also use a separate right-of-way. (SMP)

Repair: Normal repair means to restore a development to a state comparable to its original condition, including but not limited to its size, shape, configuration, location and external appearance, within a reasonable period after decay or partial destruction, except where repair causes substantial adverse effects to 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 effects to shoreline resources or environment. (SMP)

Replacement: For the purposes of standards on shoreline stabilization measures, replacement means the construction of a new structure to perform a shoreline stabilization function of an existing function which can no longer adequately serve the purpose. Additions to or increases in size of existing shoreline stabilization measures shall be considered new structures. (SMP)

Restore, Restoration, or Ecological Restoration: The reestablishment or upgrading of impaired ecological shoreline processes or functions. This may be

accomplished through measures including but not limited to revegetation, 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. (SMP)

Revetment: A shoreline protective structure constructed on a slope, and used to prevent erosion. Construction materials may be rock riprap, gabions, interlocking concrete blocks, or similar materials. (SMP)

Riparian Zone: The area of vegetation adjacent to a body of water that influences (and is influenced by) the water, an area typically used by more species of wildlife than other land areas. (SMP)

Salmon and Steelhead Habitat: Submerged areas that provide significant habitat or critical habitat components for salmon and steelhead at various life cycle stages, including: gravel-bottomed streams and rivers used for spawning; streams, rivers, lakes, wetlands and side channels used for rearing or feeding, and refuge from predators and high waters; and shallow areas along lakeshores used for rearing, feeding and refuge. Salmon and steelhead habitat is mapped on the Stream Map in the Shoreline Master Program. (SMP)

Salmonid: A species of the family *salmonidae*, the salmons, trouts, chars, and whitefishes. (SMP)

Shall: Means a mandate; the action must be taken. (SMP)

Shorelands or Shoreland Areas: Those lands extending landward for two hundred feet in all directions as measured on a horizontal plane from the ordinary high water mark; floodways and contiguous floodplain areas landward two hundred feet from such floodways; and all wetlands and river deltas associated with the streams, lakes, and tidal waters which are subject to the provisions of the Shoreline Management Act; the same to be designated as to location by the Department of Ecology. That portion of a one hundred year floodplain may be included as long as such portion includes, as a minimum, the floodway and adjacent land extending landward two hundred feet there from. (SMP)

Shoreline Modification: 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, dredged basin, fill, bulkhead, or other shoreline structure. They can include other actions, such as clearing, grading, or application of chemicals. (SMP)

Shoreline Stabilization: Means for protecting shoreline upland areas and shoreline uses from the effects of shoreline wave action, flooding or erosion. Shoreline stabilization includes structural and non-structural methods, riprap,

bulkheads, gabions, jetties, dikes and levees, flood control weirs, and bioengineered walls or embankments. (SMP)

Shorelines: All of the water areas of the state, including reservoirs, and their associated shorelands, together with the lands underlying them: except (i) shorelines of statewide significance; (ii) shorelines on segments of streams upstream of a point where the mean annual flow is twenty cubic feet per second or less and the wetlands associated with such upstream segments; and (iii) shorelines on lakes less than twenty acres in size and wetlands associated with such small lakes. (SMP)

Shorelines of Statewide Significance: Those lakes, whether natural, artificial, or a combination thereof, with a surface acreage of one thousand acres or more measured at the ordinary high water mark and those natural rivers or segments thereof where the mean annual flow is measured at one thousand cubic feet per second or more. Definition is limited to freshwater areas in Western Washington. (SMP)

Should: Means that the particular action is required unless there is a demonstrated, compelling reason, based on policy of the Shoreline Management Act and the Shoreline Rules, against taking the action. (SMP)

Sign, Directional: A permanent sign not exceeding six square feet in area, without commercial message, that guides pedestrian or vehicular traffic with directional messages, such as "one-way," or "exit only;" guides the public to specific on-site locations such as an entrance, exit, parking or service area, or to a particular aspect of a business or establishment such as a cocktail entrance; or that contains non-commercial information or directions provided by a public agency, such as safety warnings or user rules and regulations. (SMP)

Sign, Informational: A sign not exceeding six square feet in area commonly associated with, but not limited to, information and directions necessary or convenient for visitors coming on the property, including signs marking entrances and exits, parking areas, circulation direction, rest rooms, and pickup and delivery areas. (SMP)

Sign, Interpretive: A permanent sign not exceeding six square feet in area, without commercial message, located on a publicly-accessible site, that provides public educational and interpretive information related to the site on which the sign is located, such as information on natural processes, habitat restoration programs, or cultural history, or that is associated with an adopt-a-stream, adopt-a-park or similar agency-sponsored program. (SMP)

Significant Ecological Impact: An effect or consequence of a human-caused action if any of the following apply:

- The action degrades or changes an ecological function or ecosystem-wide process to such a degree that the ecosystem can no longer perform the function at levels within its natural range of variability or that the performance of the function falls outside the range needed to maintain the integrity of other ecological processes in shoreline areas.

- Scientific evidence or objective analysis indicates that the action could cause degradation or change to those ecological functions or ecosystem-wide processes described above under foreseeable conditions.

- Scientific evidence indicates that the action could contribute to degradation or change to ecological functions or ecosystem-wide processes described above as part of cumulative impacts, due to similar actions that are occurring of likely to occur. (SMP)

Significant Tree: Any healthy tree six inches in diameter at breast height, or any tree four inches in diameter (d.b.h.) that, after considering its age, height, value, or function, the tree or tree stand is determined to be significant. (SMP)

Snag: An upright stump or trunk of a tree that provides habitat for a broad range of wildlife, from beetle larvae (and the birds such as woodpeckers that feed upon them) to dens for raccoons. (SMP)

Solid Waste: Unwanted or discarded material, including waste material with insufficient liquid content to be free flowing. (SMP)

Sustained Yield: A level of harvest of a renewable resource per year (or other time period) that can be continued without jeopardizing the ability of the ecosystem to be fully renewed, and thus to continue to provide an undiminished level of harvest each year long into the future. (SMP)

Upland: Generally described as the dry land area above and landward of the ordinary high water mark. (SMP)

Utilities: Services, facilities and infrastructure that produce, transmit, carry, store, process or dispose of electric power, gas, water, sewage, communications, oil, storm water, and the like. (SMP)

Utilities, Regional: Utilities that are provided by a public agency, utility or franchise which convey essential services throughout the area beyond but including Redmond. These facilities include, but are not limited to, regional water storage tanks and lines, reservoirs and booster stations, waste water interceptors, sewage pump stations and treatment facilities, electrical transmission substations and high-tension power lines, regional natural gas pipelines and gate stations. Regional utilities also include regional

telecommunications facilities, including, but not limited to, cellular communications towers, provided by a public or private entity. (SMP)

Vehicle Use Area: An area used primarily for parking, circulation and storage of autos, trucks, delivery and service trucks, and other vehicles, including, but not limited to parking lots, drive aisles, and loading bay areas. Vehicle use areas do not include fire lanes or temporary parking areas that are predominately landscaped, or covered with turf or pervious grids covered by turf. (SMP)

Visual Access: The ability of the general public to view the water and the shoreline from adjacent locations. (SMP)

Water-Dependent Use: 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 operation. (SMP)

Water-Enjoyment Use: 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 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-orientated space within the project must be devoted to the specific aspects of the use that fosters shoreline enjoyment. (SMP)

Water-Oriented Use: A use that is water-dependent, water-related, or water-enjoyment or a combination of such uses. (SMP)

Water Quality: The physical characteristics of water within the shoreline jurisdiction, including water quantity, hydrological, physical, chemical, aesthetic, recreation-related, and biological characteristics. (SMP)

Water-Related Use: 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 it services less expensive and/or more convenient. (SMP)

Weed, Noxious: A plant that is injurious to humans, animals, fish, wildlife, or other plants or property and that has been designated as such by the Administrator. The Administrator may utilize a list of noxious weeds set forth by

the State Noxious Weed Control Board or the King County Noxious Weed Control Board. (SMP)

O:\Cathy\Shoreline Master Program Update\2009\Definitions (2009)

Redmond Shoreline Master Program Update

Shoreline Regulations

2009

20D.150 Shoreline Master Program

20D.150.10 Scope and Purposes

20D.150.10-010 Scope and Applicability

The requirements of this chapter apply to uses, activities, and development within shoreline jurisdiction as defined in 20D.150.20, Shoreline Jurisdiction. All uses, activities, and development within shoreline jurisdiction, including those exempt from the requirement to obtain a shoreline permit, shall comply with Chapter 90.58 RCW, the Shoreline Management Act, Chapter 173-26 of the Washington Administrative Code or its successor, and the policies and regulations of the Redmond Shoreline Master Program.

20D.150.10-020 Purposes

The Redmond Shoreline Master Program has the following purposes:

(1) To ensure no net loss of shoreline ecological functions.

(2) To protect the waters of state and the fish and wildlife that depend on those waters from adverse impacts.

(3) To protect the public's right to access and use the surface waters of the state.

(4) To protect the aesthetic qualities of the natural shorelines of the state to the greatest extent feasible consistent with the overall best interest of the state and the people generally.

(5) To design and carry out allowed uses in a manner that minimizes, as far as practical, damage to the ecology and environment of shoreline areas and the public's right to access and use the shorelines where public lands and rights-of-way exist.

(6) To provide for the restoration of the shorelines, which are among the state's most valuable and fragile natural resources.

(7) To provide for the recovery of fish and wildlife that use the shorelines and that have been federally or state-listed endangered or threatened and that are practical to recover within Redmond.

(8) To encourage water-related, water-dependent, and residential uses of the shorelines that are in the best interest of the public.

(9) To prepare a concerted and coordinated plan for the shorelines taking into account local, state, and federal interests to prevent the inherent harm in an uncoordinated and piecemeal development of the state's shorelines.

(10) To carry out the Shoreline Management Act, Chapter 90.58 RCW, and implementing regulations adopted by the state.

(11)To help fulfill the city's responsibilities under the Public Trust Doctrine.

(12) To protect the rights of the owners of properties within the Shoreline Jurisdiction.

20D.150.20 Shoreline Jurisdiction

The following areas of Lake Sammamish, the Sammamish River, Bear Creek, and Evans Creek shall be the area within jurisdiction. The exact location of these areas will be determined at the time of permitting for a particular project.

(1) Lake Sammamish:
Lake Sammamish, its underlying land, associated wetlands and all areas within the one percent numerical probability floodplain (100-year floodplain) as defined by the most recent Federal Emergency Management Agency map or study, together with those lands extending landward 200 feet from the ordinary high water mark of Lake Sammamish.

(2) Sammamish River:
The Sammamish River and all lands extending landward 200 feet from the ordinary high water mark of the Sammamish River

(3) Bear Creek and Evans Creek:
Bear Creek and Evans Creek where the mean annual flow is 20.0 cubic feet per second or greater and the land underlying the creek in those areas, associated wetlands, and the following areas:

(a) *West of Avondale Road:*
Those lands extending landward 200 feet from the ordinary high water mark on both sides of the creek.

(b) *East of Avondale Road:*
(i) North side of creeks:
All lands extending landward 200 feet from the ordinary high water mark plus all areas within the one-percent numerical probability floodplain (100 year floodplain) as defined by the

most recent Federal Emergency Management Agency map or study or best available data. Within the Friendly Village Mobile Home Park property, the shoreline jurisdiction shall comprise of those lands extending 200 feet from the ordinary high water mark on both sides of the creek.

(ii) South side of creeks: Those lands extending landward 200 feet from the ordinary high water mark.

20D.150.30 Shoreline Master Program & Relationship to Other Policies and Regulations

20D.150.30-010 Shoreline Master Program

(1) Shoreline Master Program Policies. The following policies shall constitute the Redmond Shoreline Master Program policies.
- (a) Comprehensive Plan Shoreline Master Program Chapter.
- (b) Comprehensive Plan Natural Environment Element Chapter policies NE-12 through NE-17 and NE-19 through NE-101. (*Ord. 2259, dated May 28, 2005*)
- (c) Comprehensive Plan Parks and Recreation Element Chapter policies PR-43 and PR-31. (*Ord. 2486, dated Sept. 25, 2009*)

(2) Shoreline Master Program Regulations. The following regulations shall constitute the Redmond Shoreline Master Program development regulations
- (a) RCDG 20D.150, *Shoreline Regulations*
- (b) RCDG 20D.140, Critical Areas (*Ord. 2259, dated May 28, 2005*), with the exception of the following subsections:
  - (i) 20D.140.10-030, *Exemptions*
  - (ii) 20D.140.10-060, *Permit Process and Application Requirements*
  - (iii) 20D.140.10-170, *Buffer Width Variances*
  - (iv) 20D.140.10-190, *Reasonable Use Provision*
  - (v) 20D.140.10-200, *Public Project Reasonable Use Provision*
  - (vi) 20D.140.20-020(6), (7), *Stream Buffer Width Averaging*
  - (vii) 20D.140.20-020(8), *Clearing and Grading in Outer Buffer*
  - (viii) 20D.140.20-020(10), *Expansion of Nonconformity in Stream Buffer*
  - (ix) 20D.140.20-030, *Alteration of Fish and Wildlife Habitat Conservation Areas*
  - (x) 20D.140.60-030, *Alteration of Geologically Hazardous Areas – Generally*
  - (xi) 20D.140.60-040, *Alteration of Geologically Hazardous Areas*
  - (xii) 20D.140.70, *Procedures*
- (c) RCDG 20D.45, *Dredging* (*Ord. 2486, dated Sept. 26, 2009*)

(d) RCDG 20A.20, *Definitions* – Those specific to shorelines and so noted with an "SMP" following their definition. (*Ord. ####, dated xx*)

(e) RCDG 20C Regulations: *Agriculture, Urban Recreation, Residential, Downtown, Commercial and Industrial Zones* – Those sections of the site requirements chart (and associated footnotes) establishing maximum height in the shoreline jurisdiction and waterfront building setbacks along Lake Sammamish, plus the following subsections specific to shoreline development:
  (i) 20C.30.25-080(3)(c) (*Ord. 2486, dated Sept. 26, 2009*)
  (ii) 20C.30.25-080(5) through (6) (*Ord. 2486, dated Sept. 26, 2009*)
  (iii) 20C.30.25-130(3) (*Ord. 2486, dated Sept. 26, 2009*)
  (iv) 20C.60.25-060(4) (*Ord. 2486, dated Sept. 26, 2009*)

(f) RCDG 20D.170, *Special Uses* – The following subsections specific to shoreline development
  (i) 20D.170.40-030(5) (*Ord. 2486, dated Sept. 26, 2009*)
  (ii) 20D.170.45-050(2)(b) (*Ord. 2486, dated Sept. 26, 2009*)
  (iii) 20D.170.45-060(2)(f) (*Ord. 2486, dated Sept. 26, 2009*)
  (iv) 20D.170.75-020 (*Ord. 2486, dated Sept. 26, 2009*)

(3) In addition to the policies and regulations adopted by reference, the following policies and regulations address shoreline issues but are not part of Redmond's Shoreline Master Program:
  (a) Policies
    (i) Comprehensive Plan Parks and Recreation Chapter Element policies PR-28 and PR-52.
  (b) Regulations
    (i) RCDG 20D.40, *Design Standards.*

20D.150.30-020 Relationship to Other Policies and Regulations

(1) The shoreline regulations contained in this chapter shall apply as an overlay and in addition to zoning, land use regulations, development regulations, and other regulations established by the City.

(2) In the event of any conflict between these regulations and any other regulations of the City, the regulations that provide greater protection of the shoreline natural environment and aquatic habitat shall prevail.

(3) Shoreline Master Program policies establish intent for the shoreline regulations.

20D.150.40 General Regulations

20D.150.40-010 Regulations of General Application.

(1) The location, design and management of all shoreline uses and activities shall not degrade the quality and quantity of surface and groundwater on the site and adjacent to the site. All Federal and State water quality and effluent standards shall be met.

(2) All shoreline uses and activities shall be located and designed in a manner that ensures no net loss of shoreline ecological functions and minimizes adverse impacts to natural shoreline resources, wildlife habitat, and fish and other aquatic habitat. All development on the shoreline impacting shoreline ecological functions shall be mitigated according to the mitigation sequence established in WAC 173-26-201(2)(e).

(3) Where specific regulations for a proposed use or activity are not provided in the Community Development Guide, uses and activities shall utilize best management practices to minimize any adverse impacts to water quality and natural shoreline resources.

(4) Disruption of natural shoreline resources, including clearing and grading, tree removal, and erosion protection, shall be the minimum necessary to accommodate the permitted use or activity.

(5) In evaluating permit applications for proposed uses and activities within the shoreline, the City shall give due consideration to the long-term and regional effects of the proposal on natural shoreline resources and the ability of future generations to enjoy and use the shoreline.

(6) New development should be located and designed to avoid the need for future shoreline stabilization to the extent feasible.

(7) Where the provisions of the Community Development Guide conflict, the more restrictive of the provisions shall apply unless specifically stated otherwise.

20D.150.50 Shoreline Environments

20D.150.50-010 Shoreline Environment Designations

The Redmond Comprehensive Plan designates shoreline environments for each area within shoreline jurisdictions. The shoreline environments are established by Policy SF-1 and designated on the Shoreline Environments Map. Classifying a given shoreline into distinct environments provides a means of assessing the different land use and environmental characteristics of the shoreline, thus providing the foundation for shoreline policies and regulations. Any shoreline area not designated shall be an Urban Conservancy environment, until evaluated and a permanent designation is made by the City.

20D.150.50-020 Allowed and Prohibited Uses and Activities in Shoreline Environments

(1) The Shoreline Management Act and its implementing regulations provide that if a use is not listed in the Shoreline Master Program, it may be allowed through a Shorelines Conditional Use Permit application (WAC 173-26-240 (2) (b) and WAC 173-27-160). Shoreline uses, activities, or conditions listed as prohibited shall not be authorized through a variance, special use permit, conditional use permit, or any other permit or approval.

(2) The Redmond Community Development Guide contains special provisions for certain uses and activities that may occur within the shoreline jurisdiction. Special standards for these uses and activities are in the Development Guide sections listed in RCDG 20D.150.50-030, *Uses and Activities in Shoreline Environments*. Only those provisions listed in RCDG 20D.150.30-010(2), *Shoreline Master Program*, are adopted by reference as part of the City of Redmond Shoreline Master Program.

(3) Shoreline modification activities shall support an allowed shoreline use that complies with the requirements of the Shoreline Master Program. Except as otherwise provided, all shoreline modification activities not associated with a legally existing or approved shoreline use are prohibited.

20D.150.50-030 Uses and Activities in Shoreline Environment

(1) Explanation of Uses Table

Table 1 identifies uses and activities and defines whether those uses are prohibited, permitted by application for Exemption or Shoreline Substantial Development Permit, or permitted by a Shoreline Conditional Use Permit. The following symbols apply:

(a) "X" means that the use or activity is prohibited in the identified Shoreline Environment.

(b) "P" means that the use or activity may be permitted by approval by the City of Redmond through a Letter of Shoreline Exemption (RCDG 20F.40.120-040(5) or through a Shoreline Substantial Development Permit (RCDG 20F.40.120-040(2)).

(c) "C" means that the use or activity may be permitted by approval of the City of Redmond and Department of Ecology through a Shoreline Conditional Use Permit (RCDG 20F.30.40 and 20F.40.120). Uses that are not specifically prohibited under Table 1 or under RCDG 20D.150.50-030(2) may be authorized through a Shoreline Conditional Use Permit.

(d) Shoreline Variances (RCDG 20F.30.40 and 20F.40.120) are intended only to grant relief from specific bulk, dimensional or performance standards in the Shoreline Master Program, NOT to authorize shoreline uses and activities. They are therefore not included in Table 1.

Note that a project exempt from a Shoreline Substantial Development Permit may still require a Shoreline Conditional Use Permit or Shoreline Variance.

(2) Prohibited Uses

(a) General. Uses identified under (b) are specifically prohibited in all Shoreline Environments. Shoreline uses, activities, or conditions listed as prohibited shall not be authorized through a variance, special use permit, conditional use permit, or any other permit or approval.

(b) Prohibited Uses in all Shoreline Environments: The following uses are prohibited and subject to (a):

(i) Agriculture and Resource Management: Hunting, trapping[1], Mining and quarrying, and In-water structures;
(ii) Utilities: Solid waste landfill or transfer station;
(iii) Transportation Facilities: Helicopter landing facilities[2], Primary use parking, Expressways, Railroads[3], Towing operators & auto impoundment, Truck terminals, railroad yards;
(iv) Manufacturing and Industrial: Hazardous waste (primary), and In-water structures;
(v) Commercial, Wholesale, Retail: Commercial marinas, piers and docks, Drive-in theatre, Off-premise signs, billboards[4], In-water structures, Hazardous waste (primary);
(vi) Residential: Floating homes; and
(vii) Recreational: Golf driving range.

(3) Relationship to Other Regulations
In cases where there is a conflict among the various sections of the Redmond Community Development Guide and the following table, the regulation that provides the greatest protection to the Shoreline Environment shall take precedent. The permits identified in this table relate to a proposal occurring within the shoreline jurisdiction as defined in 20D.150.20. Other permits and approvals may be required by the City of

[1] Does not include fishing, or hunting and trapping authorized by local, state or federal agencies, or Native American tribes, for the purposes of wildlife management or scientific research.
[2] Does not include emergency medical airlift.
[3] Grade crossings, signaling, underpasses and overpasses only. New railroad corridors are prohibited. This prohibition does not apply to the corridors of a regional light rail transit system.
[4] Real estate and political signs are allowed subject to provisions of RCDG 20D.160, Signs.

Redmond and by state and federal agencies with jurisdiction. See the land use chart for the zoning district in which a proposal is located. Special restrictions may apply to some uses, please refer to RCDG 20D.170, Special Uses Regulations for details.

Table 1
Shoreline Environments, Permitted Uses & Activities Chart

USES AND ACTIVITIES	SHORELINE ENVIRONMENT				
	Aquatic	Natural	Urban Conser-vancy	Shoreline Residen-tial	High Intensity/ Multi-Use
AGRICULTURE & RESOURCE MANAGEMENT					
Agriculture	X	X	P	P	P
Aquaculture	P	X	X	P	P
Nurseries, tree farms	X	X	P	P	P
Equestrian & livestock facilities	X	X	C	C	C
Animal kennels	X	X	X	P	P
UTLITIES					
Water-dependent utilities (i.e. outfalls)	P	P	P	P	P
Accessory utilities and other underground utilities, except stormwater conveyance facilities	X	X	P	P	P
Stormwater conveyance facilities accessory to a principal use	P	P	P	P	P
Utilities: Substation and Storage	X	X	X	P	P
Utility lines attached to existing bridge structures and underground lines	X	P	P	P	P
Under-water or over-water crossings	P	P	P	P	P
Broadcast and Relay Towers	X	X	X	P	P
Other non-commercial wireless communication facilities	X	X	X	P	P
TRANSPORTATION FACILITIES					
Bridges: autos, railroads	X	X[1]	P	P	P
Bridges: pedestrian, bicycle, equestrian	X	P	P	P	P
Bridges: regional light rail transit	X	X	P	X	P
Private non-commercial float plane landing & mooring facilities on Lake Sammamish only	P	X	X	P	X
Accessory parking to a use permitted in the designated shoreline environment	X	X	X	P	P
Principal arterials	X	X[1]	X	X	P
Connectors	X	X[1]	X	P	P
Regional light rail transit structures and facilities	X	X	P	X	P
New railroad facilities other than bridges for rail corridors existing on the effective date of this code	X	X	X	X	P
MANUFACTURING/INDUSTRY					
Light industrial & manufacturing development	X	X	X	X	P
Ports & water-related industry	P	X	X	X	P

USES AND ACTIVITIES	SHORELINE ENVIRONMENT				
	Aquatic	Natural	Urban Conser-vancy	Shoreline Residen-tial	High Intensity/ Multi-Use
Outdoor storage	X	X	X	X	P
Hazardous waste, incidental	X	X	X	X	P
COMMERCIAL, WHOLESALE, RETAIL					
Commercial, wholesale, retail development	X	X	X	X	P
Office	X	X	X	X	P
Water-enjoyment commercial uses	X	X	X	P	P
Hotel	X	X	X	X	P
Restaurant	X	X	X	X	P
Pedestrian-oriented carts, kiosks	X	X	P	P	P
Produce or handcraft stands up to 120 sq.ft.	X	X	P	P	P
Car-top boat rentals	X	X	P	P	P
Automobile, boat, recreational vehicle sales, rentals, repairs	X	X	X	X	P
Outdoor advertising	X	X	X	X	P
Outdoor storage and outdoor bulk sales	X	X	X	X	P
RESIDENTIAL					
Residential development, except floating homes	X	C	C	P	P
Boathouses	P	X	X	P	X
RECREATIONAL					
Water-oriented recreational development (e.g. interpretive center, park)	X	X	P	P	P
Non-water oriented recreational development	X	X	X	P	P
Water-dependent recreation (e.g. swimming, fishing)	P	X	P	P	P
Recreational marinas	X	X	X	P	X
Residential piers, docks, floats, and boatlifts	P	X	C	P	P
Private over water structures, including Boathouses (except piers, docks, floats)	P	X	X	P	X
Public piers, docks, fishing/viewing platforms, & boardwalks	P	P	P	P	P
Non-motorized boating	P	X	P	P	P
Boat ramps (for non-motorized)	P	X	P	P	P
Motorized boating	P	X	P	P	P
Boat ramps (for motorized)	P	X	X	P	P
Trails[2]	X	P	P	P	P
Public Access[2]	P	P	P	P	P
INSTITUTIONAL & RELIGIOUS					
Churches, temples, synagogues	X	X	X	X	P
Other institutional	X	X	X	X	P
OTHER ACTIVITIES					
Habitat conservation & recreation	P	P	P	P	P
Stand-alone shoreline protective structures not associated with a structure otherwise permitted in this Table	X	X	X	P	X
Stand-alone fill & excavation, clearing & grading not associated with an underlying	C	X	C	C	C

USES AND ACTIVITIES	SHORELINE ENVIRONMENT				
	Aquatic	Natural	Urban Conser-vancy	Shoreline Residen-tial	High Intensity/ Multi-Use
use permitted in this Table					
Fill & excavation for water-dependent use, bridge or public access	P	C	P	P	P
Fill & excavation for ecological restoration	P	P	P	P	P
Dredging	P	P	P	P	P
Water withdrawals and diversions	P	P	P	P	P
Flood control structures and activities	P	C	P	P	P
Environmental & cultural interpretation; scientific research; cultural access[3]	P	P	P	P	P

[1] See Shoreline Policy SL-2
[2] Trails and public access on public lands or rights-of-way.
[3] Includes small-scale aquaculture connected to Native American culture or sustenance.

20D.150.50-040 Use Regulations

(1) Agriculture and Resource Management

(a) Agricultural uses and development in support of agricultural uses shall be located and designed to assure no net loss of shoreline ecological functions and shall not have a significant adverse impact on other shoreline resources and values.
(b) New agricultural uses shall be consistent with the policies of the shoreline environment designation in which they are located.
(c) Impacts to water quality and stormwater quantity that would result in a net loss to shoreline ecological functions or a significant impact to aesthetic qualities or recreational opportunities shall be prevented.
(d) New structures for feeding, housing, training and caring for livestock shall be located outside the stream buffer as required under Section 20D.170.15.030(2). This also applies to accessory structures.
(e) Lighting for agriculture and resource management uses shall be consistent with Section 20D.150.120.
(f) Parking shall be consistent with Section 20D.150.140.
(g) Signs shall be consistent with Section 20D.150.150.
(h) Tree protection, landscaping, and screening requirements of Section 20D.150.110 shall be met.
(i) Vegetation management per Section 20D.150.170 shall be met.
(j) These regulations apply to new agricultural uses occurring on lands not designated for agriculture.

(2) Utilities

Utilities use regulations are found in Section 20D.150.160, Utilities Within Shorelines.

(3) Transportation Facilities

(a) Locate transportation away from the water body unless no feasible alternative exists, or unless the facility is part of a regional light rail transit system.

(b) Design and landscape transportation facilities to avoid and minimize impacts to existing land uses, shoreline views, public access, and the natural environment.

(4) Manufacturing and Industrial Uses

(a) Preference shall be given to water-dependent industrial uses over non-water-dependent industrial uses.

(b) Preference shall be given to water-related industrial uses over non-water-oriented industrial uses.

(c) Non-water-oriented industrial development on shorelines shall be prohibited except when conditions established in WAC 173-26-241(f)(i) and (ii) are met and non-water oriented industrial development is expressly allowed where the development is located in the High Intensity/Multi-use Environment separated from the ordinary high water mark by lands with a different Shoreline Environment designation.

(d) Design, locate and manage these uses to prevent significant adverse impacts on water quality, fish and wildlife habitat, and the environment, and achieve no net loss of shoreline ecological function.

(e) Design, locate, and manage these uses to minimize impacts to existing or future planned public access and visual access.

(f) Consider incorporating public access as mitigation for impacts to shoreline resources and values unless public access cannot be provided in a manner that does not result in significant interference with operations or hazards to life or property.

(g) Shoreline buffers and setbacks are established in Section 20D.150.60, Shoreline Buffers and Setbacks.

(h) Tree protection requirements per Section 20D.150.110-020 shall be met.

(i) Landscaping and screening requirements per Section 20D.150.110-010 shall be met.

(j) Lighting shall be consistent with Section 20D.150.120.

(k) Parking facilities are prohibited within shoreline buffers, except as described in 20D.150.40. Parking regulations established in Section 20D.150.140 shall be met.

(l) Signs within the shoreline jurisdiction shall be oriented away from, or screened from public shoreline areas and shall

minimize glare into fish and wildlife habitats, buffers, shoreline views, and public access areas consistent with Section 20D.150.150.

(5) Commercial, Wholesale, and Retail Uses

(a) Preference shall be given to water-dependent commercial uses over non-water-dependent commercial uses.

(b) Preference shall be given to water-related and water-enjoyment commercial uses over non-water-oriented commercial uses.

(c) Non-water-oriented commercial uses on shorelines within navigable waterways, such as Lake Sammamish, shall be prohibited except:

(i) as part of a mixed-use development; or

(ii) in situations where they do not conflict with or limit opportunities for water-oriented uses or on sites where there in no direct access to the shoreline or where the waterbody is not navigable; or

(iii) where the site is physically separate from the shoreline by another property or public right-of-way.

(d) Design, locate and manage these uses to prevent significant adverse impacts on water quality, fish and wildlife habitat, and the environment, and achieve no net loss of shoreline ecological functions.

(e) Design, locate, and manage these uses to minimize impacts to existing planned public physical access and visual access.

(f) Shoreline buffers and setbacks are established in Section 20D.150.60, Shoreline Buffers and Setbacks.

(g) Tree protection requirements per Section 20D.150.110-020 shall be met.

(h) Landscaping and screening requirements per Section 20D.150.110-010 shall be met.

(i) Lighting shall be consistent with Section 20D.150.120.

(j) Parking facilities are prohibited within shoreline buffers. Parking regulations established in Section 20D.150.140 shall be met.

(k) Signs within the shoreline jurisdiction shall be oriented away from, or screened from public shoreline areas and shall minimize glare into fish and wildlife habitats, buffers, shoreline views, and public access areas consistent with Section 20D.150.150.

(6) Residential Uses

(a) Along Lake Sammamish, structures above grade, other than those related to water use (such as docks, piers, and boathouses) shall be set back a minimum of 35 feet from the ordinary high water mark. This setback may be reduced

consistent with Section 20D.150.60-020, Lake Sammamish Setback.

(b) Shoreline buffers per Section 20D.150.60-010 apply along the Sammamish River, Bear Creek, and Evans Creek.

(c) Residential in-water structures are regulated under Section 20D.150.70.

(d) Tree protection per Section 20D.150.110 shall be met.

(e) Vegetation management per Section 20D.150.170 shall be met.

(f) Floating homes are prohibited.

(7) Recreation

(a) Design parks and recreational development to be compatible with adjacent shoreline uses, and to protect fish and wildlife habitats.

(b) Utilize maintenance procedures that ensure protection of water quality and minimizes wildlife and vegetation disturbance.

(c) In-water structures are regulated under Section 20D.150.70.

(d) Shoreline access is established in Section 20D.150.180.

(8) Institutional and Religious Uses

(a) Non-water-dependent institutional and religious uses shall be prohibited unless they can meet the criteria established for non-water-dependent uses established in WAC 173-26-241(3)(d)(i) and (ii).

(b) Design, locate and manage these uses to prevent significant adverse impacts on water quality, fish and wildlife habitat, and the environment.

(c) Design, locate, and manage these uses to minimize impacts to existing or future planned public access and visual access.

(d) Shoreline buffers and setbacks are established in Section 20D.150.60, Shoreline Buffers and Setbacks.

(e) Tree protection requirements per Section 20D.150.110-020 shall be met.

(f) Landscaping and screening requirements per Section 20D.150.110-010 shall be met.

(g) Lighting shall be consistent with Section 20D.150.120.

(h) Parking facilities are prohibited within shoreline buffers. Parking regulations established in Section 20D.150.140 shall be met.

(i) Signs within the shoreline jurisdiction shall be oriented away from, or screened from public shoreline areas and shall minimize glare into fish and wildlife habitats, buffers, shoreline views, and public access areas consistent with Section 20D.150.150.

20D.150.50-050 Shoreline Development Standards

The following chart establishes shoreline-specific development standards in the different shoreline environment designations.

DEVELOPMENT STANDARDS	SHORELINE ENVIRONMENT				
	Aquatic	Natural	Urban Conservancy	Shoreline Residential	High Intensity/ Multi-Use
Agriculture and Resource Management					
Density	n/a	n/a	.10 du/ac	.10 du/ac	.10/du ac
Buffer/setback[1]	n/a	n/a	200 feet	200 feet	200 feet
Maximum impervious surface	n/a	n/a	5%	5%	5%
Minimum lot frontage	n/a	n/a	300 feet	300 feet	300 feet
Maximum building height	n/a	n/a	30 feet	30 feet	30 feet
Utilities					
Density	n/a	n/a	n/a	n/a	n/a
Buffer/setback[1]	n/a	200 feet	200 feet	200 feet	200 feet
Maximum impervious surface	n/a	n/a	n/a	60%	75%
Minimum lot frontage	n/a	n/a	n/a	20 feet	n/a
Maximum building height	n/a	n/a	n/a	30 feet	35 feet
Transportation Facilities					
Density	n/a	n/a	n/a	n/a	n/a
Buffer/setback[1]	n/a	200 feet	200 feet	200 feet	200 feet
Maximum impervious surface	n/a	n/a	n/a	n/a	n/a
Minimum lot frontage	n/a	n/a	n/a	n/a	n/a
Maximum building height	n/a	n/a	n/a	n/a	n/a
Manufacturing/Industry					
Density	n/a	n/a	n/a	n/a	.5 FAR[4]
Buffer/setback[1]	n/a	n/a	n/a	n/a	150-200 feet
Maximum impervious surface	n/a	n/a	n/a	n/a	80%
Minimum lot frontage	n/a	n/a	n/a	n/a	30 feet
Maximum building height	n/a	n/a	n/a	n/a	35 feet[5]
Commercial, Wholesale, Retail					
Density	n/a	n/a	n/a	n/a	.35 FAR[6]
Buffer/setback[1]	n/a	n/a	n/a	n/a	150-200 feet
Maximum impervious surface	n/a	n/a	n/a	n/a	varies[9]
Minimum lot frontage	n/a	n/a	n/a	n/a	n/a
Maximum building height	n/a	n/a	n/a	n/a	35 feet
Residential					
Density	n/a	.2 du/ac	.2 du/ac	4 du/ac	varies[8]
Buffer/setback[1]	n/a	200 feet	200 feet	35 feet[7]	150 feet
Maximum impervious surface	n/a	10%	10%	60%	varies[9]
Minimum lot frontage	n/a	20 feet	20 feet	20 feet	n/a
Maximum building height	n/a	30 feet	30 feet	30 feet	35 feet
Recreational					
Density	n/a	n/a	n/a	n/a	n/a
Buffer/setback[1]	n/a	200 feet	200 feet	200 feet	200 feet
Maximum impervious surface	n/a	10%	10%	60%	60%
Minimum lot frontage	n/a	300 feet	300 feet	20 feet	20 feet
Maximum building height	n/a	30 feet	30 feet	30 feet	35 feet
Institutional and Religious					
Density	n/a	n/a	n/a	n/a	n/a

DEVELOPMENT STANDARDS	SHORELINE ENVIRONMENT				
	Aquatic	Natural	Urban Conservancy	Shoreline Residential	High Intensity/ Multi-Use
Buffer/setback[1]	n/a	n/a	n/a	n/a	150-200 feet
Maximum impervious surface	n/a	n/a	n/a	n/a	75%
Minimum lot frontage	n/a	n/a	n/a	n/a	30 feet
Maximum building height	n/a	n/a	n/a	n/a	35 feet

Notes:

1. Subject to 20D.150.60, Shoreline Buffers. Transportation crossings shall be allowed and not subject to buffer setbacks provided they meet 20D.150.60-010.
2. The height limit is restricted to that portion of the building physically located within the Shoreline jurisdiction.
3. See 20C.20.20-030 for height limitations and exceptions to the 35 foot height limitation.
4. Can go up to 1.0 FAR with TDRs.
5. See 20C.60.25-020
6. Outside of Downtown and can go up to .70 FAR with TDRs. In Downtown, 1.25 FAR without TDRs per site or at least 10,000 sq. ft. of GFA.
7. This is the buffer setback from Lake Sammamish, where the majority of the Shoreline Residential environment is designated. See 20D.150.60-020, Lake Sammamish Setback.
8. Residential density in Downtown varies with lot size up to 66 du/acre per site. Outside of Downtown is .12 du/acre per site.
9. Varies between 75 and 100 percent impervious surface per site by Downtown Design District and underlying zoning.
10. du/ac = dwelling units per acre

Note that n/a = not applicable in the shoreline environment.

20D.150.60 Shoreline Buffers

20D.150.60-010 Shoreline Buffers.

(1) Shoreline buffers are established for Type I streams; those streams identified as Shorelines of the State. Stream buffers for the Shorelines of the State are established for the Sammamish River, Bear Creek, and Evans Creek as follows:

(a) Sammamish River:

- North of Puget Sound Energy powerline crossing: 150-foot inner buffer plus a 50-foot outer buffer
- South of Puget Sound Energy powerline crossing: 150-foot buffer

(b) Bear Creek:

- West of Avondale Road: 150-foot buffer
- East of Avondale Road: 150-foot inner buffer plus a 50-foot outer buffer

(c) Evans Creek: 150-foot inner buffer plus a 50-foot outer buffer

Buffers are established to protect the integrity, function and value of the riparian corridor and shall be an area of undisturbed vegetation

where development is prohibited, subject to (2) through (5) below. There are no building setbacks from these buffers.

Where a city-sponsored stream or river restoration project remeandered a Type I stream, adjacent buffers may be reduced so that the buffers will extend no farther than the extent of the buffers immediately prior to the restoration project provided no net loss of shoreline ecological functions can be demonstrated and the reduced buffer is no less than 100 feet in width. This provision shall not be construed to allow automatic reduction of the buffer on the corresponding opposite side of the stream when the stream is being located further away from said property.

(2) Subject to (3) through (5) below, maximum clearing and grading within the outer 50-foot buffer is 35% of the outer buffer area. Nothing in this provision shall be construed to require remediation of existing situations where the current clearing and grading is in excess of 35%. Subject to (3) through (5) below, no net effective impervious surfaces may be created within this area.

(3) Except as otherwise specifically permitted in this section, 20D.150.60-010 or in any other portion of the Shoreline Master Program, development, including clearing, grading, disturbing or altering of a stream buffer is strictly prohibited, except for the following activities that are permitted within all buffer areas:

(a) Stormwater conveyance systems and underground utilities;

(b) Trails subject to the Public Access policies and regulations of the Shoreline Master Program; and

(c) Bridges which are part of a regional transit system where there is a demonstrated public need and the location has been selected through a regional transit planning process. Buffer setbacks do not apply to transportation crossings; however, buffer crossing impacts shall be minimized and mitigated.

(4) Businesses currently located in the stream buffers or stream setbacks may continue to operate. A non-conforming use in the stream buffers or stream setbacks may be expanded provided the expansion does not result in a net loss of shoreline ecological functions over existing conditions. Non-conforming structures may be maintained and repaired and may be enlarged or expanded provided said enlargement does not extend the structure closer to the shoreline. Businesses currently located in the stream setbacks may sell their land to entities for redevelopment in the same general land use category (e.g. an industrial user may sell to a different type of industrial user), who may continue forward as a nonconforming use and with the existing nonconforming structures and may also redevelop pursuant to this

section, 20D.150.60-010 and other applicable portions of the Shoreline Master Program.

(5) In any High Intensity/Multi-Use location within a buffer where the land is actively being used as part of a legitimate business operation, such land including either structures or active operational areas, established prior to January 1, 2008, may continue to operate. New structures, pavement, and other improvements are permitted within this area so long as incremental environmental benefit is provided and no net loss of shoreline ecological functions id demonstrated.

20D.150.60-020 Lake Sammamish Setback.

Lake Sammamish has no buffer (as noted in 20D.150.60-010 above) but rather has a building setback. The waterfront-building setback for new development and redevelopment (tear downs) along Lake Sammamish shall be a minimum of 35 feet. The building setback can be reduced to 20 feet if the setback area is revegetated with primarily native vegetation. Establishment of a tree canopy is encouraged. No constructed structures other than those required for waterfront access/docks are allowed within the 20-foot setback. The applicant shall record on the title documentation from the City of Redmond confirming that the structure has been built under the flexible setback option and as such, the structure is conforming and the area within the 20 foot lakefront setback is to remain planted primarily with native vegetation (as described above). The City shall assist the applicant in determining appropriate native vegetation requested, and will coordinate with the applicant on the planting success the following year. New development adhering to the 35-foot setback and/or reconstruction that involves greater than 50% the value of existing improvements shall be required to plant 50% of the area in the minimum 20 foot building setback with native vegetation.

20D.150.60-030 Buffer and Setback Measurements

Shoreline buffers and waterfront-building setbacks are measured from the ordinary high water mark.

20D.150.70 In-Water Structures

20D.150.70-010 Purpose.

The purpose of this chapter is to provide standards and guidelines for the location and design of docks, marinas, boat launches, and similar in-water structures that have the potential to adversely impact natural shoreline resources.

20D.150-70-020 Applicability.

(1) All in-water structures shall comply with the standards of this chapter.

(2) Critical Areas Restrictions. In-water structures are also subject to the requirements of RCDG 20D.140.30-030, Alteration of Wetlands, and RCDG 20D.140.20-040, Alteration of Riparian Stream Corridors.

20D.150.70-030 Permitted In-Water Structures.

(1) In-water structures shall be allowed for the following purposes only:
- (a) A water-dependent use; provided that proposals for new in-water structures demonstrate that the use cannot reasonably be accommodated by an existing in-water structure or mooring buoy;
- (b) Public access;
- (c) Enhancement of fish or wildlife habitat, or water-quality enhancement;
- (d) Construction of crossings for roads, regional light rail transit systems, bikeways or trails, provided the installation complies with the additional standards of RCDG 20D.140, Critical Areas. Note that bridge crossings are not permitted across Lake Sammamish.

(2) Restricted Locations. In-water structures shall be located away from critical habitat areas and public access facilities as follows:
- (a) In-water structures shall not be located in salmon and steelhead spawning areas or freshwater clam beds.
- (b) Marinas, boat ramps, float plane facilities and community boat docks shall be located a minimum of 100 feet from critical wildlife nesting areas, natural lake beaches, and Category I and II wetlands. Greater buffers may be required pursuant to RCDG 20D.140.20-050, Alteration of Fish and Wildlife Habitat Conservation Areas.
- (c) Marinas, motorized boat ramps, floatplane facilities, and private docks or piers shall be located a minimum of 100 feet from a public swimming beach.
- (d) Marinas and boat ramps are prohibited on Bear and Evans Creeks. Marinas are prohibited on the Sammamish River.
- (e) Floats are allowed on Lake Sammamish only.

(3) Floating homes are prohibited.

20D.150.70-040 General Design Requirements for In-Water Structures.

(1) Proposals for in-water structures shall provide a pre-construction habitat evaluation, including an evaluation of salmon and steelhead habitat, freshwater clam habitat, and critical wildlife habitat, and a post-construction monitoring plan. They shall also include an evaluation of shoreline ecological functions and demonstrate how the project achieves no net loss of shoreline ecological functions.

(2) Proposals for in-water structures shall mitigate adverse impacts to fisheries, aquatic and wildlife resources, shoreline and native aquatic vegetation, and impacts to other natural shoreline systems. Mitigation may include, but is not limited to, joint use of existing structures, open decking on piers, replacement of non-native vegetation, installation of in-water habitat features, or restoration of shallow water habitat. All proposals for in-water structures, except for single-family residential docks and piers, shall, at a minimum, meet the requirements of RCDG 20D.140.20-060, Riparian Stream Corridor Performance Standards and RCDG 20D.140.30-040, Wetland Performance/Design Standards.

(3) Protection of Vegetation.

(a) In-water structures shall be designed and located to minimize shading of native aquatic vegetation. Removal of shoreline, riparian and aquatic vegetation shall be limited to the minimum extent necessary to construct the project. All upland and aquatic areas disturbed by construction shall be replanted with native vegetation.

(b) In-water structures shall include the installation of native aquatic plants, such as hardstem bulrush (*Scirpus acutus*), below the ordinary high water mark to a minimum width of 10' to mitigate the effects of introduced structures on wave action and erosion.

Significant trees shall be protected and replaced adjacent to the water body, pursuant to RCDG 20D.150.110, Tree Protection, Landscaping and Screening Within Shorelines.

(4) New or replacement in-water structures shall be designed and located such that natural hydraulic and geologic processes, such as erosion, wave action, or floods will not necessitate the following:

(a) Reinforcement of the shoreline or stream bank with new bulkheads or similar artificial structures to protect the in-water structure;

(b) Excessive dredging; or

(c) Dredging in salmon and steelhead spawning areas.

Replacement of in-water structures shall include proper removal of abandoned or other manmade structures and debris.

(5) All in-water structures shall be designed to allow for the free passage of water and fish. Intake pipes shall be screened to avoid impacting fish, consistent with the Washington Department of Fish and Wildlife's Screening Guidelines.

(6) In-water structures are not subject to the waterfront setbacks or building setbacks otherwise provided for in the Community Development Guide. Specific types of in-water structures are subject to side property line setbacks as identified in the specific sections that follow.

(7) In-water structures shall not interfere with the public's right of navigation. Where in-water structures are located adjacent to public piers, public beaches, or other public open space, such structures shall provide or enhance public access commensurate with the scale of the project's impacts to public access.

(8) In-water structures shall be designed to minimize aesthetic impacts to the shoreline. In-water structures, excluding mechanical equipment associated with watercraft, shall consist of nonreflective or low-reflective material.

(9) Bulk storage of gasoline, oil and other petroleum products over the water or in the water is prohibited.

20D.150.70-050 Piers, Docks and Floats.

Piers and docks are prohibited in the Sammamish River, Bear Creek, and Evans Creek. Where new or replacement piers, docks, floats or boardwalks are allowed, they shall meet the following additional conditions:

(1) Demonstrated Need.
   (a) Where a proposed pier or dock is located within 100 feet of an existing pier or dock, the proposal shall demonstrate that a combined or shared facility is not available or feasible, or would not serve to reduce environmental impacts to shoreline resources. This shall not apply to piers and docks accessory to single family residences. Easements or covenants assuring joint use and specifying maintenance responsibility shall be provided with a joint application.
   (b) The proposal shall demonstrate that other means, such as floating moorage buoys or boat lifts, cannot accommodate the use or are not available or are infeasible.

(2) Number of Piers.
   (a) No lot shall have more than one pier, dock or float structure, except as provided below:
      (i) An additional pier, dock or float structure is allowed where such structure is open to, and accessible to the public.
      (ii) A residential lot may include one float in addition to one pier or one dock.
   (b) Finger piers supported by pilings are prohibited. Finger floats or docks are allowed.

(3) Each pier and float structure shall meet the length, width, height and area restrictions specified in this section.

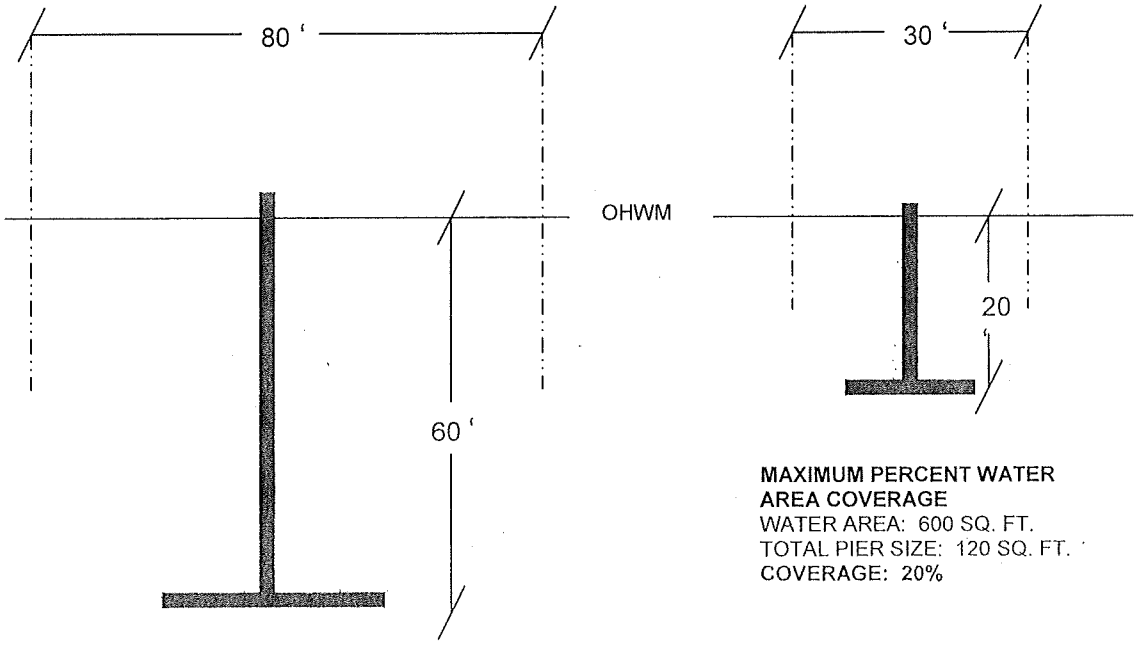
(4) Floats. Where allowed, residential floats or over-water platforms may not exceed 60 square feet in area, except that where a lot does not have a pier or dock, floats may not exceed 80 square feet. Floats and over-water platforms must be located no closer than five feet from a property line, and no further waterward than the waterward extent of the primary pier or dock, or than the point where the water depth reaches 13 feet, whichever is less.

(5) Maximum Coverage. The maximum total water coverage by piers, docks and floats per lot shall be as follows (see Figures 1 and 2):

(a) In single-family residential zones: The lesser of 20 percent of the area bounded by the line of ordinary high water, the waterward projection of the side property lines, and the waterward extremity of the pier projected parallel to the line of ordinary high water or 480 square feet. Small finger docks attached to the main pier and floats shall be included in this maximum area.

(b) In multiple-family residential zones: The lesser of 25 percent of the area bounded by the line of ordinary high water, the waterward projection of the side property lines, and the waterward extremity of the pier projected parallel to the line of ordinary high water or 960 square feet. Small finger docks attached to the main pier and floats shall be included in this maximum area.

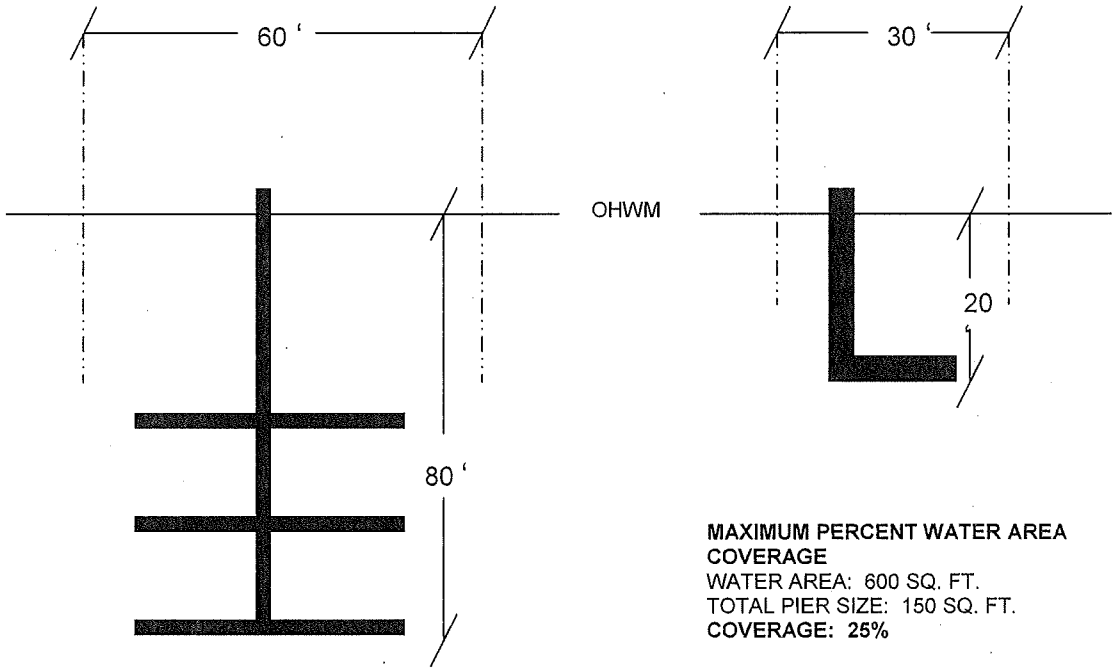
Figure 1: Example Maximum Pier Coverage
Single Family Residential Zones



MAXIMUM PIER AREA COVERAGE
WATER AREA: 4,800 SQ. FT.
TOTAL PIER SIZE: 480 SQ. FT.
COVERAGE: 10%

MAXIMUM PERCENT WATER AREA COVERAGE
WATER AREA: 600 SQ. FT.
TOTAL PIER SIZE: 120 SQ. FT.
COVERAGE: 20%

Figure 2: Example Maximum Pier Coverage
Multi-Family Residential Zones

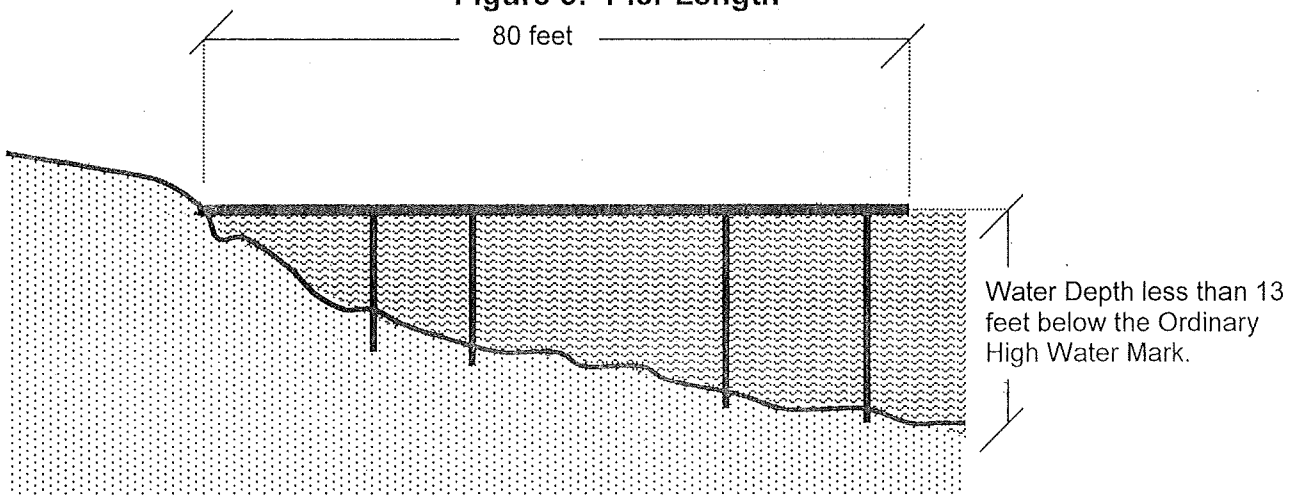


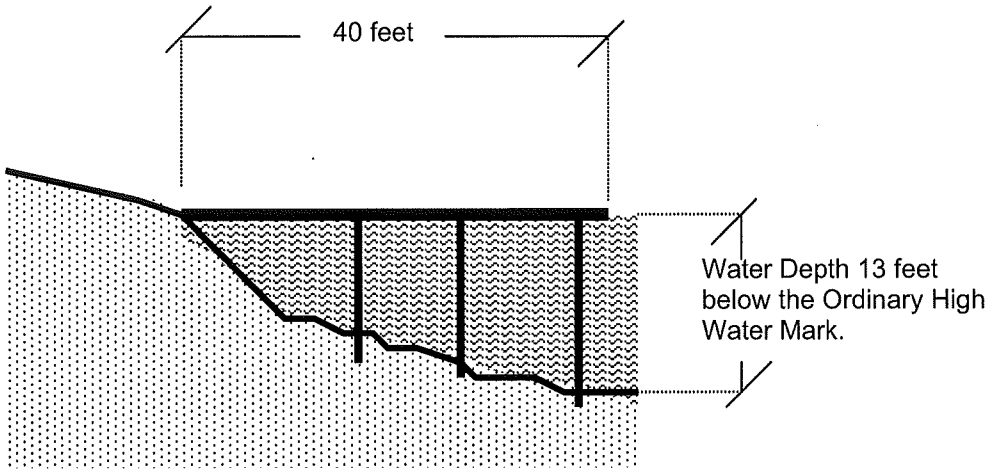
MAXIMUM PIER AREA COVERAGE
WATER AREA: 4,800 SQ. FT.
TOTAL PIER SIZE: 960 SQ. FT.
COVERAGE: 20%

MAXIMUM PERCENT WATER AREA COVERAGE
WATER AREA: 600 SQ. FT.
TOTAL PIER SIZE: 150 SQ. FT.
COVERAGE: 25%

(6) Pier Length. The maximum pier or dock length from the shoreline shall be the lesser of 80 feet, or a length necessary to reach a water depth at the end of the pier of 13 feet below ordinary high water (see Figure 3).

Figure 3: Pier Length





(7) Pier Width. No pier or dock may exceed six feet in width. Floats may not exceed ten feet in width.

(8) Pier Height.
- (a) No pier or dock shall exceed four feet in height above ordinary high water.
- (b) Railings, storage bins, signs, boat lifts and other features and structures accessory to piers, docks and floats shall have a height limit of four feet above the deck surface.
- (c) Public access features accessory to a public pier or dock, such as seating areas or interpretive signs, shall not project more than four feet above the deck surface of a pier or dock, except that covered public shelters shall not exceed 12 feet in height above the deck surface.
- (d) Skirting, decking lower than one vertical foot above ordinary high water, or similar structures around docks and floats are not allowed.

(9) Pier Setbacks. The minimum setback from any side property line is ten feet, except that shared facilities may be located adjacent to or on both sides of a property line upon agreement of the affected property owners.

(10) Any utility lines serving a pier or dock shall be located below the pier deck or underground.

(11) Lighting for piers and docks shall be the minimum necessary to locate the dock at night, shall be designed to minimize glare, and shall incorporate cut-off shields or otherwise shall be directed downward toward the dock. Piers, docks and floats that are not lighted shall incorporate reflectors for nighttime visibility.

(12) Pilings and Decking. Piers, docks and pilings shall minimize shading of the water and habitat for salmonid predators by minimizing piling and decking area, as follows:

(a) Piers shall use steel pin pilings where wave action and substrate allow. Piers using traditional pilings shall use the minimum number of pilings necessary to support the pier and maximize the distance between pilings.

(b) The decking of all piers and docks shall be designed to allow 50% light passage. This may be accomplished through grated decks, light prisms, or other means.

(c) Piers shall be designed to span, without pilings, aquatic areas where summer water depths range between 3.3 to 6.6 feet deep.

(d) Pier platforms shall be designed and located to avoid or reduce shallow water (less than nine feet deep) shading.

(e) Preferred construction techniques include vibratory pile drivers rather than conventional hammer pile drivers.

(13) Wooden components that will be in contact with standing water or floodwaters shall not contain creosote, pentachlorophenol, or similar toxic substances. Use durable, non-toxic materials for wooden components protection. Structures shall be made out of materials that have been approved by applicable state agencies.

(14) New residential development of two or more dwellings shall provide joint use or community dock facilities rather than individual docks for each residence, when feasible.

20D.150.70-060 Marinas and Boat Launches.

(1) Marinas in Publicly Owned Facilities. Marinas, boat ramps and boat launch sites located in publicly owned facilities such as parks must be available to the general public with no preference for private clubs or groups.

(2) All proposals for marinas and boat launching facilities that may require periodic removal of aquatic vegetation shall provide a comprehensive aquatic vegetation management and monitoring plan.

(3) Marinas and boat launching facilities shall be located no closer than 50 feet from another marina, boat launch, or dock.

(4) Marinas, boat ramps and launching sites shall be designed and located according to the following criteria:

(a) They shall not interfere with existing in-water recreational activities;

(b) They shall not significantly damage fish and wildlife habitats;

(c) They shall be designed to achieve no net loss of shoreline ecological functions.

(d) They shall be aesthetically and functionally compatible with the shoreline area and nearby uses. Aesthetic impacts shall be avoided, or if not possible, aesthetic impacts shall be mitigated.

(e) They shall be located only at sites with suitable environmental conditions, shoreline configuration, access, and neighborhood uses.

(5) Boat launch ramps and vehicle access to the ramps shall be paved. Access to the ramp and parking for the ramp shall be located a sufficient distance from any frontage road to provide safe maneuvering of boats and trailers, and shall not be located through public beaches, or through critical habitat areas, including, but not limited to, Category I and II wetlands.

(6) Boat launch ramps shall be designed to minimize areas of landfill or shoreline protective structures.

(7) All facilities shall meet health, safety, and welfare requirements of appropriate state agencies.

(8) Covered moorage is prohibited.

(9) Commercial marinas are prohibited. Recreational marinas are permitted and shall provide public access.

(10) If a recreational marina allows live-aboard vessels, a Shoreline Conditional Use Permit shall be required.

(11) Marinas and boat launches shall not interfere with the rights of navigation.

(12) Vessels shall be restricted from extended mooring on waters of the state except as allowed by applicable state regulations and unless a lease or permission is obtained from the state and impacts to navigation and public access are mitigated.

20D.150.70-070 Water-Oriented Accessory Structures.

Accessory structures that are water-oriented and accessory to a shoreline or water-dependent use shall meet the following standards.

(1) Water-oriented accessory structures are not subject to the waterfront building setbacks or side yard setbacks of the underlying zone (see RCDG 20C.30.25), unless otherwise noted below.

(2) Boathouses and similar water-oriented structures may extend no further waterward than the ordinary high water line. Such structures shall meet

the minimum side yard setback required in the underlying zone, unless they are a joint use facility that serves more than one adjoining waterfront lot.

(3) Water-oriented accessory structures shall not exceed ten feet in height and 250 square feet in area. However, multiuse structures that include storage and changing rooms may be a maximum of 500 square feet. The area of such covered structures shall be included in the maximum lot coverage and impervious surface limits of the zone in which they are located.

(4) Uncovered boat lifts and similar equipment or structures used for watercraft may be located waterward of the ordinary high water mark to the waterward limit of the associated pier or dock. Such structures associated with docks shall have a height limit of four feet above ordinary high water. Such structures associated with piers shall have a height limit of four feet above the deck of the pier. Where a boatlift is used in lieu of a pier, it may extend waterward of the ordinary high water mark, provided it does not exceed four feet above the OHWM in height and meets the side yard setback of the underlying zoning district. Covered boat lifts shall not exceed 96 inches in height as measured from the ordinary high water mark.

(5) Joint Use Accessory Structures. Water-oriented accessory structures that serve more than one adjoining waterfront lot may be constructed with a zero side setback from the common boundary, provided that the owners of such property enter into a reciprocal use agreement recorded with the King County Auditor.

20D.150.80 Shoreline Protective Structures

20D.150.80-010 Purpose.

The purpose of this chapter is to provide standards and guidelines for the location and design of bulkheads, levees and other shoreline protective structures that have the potential to adversely impact the shoreline natural environment. New development, however, should be located and designed to avoid the need for future shoreline stabilization to the extent feasible.

20D.150.80-020 Permitted Shoreline Protective Structures.

(1) New and replacement shoreline protective structures shall be allowed under the following circumstances only:

(a) A geotechnical analysis prepared by a licensed professional engineer demonstrates that shoreline stabilization is necessary to prevent damage to or loss of the following facilities, due to wave

action, and no practicable alternative exists. The geotechnical analysis shall evaluate on-site drainage problems away from the shoreline edge before considering structural shoreline stabilization.

(i) Existing structures, where the structure is a single-family residence or where the fair market value of the structure to be protected equals or exceeds the construction cost of the shoreline protective structure;
(ii) Existing private roads and bridges;
(iii) Public roads and bridges, and regional light rail transit facilities; or
(iv) Public Shoreline access facilities.

(b) Shoreline structures are necessary to protect or enhance water quality or aquatic habitat; or

(c) Shoreline structures are necessary to remedy an emergency situation; and

(d) Shoreline structures, except temporary emergency construction, comply with the requirements of 20D.150.80-020(2) through (3), and 20D.150.80-030, Design Requirements for Shoreline Protective Structures.

(e) Erosion is not being caused by upland conditions, such as the loss of vegetation and drainage.

(f) Nonstructural measures, planting vegetation, or installing on-site drainage improvements are not feasible or not sufficient.

(2) Shoreline protective structures, including replacement structures, shall not be located in salmon and steelhead spawning areas or freshwater clam beds, except under the following circumstances:

(a) A hydraulic analysis demonstrates that the protective structure will have no adverse impacts on long-term stream or lake hydraulics affecting salmon and steelhead spawning areas or freshwater clam beds;

(b) A biological inventory and analysis demonstrates that impacts to salmonids and freshwater clams are negligible; and

(c) For non-structural solutions, the proposed measures are necessary to protect or rehabilitate eroding shorelines, and are designed to protect or restore water quality and aquatic habitat.

(3) Shoreline protective structures shall not be allowed where they will result in any of the following:

(a) Increased or expanded residential development in undeveloped areas of the floodplain or upland of ecologically intact shorelines;

(b) Creation of dry land waterward of the ordinary high water mark of a lake, stream or wetland;

(c) Loss of significant flood storage capacity in the floodplain; or

(d) Deflection or constriction of flood flows to a degree which will result in significantly increased flood heights on unprotected properties.

(e) Loss of shoreline ecological functions.

(4) An existing shoreline stabilization structure may be replaced with a similar structure if there is a demonstrated need to protect principal uses or structures from erosion caused by currents or waves, provided the following is met:

(a) The replacement structure shall be designed, located, sized, and constructed to assure no net loss of ecological functions;

(b) Replacement walls or bulkheads shall not encroach waterward of the OHWM or existing structure unless the residence was occupied prior to January 1, 1992 and there are overriding safety or environmental concerns. In such cases, the replacement structure shall abut the existing shoreline stabilization structure.

(c) Soft shoreline stabilization measures that provide restoration of shoreline ecological functions may be permitted waterward of the OHWM.

(d) For the purposes of this section standards on shoreline stabilization measures ,"replacement" means the construction of a new structure to perform a shoreline stabilization function of an existing structure which can no longer adequately serve the purpose. Additions to or increases in size of existing shoreline stabilization measures shall be considered new structures.

(5) Breakwaters and jetties are prohibited.

20D.150.80-030 Design Requirements for Shoreline Protective Structures.

(1) All proposals for new and replacement shoreline protective structures, except those necessary to remedy an emergency situation, shall include all of the following:

(a) An evaluation by a licensed professional engineer or qualified geologist who has professional expertise about the region and local shoreline geology and processes of the hazard to be addressed, the need for the shoreline protective structure by estimating time frames and rates of erosion, and the feasibility of non-structural alternatives, such as the relocation of structures or biotechnical solutions, to address the particular hazard.

(b) A hydraulic analysis prepared by a licensed professional engineer that sufficiently describes the proposal's effects on stream or lake hydraulics, including potential increases in base flood elevation, changes in stream or wave velocity, changes in groundwater movement, the potential for redirection of the normal flow or currents of the stream or lake, and potential for resultant erosion at other properties adjacent to the stream or lake.

(c) A biological inventory and analysis prepared by a professional biologist that sufficiently describes the proposal's effects on fisheries, aquatic life and wildlife. This shall include an evaluation of shoreline ecological functions that describe how the project will achieve no net loss of shoreline ecological functions.

(d) Where mitigation is required, a monitoring program pursuant to RCDG 20D.140.10-150, Monitoring Program and Contingency Plan.

(2) Structural solutions to stabilize or reinforce shorelines shall not be allowed, unless it is demonstrated that planting of vegetation, biotechnical measures, relocation or re-design of affected structures, or other non-structural solutions are infeasible or ineffective in preventing or correcting significant erosion. This shall apply to new, replacement, repair and emergency protective structures. Replacement or repair of bulkheads shall not be allowed except where it can be demonstrated that replacement with a non-structural solution is ineffective or infeasible. In general, hard armoring solutions are not permitted unless a geotechnical report pursuant to this section confirms that there is a significant possibility that such a structure will be damaged within three years as a result of shoreline erosion in the absence of such hard armoring measures, or where waiting until the need is that immediate, would foreclose the opportunity to use measures that avoid impacts of ecological functions.

(3) Structures shall have no long-term detrimental effects on stream or lake hydraulics, including increased wave energy or erosion at other properties, or on fisheries, aquatic life and wildlife.

(4) Shoreline protective structures shall be designed to the minimum size, height, bulk and extent necessary to remedy the identified hazard. Flood control dikes and levees shall be limited to the minimum height required to protect existing development in the floodplain from the design flood, as identified in the King County Flood Hazard Reduction Plan.

(5) Methods selected for shoreline protection shall be appropriate for the length and configuration of the existing shoreline, erosional conditions at the site, the natural condition and habitat functions of the shoreline, and adjacent land uses, particularly single-family residences and public access.

(6) Where structural solutions to shoreline protection are allowed, structures shall meet the following standards:

(a) Structures shall be located landward of the ordinary high water mark, except as provided below:

(i) Where a bulkhead exists, the toe of a replacement bulkhead shall not be located waterward of the toe of the existing bulkhead.

(ii) To the extent necessary to protect the toe of a slope with a gradient of 40% or greater, a bulkhead may extend waterward of the ordinary high water mark up to a maximum of six feet beyond the ordinary high water mark.

(iii) Flood control structures may extend waterward of the ordinary high water mark, but shall be located landward of the floodway and any wetlands associated with Class I streams or Lake Sammamish.

(b) Filling behind bulkheads shall be the minimum amount and extent necessary to install the protective structure. Fill material must be nondissolving and nondecomposing, and shall be free of materials that would be detrimental to water quality. The elevation of the existing shoreline in the vicinity of the protective structure shall not be raised more than four feet, except where necessary for an approved flood control structure such as a levee or dike.

(c) The existing contour of the natural shoreline shall be generally followed. Levees and dikes shall, where adjacent lands are within the same ownership or undeveloped, be set back from the ordinary high water mark to maintain natural bank gradients.

(d) Vertical wall or solid slab bulkheads shall not be allowed, unless it is demonstrated that riprap bulkheading or an open structure is infeasible and ineffective. This shall apply to new, replacement, repaired and emergency protective structures. Structures shall be designed with a tiered or sloping face, or similar design measure to minimize the impact of wave action.

(e) Riprap faces shall be constructed to a stable slope and shall be of a material of sufficient size to be stable. All riprap areas shall be inter-planted with native shrubs and groundcover of native species or erosion-control grasses.

(f) Rock used for shoreline protective structures shall be composed of clean, angular material of a sufficient size to prevent its being washed away. Rock used for toe protection shall be smooth, well-rounded gravel material suitable for use by spawning salmon and steelhead. Alternatively, spawning gravel could be added on top of toe rock if toe protection needs to be more sufficient to structurally support the weight of the larger rock required on the face of the structure.

(g) Structures shall incorporate the installation of native aquatic plants, such as hardstem bullrush (Scirpus acutus), below the ordinary high water mark to mitigate the effects of introduced structures on wave action and erosion.

(7) Shoreline protective structures within shorelines and other water bodies used by or that have the potential to be used by salmonids shall provide for adequate upstream and downstream salmonid migration.

(8) Shoreline protective structures shall not interfere with the public's right of navigation. Where shoreline protective structures located on the Sammamish River or Lake Sammamish are wholly or partially publicly funded, such structures shall provide public access if none exists, or enhance existing public access, commensurate with the scale of the project's impacts to public access.

(9) Shoreline protective structures shall be designed to minimize aesthetic impacts to the shoreline.

(10) Protection of Vegetation. Removal of shoreline, riparian and aquatic vegetation shall be limited to the minimum extent necessary to construct the project. Significant trees and other shoreline or riparian vegetation shall be protected and replaced adjacent to the water body, pursuant to RCDG 20D.150.110, Tree Protection, Landscaping and Screening Within Shorelines. All upland and aquatic areas disturbed by construction shall be replanted and restored pursuant to RCDG 20D.140.30-040 Wetlands Performance/Design Standards and 20D.140.20-060, Riparian Stream Corridor Performance Standards.

(11) Proposals for bioengineered or other non-structural methods involving erosion-control plantings shall include a five-year maintenance plan to ensure the long-term survival of vegetation.

(12) All proposals for shoreline protective structures shall mitigate adverse impacts to fisheries, aquatic and wildlife resources, shoreline vegetation, and impacts to other natural shoreline systems. Mitigation may include, but is not limited to, relocation of threatened structures, use of natural vegetation for bank stabilization, replacement of native vegetation, installation of in-water habitat features, replacement of gravel substrate, or restoration of shallow water habitat. At a minimum, mitigation shall meet the requirements of RCDG 20D.140.30-040, Wetlands Performance/Design Standards and 20D.140.20-060, Riparian Stream Corridor Performance Standards.

(13) All proposals for shoreline protective structures shall include provisions for adequate erosion control, emergency erosion control, and protection of water quality, fisheries and aquatic life during construction.

(14) All material resulting from excavation or dredging during construction shall be disposed of in a manner that prevents the material entering into a water body through erosion or floodwaters.

(15) Maintenance corridors and service roads accessory to a shoreline protective structure shall be the minimum size necessary to safely accomplish maintenance and repair; and shall be located, where possible, in areas already disturbed or away from significant trees, and where siltation and erosion impacts will be minimal.

20D.150.90 Clearing, Grading, Landfilling and Excavation Within Shorelines.

Clearing, grading, landfilling and excavation within the shoreline jurisdiction shall also meet all clearing and grading regulations specified in RMC Chapter 15.24, Clearing, Grading, and Stormwater.

20D.150.90-010 Prohibited Clearing and Grading.

The following clearing and grading activities are prohibited within the shoreline jurisdiction:

(1) Clearing or grading within shoreline buffers, except as part of a buffer restoration or mitigation plan and except as otherwise permitted under 20D.150.60-010(2) through (5).

(2) Clearing or grading within Lake Sammamish waterfront building setbacks, except for the purpose of habitat restoration and enhancement or natural beach enhancement or protection, or the installation of residential docks, shoreline protective structures, or public access, where allowed.

20D.150.90-020 Prohibited Landfilling.

The following landfilling activities are prohibited within the shoreline jurisdiction:

(1) Landfilling that will cause a significant change in the shoreline, or cause a significant reduction of the normal surface area of a body of water at ordinary high water; and

(2) Landfilling within salmon and steelhead spawning areas, or where the drift of fill materials is likely to adversely affect spawning areas.

20D.150.90-030 Permitted Landfilling and Excavation.

Landfilling and excavation under the following circumstances may be permitted:

(1) In the High Intensity/Multi-Use and Shoreline Residential shoreline environments.

(2) In the Aquatic, Natural, and Urban Conservancy shoreline environments, for the following uses only:
   (a) Enhancement or restoration of fish or wildlife habitat;
   (b) Shoreline protective structures;

(c) In conjunction with boat launches, residential docks and public access facilities;
(d) Natural beach enhancement or protection to remedy or prevent erosion of a natural beach or public swimming beach; provided that beach enhancement does not create additional dry land;
(e) In conjunction with roadways and regional light rail where there is a demonstrated public need, pile or pier supports are proven infeasible; and no practicable alternative location exists;
(f) In conjunction with floodway- or floodplain-dependent structures such as dams or diversions for flood control or fisheries enhancement, or flood control structures such as levees and pumping stations, where allowed;
(g) Storm water conveyance or treatment facilities.

(3) Fill waterward of the OHWM for any use except ecological restoration should require a Conditional Use Permit.

20D.150.90-040 Solid Waste Disposal.
Landfills for solid waste disposal are prohibited within the shoreline.

20D.150.90-050 Quarrying and Mining Prohibited.
Quarrying and mining, including mining by the use of dredging techniques, are not permitted within the shoreline. (Formerly 20D.150.10-080)

20D.150.90-060 Design and Construction Standards in Shorelines.
Any clearing, grading, landfill or excavation within the shoreline jurisdiction shall meet the additional construction standards specified in this section. Shoreline buffers are defined in 20D.150.60, Shoreline Buffers and Setbacks. Waterfront building setbacks are defined in 20D.150.60-020, Lake Sammamish Setback. The shoreline jurisdiction is defined in 20D.150.20, Shoreline Jurisdiction.

(1) Landfills and excavations shall not cause significant direct or indirect damage to shoreline vegetation, water quality, stream flow, fish habitat, aquatic life or wildlife. Landfills and excavations shall achieve no net lot of shoreline ecological functions.

(2) Landfills and excavations shall not significantly reduce the aesthetic and visual qualities of the shoreline, nor significantly reduce public access to the shoreline or significantly interfere with shoreline recreational uses.

(3) The extent of the landfill shall be the minimum amount and extent necessary to accomplish the purpose for the fill under subsection 20D.150.90-030 of this section.

(4) Landfilling shall not create unstable land conditions, cause subsidence, cause land to rise, or otherwise jeopardize public safety and property.

(5) Fill material shall consist of clean materials, free of toxins or other wastes that may degrade water quality or shoreline habitat.

(6) All proposals for landfills within the floodplain shall provide confirmation that an equal water storage capacity is maintained and that no significant direct or indirect damage to the watercourse, water quality, stream flow or aquatic life will occur, and compliance with the development standards for flood hazard areas as outlined in RCDG 20D.140.40-030.

(7) Any clearing or grading within a shoreline buffer shall also meet the requirements for stream buffers and wetland buffers in the City's critical areas regulations, RCDG 20D.140.30-020, Wetland Buffers and 20D.140.20-020, Stream Buffers, including 20D.150.60-010, Shoreline Buffers.

(8) All landfilling in the floodplain is also subject to the requirements of RCDG 20D.140.40-030, Flood Hazard Areas – Development Standards.

(9) Natural Beach Enhancement and Protection.
- (a) Materials used in landfills for natural beach enhancement and protection shall be equivalent in form, size and function to beach material that naturally occurs at the site or other comparable natural beach site.
- (b) Beach enhancement and protection shall incorporate planting of native emergent and upland vegetation, where such vegetation would naturally occur and where planting would promote beach stabilization.
- (c) Natural beach enhancement and protection shall not:
  - (i) Detrimentally interrupt littoral drift, or redirect waves, current or sediment to other sites.
  - (ii) Extend waterward more than the minimum amount necessary to achieve a reasonable level of beach stabilization.
  - (iii) Result in steep contours that trap drifting sediments, impede pedestrian access, or that result in unstable slopes.

(10) Protection and Replacement of Vegetation.
- (a) Within waterfront building setbacks, areas disturbed by clearing, grading or excavation for shoreline protective structures, docks and other improvements allowed within waterfront building setback (see RCDG 20C.30.25-080(5), Waterfront Building Setbacks) shall be revegetated to ensure no net loss of shoreline ecological functions.
- (b) Vegetation Restoration. Vegetation remaining after project construction, including areas disturbed by clearing, grading or excavation within shoreline buffers shall be restored to its native

condition, equal alternative or an improved condition, pursuant to RCDG 20D.140.30-040, Wetlands Performance/Design Standards and RCDG 20D.140.20-060, Riparian Stream Corridor Performance Standards.

(c) Any removal of trees within the shoreline jurisdiction shall also meet the requirements of RCDG 20D.150.110, Tree Protection, Landscaping and Screening Within Shorelines.

20D.150.100 Fences

20D.150.100-010 Prohibited Locations

Fences are prohibited in stream buffers.

20D.150-110-020 General Regulations

Fences in residential and other zones are regulated in RCDG 20D.50, Fences.

20D.150.110 Tree Protection, Landscaping and Screening Within Shorelines.

20D.150.110-010 Tree Protection

In addition to RCDG 20D.80, Landscaping and Tree Protection, all development within the shoreline jurisdiction shall comply with the additional tree protection, landscaping and screening requirements of this section. Where there is a conflict between regulations, the more restrictive regulation shall apply.

(1) Tree Protection Requirements. To maintain the ecological functions that trees provide to the shoreline environment, including air quality, wildlife habitat, temperature and glare attenuation, and aquifer recharge, significant trees shall be retained as follows:

(a) Consistent with 20D.180.20-070, Tree Protection Standards, a minimum of 35% of the existing significant trees shall be preserved on site.

(b) Within the waterfront building setback, significant trees shall be retained, except where the tree is dead, diseased, dying or hazardous.

(c) Within the shoreline buffer, trees shall be removed only where allowed under RCDG 20D.140.10-160, Buffer Areas, and 20D.140.20-020, Stream Buffers.

(d) Within the shoreline jurisdiction, significant trees shall not be removed or topped for the purpose of creating views. Non-destructive thinning of lateral branches to enhance views is allowed.

(2) Tree Replacement. Significant trees that are removed, or significant trees designated for protection that are irreparably damaged or destroyed shall be replaced. Replacement trees shall be planted as follows:

(a) Each existing significant tree shall be replaced with two new trees.

(b) For each additional three inches d.b.h. above six inches d.b.h., one additional replacement tree shall be planted, up to six trees.

(c) Where on-site tree replacement is not feasible, the Administrator may allow up to 60% of the required replacement trees to be planted off-site, pursuant to RCDG 20D.80.20.080, Tree Replacement. Replacement trees shall be planted within or adjacent to the shoreline jurisdiction. Trees planted in proposed landscaping of the site perimeter, vehicle use areas, shoreline buffers and other areas of the site may be counted as replacement trees.

(d) See RCDG 20D.80.20-080(5) for size, species and condition of replacement trees.

(3) Trees planted within shoreline public open space areas and public trail corridors shall be maintained only under the supervision of Redmond Parks Department.

20D.150.110-020 Landscaping and Screening in Shorelines

(1) Landscaping Within Stream Buffers.
Within stream buffers, landscaping shall meet the additional requirements of RCDG 20D.140.30-040, Wetlands Performance/Design Standards in RCDG 20D.140.20-060, Riparian Stream Corridor Performance Standards.

(2) Landscape Area Requirements. In Business (CO, CB, NC & GC) zones, 25% of the site shall be landscaped. In the Business Park Zone, 22% of the site shall be landscaped if the site is less than one acre and 20% of the site shall be landscaped if the site is one acre or larger in size. In Industrial (MP & I) zones, 20% of the site shall be landscaped if the site is less than one acre and 18% of the site shall be landscaped if the site is one acre or larger in size. In multi-family residential zones (R12, R18, R20 & R30), 50% of the site shall be landscaped. Vegetated buffers may be used to meet the site area landscaping requirements.

(3) Screening of Storage and Service Areas.

(a) All outdoor storage areas shall be screened on all sides, pursuant to 20D.120.10-040, Screening.

(b) All vehicle use areas located adjacent to, or visible from public parks or open space, the water body, or shoreline trails or public access features shall be screened from the water body, shoreline trails and public access features. Screening is intended to create a

visual separation that is not necessarily 100% sight-obscuring. Plantings shall be evergreen or a mixture of deciduous trees with large shrubs and groundcover interspersed with trees and/or a decorative wall or fence. Plantings shall include a minimum of 60% evergreen trees and shrubs.

(c) Rooftop mechanical equipment shall be screened from the water body, shoreline trails and public access features. Rooftop screening shall be at least as high as the equipment being screened, shall be of a material and design compatible with the building, and shall surround the building. Screening shall comply with the additional standards of 20D.120.20-010, Rooftop Mechanical Equipment Screening.

(d) Garbage and trash receptacles shall be screened from the water body, shoreline trails and public access features. Screening shall be of a material and design compatible with the associated structure and shall be at least as high as the receptacle. Screening shall meet the standards of 20D.120.20-030, Garbage and Trash Receptacle Screening.

(4) Use of Native Plants. Landscaping within the shoreline jurisdiction shall incorporate a minimum of 50% native plants. All plantings within the shoreline buffer shall consist of native plant material. Native plantings are encouraged to be placed closest to the waterbody.

20D.150.120 Lighting Within Shoreline Jurisdiction.

(1) Lighting plans shall be submitted with development proposals to demonstrate how the proposal complies with the City's "dark skies" policies.

(2) Lighting shall be designed and constructed to minimize glare and prevent glare and light from intruding on neighboring properties.

(3) Lighting for active outdoor recreational uses shall not be illuminated by artificial light from 10:00 p.m. to 8:00 a.m. Lighting shall incorporate cut-off shields, and be mitigated through screening plantings of native conifers.

(4) See RCDG 20D.90 for additional citywide lighting standards.

20D.150.130 Regulations for Shoreline Recreation

(1) Preference shall be given to shoreline recreational developments related to enjoyment and use of water and shorelines of the state.

(2) Public Access. See RCDG 20D.150.180 for public access requirements.

(3) Motorized Vehicles. The use of motorized vehicles for recreational purposes within shoreline buffers and waterfront building setbacks is prohibited. The use of motorized vehicles within the shoreline, except golf carts associated with a golf course, shall be limited to public streets.

(4) Motorized Boats.
- (a) Power-operated boats and jet skis are prohibited in Bear and Evans Creeks.
- (b) Jet skis are prohibited on the Sammamish River.
- (c) Power-operated boats on the Sammamish River shall not exceed the speed limit established in RMC Chapter 14.16, Operation of Vessels and Personal Watercraft.
- (d) Power-operated boats and jet skis on Lake Sammamish operated within 100 yards of the shoreline, swimming area, dock or restricted area shall not exceed the speed limits established in RMC Chapter 14.16, Operation of Vessels and Personal Watercraft.

(5) Boat launching facilities are not permitted on Bear and Evans Creeks.

(6) Harassment of, or taking of any wildlife species within shoreline buffers or shoreline setbacks, other than fishing under WDFW license or treaty is prohibited.

(7) Public recreational development facilities shall be located, designed, and operated in a manner to assure no net loss of shoreline ecological functions or ecosystem-wide processes results.

(8) Playfields, ballfields, golf courses and similar large-scale outdoor recreational uses located within the shoreline jurisdiction shall meet the additional standards below:
- (a) No more than 20 percent (20%) of the site shall be covered with buildings, parking, and other impervious surfaces.
- (b) Buildings and parking areas shall be sited in locations least likely to block or interrupt scenic vistas from public open spaces, public roadways and surrounding residential areas, and to minimize impacts on uses on adjacent properties.
- (c) Parking and storage areas shall be screened from the shoreline, per RCDG 20D.80.10, Landscaping and Screening, and RCDG 20D.120, Outdoor storage.
- (d) Freestanding signs shall have a maximum height of five feet.
- (e) No uses shall be externally illuminated by artificial light except for parking lot lighting, safety lighting near buildings, and outdoor recreational uses. Outdoor recreational uses shall not be illuminated by artificial light from 10:00 p.m. to 8:00 a.m. All lighting

shall be designed and constructed to minimize glare and prevent glare and light from intruding on neighboring properties.

(9) Large-scale outdoor recreational uses located within the Agriculture and Urban Recreation zoning districts shall meet the additional standards contained in RCDG 20C.20.25-010, Special Use Standards for Recreational Uses.

(10) Amusement parks, water slides, miniature golf courses, motorized or non-motorized race tracks, and uses similar to any of these uses shall be prohibited within the shoreline jurisdiction.

(11) Trails and other public access facilities shall meet the additional standards contained in RCDG 20D.150.180, Shoreline Access.

(12) Recreational structures located waterward of the ordinary high water mark are regulated by 20D.150.70, In-Water Structures.

(13) See RCDG 20D.110 for additional citywide Open Space and Recreation standards.

(14) Commercial recreational development shall be consistent with 20D.150.50-040(5), Commercial, Wholesale, and Retail Uses.

20D.150.140 Parking Facilities Within Shorelines.

Parking facilities associated with all uses other than single-family residential within the shoreline jurisdiction shall comply with the following additional requirements:

(1) Parking facilities are prohibited in the Lake Sammamish waterfront building setbacks established in 20D.150.60-020, Lake Sammamish Setback.

(2) Parking facilities are prohibited within shoreline buffers established in 20D.150.60-010, Shoreline Buffers, unless in a location where the Shoreline Environment is High Intensity/Multi-Use, and where clearing, grading, disturbance or alteration already exists within the outer and/or inner buffer.

(3) Parking facilities within the shoreline jurisdiction shall be located upland of, or beside buildings. Parking, loading bays and other vehicle use areas shall be screened from the shoreline pursuant to RCDG 20D.150.110, Tree Protection, Landscaping and Screening Within Shorelines.

(4) Parking Bonus for Shoreline Access Parking. Additional parking stalls above the maximum number allowed under Table 20D.130.10-020(2), Required Off-Street Parking, shall be granted to properties adjacent to shoreline trails and shoreline trail connections for the dedication of parking for shoreline trail users.

(a) One additional parking stall above the maximum shall be allowed for each parking stall dedicated to public use. One-half (.5) stall above the maximum shall be allowed for each cooperative parking stall shared between private and public users. Dedicated or cooperative stalls shall be designated as public with signs.

(b) All parking stalls dedicated to or shared with the public shall be exempt from the maximum parking spaces under Table 20D.130.10-020(2), Required Off-Street Parking.

(5) See RCDG 20D.130 for additional citywide parking regulations.

20D.150.150 Signs

20D.150.150-010 Signs Regulations in Shoreline Jurisdiction

(1) Signs within the shoreline jurisdictions, except directional, address and interpretive signs, shall be oriented away from, or screened from public shoreline areas and the water body and shall minimize glare into fish and wildlife habitats, buffers, shoreline views, and public access areas.

(2) The maximum permitted height of a freestanding sign within the shoreline jurisdiction is five feet.

(3) See RCDG 20D.160 for additional citywide sign regulations.

20D.150.150-020 Amortization of Off-Premise Signs Within the Shoreline.

(1) Any off-premise sign, excluding sandwich board signs, located within the shoreline jurisdiction that was legally established and in use prior to the effective date of this section may continue to be used for five years from the effective date, provided that the off-premise sign is in compliance with all regulations, including sensitive areas and shorelines regulations, in effect when the sign was legally established.

(2) After the five-year amortization period in subsection (1) has ended, any off-premise sign, excluding sandwich board signs, located within the shoreline jurisdiction that was legally established prior to the effective date of this section shall be a prohibited use and structure and it shall be removed.

(3) Amortization of sandwich board signs within the shoreline jurisdiction shall be as provided in section 20D160.10-110, Amortization of Sandwich Board Signs.

20D.150.160 Utilities Within Shorelines

20D.150.160-010 Permitted locations

Utilities may be allowed within the shoreline jurisdiction pursuant to RCDG 20D.150.50-030, Uses and Activities in Shoreline Environments. Utilities includes all services and facilities that produce, convey, store, or process power, gas, water, sewage, communications, oil, waste, and the like.

20D.150.160-020 Construction Standards

Where allowed, utilities shall meet the following construction standards:

(1) Primary above-ground utilities not dependent on a shoreline location shall be located outside of the shoreline jurisdiction, unless it is demonstrated that no feasible alternative location exists.

(2) All utility facilities shall be designed and located to assure no net loss of shoreline ecological functions and preserve the natural landscape.

(3) All utility facilities shall be designed and located to minimize conflicts with present and planned land and shoreline uses while meeting the needs of future populations in areas planned to accommodate growth.

(4) Transmission facilities for the conveyance of energy and communication services, such as powerlines, cables, pipelines, shall be located outside the shoreline jurisdiction where feasible, and when necessarily located within shoreline areas, shall assure no net loss of shoreline ecological functions.

(5) Utility transmission lines, pipelines and cables shall be placed underground, pursuant to RCDG 20D.220.10, Underground Wiring.

(6) Utilities shall be located in existing rights-of-way, utility corridors and sites, and bridge crossings wherever feasible. However, no additional utilities shall be located in the utility corridor along the west side of the edge of Lake Sammamish containing the city's sewer line.

(7) Water crossings.
   (a) New corridors involving above-water crossings or underwater tunneling are prohibited, unless it is demonstrated that no feasible alternative exists.

(b) Underwater pipelines transporting hazardous substances or other substances harmful to aquatic life or water quality are prohibited, unless it is demonstrated that no feasible alternative exists. Such pipelines shall meet the requirements for transmission lines within floodways contained in RCDG 20D.140.40-030(3)(i).

(c) Where it is necessary for transmission and distribution lines to cross water bodies, crossings shall be by the shortest, most direct route feasible, unless alternative locations would provide better protection of the shoreline natural environment.

(8) Landfilling in the Aquatic, Natural, and Urban Conservancy shoreline environments for non-water-dependent utilities is prohibited.

(9) Where allowed, utilities located within the Aquatic, Natural, and Urban Conservancy shoreline environments shall be designed and located to minimize the need for shoreline protective structures.

(10) New publicly-owned utility corridors maintained by a public or quasi-public utility shall incorporate shoreline public access, such as trails, viewpoints and vehicle turnouts, where compatible with adjacent land uses and the shoreline natural environment. Corridors owned by private utility entities shall be integrated, where possible, with trails or other open space connections to the shoreline. This requirement does not apply to utilities in easements on private property.

(11) Utilities shall not encroach into shoreline view corridors unless no feasible alternative exists. Where the aesthetic quality of the shoreline may be degraded, utilities shall incorporate screening and landscaping sufficient to maintain the shoreline aesthetic quality.

(12) Outfalls. Outfalls and discharge pipes located upstream of salmon and steelhead spawning areas and freshwater clam and mussel beds shall be designed and constructed to minimize downstream disturbance. Outfalls shall not be located within salmon and steelhead spawning areas or freshwater clam and mussel beds unless the following criteria are met:

(a) No feasible alternative location exists;

(b) The outfall is placed below the surface of the beach or streambed;

(c) The outfall discharges waterward of the littoral zone or further, where necessary to prevent discharge directly into shallow areas used by salmon and steelhead;

(d) Any disturbed upland or aquatic areas are revegetated and enhanced with native plants, habitat features and restored substrate.

(13) Clearing of vegetation within utility corridors shall be the minimum necessary for infrastructure maintenance and public safety, and is subject to the requirements of RCDG 20D.150.170, Vegetation Management.

(14) Stormwater conveyance and detention facilities shall be designed to incorporate native trees, shrubs and groundcover plants and, where applicable, native aquatic vegetation. Use of non-native turf grasses shall be limited to a maximum of 25% of the conveyance or detention area. Detention facilities shall be designed with a maximum side slope of 3:1.

(15) Utilities located in the floodplain are subject to the additional requirements of RCDG 20D.140.40-030, Flood Hazard Areas – Development Standards.

(16) Utilities are subject to the stream and wetland buffers, and Fish and Wildlife Habitat Conservation Areas requirements contained in RCDG 20D.140.

(17) See RCDG 20D.220 for additional citywide utility standards.

20D.150.170 Vegetation Management

20D.150.170-010 Purpose

The purpose of this chapter is to protect shorelines, sensitive areas, fish and wildlife habitat, and other natural areas from potentially adverse management activities, and to implement the goals and policies for the protection of the natural environment contained in RCDG Title 20B, Goals, Policies and Plans.

20D.150.170-020 Vegetation Management Within Shorelines

(1) Preservation of Shoreline Vegetation. Trees and other vegetation within the shoreline shall be preserved consistent with 20D.150.110, Tree Protection, Landscaping and Screening Within Shorelines, 20D.150.60-010, Shoreline Buffers, and 20D.150.60-020, Lake Sammamish Setback.

(2) Clearing and grading within the shoreline is regulated by RCDG 20D.150.90, Clearing, Grading, Landfill and Excavation Within Shorelines.

(3) Aquatic Vegetation Removal Prohibited.
   (a) Removal of aquatic vegetation within the Aquatic, Natural or Urban Conservancy Shoreline Environments is prohibited, except where
      (i) authorized under an approved habitat enhancement plan, adopted basin plan, or authorized aquatic weed management program; and where

(ii) native plant communities and habitats are threatened or an existing water-dependent use is threatened by the presence of aquatic weeds.

(b) The removal of native aquatic plants is prohibited, except where
(i) an existing water-dependent use is threatened; or where
(ii) the overabundance of the native plant threatens fish and wildlife habitat.

(c) The use of herbicides to control aquatic vegetation is prohibited, except where:
(i) no reasonable alterative exists;
(ii) the use of herbicides has been approved through a comprehensive vegetation management and monitoring plan; and where
(iii) authorized by the City or other agency through the environmental review process pursuant to WAC 197-11, the State Environmental Policy Act.

(d) Where aquatic vegetation removal becomes necessary, it shall be the minimum area and duration necessary to accomplish the stated objectives of the removal program, and shall minimize negative impacts on wildlife, fish and shoreline habitat.

(e) Aquatic vegetation management programs shall include preventive measures and monitoring recommendations.

(f) Aquatic vegetation removal activities within the shoreline jurisdiction shall comply with the requirements of the responsible agencies (i.e. Washington State Departments of Agriculture, Fish and Wildlife, or Ecology, or the Federal Environmental Protection Agency.)

(4) Vegetation Removal Restricted.

(a) Normal pruning and trimming of landscape plants within the shoreline jurisdiction are exempt from the requirements of this subsection.

(b) Vegetation removal within shoreline buffers and waterfront building setbacks shall be allowed only for the purposes of maintaining established landscaping, maintaining public safety, maintaining an allowed shoreline use or improvement, or to enhance fish or wildlife habitat; provided that:
(i) removal shall not be by mechanical means unless no feasible alternative exists;
(ii) the extent of removal is the minimum necessary to achieve the above purposes;
(iii) native plants are not removed for the purpose of establishing non-native plants; and
(iv) the timing and duration of such removal is demonstrated to not have long-term adverse impacts on wildlife or fish.

(5) Application of Herbicides, Pesticides and Fertilizers.

(a) The application of pesticides, herbicides or fertilizers within shoreline buffers or waterfront building setbacks is discouraged and shall be the minimum necessary for the long-term maintenance or restoration of fish or wildlife habitat, restoration or maintenance of native plants, or maintenance of existing landscaping.

(b) Herbicides and other agricultural and landscape chemicals shall be applied in a manner that minimizes their transmittal to adjacent water bodies. The direct runoff of chemical-laden waters into adjacent water bodies is prohibited. Aerial spraying of herbicides, pesticides and fertilizers within 500 feet of the o.h.w.m. of the adjacent water body is prohibited.

(c) Within 20 feet of the shoreline buffer or waterfront building setback, broad spectrum herbicides shall be used only for spot application with wicking or small spray equipment on noxious weeds.

(d) The use of time-release fertilizers and herbicides shall be preferred over liquid or concentrate application on turf within the shoreline jurisdiction.

(e) The use of pesticides, herbicides or fertilizers within the shoreline jurisdiction shall comply with regulations of responsible agencies (i.e. Washington State Departments of Agriculture, Fish and Wildlife, or Ecology, or the Federal Environmental Protection Agency.)

(f) Sports fields, parks, golf courses and other outdoor recreational uses that require maintenance of extensive areas of turf shall provide a chemical management plan or integrated turf management program designed to ensure that existing water quality of adjacent water bodies and aquifers is maintained. The chemical management plan or integrated turf management program shall incorporate facilities and management methods sufficient to maintain water quality, including stormwater treatment facilities adequate to remove a minimum of 50% of excess phosphorous and nitrogen, and up to 25% additional shoreline and shoreline tributary buffers where necessary to protect water quality.

(6) Landscape Maintenance Required.

(a) All landscaped areas within the shoreline jurisdiction, shoreline buffers and shoreline setbacks shall be managed and maintained to prevent the excessive growth of noxious weeds as required by Redmond Municipal Code Chapter 6.12.030.

(b) Areas disturbed by removal of noxious or invasive plants shall be replanted in a timely manner with native vegetation.

(7) Where large quantities of plants are removed by vegetation control activities, plant debris shall be collected and disposed of in an appropriate

upland location outside of shoreline buffers and waterfront building setbacks.

20D.150.180 Shoreline Access

(1) Shoreline Access Requirement.

(a) Public Access. Except as otherwise provided in 20D.150.180(1)(b), all development within the shoreline jurisdiction shall provide physical public access to the shoreline as shown on the Shoreline Public Access System map (Figure S-1 of the Shoreline Master Program in the Redmond Comprehensive Plan) except where:

(i) Fewer than ten (10) new dwelling units will be constructed or renovated;

(ii) The proposed subdivision involves fewer than ten (10) lots;

(iii) Industrially developed sites;

(iv) The development consists of interior improvements only;

(v) The value of a proposed redevelopment of non-residential structures and improvements is less than 25% of the assessed value of existing site improvements.

(b) Development along Downtown Shorelines.

(i) Development and uses adjoining the Sammamish River, Bear Creek, and their associated parklands shall provide convenient pedestrian access through the site to these features (excepting development and uses lying between NE 83rd Street (if extended) and the BNSF ROW to the south, which shall provide a pathway or walkway between the development and the Sammamish River Trail) unless modified through an approved development agreement where access from the site to the river or creek/parkland is provided.

(ii) Buildings within 100 feet of a property line of a waterway or park, except single-story retail buildings, shall provide building entrances, balconies, or other such building features or site features (for example: plazas or pedestrian features) on the façade fronting waterways or parks to allow users of the buildings to interrelate with the waterway or park.

(iii) Buildings next to trails and walkways along waterways and parks shall incorporate pedestrian-scaled/friendly architectural features on the façades facing the trails/pathways.

(c) Private access. Residential developments of fewer than ten (10) dwelling units or lots shall provide physical access for residents from the development to the shoreline.

(d) Where physical public access is required, development located within the shoreline shall provide, at a minimum, all of the following access facilities at that shoreline location, as specified below:

(i) Bear/Evans Creeks:

- A trail corridor width meeting AASHTO standards for non-motorized multi-use trail facilities parallel to the creek located a minimum of 100 feet from the ordinary high water mark and dedicated for the Bear and Evans Creek Trail and Greenway;
- The trail may be located within 100 feet from the creek's ordinary high water mark only when it has been demonstrated that it is absolutely necessary, no reasonable alternative exists, existing facilities do not increase the degree of nonconformity, and appropriate mitigation is implemented to ensure no net loss of the ecological functions of the shoreline;
- Where point access is identified on the Shorelines Public Access System map, Figure S-1, a designated 8' wide public multi-use trail from the public street to the outside edge of the stream buffer; and
- A designated private or public pedestrian pathway from common building entrance(s) to the outside edge of the stream buffer.

(ii) Sammamish River:

- During river restoration and/or trail improvement projects, the Sammamish River Trail may be widened to be brought into compliance with AASHTO standards for trail safety, provided the widening is no closer to the Sammamish River than the existing trail pavement edge and mitigation per 20D.140 is required;
- Where point access is identified on the Shorelines Public Access System map, a designated 8' wide public multi-use trail from the public street to the Sammamish River Trail; and
- A designated private or public pedestrian pathway from common building entrance(s) to the Sammamish River Trail.

(iii) Lake Sammamish:

- Where point access is identified on the Shoreline Public Access System map, Figure S-1, a designated 8' wide public multi-use trail from the public street to the outside edge of the waterfront building setback; EXCEPT where equivalent public access can be provided on public

lands adjacent to Lake Sammamish within one-quarter mile of the development; and

- A designated private or public pedestrian pathway from common building entrance(s) to the outside edge of the waterfront building setback.

(e) Where private access is required, the development shall provide, at a minimum, the following:

(i) On Bear/Evans Creeks: A designated pedestrian pathway from common building entrance(s) or common area(s) to the outside edge of the stream buffer.

(ii) On Sammamish River: A designated pedestrian pathway from common building entrance(s) or common area(s) to the Sammamish River Trail.

(iii) On Lake Sammamish: A designated pedestrian pathway from common building entrance(s) or common area(s) to the outside edge of the waterfront building setback.

(2) Water Access Facilities. A shoreline development may provide water access facilities, such as viewing platforms, piers, boat launches or trails to the water's edge, at points along the shoreline designated in the Shorelines Public Access System map (Figure S-1) or designated by the Technical Committee.

(a) The Technical Committee may accept water access facilities in lieu of the required public access in subsection (1)(c) where consistent with Redmond's shoreline access policies.

(b) Public water access facilities may be located within shoreline buffers to the extent allowed in RCDG 20D.140.20-020, Stream Buffers, and within Lake Sammamish waterfront setbacks, provided that such facilities shall be allowed only where impacts to shoreline vegetation and habitat will be minimal.

(3) Public rights-of-way within the shoreline jurisdiction shall not be vacated unless it can be demonstrated that such rights-of-way do not provide, nor have the potential to provide, shoreline public access.

(4) See RCDG 20D.210 for additional citywide Transportation and Access Standards.

(5) See RCDG 20D.80 for additional citywide Landscaping Standards.

20D.150.190 Protection of Resources Within Shoreline Jurisdiction.

20D.150.190-020 Shoreline Views

(1) Identification of Citywide Shoreline Public Views

Consistent with RCDG 20D.42.50, Identification of Citywide Public View Corridors, the Public View Corridors map (20D.42.40) identified significant shoreline views from public spaces. These views include the following:

(a) Territorial view of the Sammamish Valley Along NE 116th Street (RDCG 20D.42.50-020)

(i) Description of View to Be Protected. A territorial view of the Sammamish Valley and Mt. Rainier can be seen along EN 116th Street from Willows Road to the York Bridge.

(ii) Solid fencing, solid hedges or rows of trees will not be allowed south of NE 116th Street in the Urban Recreation zone if fencing or the height of the landscaping at mature growth would block views of the Sammamish Valley or of Mt. Rainier. The use of street trees or median dividers with hedges for roadway improvements shall not be allowed.

(b) Territorial View of the Sammamish Valley Along Willows Road (RCDG 20D.42.50-030).

(i) Description of View to Be Protected. A territorial view of the Sammamish Valley with distant ridgelines of Education Hill in the background, and a view of Mt. Rainier can be seen along Willows Road from just north of the Willows Run Golf Course complex to the City limit.

(ii) Solid fencing, solid hedges or rows of trees will not be allowed along the east edge of Willows Road or along property lines between the road and the Sammamish River. The use of street trees on the eastern edge or median dividers with hedges for roadway improvements shall not be allowed.

(c) Puget Power Trail to Sammamish Valley (20D.42.50-040)

(i) Description of View to Be Protected. Views are of the Sammamish Valley and the west ridgeline above the Sammamish Valley, beginning as one descends the trail on the Puget Sound Energy right-of-way almost to Redmond-Woodinville Road.

(ii) Trail fencing in this public view corridor should be kept to a minimum, be built low when feasible, use natural or natural-looking materials and colors, and use fence types such as post and rail or split rail.

(d) Downtown and Sammamish Valley from 148th Avenue NE (20D.42.50-060)

(i) Description of View to Be Protected. Beginning approximately 500 feet south of the Redmond Way intersection, views of the Sammamish Valley and distant mountains are evident. Near the intersection, the details of Downtown development patterns become apparent. From the point north of Redmond Way, views are to the north and northeast to about halfway to the bottom of the Hill.

(ii) Solid fencing, solid hedges or rows of trees will not be allowed where they would obstruct views out to the Sammamish Valley or Downtown. Signage located in this public view corridor shall be designed to minimize view obstruction.

(e) Lake Sammamish Along Idylwood Park (20D.42.50-110)

(i) Description of View to Be Protected. Views are of Lake Sammamish from West Lake Sammamish Parkway alongside Idylwood Park. Views are from the sidewalk, bike lanes, and roadway. Views are through existing vegetation and are more open on the northern half of the park.

(ii) Road projects along the eastern edge of West Lake Sammamish Parkway shall not include sight-obscuring objects such as fencing or hedge-like landscaping. This treatment should be avoided within the park as well, and any additional structures, signs, or landscaping within the park should be designed to protect views to the lake.

(f) Bear/Evans Creek Valley/Cascade Range from NE 80th Street and 172nd Avenue NE (20D.42.50-120)

(i) Description of View to Be Protected. Where NE 80th Street curves north to turn into 172nd Avenue NE, a narrow public view corridor exists, following the existing electric lines, that overlooks the business park area; however the primary view is of the Bear/Evans Creek Valley and to distant mountain peaks. The corridor extends nearly to Avondale Way.

(ii) Maintain the right-of-way/utility corridor for potential pedestrian use. Trail enhancements could create additional accessibility for the public to this view corridor. Undergrounding of utility lines would also enhance this view.

(g) Bear/Evans Creek Valley (20D.42.40-130)

(i) Description of View to Be Protected. Pastoral views of the Bear/Evans Creek Valley towards the east of the Bear/Evans

Creek Valley extend nearly a half-mile along a stretch of Avondale Road just below the entrance to the Ashford Park Condominiums to just short of the Bear Creek crossing. The view is currently almost unobstructed with only a handful of single family structures in the northern stretch.

(ii) Sight-obscuring fencing will not be allowed along Avondale Road anywhere between the road and Bear/Evans Creek. Fences such as split rail would be allowed. New development shall avoid sight-obscuring, tall hedge-like landscaping.

(2) Design Standards for Public Shoreline
Consistent with RCDG 20D.40, Design, Public Shoreline Views shall be subject to the following design standards:

(a) Site development should blend with natural landforms and be designed to maximize scenic views identified as public view corridors.

(b) Consider the impact of building mass, color, lighting, and design upon adjacent open spaces, continuity of identified public views corridors, public open spaces or parks, and recreational areas.

(c) Encourage enhancement of natural landscapes and preservation or enhancement of identified public view corridors to natural landforms or water bodies after initial clearing and development.

(d) Views through a development, where identified as public view corridors or shoreline views, should be preserved, opened up or designed to become part of the surrounding open space focus. Designs that offer views or partial views into interior open spaces are encouraged.

(e) Orient buildings to retain and offer views to, from, and through the site where identified as public view corridors or shoreline views by taking advantage of topography, building location, and style.

(f) Placement of landscaping and eventual height of plantings should ensure that identified public view corridors are preserved.

(g) Provide space on site for active and/or passive recreational purposes. When located in an identified public view corridor, this open space may also provide views through a development to important features such as: Lake Sammamish; the Sammamish River Valley; Bear Creek; or panoramic mountain views.

(3) Additional Shoreline View Requirements.

(a) Public shoreline views along the Sammamish River corridor are provided by the Sammamish River Trail along the east side of the river and the informal trail along the west side of the river. Because of this public facility and the established Citywide Shoreline Public Views identified in (1) above, additional public shoreline view regulations and provisions within proposed developments for public views are not required along the Sammamish River.

(b) Public shoreline views along the Bear/Evans Creek Valley are protected to some degree by Citywide Shoreline Public Views identified in (1) above. Potential public physical access will eventually be provided by the Bear/Evans Creek Trail Greenway System, which in turn will provide public visual access.

(c) Public shoreline views along the north side of Bear Creek (between the Sammamish River and Union Hill Road) are provided by the Bear Creek Trail. Additional public shoreline view regulations are not required for this reach of Bear Creek.

(d) One public shoreline view of Lake Sammamish is identified in (1) above via Idylwood Park. Public view corridor regulations of single family homes along Lake Sammamish shall not be required.

20D.150.190-020 Shoreline Cultural Access. – Reserved.

20D.150.200 Shoreline Administration and Procedures

20D.150.200-010 Administrative Interpretations

The Administrator may adopt such code interpretations as necessary to administer the shoreline master program policies and regulations. Any formal written interpretations of shoreline policies or regulations shall be submitted to the Department of Ecology for review.

20D.150.200-020 Nonconformances

(1) Nonconformities, as defined in Chapter 20A.20 RCDG, Definitions, may continue to be used and maintained in accordance with the provisions of this chapter except as otherwise provided in RCDG 20D.150.150-020, Amortization of Off-premise Signs within the Shoreline and, RCDG 20D.160.10-110, Amortization of Nonconforming Sandwich Board Signs. The use and maintenance is permitted as a result of vested rights obtained through the legal establishment of the nonconforming use or structure.

(2) Nonconforming Shoreline Uses. A nonconforming use located within the shoreline jurisdiction may not be enlarged or expanded. If a nonconforming use is discontinued for twelve consecutive months or for twelve months during any two-year period, the nonconforming rights shall expire and any subsequent use shall be conforming.

(3) Nonconforming Shoreline Structures. A nonconforming structure may not be expanded or altered in any way so as to increase that nonconformity. Provided, however, that nonconforming shoreline structures may be maintained and repaired and may be enlarged or expanded provided that said enlargement or expansion does not extend the structure closer to the shoreline. A nonconforming structure shall be brought into full compliance with the Redmond Community Development Guide (meaning the development shall be modified to make it code compliant) when alteration or expansion of the structure takes place and the following takes place within any three-year period:

(a) The gross floor area of the structure is increased by 100 percent or more; or

(b) The costs stated on all approved building permit applications for the structure equal or exceed the assessed value of the structure at the beginning of that three-year period.

20D.150.200-030 Shoreline Permits

(1) Purpose. It is the purpose of this section to describe the procedures and requirements for development within specified areas related to lakes, rivers, streams, wetlands, and floodplains as required to implement the Shoreline management Act, as amended, Chapter 90.58 RCW, ,and to aid in implementation of the Federal Flood Insurance Program and the State Flood Control Zone Program.

(2) Permit Required. Within the shoreline jurisdiction, as described in 20D.150.20, development shall be allowed only as authorized in a Shoreline Substantial Development Permit, Shoreline Conditional Use Permit or Shoreline Variance Permit unless specifically exempted from obtaining such a permit under Section 20D.150.200-030(3), Exemptions. Enforcement action by the City or Department of Ecology may be taken whenever a person has violated any provision of the Shoreline Management Act or any Redmond Shoreline Master Program provision, or other regulation promulgated under the Act. Procedures for enforcement action and penalties shall be as specified in 1.14 Redmond Municipal Code. In addition, where here a single integrated development encompasses both shoreline and non-shoreline areas, a shoreline substantial

development permit must be obtained before any part of the development, even a portion of a single integrated development that is entirely confined to the upland areas, can proceed.

(3) Exemptions. Proposals identified under WAC 173-27-040 are exempt from obtaining a Shoreline Substantial Development; however, a Shoreline Variance or Shoreline Conditional Use may still be required. Applicants shall have the burden to demonstrate that the proposal complies with the requirements for the exemption sought as described under WAC 173-27-040. Some exempt development shall not commence until the City of Redmond has issued a Letter of Exemption. Letters of Exemption shall be subject to a Type I permit process. The table below identifies the exemptions existing on the date of this code and categorizes them as requiring or not requiring a Letter of Exemption. Note: Shoreline Exemptions may also be identified in RCW 90.58, as updated periodically by the legislature.

(4) Revisions to WAC 173-27-040. With subsequent revisions to WAC 173-27-040, the Planning Director shall determine administratively whether a Letter of Exemption is required and issue said decision as an Administrative Interpretation under RCDG 20D.150.200-010.

The following table discusses when an application is required for a potential Shoreline Exemption.

Table 1 Shoreline Exemptions Process, WAC 173-27-040 (2)

No Application Required*	**Application Required****
Aquatic weed control (n)[1]	Fair market value <= $5,718 (a)
Construction practices normal for farming (e)	Construction of normal bulkheads (c)[2]
Navigational aids (f)	Emergency construction (application submitted after-the-fact if needed) (d)
Operation and maintenance of waterways (i)	Single-family residences (g)
Marking of property lines (j)	Docks <= $10,000 (h)
Operation and maintenance of dikes and levies (k)	Watershed restoration projects (o)
Projects with certification from the Governor (l)	Fish and Wildlife restoration projects (p)
Site exploration (m)	Normal maintenance and repair of existing uses.

1 Other state agency permits may be required.

2 Bulkhead construction is only exempt if the proposed bulkhead is located at or near the Ordinary High Water Mark and is needed to protect an existing residence or appurtenant structure from loss or damage by erosion.

* "No Application Required". These activities do not require an application or letter of exemption, but shall comply with the City of Redmond's Shoreline Master Program and Redmond Community Development Guide.

** "Application Required". These activities require a Letter of Shoreline Exemption for the City of Redmond before they may commence. An application shall be on the Joint Aquatic Resources Permit Application form and any other application forms deemed appropriate by the Administrator. Applications may be deemed complete when required forms and attachments are provided consistent with a Shoreline Exemption Development Application Checklist. The applicant shall identify whether the proposal meets the requirements of WAC 173-27-050 (an application which requires a Corps of Engineers Section 10 or Section 404 Approval). If so, a copy of the Letter of Exemption shall be filed with the Department of Ecology.

(5) Letters of Exemption Required. Applications for Exempt Status may be denied, approved, or conditionally approved through a Type I permit process and in a format approved by the Administrator. The format of the decision shall contain, at a minimum, those items identified under WAC 173-27-050. Copies of the decision shall be sent to the Department of Ecology if the proposed development requires those permits listed under WAC 173-27-050 (1) (a) and (b). The applicant is responsible for determining and disclosing in the Joint Aquatic Resources Permit Application whether permits listed under WAC 173-27-050 (1) (a) and (b) are required.

(6) Procedures

(a) Shoreline Exemption. Applications for a Shoreline Exemption shall follow the procedures for a Type I review pursuant to RCDG 20F.30.30.

(b) Shoreline Substantial Development Permit. Applications for a Shoreline Substantial Development Permit shall follow the procedures for a Type II review pursuant to RCDG 20F.30.35. In addition to required content listed in 20F.30.35-020, notice of applications for Shoreline Substantial Development Permits must also contain the following information:

Statements that

(i) Any person desiring to submit written comments concerning an application, or desiring to receive notification of the final decision concerning the application may submit the

comments or requests for decisions to the City within 30 days of the date the notice is published pursuant to this section;

(ii) After exhausting the administrative appeals process with the City of Redmond, those parties still aggrieved by a decision may appeal the decision pursuant to WAC 173-27-220; and

(iii) For limited utility extensions and bulkheads, as described in WAC 173-27-120, the notice shall include a further statement regarding the manner in which the public may obtain a copy of the local government decision on the application no later than two days following its issuance.

The minimum notice of application comment period for Shoreline Substantial Development Permits shall be no fewer than 30 days. However, the minimum comment period for applications for Shoreline Substantial Development Permits for limited utility extensions and bulkheads, as described by WAC 173-27-120, shall be 20 days. All comments received on the Notice of Application must be received in the Redmond Development Services Center by 5:00 p.m. on the last day of the comment period. Comments may be mailed, personally delivered or sent by facsimile. The Technical Committee's decision on a Type II application shall not be issued prior to the expiration of the minimum comment period.

At the conclusion of an administrative appeal proceeding of any other entitlement permit related to the Shoreline Substantial Development Permit with the City of Redmond, the Administrator shall mail a copy of the Technical Committee report, permit decision, transmittal sheet and Shoreline checklist to the applicant, Department of Ecology, and the Washington State Attorney General's Office, pursuant to RCW 90.58.140 and WAC 173-27-130. The permit shall state that construction pursuant to a permit shall not begin or be authorized until twenty-one days from the date the permit decision was filed as provided in RCW 90.58.140 (6); or until all review proceedings are terminated if the proceedings were initiated within twenty-one days from the date of filing as defined in RCW 90.58.140 (5) and (6). "Date of Filing" is that date that the Department of Ecology received a copy of the decision.

An appeal of a Shoreline Substantial Development Permit shall be to the State Shorelines Hearings Board and shall be filed within 21 days of the receipt of the City's decision by the Department of Ecology as set forth in RCW 90.58.180.

(c) Shoreline Conditional Use Permit and Shoreline Variance. Applications for a Shoreline Conditional Use Permit or a Shoreline Variance shall follow the procedures for a Type III review pursuant to RCDG 20F.30.40.

In addition to required content listed above, notice of applications for Shoreline Conditional Use Permits and Variances must also contain the following information:

Statements that:

(i) Any person desiring to submit written comments concerning an application, or desiring to receive notification of the final decision concerning the application as expeditiously as possible after issuance of the decision, may submit the comments or requests for decisions to the City within 30 days of the date the notice is published pursuant to this section.

(ii) After exhausting the administrative appeals process with the City of Redmond, those parties still aggrieved by a decision may appeal the decision pursuant to WAC 173-27-220.

The Notice of Application shall provide a minimum comment period of 30 days. All comments received on the Notice of Application must be received in the Redmond Development Services Center by 5:00 p.m. on the last day of the comment period. Comments may be mailed, personally delivered or sent by facsimile. The Technical Committee's recommendation on a Type III application shall not be issued prior to the expiration of the minimum comment period.

After the conclusion of the appeal period of any other entitlement permit related to the Shoreline Conditional use Permit or Shoreline Variance, or the resolution of a filed appeal, the Administrator shall mail the Notice of Final Decision and the final SEPA threshold determination, if any, to the applicant and to each person who participated in the public hearing or who submitted comments during the public comment period at any time prior to issuance of the decision.

After administrative appeals proceedings for any related entitlement permit have terminated, for a Shoreline Conditional Use Permit and a Shoreline Variance, the Administrator shall, pursuant to RCW 90.58.140 and WAC 173-27-130 – File with the department, mail a copy of the Technical Committee report, permit decision, transmittal sheet, and Shoreline Checklist to the applicant, Department of Ecology, and the State of Washington's Office of the Attorney General. The permit shall state that construction pursuant to a permit shall not begin or be authorized until twenty-one days from the date the permit decision was filed as provided in RCW 90.58.140(6); or until all review proceedings are terminated if the proceedings were initiated within twenty-one days from the date of filing as defined in RCW 90.58.140(5) and (6). "Date of Filing" is that date that the Department of Ecology received a copy of the decision.

Appeals of Shoreline Conditional Use Permits or Shoreline Variances shall be to the State Shoreline Hearings Board and shall be filed within 21 days of the receipt of the City's decision by the Department of Ecology, as set forth in RCW 90.58.180.

(d) Special Requirements

(i) For Shoreline Substantial Development Permits, no final action or construction shall be taken until 21 days after notice of the final action taken by the City is filed with the Department of Ecology.

Construction and activities authorized by a Shoreline Substantial Development Activity are subject to the time limitations under WAC 173-27-190 - Permits for substantial development, conditional use, or variance and under WAC 173-27-090 – Time requirements of permit apply.

(ii) For Shoreline Conditional Use Permits and Shoreline Variances, no final action or construction shall be taken until all review proceedings initiated within 21 days from the date DOE transmits its decision on the Shoreline Conditional Use Permit or Shoreline Variance.

Construction and activities authorized by a Shoreline Conditional Use Permit or Shoreline Variance are subject to the time limitations under WAC 173-27-190 - Permits for

substantial development, conditional use, or variance and under WAC 173-27-090 – Time requirements of permit.

(7) Decision Criteria. All applications, including exemptions shall comply with WAC 173-27-140, as amended.

(a) Shoreline Exemptions. Types of developments outlined in 20D.150.200-030(3) are exempt from the requirements of a Shoreline Substantial Development Permit but shall comply with the state Shoreline Management Act, the City's Shoreline Master Program, and all other policies, plans, codes and regulations of the City.

Decisions of Shoreline Exempt Status. Letters of Shoreline Exempt Status, issued under 20D.150.200-030(3) for activities or development requiring permits listed under WAC 173-27-050 (1) (a) or (b) shall be mailed to the Department of Ecology. The applicant is responsible for determining and disclosing in the Joint Aquatic Resources Permit Application whether permits listed under WAC 173-27-050 (1) (a) or (b) are required.

(b) Shoreline Substantial Development Permit. Shoreline Substantial Development Permit applications shall be reviewed pursuant to WAC 173-27-150. Special review criteria are provided in Chapter 20D.150, Shoreline Regulations. In addition, all projects must be consistent with Redmond Shoreline Master Program policies.

(c) Shoreline Conditional Use Permit. Uses which are not classified or set forth in the master program or use regulations may be allowed provided the applicant can demonstrate that they meet the criteria outlined in WAC 173-27-160.

(d) Shoreline Variance. Relief may be granted from specific provisions of the Shoreline Master Program or shoreline use regulations, provided the applicant can demonstrate that the variance will meet the criteria outlined in WAC 173-27-170.

(8) Modification or Addition to an Approved Project or Decision. Revisions to a Shoreline Substantial Development Permit, Shoreline Conditional Use Permit, or a Shoreline Variance shall be governed by WAC 173-27-100 - Revisions to permits.

(9) Termination of Approval. Shoreline Substantial Development Permits, Shoreline Conditional Use Permits, and Shoreline Variances shall be subject to WAC 173-27-090 - Time requirements of permit apply.

20D.150.200-040 Annexation of Shorelines

The City may adopt shoreline environment pre-designations for shorelines located outside of city limits but within the urban growth area. In the event of annexation of a shoreline not pre-designated in the shoreline master program, the City shall develop or amend shoreline policies and regulations to include the annexed area. Such policies and regulations for annexed areas shall be consistent with RCW 90.58 and WAC 173-26 and shall be submitted to the Department of Ecology for approval.

O:\Cathy\Shoreline Master Program Update\2009\Shoreline Regulations (2009)

Redmond Shoreline Master Program Update

20C Regulations: Agriculture, Urban Recreation, Residential, City Center, Commercial and Industrial Zones

2009

20C.20 Agriculture and Urban Recreation

20C.20.10 Agriculture and Urban Recreation Zones.

20C.20.15-040 Accessory Uses.

(1) Accessory uses shall be permitted in conjunction with an allowed use. Accessory uses may include, but are not limited to, equipment storage, parking (unless excluded by the use listed in RCDG 20C.10.15-030, Agriculture and Urban Recreation Zones Land Uses Chart or 20D.150.40-030, Table 1 – Shoreline Environments, Permitted Uses and Activities Chart), outbuildings and fences.

20C.20.20 Site Requirements.

20C.20.20-030 Site Requirements Chart.

Agriculture and Urban Recreation Site Requirements Chart

Site Requirement	Agriculture Zone	Urban Rec. Zone
Minimum Buffer from Sammamish River (SMP)	200 feet	200 feet
Maximum Height[4]	45 feet	35 feet
Maximum Height within Shoreline[5] (SMP)	30 feet	30 feet

Notes:

4 Additional height may be granted to agricultural structures through the special use permit process. (Ord. 1917)

5 Agricultural structures within the shoreline jurisdiction, such as silos and barns, may have a maximum height of 35 feet. Additional height above 35 feet may be granted to agricultural structures within the shoreline jurisdiction through the shoreline variance permit process, provided that structures greater than 35 feet in height are located outside of shoreline view corridors from residential areas located to the east and west of the valley floor. (SMP)

20C.20.25 Special Use Regulations.

20C.20.25-030 Livestock Restrictions.

The following regulations shall apply to raising or boarding livestock, including horses and small farm animals:

(1) All livestock and equestrian facilities and operations shall comply with the standards in RCDG 20D.170.15-030, General Development Standards for Equestrian and Livestock Facilities.

20C.30 Residential

20C.30.20 Permitted Land Uses in Residential Zones.

20C.30.20-020 Allowed Uses.

(8) Uses Within Shorelines. Certain uses allowed under the provisions of this Chapter may be prohibited or restricted within the shoreline. See 20D.150.40-030, Table 1 – Shoreline Environments, Permitted Uses and Activities Chart. (SMP)

Residential Zones Permitted Land Uses Chart

	Zoning Districts											
Land Use	**RA5**	**R1**	**R2**	**R3**	**R4**	**R5**	**R6**	**R8**	**R12**	**R18**	**R20**	**R30**
Transportation, Communication, Utilities												
Heliports/Fixed Wing Float Plane[8]	C	C	C	C	C	C	C	C	C	C	C	C
Cultural, Recreational, Entertainment												
Piers, docks and floats[6a]	P	P	P	P	P	P	P	P	P	P	P	P
Water-orientated Accessory Structures[6b]	P	P	P	P	P	P	P	P	P	P	P	P

Notes:

6a Special height, setback and area requirements apply (see RCDG 20D.150.70, In-Water Structures. (SMP)

6b Special height, setback and area requirements apply (see RCDG 20D.150.70-070, Water-Orientated Accessory Structures. (SMP)

8 Does not include medical airlift. Floatplane facilities and heliports allowed only abutting Lake Sammamish, subject to the criteria for Special Uses in RCDG 20D.170.75, Heliports and Float Plan Facilities.

20C.30.25 Site Requirements for Residential Zones.

20C.30.25-040 Minimum Required Density.

(5) Net Buildable Area Calculation. Net buildable area, for the purpose....

(a) Critical areas and shoreline areas where development is prohibited or restricted shall be excluded from the net buildable are. These critical areas and shoreline areas shall include: Landslide Hazard Areas; Category I through IV wetlands; Class I through IV streams; floodways; floodplains; critical areas buffers; the area waterward of the line of the ordinary high water mark on Lake Sammamish, regardless of the extent of ownership; lands required to be maintained in open space; and native growth protection easements.

20C.30.25-050 Average Lot Size.

(2) Requirements.

(b) Limitations on Averaging.

(ii) The following critical areas and shoreline areas shall not be included in the average lot size determination for all residential zones: Landslide Hazard Areas; Category I wetlands and their buffers; Class I streams and their buffers; the area waterward of the line of the ordinary high water mark on Lake Sammamish, regardless of the extent of ownership; and floodway areas.

(d) Area of Waterfront Lots. The area of waterfront lots is considered to be the area landward of the line of ordinary high water mark on Lake Sammamish, regardless of the extent of ownership; or the area landward of the ordinary high water mark along streams.

20C.30.25-060 Minimum Lot Width Circle.

(2) Requirement. The Site Requirements Chart (RCDG 20C.30.25-140) identifies the minimum lot width circle diameter that must fit within each newly created lot for each residential zone. This circle establishes that at least some portion of a lot must be at least as wide as the minimum lot width. The lot width circle shall not include the area waterward of the line of ordinary high water mark on Class I through Class IV streams and Lake Sammamish, regardless of the extent of ownership; floodways; Category I wetlands; or Landslide Hazard Areas. (SMP) In the area between Lake Sammamish and West Lake Sammamish Parkway, the minimum lot width circle diameter shall be 45 feet. (Ord. 1901)

20C.30.25-080 Building Setbacks.

(3) Encroachments/Front, Rear, Side Setbacks. Minor structures, appurtenances and improvements may encroach into required front, rear, and side setbacks as follows:

(a) The following features are permitted to encroach up to three feet into front, rear, and side street setback areas: chimneys, porches, bay windows, other building extremities, and decks. Roof structures which extend beyond the building line may project up to five feet into front, rear, and side street setback areas. No encroachment into a front, rear, or side street setback area may extend closer than two feet to the nearest property line.

(b) Encroachments/Side Interior Setbacks. The following features may encroach up to five feet into side interior setback areas: chimneys, porches, bay windows, roof structures, other building extremities, and decks. No encroachment into a side interior setback area may extend closer than two feet to the nearest property line.

(c) No encroachments are allowed with the Lake Sammamish waterfront building setbacks, except as provided in RCDG 20C.30.25-080(5), Waterfront Building Setbacks along Lake Sammamish. (SMP)

(d) Improvements. Improvements less than 30 inches above grade including decks, patios, walks and driveways are permitted in setback areas. Fences, landscaping, flagpoles, street furniture, transit shelters and slope stability structures are permitted in setback areas provided that all other applicable requirements are met.

(4) Setback Modification.....

(5) Waterfront Building Setbacks along Lake Sammamish. (SMP)

(a) Waterfront building setbacks shall be a distance measured from the line of the ordinary high water mark on Lake Sammamish. The ordinary high water mark, as defined in RCDG 20A.A0, Definitions, shall be located for each shoreline property through a site reconnaissance and survey by a licensed surveyor.

(b) See RCDG 20D.150.60-020, Lake Sammamish Setbacks, for setback requirements and restrictions. Habitat enhancement features or shoreline protective structures,

subject to the requirements of 20D.150.80, Shoreline Protective Structures, and in-water structures, subject to the requirements of 20D.150.70, In-Water Structures, are permitted. Setback vegetation should consist of native trees, shrubs, or groundcover with an emphasis on encouraging a tree canopy.

(c) Parking is prohibited within the waterfront building setback.

(6) Water-Orientated Accessory Structure. (SMP) Water-orientated structures accessory to a shoreline or water-dependent use are permitted in residential zones, provide such structures comply with the special height, setback and area requirements in RCDG 20D.150.70-060, Water-Orientated Accessory Structures.

(7) Building Setbacks from Critical Areas. There are no building setbacks from required critical areas buffers.

(8) Minimum Setbacks in a Transition Overlay....

20C.30.25-130 Maximum Height of Structures.

(2) Requirements. The maximum height of structures requirement sets the limit above which structures shall not extend, as defined in the Site Requirements Chart (RCDG 20C.30.25-140) for each residential zone.

(a) Chimneys, antennas, smoke and ventilation stacks, and flagpoles may exceed the highest point of the existing or proposed structure by no more than 15 feet. (Ord. 1954; Ord. 1901)

(b) Religious Icons and Structures. Special height exceptions for steeples, bell towers, crosses or other symbolic religious icons are contained in RCDG 20D.170.40.030.

(3) Maximum Height of Structures – Height Limits Within Shorelines. (SMP) Within the shoreline jurisdiction, the following height limits apply:

(a) The maximum height of all structures, except water-orientated accessory structures and piers or docks, shall be 30 feet.

(b) Water-orientated accessory structures shall not exceed 10 feet in height.

(c) The maximum height of docks is specified in RCDG 20D.150.70, In-Water Structures.

(d) The maximum height of structures, including bridges, that support a regional light rail transit system may be higher than 30 feet but shall be no higher than is reasonably necessary to address the engineering, operational, environmental, and regulatory issues at the location of the structure.

20C.30.25-140 Site Requirements Chart and Flexibility.

Residential Zones Permitted Land Uses Chart
Subject to Neighborhood Requirements

	Zoning District											
	RA5	R1	R2	R3	R4	R5	R6	R8	R12	R18	R20	R30
Lake Sammamish Setback[10] (SMP)	35'	35'	35'	35'	35'	35'	35'	35'	35'	35'	35'	35'
Maximum Height	35'	35'	35'	35'	35'	35'	35'	35'	45'	45'	60'	60'
Maximum Height within Shorelines[15] (SMP)	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'	30'

Notes:
10 See 20D.150.60-020, Lake Sammamish Setback, for setback requirements and restrictions. (SMP)
15 Building height in the shoreline jurisdiction is measured from average existing grade (SMP). See also 20C.30.25-130(3) for Maximum Height of Structures within Shorelines.

20C.30.105 Planned Residential Development.

20C.30.105-050 Modification of Development Regulations.

(1) General Applicability. The requirements of RCDG 20C.30.20, Permitted Uses in Residential Zones and RCDG 20C.30.25, Site Requirements, and RCDG 20C.70.50-050(4)(b)(i), Willows/Rose Hill – Building Character, proportionality and Massing may be modified by this section. The absence of any use or site requirement in this section prohibits a PRD or MPRD application from varying or modifying that requirement. Uses allowed under 20D.150.40, Shoreline Environments, may not be modified by application of this section.

(6) Building Setbacks. PRDs and MPRDs are subject to minimum front, rear and side street setbacks of 10 feet. No minimum interior setback is established, but may be required as a condition of approval. All other building setbacks, including lakefront building setbacks, are as shown in the Site Requirements Chart (RCDG 20C.30.25-140) and as defined in RCDG 20C.30.20-080, Building Setbacks.

20C.40 Downtown

20C.40.40 Site Requirements.

20C.40.40-045 Site Requirements.

Downtown Districts Site Requirements Chart

Design Criteria	Old Town	Town Center	Valley View, Bear Creek, Trestle	Town Square	Sam. Trail, Anderson Park	River Bend	River Trail, East Hill, Carter
Maximum Height within Shorelines 9a, 9b, 9c (SMP)	35'	35'	35'	n/a	35'	n/a	35'

Notes:

9a Water-enjoyment uses within the shoreline jurisdiction may exceed this height limit up to a maximum of 60 feet, or the maximum specified by the underlying zone, whichever is less, approved through a Shoreline Conditional Use Permit. (SMP)

9b This height limit is restricted to that portion of the building physically located within the shoreline jurisdiction. (SMP)

9c The maximum height of structures, including bridges, that support a regional light rail transit system may be higher than 35 feet but shall be no higher than is reasonably necessary to address the engineering, operational, environmental, and regulatory issues at the location of the structure. (SMP)

20C.50 Commercial

20C.50.20 Permitted Uses.

20C.50.20-010 Purpose.

20C.50.20-020 Permitted Land Uses.

Commercial Zones Permitted Land Uses Chart

	Zoning Districts	
Land Use	**NC**	**GC**
Cultural, Entertainment, and Recreation		
Cultural Facilities (Libraries, Museums, Galleries)	P[2,8]	P[2a]
Nature Exhibits, Zoos, Aquariums, Botanical Gardens		P[2a]
Outdoor Public Assembly, including amusement, fairgrounds, swap meets	S[2a]	S[2a]
Athletic/Fitness Centers	P[2,8]	S[2a]
Wholesale and Retail Trade		
Carts and Street Venders[7]	S[7a]	P[7a]

Notes:

2a Within the shoreline jurisdiction only, water-enjoyment uses are allowed in limited areas, as follows: (SMP)
(a) Bear Creek: Downtown of Avondale Road on Union Hill Road, Redmond Way, or SR 520;
(b) Sammamish River: At NE 85th Street or NE 90th Street.
Refer to 20A.20, Definitions, for the definition of water-enjoyment use.
NOTE: Policies for "non-water contact" water enjoyment uses on Bear Creek downstream of Avondale Road are addressed in the Shoreline Master Program.

7a Within the shoreline jurisdictions of Bear Creek and the Sammamish River, vending carts and kiosks associated with a water-enjoyment use are permitted, subject to the special use standards in 20D.170.35.

8 Limited to gross floor area of 5,000 square feet per establishment in mixed use or multi-tenant buildings only. This limit does not apply to water-enjoyment uses approved through a Conditional Use Permit or Special Use Permit.

20C.50.25 Site Requirements for Commercial Zones.

20C.50.25-010 Purpose.

20C.50.25-020 Chart of Site Requirements.

Commercial Zones Site Requirements Chart

Commercial Zones Site Requirements Chart

	Zoning Districts	
Site Requirement	**NC**	**GC**
Maximum Height Within Shorelines (SMP)[18]		

Notes: The maximum height of structures, including bridges, that support a regional light rail transit system may be higher than 35 feet but shall be no higher than is reasonably necessary to address the engineering, operational, environmental, and regulatory issues at the location of the structure.

20C.60 Business, Manufacturing and Industrial Zones

20C.60.20 Permitted Uses.

20C.60.20-020 Allowed Uses.

Business, Manufacturing and Industry Zones Permitted Land Uses Chart

	Zoning Districts			
Land Use	**BP**	**OV**	**MP**	**I**
Wholesale and Retail Trade				
Vending Carts/Kiosks	S[5a]		S[5a]	
Water-enjoyment Uses	S[5b]		S[5b]	

Notes:

5a Within the shoreline jurisdictions of Bear Creek and the Sammamish River, vending carts and kiosks associated with a water-enjoyment use are permitted, subject to the special use standards in RCDG 20D.170.35 (SMP)

5b Within the shoreline jurisdiction only, water-enjoyment uses are allowed in limited areas, as follows: (SMP)

(a) Bear Creek: Downstream of Avondale Road on Union Hill Road, Redmond Way or SR 520;

(b) Sammamish River: At NE 85th Street or NE 90th

20C.50.25 Site Requirements for Business Park, Overlake Business and Advanced Technology, Manufacturing Park and Industry

20C.60.25-020 Chart of Site Requirements.

Business and Manufacturing Park Requirements

	Zoning Districts			
Site Requirements	**BP**	**OV**	**MP**	**I**
Maximum Heights Within Shorelines (SMP)	35' [11a, 11b, 11c]		35'[11a, 11b]	35'[11a, 11b]

Notes:

10 Except for buildings used for water-enjoyment uses within the shoreline, buildings not used exclusively for research and development, manufacturing, warehousing, or allowed light industrial uses shall not exceed two stories and 25 feet. No building over two stories may be converted to office uses.

11a Water-enjoyment uses within the shoreline jurisdiction may have a maximum height of 45 feet. See 20C.60.25-060(4), Maximum Height of Structures. (SMP)

11b This height limit is restricted to that portion of the building physically located within the shoreline jurisdiction. This height restriction does not apply to rock crushing equipment, asphalt and concrete batch plants, silos and other related equipment necessitated to meet environmental controls and structures housing manufacturing facilities which require more clear space than by a 35 foot height limit. The maximum height limit for these features shall be 90 feet. (SMP)

11c The maximum height of structures, including bridges, that support a regional light rail transit system may be higher than 35 feet but shall be no higher than is reasonably necessary to address the engineering, operational, environmental, and regulatory issues at the location of the structure. (SMP)

20C.60.25-060 Maximum Height of Structures.

(4) Water-Enjoyment Uses. Where water-enjoyment uses are allowed (refer to 20C.60.20-020, Permitted Uses), building heights for water-enjoyment uses may be increased per 20C.60.25-020, Site Requirements, when approved through a Shoreline Conditional Use Permit. Refer to 20A.20, Definitions, for the definition of a water-enjoyment use. (SMP)

20C.60.60 Planned Commercial Development.

20C.60.60-050 Modification of Development Regulations.

(5) Maximum Height of Structures. Requirements for building height may be modified as described below with a PCD when it assists in maintaining open space and natural resources, and does not interfere with the established views of adjoining properties. No modifications to the maximum heights within areas under the jurisdiction of the Shoreline Management Act are allowed, except as provided in RCDG 20D.60.25-020, Site Requirements Chart.

20C.60.60-060 Limitations on Modifications to Development Regulations. The following provisions of the Community Development Guide may not be modified pursuant to RCDG 20C.60.60-050, Modification of Development Regulations: any provision of this section, RCDG 20C.60.60; the procedural, enforcement, and administrative provisions of the Community Development Guide or any other applicable City Code; and provision of the Community Development Guide that specifically states that its requirements are not subject to modification under a PCD; any provision of Chapter 20D.140 RCDG, Critical Areas Regulations, except as specifically provided for in this section, or any provision of 20D.150, Shoreline Master Program. (Ord. 1901)

Redmond Shoreline Master Program Update

Dredging Regulations
2009

20D.45 Dredging (SMP)

20D.45.10 Purpose
The purpose of this chapter is for the protection of the natural and aquatic environments of shorelines, wetlands, and streams.

20D.45.20 General Provisions.

20D.45.20-010 Permitted Dredging.
Dredging may be permitted for the following purposes only:

(1) To maintain marinas, public boat launches, or public swimming areas, where such uses are allowed: or

(2) To maintain the navigability of Lake Sammamish or the Sammamish River; or

(3) To maintain the flood conveyance capacity of a waterbody, where authorized under an approved flood hazard reduction plan or watershed plan; or

(4) To mitigate conditions which could endanger public health or safety; or

(5) To improve water quality or restore fish or wildlife habitat as part of an approved habitat restoration or watershed plan.

(6) New development shall be sited and designed to avoid, or if unfeasible, to minimize the need for new dredging.

20D.45.20-020 Prohibited Dredging.
The following dredging activities are prohibited:

(1) Dredging that would cause the spread of milfoil, have long term adverse impacts on shoreline vegetation, fish or wildlife, or create new channels; (Formerly 20D.150.20.080)

(2) Dredging in shallow water habitat used by salmon and steelhead for migration corridors, rearing, feeding and refuge, or in freshwater shellfish beds, unless no feasible alternative exists;

(3) Dredging for the purpose of obtaining fill or construction materials;

(4) Dredging in identified or potential archaeological sites, except where allowed under a City or State Archaeologist approved cultural resource protection and monitoring plan;

(5) Dredging for uses prohibited under 20D.140.10-070, Alteration or Development of Critical Areas; and

(6) Dredging for purposes other than those specified in 20D.45.20-010.

20D.45.20-030 Identification and Analysis of Dredging Impacts.

Applications for dredging and dredge material disposal shall provide the following types of information:

(1) Physical, chemical and biological assessment of the proposed dredged material applicable to the particular dredging site, including:
   (a) Summary of the existing biological communities and resources within and adjacent to the dredge site;
   (b) Assessment of the possibility of significant sediment contamination;
   (c) Description and evaluation of the proposed dredge spoil disposal site;
   (d) Specific data on the physical and chemical composition and structure of the dredge material, including:
      (i) grain size, clay, silt, sand or gravel content, as determined by sieve analysis;
      (ii) chemical analysis, including metals and organics; and
   (e) Bioassays useful in determining the suitability of dredged material for a selected disposal option.

(2) Dredging volumes, methods, schedule, frequency, hours of operation and procedures, and dewatering process, including adjacent dewatering and handling procedures.

(3) Method of disposal, including the location, size, capacity and physical characteristics of the disposal site, transportation method and routes, hours of operation and schedule.

(4) Stability of bedlands adjacent to the proposed dredging area.

(5) Hydraulic analyses, including current flows, direction and projected impacts. Hydraulic modeling studies that identify existing geohydraulic-hydraulic patterns and probable effects of dredging shall be submitted for large scale, extensive dredging projects, and for projects located within salmon and steelhead spawning, feeding, breeding or rearing habitats.

(6) Assessment of water quality impacts.

(7) A biological assessment of fish and aquatic habitat impacts, including migratory, seasonal and spawning use areas.

(8) A recommendation for any long-term monitoring needs and, if appropriate, a monitoring plan, to ensure compliance with permit conditions, and the long-term protection of water quality and aquatic habitat.

20D.45.20-040 Minimum Design and Construction Standards.

(1) Protection of Habitat and Water Quality Required. Proposals for dredging activities shall include all feasible measures to protect fish, aquatic and critical wildlife habitat, and to minimize 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, freshwater shellfish beds, or the biological productivity of other aquatic plant and animal communities. Dredging activities, including initial dredging, subsequent maintenance dredging, and dredge spoil disposal shall be permitted only where it is demonstrated that the activity will not:

(a) Result in significant and/or ongoing damage to water quality, fish, shellfish and other aquatic organisms essential to the biological functions of the waterbody; or

(b) Adversely alter natural drainage and circulation patterns, water currents or flows, shoreline wave action or currents, or significantly reduce flood water capacities.

(2) Proposals for dredging activities shall include all feasible measures to mitigate significant impacts to fish, aquatic and critical wildlife habitat. Mitigation measures shall include, at a minimum, those measures contained in 20D.140, Critical Areas, including, but not limited to, the replacement of shallow-water habitat, revegetation of disturbed uplands, and the introduction of in-water habitat features.

(3) Proposed dredging shall be the minimum necessary to accomplish the proposed use.

(4) Dredging activities shall be timed to minimize interference with and impacts to fish runs, critical wildlife breeding or nesting seasons, and other critical life stages for fish, aquatic organisms or critical wildlife.

(5) Dredging activities shall utilize techniques that cause minimum dispersal and broadcast of bottom material. Dredging shall not result is significant erosion above or below the ordinary high water.

(6) Impacts to Shoreline Uses. Dredging activities shall be planned and conducted to minimize interference with navigation, and to minimize adverse impacts to other shoreline uses, public access, shoreline views, and shoreline properties and values.

(7) Vegetation Restoration. Vegetation disturbed by dredging activities shall be restored to its original condition, equal alternative or an improved condition. All replacement vegetation used shall be indigenous plants.

20D.45.20-050 Dredge Spoil Disposal.

In addition to complying with the minimum design standards in 20D.45.20-040, all dredge spoil disposal shall meet the following requirements:

(1) Dredge spoils shall be disposed of on land but not with the floodplain, except that:

(a) Dredge spoil disposal may be allowed in open water or the floodplain for the purposes of fish and wildlife habitat enhancement where such enhancement is authorized under an approved habitat enhancement or watershed plan.

(b) Clean, uncontaminated dredge spoils may be recycled at the dredge site for a purpose specified in 20D.45.20-010.

(2) In-Water Disposal. In-water disposal shall be prohibited unless identified as part of an approved mitigation plan.

(3) On-Land Processing and Disposal. Disposal of dredge material on land shall meet the following requirements:

(a) Dredge spoil interim processing (during construction) disposal sites shall be enclosed by a system of dikes, settling basins and

biofiltration swales and other facilities (temporary and/or permanent) of sufficient capacity to provide adequate water quality of entrapped water before it leaves the diked area or enters adjacent waters. Permanent landscaping with trees, shrubs and groundcover shall be required and, where disposal sites are visible from public ways, landscape buffers may be required. Disposal or interim processing sites which have been completely filled shall be drained, graded to a maximum slope of 3:1 and visually incorporated into an approved landscape plan. (Formerly 20D.150.20.030).

(b) The proper management (routing, detention if warranted, and water quality facilities) of surface discharge and runoff shall be provided to maintain the integrity of existing streams, wetlands, natural drainages, underground springs and aquifers in accordance with an approved stormwater management plan.

(c) Critical wildlife habitat, significant trees and riparian vegetation shall not be significantly adversely affected.

(d) Disposal shall occur on the smallest possible land area necessary to accommodate the proposed volume of material and meet the above standards, unless dispersed disposal is specifically designed and approved.

(e) The selection of disposal sites shall meet all requirements and criteria of applicable regulatory agencies.

(f) Dredged material disposal on land is also subject to the landfill regulations in 20D.70 and Critical Areas regulations in 20D.140.

(4) Dredge disposal operations shall comply with the permit requirements and standards of all applicable regulatory agencies.

(5) Yearly status reports may be required to be submitted to the City by the dredge disposal permittee. Where required, status reports shall state the quantity of disposed material, characterize the quality of the material, and review any factors necessary to verify continued compliance with the Shoreline Permit, including continued compliance with water quality and habitat protection measure or conditions.

20D.45.20-060 Dredging Permits

(1) All dredging requires a Clearing, Grading and Stormwater Permit pursuant to RMC Chapter 15.24, Clearing, Grading and Stormwater. (Formerly 20D.150.20-090)

(2) Dredging within Bear Creek, Evans Creek, Sammamish River, or Lake Sammamish may require a Shoreline Substantial Development Permit pursuant to RCDG 20F.30.

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Redmond Shoreline Master Program Update

Design Standards
2009

20D.40 Design Standards

20D.40.10-020 Scope and Authority

(2) Authority.
- (a) Design Review Required. All applications requiring a building permit for exterior building modifications, new construction and signs, projects requiring a Level II or III Certificate of Appropriateness, and any private or public development within the shoreline jurisdiction shall comply with the Intent Statements and Design Criteria as provided in subsection (2)(e).
- (b) Design Review Board Authority…
  - (ii) Within the shoreline jurisdiction, all site plan review applications in which exterior building or site modifications have a total valuation of $50,000 or more, including, but not limited to the following types of projects: parks, parking lots, commercial buildings, regional utilities, streets, and bridges.
  - (iii) Planned Residential Development (PRD) applications when the proposal includes housing types other than single family detached units.
- (f) Administrative Design Flexibility….
  - (v) Consistency with the Shoreline Master Program.

20D.40.15 City-Wide Design Standards

20D.40.20 Context Design Standards

20D.40.20-030 Relationship to Adjacent Properties

(1) Intent
- (e) To encourage development that responds to the aesthetic, natural and recreational values of a shoreline location, through appropriate building design and orientation, and adequate visual and physical linkages to the shoreline.

20D.40.25 Site Design Standards

20D.40.25-010 Purpose
The purpose of this section is to establish criteria for development-wide design and improvements relative to natural features, critical areas, open space and recreation, safety, lighting, service areas, and storm water facilities.

20D.40.25-020 Natural Features, Sensitive Areas, and Shorelines

(1) Intent.
- (a) To encourage the integration of critical areas and shorelines into the site plan and development proposal as site amenities.
- (b) To reduce natural hazards and impacts on the natural environment, and to minimize the visual impact of development on hillsides and shorelines.
- (c) To preserve natural features, critical areas and shorelines in a manner which links natural systems and habitat rather than creating isolate pockets of such areas.

(2) Design Criteria.
- (a) Preserve and enhance natural features to create a desirable environment for residents, tenants and employees. Provide visual access areas, and where safety and function allow, physical access to natural features, sensitive areas and shorelines.
- (b) Provide for a transition from built features to significant natural features.
- (c) Where possible, critical areas and shorelines should be linked with other critical areas or open spaces on adjacent properties or to adjacent open space corridors.

20D.40.25-030 Open Space and Recreation

(2) Design Criteria.
- (e) Environmental conditions, such as critical areas, shorelines, solar access, microclimates, views, and privacy should determine the siting of open space, buildings, parking areas, and streets.
- (l) Commercial and industrial developments should create a desirable environment for employees. Design the building and site in a manner that provides visual access and, where appropriate, physical access to attractive natural features, such as shorelines, unusual landforms, or critical areas on the site.

20D.40.25-060 Site Lighting

(1) Intent.
- (c) To reduce horizontal light glare and vertical light trespass from a development site onto adjacent residential and commercial development and onto natural features, shorelines and sensitive areas.

(2) Design Criteria.

(a) Site lighting should not trespass onto adjacent uses, particularly residential uses, shorelines and critical wildlife habitat.

(g) Within the shoreline jurisdiction, development proposal shall demonstrate compliance with the City's "dark skies" policies, such as demonstrating that light levels are the minimum necessary for safety and essential site functions.

(h) Lighting for sports fields, driving ranges and similar intensive recreational uses within the shoreline jurisdiction shall incorporate cut-off shields, and shall incorporate plantings of native conifers to screen the development from the shoreline.

20D.40.25-070 Service Areas

(1) Intent.

(a) To reduce the visual and physical impacts of service areas, mechanical equipment, trash and recycling containers, and other similar uses on other on-site uses, the street environment, adjacent shoreline areas and other public open spaces, and adjacent properties, while maintaining accessibility for service providers and users.

(2) Design Criteria.

(a) Services and outdoor storage areas, large utility cabinets and mechanical equipment, and waste receptacles (trash dumpsters, compactors, and mechanical equipment) shall be located away from highly visible areas, such as streets and public shoreline areas, to minimize visual, noise, or physical impacts on the site, street environment, adjacent public open spaces, and adjacent properties.

(c) When service elements and outdoor storage areas (dumpsters, refuse, and recycling collection areas) are visible from the sidewalk, shoreline public access areas or adjacent properties, the elements shall be screened from view using materials and colors consistent with the design of the primary structure(s) on the site. Utility cabinets and small-scale service elements may be screened with landscaping and/or structures.

20D.40.25-080 Stormwater Facilities

(2) Design Criteria

(b) Stormwater facilities should be designed to address the following;

(vii) Adjacent to natural shoreline areas, above-ground stormwater facilities shall be landscaped with native plants, and should include snags, nest boxes or other habitat features as appropriate for the scale, function and location of the facility.

20D.40.30 Building Design Standards

20D.40.30-010 Purpose

20D.40.30-020 Architectural Concepts

(2) Design Criteria.

(b) The architectural composition....

(i) Building Orientation. Buildings may be oriented around a courtyard, be terraced down a hillside, or respond in design to a prominent feature, such as a corner location, a street or the river. Windows, breezeways and common areas should be oriented toward shorelines, scenic views, or natural or recreational amenities on the site. Buildings and site design should provide inviting entry orientation. Water-enjoyment uses located adjacent to the shoreline should incorporate substantial areas of windows and outdoor seating areas and walkways oriented toward the shoreline. Outdoor use areas should include attractive landscaping, lighting and street furniture. Buildings should not turn their backs to the street or to shoreline public access areas.

(iii) Building Scale. The apparent mass and scale of large buildings can be reduced through the use of modulation and articulation that provides a pedestrian scale and architectural interest. Height and modulation should reflect natural features and views. The building envelope shall be designed to maintain shoreline view corridors from the site and nearby properties. (See also 20D.40.30-030, Building Scale.)

20D.40.35 Landscape Design Standards

20D.40.35-010 Purpose

20D.40.35-020 Planting Design

(1) Intent.

(a) Planting design is an integral part of the overall site and community design and should complement the architecture, other site elements and the visual appearance of the neighborhood, as well as the northwest environment. The landscape plan should help reduce impacts to and create a transition to adjacent natural features, such as sensitive areas and shorelines. The landscape plan should be based on a well-defined concept addressing criteria for function, design, horticulture, maintenance, and irrigation.

(2) Design Criteria.

(a) Retention and Enhancement of Existing Vegetation. Preserve as much native non-invasive vegetation as possible, particularly adjacent to buffers of sensitive areas and shorelines. Replant developed areas with stands of non-dwarf evergreens in natural and random patterns where possible.

(d) Transition. Provide plantings that effectively accommodate a change in design between adjacent sites, within a site, and from native vegetation areas. To lessen impacts and provide transitions to natural areas, use native plants as much as possible adjacent to the buffers of critical areas and shorelines. Design foundation plantings to create an effective change from public to private space and from the vertical to horizontal plane at building edges.

20D.40.35-040 Tree Retention

(1) Intent.

(f) To lessen impacts of development on adjacent sensitive areas and shorelines.

(2) Design Criteria.

(b) Mature trees, stands of trees, and trees and their understory adjacent to a critical area or shoreline buffer should be protected wherever possible.

20D.40.40 Sign Design Standards

20D.40.40-010 Purpose

20D.40.40-020 Signs and Street Graphics

(1) Intent.

(j) To ensure that sign scale, orientation and lighting are compatible with natural and aesthetic qualities of adjacent critical areas, shorelines, or other natural open space.

20D.40.45-020 Street Design

(1) Intent.

(b) To create attractive and effective streetscapes that provide safe linkages to public facilities, shorelines, and other public open spaces, and that complement the aesthetics of adjacent natural features and buildings.

(2) Design Criteria.

(j) Within the shoreline jurisdiction, streets and bridges should be designed to enhance shoreline visual, physical and cultural access by incorporating special design features, such as viewpoints, gateway design elements, street furniture, decorative lighting, landscaping, public art or street graphics.

20D.40.45-040 Pedestrian and Bicycle Circulation

(1) Intent.

(b) To enhance access to on-and off-site open space areas, shoreline access areas, and pedestrian/bicycle paths.

(2) Design Criteria.

(b) Enhance site access and access to adjacent sites by linking paths, driveways and parking areas to adjoining public or private open space, paths, crosswalks and transit stops. (See Comprehensive Plan Recreation and Open Space Trails Plan, Shoreline Public Access Map, and Redmond City Center Bicycle Plan.)

20D.40.45-060 Parking Lot Location and Design

(1) Intent.

(e) To reduce the negative impacts of parking and circulation facilities on highly visible public open spaces, such as shorelines and other natural open spaces.

(2) Design Criteria.

(a) Locate parking where possible behind buildings and away from areas of high public visibility and shorelines.

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Redmond Shoreline Master Program Update

Special Uses Regulations

2009

20D.170 Special Uses

20D.170.15 Animal Boarding: Kennels, Shelters, and Equestrian Facilities.

20D.170.15-030 General Development Standards for Equestrian Facilities.

(2) Setback Requirements. Structures and operations for feeding, housing, training and caring for livestock and storing livestock feed or wastes shall meet the setback requirements in the chart below.

Structure or Operation	Minimum Setback from Property Line	Minimum Setback from Water Bodies (ordinary high water mark)
Structures for feeding, housing, training and caring for livestock	50 feet	100 feet, or the minimum buffer established by critical areas buffers requirements in 20D.140.20-020, Stream Buffers, 20D.150.60 Shoreline Buffers and Setbacks, and waterfront building setback requirements in 20C.30.25-080, whichever is greater.
Accessory structures	5 feet	Established by critical areas buffers requirements in 20D.140.20-020, Stream Buffers, 20D.150.60 Shoreline Buffers and Setbacks, and waterfront building setback requirements in 20C.30.25-080, whichever is greater.
All other buildings	See site requirements chart.	Established by critical areas buffers requirements in 20D.140.20-020, Stream Buffers, 20D.150.60 Shoreline Buffers and Setbacks, and waterfront building setback requirements in 20C.30.25-080, whichever is greater.

(7) Lighting. Parking lot lighting and lighting on structures or signs shall be designed to minimize excessive glare and light trespass onto neighboring properties and shorelines, and shall comply with the development regulations for lighting and signage and with the Design Standards of Chapter 20D.40 RCDG.

20D.170.20 Automobile, Recreational Vehicle and Boat: Sales, Service and Rental.

20D.170.20-020 Standards for vehicle Sales, Service and Rentals Where Allowed.

(7) Landscaping. If the use is a stand alone use, the perimeter arterial street frontage shall have a landscaped buffer to provide a "Type II" visual screen as described in the development regulations for landscaping, natural screening and tree preservation. If the use abuts an existing residential use, a "Type I" solid landscape buffer in planters no less than 15 feet in width shall be required. No razor wire, chain link, or barbed wire fences shall be allowed on the business frontage or fronting shoreline public access areas (Shoreline Public Access System Map, Figure S-1 of the Shoreline Master Program). Decorative fencing or decorative walls and landscaping on side or back lots will be required where necessary to prevent visual impacts on neighboring businesses, residential uses, public shoreline areas, and the streetscape.

(10) Parking lot lighting and lighting on structures, or signs shall be designed to minimize excessive glare and light trespass onto neighboring properties and shorelines, and shall comply with the development regulations for lighting and signage and with the Design Standards of Chapter 20D.40 RCDG. (Ord. 1930 (20C.80.7160))

20D.170.30 Batch Plant and Extractive Industry.

20D.170.30-030 Batch Plant and Extractive Industry Review Standards.

(2) Noise and Lighting Impacts. Noise and lighting impacts from extractive operations shall be minimized by using noise suppression devices, light shielding and landscape buffers to screen lighting from adjacent shoreline areas. Nighttime trucking is permitted although extraction operations should occur during daylight hours.

(4) Water Quality. Uses shall assure protection of groundwater quality and Evans Creek through the application of critical areas regulations and the establishment of vegetated buffers between development and the creek.

20D.170.40 Churches, Temples, Synagogues, and Other Places of Worship.

20D.170.40-030 General Development Criteria.

(1) Lighting for parking lot areas, structures, statuary and signage shall be designed to minimize excessive glare and light trespass onto neighboring properties and shorelines, and shall comply with the development regulations for parking, lighting and signs and the design standards of Chapter 20D.40 RCDG.

(3) The storage of buses or vans....

(d) Decorate fencing or decorative walls and landscaping on side or back lots will be required when necessary to prevent visual impacts on neighboring properties and public shoreline areas. The screening requirement or amount of screening may be eliminated or reduced in light industrial zones to the extent that the storage of vehicles is treated uniformly with other uses in the same zone.

(5) Places of Worship Within Shorelines. Within the shoreline jurisdiction, site development shall comply with the general standards of the zone in which it is located, except as otherwise provided in 20D.170.40-040 and 20D.170.40-050 below. The maximum building height, exclusive of steeples, bell towers, crosses or other symbolic religious icons mounted on the rooftop is 35 feet. An additional building height allowance of 15 feet is allowed for symbolic religious icons located on the building. (SMP)

(6) The maximum height for separate structures on-site such as bell towers, crosses, statuary, or other symbolic religious icons shall be 15 feet.

(7) The proposed structure(s) shall comply with the applicable design criteria contained in Chapter 20D.40 RCDG, Design Standards, for the zone in which the use is located.

(8) Additional standards are applicable to the use. The underlying zoning and size of the facility shall determine which additional criteria shall apply. The additional criteria can be found in either RCDG 20D.170.40-040 or 20D.170.40-050 below as the capacity and zone apply. (Ord. 1930 (20C.80.7370))

20D.170.45 Telecommunications Facilities.

20D.170.45-020 Permits and Exemptions.

(1) Permits Required.

(e) Summary of Required Permits.

(iv) Broadcast and Relay Towers. Broadcast and relay towers and other freestanding support structures require a building

permit and a conditions use permit (Type IV) in all zoning districts where allowed, except the Industry (I) and Manufacturing Park (MP) zones where a special use permit (Type II) is required.

(3) Note that all telecommunication facilities located within the Shorelines shall comply with 20D.150.160, *Utilities Within the Shorelines.*

20D.170.45-030 General Siting Criteria.

(3) Broadcast and relay towers are not allowed within the Agriculture, Urban Recreation and Rural Residential zones (A, UR, RA-5, and R-1) of the City unless reviewed through the Essential Public Facilities Review Process (RCDG 20D.170.55-040). When a broadcast and relay tower is proposed, preferred locations are within the Industry (I) and Manufacturing Park (MP) zoning districts by utilizing a Type II (i.e. special use permit) permit procedures.

(a) Broadcast and Relay Towers. Broadcast and relay towers including monopoles shall be minimized by collocating wireless facilities on existing towers. New broadcast and relay towers are most appropriately located in industrial areas followed in order of preference by manufacturing, business, commercial, and residential zones (I, MP, BP, CO, CB, GC, PA, RC, NC, GDD, Downtown and R-30 through R-2). Broadcast and relay towers are not allowed in Agriculture, Urban Recreation, Rural, and Large Lot Residential zones (A, UR, RA05 and R-1), or within shoreline jurisdiction (20D,150,20) unless approved through the Essential Public Facilities Process (RCDG 20D.170.55-040). The City may request studies associated with applications for telecommunication facilities which demonstrate that the facility is located outside of shoreline public access areas and shoreline view corridors, and has been designed to minimize impacts to views from surrounding areas.

20D.170.45-050 Amateur Radio Towers – Development Standards.

(2) Additional Standards in Agriculture, Urban Recreation, and Residential Zones and Shorelines – Amateur Radio Towers.

(b) The height of a ground-mounted tower may not exceed 65 feet unless a proposal demonstrates that physical obstructions impair the adequate use of the tower. Telescoping towers may exceed the 65-foot height limit only when extended and operating. The combined structure of a roof-mounted tower and antenna(s) shall not exceed a height of 25 feet above the existing roofline. Within the shoreline jurisdiction, the height limit for ground-mounted and

roof-mounted towers and antennas, including of building height is 50 feet. (SMP)

(c) In the Agriculture and Urban Recreation Zones, towers shall be located in what would customarily be considered the yard of the residence. Placement shall avoid, to the extent possible, using land that is available for crops, pasturage or other agricultural activities.

20D.170.45-060 Broadcast and Relay Towers – Development Standards.

(2) Additional Standards in Agriculture, Urban Recreation and Residential Zones and Shorelines – Broadcast and Relay Towers.

(a) Commercial broadcast and relay towers shall not be allowed in the Agriculture, Urban Recreation, Semi-Rural (RA-5), or Large Lot (R-1) zoning districts or shoreline jurisdiction, unless reviewed through the Essential Public Facilities Review Process (RCDG 20D.170.55) (SMP) Commercial broadcast and relay towers shall not be allowed in the Low Density Residential (R-2 and R-3 zones) and the Low-Moderate Density Residential Zone (R-4, R-5, and R-6) zones, unless they meet the Special Exception Criteria, RCDG 20D.170.45-080.

(e) The base of a ground-mounted broadcast and relay tower shall be screened with fencing, walls, landscaping, or other means such that the view of the antenna(s) base is blocked as much as practicable from any street, from the yards and main living floor areas of surrounding residential properties, and from public shoreline areas. The screening may be located anywhere between the antenna(s) and the above-mentioned viewpoints. Landscaping that qualifies for the purpose of screening shall be maintained in a healthy condition.

(f) Within the shoreline jurisdiction, additional screening shall be provided through plantings or double rows of native conifers surrounding the base of the structure. (SMP)

(g) Stealth technology that mimics natural features, such as native trees, shall be employed.

20D.170.45-070 Wireless Communication Facilities – Development Standards.

(1) Development Standards for All Zoning Districts.

(f) Screening of wireless equipment shall be provided with one or a combination of the following materials: fencing, walls, landscaping, structures, or topography which will block the view of the antenna(s) and equipment shelter as much as practicable from any street and from the yards and main floor living areas of residential properties within approximately 500 feet, and from public shoreline areas. Screening may be located anywhere between the base and the above-mentioned viewpoints. Landscaping for the purposes of screening shall be maintained in a healthy condition.

(2) Additional Standards in Agriculture, Urban Recreation and Residential Zones and Shorelines – Wireless Communication Facilities.

(a) Commercial telecommunication facilities shall not be allowed in the Agriculture and Urban Recreation Zones or in Residential zones if the site or building is used exclusively for residential purposes except in the R-20 and R-30 zoning districts where a special development permit (Type IV) is required.

(c) Associated above-ground equipment shelters shall be minimized, and shall not exceed 240 square feet (e.g., 12 by 20 feet) unless operators can demonstrate that more space is needed. Shelters shall be painted a color that matches existing structures or the surrounding landscape. The use of concrete or concrete aggregate shelters is not allowed. A Type I visual screen (see landscape standards) shall be created around the perimeter of the shelter. Operators shall consider undergrounding equipment if technically feasible or placing the equipment within existing structures. Screening of towers associated with wireless facilities shall be as provided in subsection (2) for broadcast and relay towers.

(d) Stealth technology that mimics natural features, such as native trees, shall be employed.

20D.170.45-080 Special Exceptions.

(1) Special Exception Criteria.

(b) The applicant for a Special Exception shall demonstrate that the proposed materials, shape, and color of the antenna(s) will, to the greatest extent possible, minimize negative visual impacts on adjacent or nearby residential uses and recreational uses in the Agriculture and Urban Recreation zones and shoreline areas. The use of certain materials, shapes and colors and landscaping may be required in order to minimize visual impacts.

(2) Large Satellite Dish Antenna(s) – Special Exceptions.

(a) Agriculture, Urban Recreation, and Residential Zones and Shorelines. Modifications to requirements for setback, size, screening and maximum height limit may be considered by Special Exception. If a Special Exception from the height limit for a ground-mounted dish is requested, the height of the dish shall be limited to a maximum of 18 feet.

Only if these modifications....

(3) Amateur Radio Towers – Special Exceptions.

(a) Agriculture, Urban Recreation and Residential Zones and Shorelines. Where a property owner desires to very from the height, location or setback limitations, the Special Exception Criteria must be met.

(4) Broadcast and Relay Towers – Special Exceptions.

(a) Agriculture, Urban Recreation and Residential Zones and Shorelines.

(ii) Placement of a broadcast and relay tower within the A. UR, RA-5 and R-1 zones and shoreline jurisdiction shall require review through the Essential Public Facilities Process (RCDG 20D.170.55).

(5) Wireless Communication Facilities – Special Exceptions.

(a) Agriculture, Urban Recreation and Residential Zones and Shorelines. An applicant or a proposed wireless facility that exceeds the height limit shall meet the Special Exception Criteria.

20D.170.75 Heliports and Float Plane Facilities.

20D.170.75-010 Heliports. Reserved

20D.170.75-020 Float Plane Facilities. (SMP)

Float plane facilities shall comply with the following guidelines.

(1) Location of Float Plane Facilities. Piers, docks and floats associated with the operation of float planes shall meet, as a minimum, the location criteria contained in 20D.150.70-030, Permitted In-Water Structures. Piers and docks are also subject to the standards for residential piers and docks contained in 20D.150.70-050, Piers, Docks and Floats.

(2) Only one float plane per lot is allowed.

(3) Speeds Restricted. Float planes shall observe the speed regulations for watercraft and vessels contained in Redmond Municipal Code 14.16.030, Speed Regulations, except that these speeds may be exceeded for a short duration of time during landing and takeoff of planes.

(4) Float plane facilities or operation of float planes is prohibited on the Sammamish River, Bear Creek and Evans Creek.

(5) Float plane facilities and operation shall comply with FAA standards, including standards for fueling, oil spill cleanup, fire fighting equipment, and vehicle and pedestrian separation.

O:\Cathy\Shoreline Master Program Update\2009\Special Use Regulations (2009)

Redmond Shoreline Master Program Update

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20F.10.30 Administrative Interpretations.

20F.10.30-090 Administrative Interpretations, Shoreline Master Program. See 20D.150.200-010.

20F.10.50 Nonconformances.

20F.10.50-040 Continuance of Nonconformities.

Nonconformities, as defined in Chapter 20A.20.140 RCDG, Definitions, may continue to be used and maintained in accordance with the provisions of this chapter except as otherwise provided in RCDG 20D.150.150-020, Amortization of Off-premise Signs within the Shoreline and, RCDG 20D.160.10-110, Amortization of Nonconforming Sandwich Board Signs. The use and maintenance is permitted as a result of vested rights obtained through the legal establishment of the nonconforming use or structure. (Ord. 2118)

20F.10.50-090 Alteration or Expansion of a Nonconformance.

(3) Nonconforming Structures. A nonconforming structure may not be expanded or altered in any way so as to increase that nonconformity. See 20D.150.200-020(3) for nonconforming shoreline structures. A nonconforming structure shall be brought into full compliance with the Redmond Community Development Guide when alteration or expansion of the structure takes place and the following takes place within any three-year period....

20F.30.25-030 Application Review and Decision Timeframe.

(6) See also 20D.150.200-030, *Shoreline Permits*.

20F.30.30-030 Administrative Decision.

A written record of the Type I decision shall be prepared in each case. The record may be in the form of a staff report, letter, the permit itself, or other written document and shall indicate whether the application has been approved, approved with conditions, or denied. The department decision shall be based on the applicable Redmond Community Development Guide or other adopted uniform code and shall include any conditions to ensure consistency with the development regulations. The applicant shall be notified of the final decision. All other decisions are final upon expiration of any applicable appeal period, or if

appealed, on the date of the appeal body's final decision on the application. (Ord. 2118) See 20D.150.200-030(7)(a) for decisions on Shoreline Exemptions.

20F.30.35-020 Notice of Application.

20F.30.35-020 (3)

(xi) Shoreline Substantial Development Permits. See also 20D.150.200-030(6)(b) for additional requirements.

20F.30.35-030 Minimum Comment Period.

(5) Shoreline Substantial Development Comment Period – See 20D.150.200-030(6)(b).

20F.30.35-070 Notice of Decision.

The Administrator shall mail notice of the Technical Committee/Design Review Board/Landmark Commission decision and the SEPA determination, if any, to the applicant and to each person who submitted comments during the public comment period or at any time prior to issuance of the decision. The Notice of Decision shall include a statement of any threshold determination made under SEPA (Chapter 43.21C RCW) and the procedures for administrative appeal, if any. For those project permits subject to SEPA, the Notice of Decision on the issued permit shall contain the requirements set forth in RCDG 20F.20.40, Environmental Review. The exception shall be for decision on those properties governed by King County interlocal agreement for preservation services. Notice procedures for those can be found in King County Code Chapter 20.62. (Ord. 2164; Ord. 2118) See 20D.150.200-030(6)(b) for Shoreline Substantial Development Permits.

20F.30.35-075 Termination of Approval.

(4) See 20D.150.200-030(9) for Shoreline Substantial Development Permits.

20F.30.35-080 Appeal of Type II, Technical Committee and/or Design Review Board/landmark Commission Decisions.

(2) Shoreline Permit Appeals. See 20D.150.200-030(6)(b).

20F.30.35-140 Commencement of Activity.

Some construction activity may commence prior to the conclusion of an appeal. See RCDG 20F.30.60-030(2), Effect of Appeal. (Ord. 2118) See 20D.150.200-030(6)(d) for Shoreline Substantial Development Permits.

20F.30.35-150 Modification or Addition to an Approved Project or Decision.

See RCDG 20F.40.25, Administrative Modifications. (Ord. 2118). See 20D.150.200-030(8) for Shoreline Substantial Development Permits.

20F.30.40-020 (3) (a)

(xi) Shoreline Conditional Use Permits and Shoreline Variances. See also 20D.150.200-030(6)(c) for additional requirements.

20F.30.40-030 Minimum Comment Period.

(5) Shoreline Conditional Use Permits and Shoreline Variances – See 20D.150.200-030(6)(c).

20F.30.40-100 Notice of Final Decision.

After the conclusion of the appeal period, or the resolution of a filed appeal, the Administrator shall mail the Notice of Final Decision and the final SEPA threshold determination, if any, to the applicant and to each person who participated in the public hearing or who submitted comments during the public comment period at any time prior to issuance of a decision. (Ord. 2118) See 20D.150.200-030(6)(c) for Shoreline Conditional Use Permits and Shoreline Variances.

20F.30.40-105 Termination of Approval.

(4) Shoreline Conditional Use Permits and Shoreline Variances – See 20D.150.200-030(9).

20F.30.40-110 Appeal of Type III, Hearing Examiner Decision

(2) Shoreline Conditional Use Permits and Shoreline Variances. See 20D.150.200-030(6)(c).

20F.30.40-130 Commencement of Activity.

Some construction activity may commence prior to the conclusion of an appeal. See RCDG 20F.30.60-030(2), Effect of Appeal. (Ord. 2118) See 20D.150.200-030(6)(d) for Shoreline Conditional Use Permits and Shoreline Variances.

20F.30.40-140 Modification or Addition to an Approved Project or Decision.

See RCDG 20F.40.25, Administrative Modifications. (Ord. 2118)

See 20D.150.200-030(8) for Shoreline Conditional Use Permits and Shoreline Variances.

20F.40.30-100 Annexation of Shorelines.

See 20D.150.200-010

20F.40.120 Shoreline Permits[1]

See 20D.150.200 Shoreline Administration and Procedures

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[1] Repeal everything currently in RCDG 20F.40.120.

20D.140 Critical Areas. (SMP)

20D.140.10-010 Purpose and Intent.

(1) The City finds that Redmond contains certain areas that can be identified and characterized as environmentally sensitive or critical. Such areas within the City include Fish and Wildlife Habitat Conservation Areas, Wetlands, Frequently Flooded Areas, Geologically Hazardous Areas, and Critical Aquifer Recharge Areas, and their associated buffers.

(2) The City finds that past growth patterns have in some cases resulted in natural disasters which threaten public health and safety, and that by preventing development on certain critical areas the City can better maintain public health, safety and welfare. In addition, by preserving features that provide for clean water, fisheries, and wildlife, the City can help maintain a positive ecological balance that provides for the immediate and long-term public welfare. This chapter is intended to preserve the City's important environmental features while allowing development to occur if compatible with and in consideration of these critical areas.

(3) The classification and designation of these critical areas is intended to assure the conservation and protection of critical areas from loss or degradation, and to restrict land uses and development which are incompatible with environmentally critical areas. It is the intent of this chapter to designate and protect critical areas.

(4) The City finds that these essential critical areas perform a variety of valuable and beneficial biological and physical functions that benefit the City and its residents. Some types of critical areas may also pose a threat to human safety or to public and private property. The City further finds that the functions of critical areas include the following:

(a) Fish and Wildlife Habitat Conservation Areas. Wildlife areas are ecosystems composed of unique interacting systems of soils, geology, topography, and plant and animal communities. They consist of land based areas and aquatic areas.

Wildlife habitat provides opportunities for food, cover, nesting, breeding and movement for fish and wildlife within the City; maintains and promotes diversity of species and habitat within the City; helps to maintain air and water quality; controls erosion; serves as areas for recreation, education and scientific study and aesthetic appreciation; and provides neighborhood separation and visual diversity within urban areas.

Riparian corridors are essential for wild fish populations. Healthy riparian zones are dynamic ecosystems that perform various functions that form salmonid habitat. Some of the major functions include: producing and delivering large and small woody debris to shorelines and stream channels;

shoreline protection and habitat formation; removing sediments and dissolved chemicals from water; moderating water temperature; providing favorable microclimate; providing habitat for terrestrial animals; and providing proper nutrient sources for aquatic life. Additionally, aquatic areas and their associated buffers store and convey stormwater and floodwater; recharge groundwater; and serve as areas for recreation, education and scientific study and aesthetic appreciation. The City's overall goal shall be no net loss of riparian corridor functions and values.

The primary purpose of Fish and Wildlife Habitat Conservation Areas regulations is to achieve no net loss of Core Preservation Areas, which includes riparian corridors, minimize impact to and retain character of Quality Habitat Areas, and protect Species of Concern, Priority Species, and Species of Local Importance.

(b) Wetlands. Wetlands are fragile ecosystems which serve a number of important beneficial functions. Wetlands assist in the reduction of erosion, siltation, flooding, ground and surface water pollution, and provide wildlife, plant, and fisheries habitats. Wetlands destruction and impairment may result in increased public and private costs or property losses.

The City's overall goal shall be to achieve no net loss of wetlands. This goal shall be implemented through retention of the function, value and acreage of wetlands within the City. Wetland buffers serve to moderate runoff volume and flow rates; reduce sediment, chemical nutrient and toxic pollutants; provide shading to maintain desirable water temperatures; provide habitat for wildlife; protect wetland resources from harmful intrusion; and generally preserve the ecological integrity of the wetland area.

The primary purpose of the wetland regulations is to avoid wetland impacts and achieve a goal of no net loss of wetland function, value and acreage; and where possible enhance and restore wetlands.

(c) Frequently Flooded Areas. Floodplains and other areas subject to flooding perform important hydrologic functions and may present a risk to persons and property. Floodplains help to store and convey storm water and flood water; recharge ground water; provide important areas for riparian habitat; and serve as areas for recreation, education, and scientific study. Development within floodplain areas can be hazardous to those inhabiting such development, and to those living upstream and downstream. Floods also cause substantial damage to public and private property that result in significant costs to the public and individuals.

The primary purpose of Frequently Flooded Areas regulations is to strive towards no net loss of structure, value, and functions of natural systems within Frequently Flooded Areas and to employ no net impact floodplain

management in order to avoid impacts to upstream and downstream properties and substantial risk and damage to public and private property and loss of life.

(d) Critical Aquifer Recharge Areas. Potable water is an essential life sustaining element. Aquifer recharge areas provide a source of potable water and contribute to stream discharge during periods of low flow. The City finds that certain portions of its planning area are susceptible to contamination of drinking water and watercourse supplies through rapid infiltration of pollutants through the soil to ground water aquifers.

The primary purpose of aquifer recharge area regulations is to protect critical aquifer recharge areas by avoiding land use activities that pose potential contamination; and to minimize impacts to recharge areas through the application of strict performance standards.

Wellhead Protection Zones 1, 2, and 3 are designated as Critical Aquifer Recharge Areas under the provisions of the Growth Management Act (Chapter 36.70A RCW) and are established based on proximity to and travel time of groundwater to the City's public water source wells.

(e) Geologically Hazardous Areas. 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 commercial, residential, or industrial development is sited in or near areas of significant hazard. Some geological hazards can be reduced or mitigated by engineering, design, or modified construction so that risks to health and safety are acceptable. When technology cannot reduce risks to acceptable levels, building in geologically hazardous areas should be avoided.

The primary purpose of Geologically Hazardous Areas regulations is to avoid and minimize potential impacts to life and property from geologic hazards such that sites are rendered as safe as one not containing such hazard through appropriate levels of study and analysis, application of sound engineering principles, and regulation or limitation of land uses.

The City finds, therefore, that identification, regulation and protection of critical areas are necessary to protect the public health, safety and general welfare.

(5) This section of the Redmond Community Development Guide contains standards, guidelines, criteria and requirements intended to identify, analyze, preserve and mitigate potential impacts to the City's critical areas and to enhance and restore degraded resources, such as wetlands, riparian stream corridors or habitat, where possible. The intent of these regulations is to avoid impacts to critical areas and preserve the functions of critical areas. In appropriate circumstances, impacts to specified critical areas resulting from regulated activities may be minimized, rectified, reduced and/or compensated for, consistent with the requirements of this chapter.

(6) By limiting development and alteration of critical areas, this Chapter seeks to:

(a) Protect members of the public and public resources and facilities from injury, loss of life, or property damage due to landslides and steep slope failures, erosion, seismic events, or flooding;

(b) Protect unique, fragile, and valuable elements of the environment, including ground and surface waters, wetlands, and fish and wildlife and their habitats;

(c) Direct activities not dependent on critical area resources to less ecologically sensitive sites and mitigate unavoidable impacts to critical areas by regulating alterations in and adjacent to critical areas; and

(d) Prevent cumulative adverse environmental impacts to water quality, wetlands, and fish and wildlife habitat, and the overall net loss of wetlands, frequently flooded areas, and habitat conservation areas.

(7) It is the further intent of this section to:

(a) Provide standards, guidelines, and criteria to guide application of these critical areas goals and policies when considered with other goals and policies of the Redmond Community Development Guide, including those pertaining to natural features and environmental protection;

(b) Serve as a basis for exercise of the City's substantive authority under the State Environmental Policy Act (SEPA) and the City's SEPA rules;

(c) Protect critical areas in accordance with the Growth Management Act and through the application of best available science, as determined according to WAC 365-195-900 through 365-195-925, and in consultation with state and federal agencies and other qualified professionals; and

(d) Coordinate environmental review and permitting of proposals to avoid duplication and delay.

(8) For the purposes of this division, "department" shall mean the City of Redmond Department of Planning and Community Development and "committee" shall mean the City of Redmond Technical Committee. (Ord. 2180; Ord. 1693. Formerly 20C.40.010)

20D.140.10-020 Applicability – Regulated Activities.

(1) The provisions of this chapter shall apply to any activity that has a potential to significantly adversely impact a critical area or its established buffer unless otherwise exempt. Such activities include but are not limited to:

(a) Removing, excavating, disturbing or dredging soil, sand, gravel, minerals, organic matter or materials of any kind;

(b) Dumping, discharging or filling with any material;

(c) Draining, flooding or disturbing the water level or water table;

(d) Driving pilings or placing obstructions;

(e) Constructing, reconstructing, demolishing or altering the size of any structure or infrastructure that results in disturbance of a critical area or the addition of any impervious surface coverage to a site;

(f) Destroying or altering vegetation through clearing, grading, harvesting, shading or planting vegetation that would alter the character of a critical area;

(g) Activities that result in significant changes in water temperature, physical or chemical characteristics of water sources, including quantity and pollutants; and

(h) Any other activity that has a potential to significantly adversely impact a critical area or established buffer not otherwise exempt from the provisions of this chapter.

(i) With regard to Frequently Flooded Areas, the provisions of this chapter shall apply to any activity that would result in change to the flood storage capacity of a floodplain or flood fringe area, or cause an increase in the base flood elevation, unless otherwise exempt.

(2) To avoid duplication, Types I, II, III, IV, V, & VI Permits shall be subject to and coordinated with the requirements of this chapter.

20D.140.10-040 Critical Areas Maps.

Critical Areas Generally. Critical areas maps are included as a part of this division and listed as follows:

(1) Fish and Wildlife Habitat Conservation Areas;

(2) Streams;

(3) Wetlands;

(4) Frequently Flooded Areas;

(5) Wellhead Protection Zones;

(6) Landslide Hazard Areas;

(7) Erosion Hazard Areas; and

(8) Seismic Hazard Areas.

20D.140.10-050 Relationship to Other Regulations.

(1) These critical area regulations shall apply as an overlay and in addition to zoning, land use and other regulations established by the City of Redmond. In the event of any conflict between these regulations and any other regulations of the City, the regulations which provide greater protection to environmentally critical areas shall apply.

(2) Areas characterized by particular critical areas may also be subject to other regulations established by this chapter due to the overlap or multiple functions of some sensitive or critical areas. Wetlands, for example, may be defined and regulated according to the Wetland and Fish and Wildlife Habitat Conservation Area provisions of this chapter. In the event of any conflict between regulations for particular critical areas in this chapter, the regulations which provide greater protection to environmentally critical areas shall apply. (Ord. 1693. Formerly 20C.40.060)

(3) Compliance with the provisions of this Chapter does not constitute compliance with other federal, state, and local regulations and permit requirements that may be required.

20D.140.10-070 Alteration or Development of Critical areas – Standards and Criteria.

Standards and criteria are set forth in RCDG 20D.140.10-080 through 100, 20D.140.20-030 through 050, 20D.140.30-030, 20D.140.40-020 through 030, 20D.140.50-020 through 030, and 20D.140.60-030 through 040. (Ord. 1693. Formerly 20C.40.100)

20D.140.10-080 General Mitigation Standard.

All significant adverse impacts to critical areas functions and values shall be mitigated. Mitigation actions by an applicant or property owner shall occur in the following sequence:

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

(2) Minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps, such as project redesign, relocation, or timing, to avoid or reduce impacts;

(3) Rectifying the impact to the critical area 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 impact over time by preservation and maintenance operations during the life of the action;

(5) Compensating for the impact by replacing or providing substitute resources or environments; and/or (Ord. 1693. Formerly 20C.40.100(05))

(6) Monitoring the hazard or other required mitigation and taking remedial action when necessary.

20D.140.10-090 Other Appropriate Mitigation Actions.

Where impacts cannot be avoided, and the applicant has exhausted feasible design alternatives, the applicant or property owner shall seek to implement other appropriate mitigation actions in compliance with the intent, standards and criteria of this chapter. In an individual case, these actions may include consideration of alternative site plans and layouts, reductions in the density or scope of the proposal, and/or implementation of the performance standards listed in RCDG 20D.140.10-070 through 100, 20D.140.20-030 through 050, 20D.140.30-030, 20D.140.40-020 through 030, 20D.140.50-020 through 030, and 20D.140.60-030 through 040; and 20D.140.10-120 through 140, 20D.140.20-060 through 070, 20D.140.30-040, 20D.140.50-040, and 20D.140.60-050. (Ord. 1693. Formerly 20C.40.100(10))

20D.140.10-100 Proposed Developments.

Development proposed in critical areas shall incorporate and reflect the performance standards contained in RCDG 20D.140.10-110 through 140, 20D.140.20-060 through 070, 20D.140.30-040, 20D.140.50-040, and 20D.140.60-050. (Ord. 1693. Formerly 20C.40.100(20))

20D.140.10-110 Mitigation Standards, Criteria and Plan Requirements.

(1) Mitigation Performance Standards. Significant adverse impacts to critical area functions and values shall be mitigated. Mitigation actions shall be implemented in the preferred sequence identified in RCDG 20D.140.10-080. Proposals which include less preferred and/or compensatory mitigation shall demonstrate that:

(a) All feasible and reasonable measures will be taken to reduce impacts and losses to the critical area, or to avoid impacts where avoidance is required by these regulations; and

(b) The restored, created or enhanced critical area or buffer will be as viable and persistent as the critical area or buffer area it replaces; and

(c) In the case of wetlands and riparian stream corridors, no overall net loss will occur in wetland or riparian stream corridor functions and values.

(2) Location and Timing of Mitigation.

(a) Mitigation shall be provided on-site, unless on-site mitigation is not scientifically feasible due to physical features of the property. The burden of proof shall be on the applicant to demonstrate that mitigation cannot be provided on-site.

(b) When mitigation cannot be provided on-site, mitigation shall be provided in the immediate vicinity of the permitted activity on property owned or controlled by the applicant, such as an easement, provided such mitigation is beneficial to the critical area and associated resources.

(c) In-kind mitigation shall be provided except when the applicant demonstrates and the Department concurs that greater functional and habitat value can be achieved through out-of-kind mitigation.

(d) Only when it is determined by the Department that subsections (2)(a), (b), and (c) above are inappropriate and impractical shall off-site, out-of-kind mitigation be considered.

(e) When wetland or riparian stream corridor mitigation is permitted by these regulations on-site or off-site, the mitigation project shall occur near an adequate water supply (river, stream, ground water, stormwater facility outfall) with a hydrologic connection to the critical area to ensure successful development or restoration.

(f) Any agreed upon mitigation proposal shall be completed concurrently with project construction, unless a phased schedule, that assures completion prior to occupancy, has been approved by the Department.

(g) Wetland acreage replacement ratios shall be as specified in subsection 20D.140.30-030(7)(b) of this section.

(h) Restored or created riparian stream corridors, where permitted by these regulations, shall be an equivalent or higher riparian stream corridor value or function than the altered riparian stream corridor.

20D.140.10-120 Performance Standards for Mitigation Planning.

The performance standards in RCDG 20D.140.20-070 through 080, 20D.140.30-040, 20D.140.50-050, and 20D.140.60-050, and the standards contained in RCDG 20D.140.10-080 through 110, 20D.140.20-040 through 060, 20D.140.30-030, 20D.140.40-020 through 030, 20D.140.50-030 through 040, and 20D.140.60-030 through 040 shall be incorporated into mitigation plans submitted to the City for impacts to critical areas. Mitigation plans shall contain the information indicated in RDCG Appendix 20D-2, *Critical Areas Reporting*. (Ord. 1693. Formerly 20C.40.120(05))

20D.140.10-130 Approved Mitigation Projects – Signature.

On completion of construction, any approved mitigation project must be signed off by the applicant's qualified consultant and approved by the Department. Signature will indicate that the construction has been completed as planned. (Ord. 1693. Formerly 20C.40.120(10))

20D.140.10-140 Approved Mitigation Projects – Contingency Planning.
Approved mitigation projects shall implement the monitoring and contingency planning requirements of RCDG 20D.140.10-150. (Ord. 1693. Formerly 20C.40.120(15))

20D.140.10-150 Monitoring Program and Contingency Plan.

(1) A monitoring program shall be implemented by the applicant to determine the success of the mitigation project and any necessary corrective actions. This program shall determine if the original goals and objectives are being met.

(2) A contingency plan shall be established for indemnity in the event that the mitigation project is inadequate or fails. A performance and maintenance bond or other acceptable security device is required to ensure the applicant's compliance with the terms of the mitigation agreement. The amount of the performance and maintenance bond shall equal 125 percent of the cost of the mitigation project for a minimum of five years. This amount includes installation, maintenance and monitoring over the five-year period. The bond may be reduced in proportion to work successfully completed over the period of the bond. The bonding period shall coincide with the monitoring period.

(3) Monitoring programs prepared to comply with this chapter shall reflect the following guidelines:

    (a) Use scientific procedures for establishing the success or failure of the project;

    (b) For vegetation determinations, permanent sampling points shall be established;

(c) Vegetative success equals 80 percent per year survival of planted trees and 80 percent cover of shrubs, groundcover and emergent species and less than 20 percent cover of invasive species;

(d) Submit monitoring reports on the current status of the mitigation project to the Department. The reports are to be prepared by a qualified consultant and reviewed by the City's and shall be produced on the following schedule: at the time of construction; 30 days after planting; early in the growing season of the second year; end of the growing season of second year; and annually thereafter;

(e) The monitoring reports shall contain the following information on monitoring method and monitoring components, as relevant:

(i) Vegetation Monitoring: Methods shall include counts, photopoints, random sampling, sampling plots, transects, visual inspections, and/or other means deemed appropriate by the Department and a qualified consultant. Vegetation monitoring components shall include general appearance, health, mortality, colonization rates, percent cover, percent survival, volunteer plant species, invasive weeds, and/or other components deemed appropriate by the Department and a qualified consultant.

(ii) Water Quantity Monitoring: Methods shall include piezometers, sampling points, stream gauges, visual observation, and/or other means deemed appropriate by the Department and a qualified consultant. Water quantity monitoring components shall include water level, peak flows, soil saturation depth, soil moisture within root zone, inundation, overall water coverage, and/or other components deemed appropriate by the Department and a qualified consultant.

(iii) Water Quality Monitoring: Methods shall include testing, plant indicators, and/or other means deemed appropriate by the Department and a qualified consultant. Water quality monitoring components shall include temperature, pH, dissolved oxygen, total suspended solids, total metals, herbicides, pesticides, and/or other components deemed appropriate by the Department and a qualified consultant.

(iv) Wildlife Monitoring: Methods shall include visual sightings, aural observations, nests, scat, tracks, and/or other means deemed appropriate by the Department and a qualified consultant. Wildlife monitoring components shall include species counts, species diversity, breeding activity, habitat type, nesting activity, location, usage, and/or other components deemed appropriate by the Department and a qualified consultant.

(v) Geomorphic Monitoring: Methods shall include cross-sectional surveys, profile surveys, point surveys, photo-monitoring, and/or other means deemed appropriate by the Department and a qualified consultant. Monitoring components shall include location and affect of large woody debris, depth and frequency of pools, bank erosion, channel migration, sediment transport/deposition, structural integrity of weirs, and/or other components deemed appropriate by the Department and a qualified consultant.

(f) Monitoring programs shall be established for a minimum of five years;

(g) If necessary, correct for failures in the mitigation project;

(h) Replace dead or undesirable vegetation with appropriate plantings;

(i) Repair damages caused by erosion, settling, or other geomorphological processes to all affected properties and structures, both on and off the property;

(j) Redesign mitigation project (if necessary) and implement the new design; and

(k) Correction procedures shall be approved by a qualified consultant and the Department. (Ord. 1693. Formerly 20C.40.130)

20D.140.10-160 Buffer Areas.

(1) The establishment of buffer areas may be required for development proposals and activities in or adjacent to critical areas. The purpose of the buffer shall be to protect the integrity, function, value and resource of the subject critical area, and/or to protect life, property and resources from risks associated with development on unstable or sensitive lands. Buffers shall consist of an undisturbed area of native vegetation established to achieve the purpose of the buffer. If the site has previously been disturbed, the buffer area shall be revegetated pursuant to an approved planting plan. Buffers shall be protected during construction by placement of a temporary barricade, on-site notice for construction crews of the presence of the critical area, and implementation of appropriate erosion and sedimentation controls.

(2) Required buffer widths shall reflect the sensitivity of the particular critical area and resource or the risks associated with development and, in those circumstances permitted by these regulations, the type and intensity of human activity and site design proposed to be conducted on or near the critical area.

(3) See individual critical areas regulations in 20D.140.20-020, 20D.140.30-020, and 20D.140.50-020 for required buffer widths.

20D.140.10-180 General Critical Area Protective Measures

(1) Critical Area Markers and Signs

(a) The boundary at the outer edge of critical area tracts and easement shall be delineated with permanent survey stakes, using iron or concrete markers as established by local survey standards.

(b) The boundary at the outer edge shall be identified with temporary signs prior to any site disturbance. The temporary signs shall be replaced with permanent signs prior to occupancy or use of the site. The number and spacing of permanent signs shall be designated by the Planning Department.

(2) Critical Area Fencing. In order to inform subsequent purchasers of real property of the location of the critical area buffer boundaries and to discourage encroachment into that buffer, the developer of the property shall install split-rail fencing or a similar fencing approved by the Department, along the boundary of the critical area.

(3) Notice on Title

(a) In order to inform subsequent purchasers of real property of the existence of critical areas, the owner of any property containing a critical area or buffer on which a development proposal is submitted shall file a notice with King County Department of Records and Elections. The notice shall state the presence of the critical area or buffer on the property, of the application of the Critical Areas Ordinance to the property, and the fact that limitations on actions in or affecting the critical area or buffer may exist. The notice shall run with the land.

(b) The applicant shall submit proof that the notice has been filed for public records before the city approves a building permit or, in the case of subdivision of land or binding site plans, at or before recording.

(4) Critical Areas Tracts

(a) Critical areas tracts, or other mechanisms as deemed appropriate by the Department, shall be used to delineate and protect contiguous critical areas and buffers. Areas in critical areas tracts can be included in determining gross site density, floor area ratios, and other area and dimensional regulations.

(b) Critical area tracts shall be recorded on all documents of title or record for all affected lots.

(c) Critical area tracts shall be designated on the face of the plat or recording drawing in a format provided by the city attorney.

(d) The City may require that any required critical areas tract be held in an undivided interest by each owner of a building lot within the development with the ownership interest passing with the ownership of the lot, or held by an incorporated homeowner's association, or other legal entity which assures the ownership, maintenance, and protection of the tract.

20D.140.20 Fish and Wildlife Habitat Conservation Areas

20D.140.20-010 Classification and Rating of Fish & Wildlife Habitat Conservation Areas.

The Growth Management Act identifies Fish and Wildlife Habitat Conservation Areas. These areas include

- Areas with which Species of Concern have a primary association.
  - Federally designated endangered and threatened species are those fish and wildlife species identified by the U.S. Fish and Wildlife Service and the National Marine Fisheries Service that are in danger of extinction or threatened to become endangered. The U.S. Fish and Wildlife Service and the National Marine Fisheries Service should be consulted as necessary for current listing status.
  - State designated endangered, threatened, and sensitive species are those fish and wildlife species native to the State of Washington identified by the Washington State Department of Fish and Wildlife, that are in danger of extinction, threatened to become endangered, vulnerable, or declining and are likely to become endangered or threatened in a significant portion of their range within the state without cooperative management or removal of threats. State designated endangered, threatened, and sensitive species are periodically recorded in WAC 232-12-014 (state endangered species), and WAC 232-12-011 (state threatened and sensitive species). The Washington State Department of Fish and Wildlife maintains the most current listing and should be consulted as necessary for current listing status. Included, also, are State Candidate Species which include fish and wildlife species that the Washington Department of Fish and Wildlife will review for possible listing as endangered, threatened, or sensitive.
- State priority habitats and areas associated with state priority species. Priority habitats and species are considered to be priorities for conservation and management. Priority species require protective measures for their perpetuation due to their population status, sensitivity to habitat alteration, and/or recreational, commercial, or tribal importance. Priority habitats are those habitat types or elements with unique or significant value to a diverse assemblage of species. A priority habitat may consist of a unique vegetation type or dominant plant species, a described successional stage, or a specific structural element. Priority habitats and species are identified by the Washington State Department of Fish and Wildlife.

- Habitats and species of local importance. Habitats and species of local importance are those identified by the City of Redmond, including those that possess unusual or unique habitat warranting protection because of qualitative species diversity or habitat system health indicators. The City Council shall formally designate habitats and species of local importance, if any, through the Development Guide Amendment process.

- Naturally occurring ponds under twenty (20) acres. Naturally occurring ponds are those ponds under twenty (20) acres and their submerged aquatic beds that provide fish or wildlife habitat, including those artificial ponds intentionally created from dry areas in order to mitigate impacts to ponds. Naturally occurring ponds do not include ponds deliberately designed and created from dry sites, such as canals, detention facilities, wastewater treatment facilities, farm ponds, temporary construction ponds, and landscape amenities, unless such artificial ponds were intentionally created for mitigation.

- Waters of the State. Waters of the state includes lakes, rivers, ponds, streams, inland waters, underground waters, and other surface waters and watercourses within the jurisdiction of the State of Washington, as classified in WAC 222-16-031.

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

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

To promote consistent application of the standards and requirements of this chapter, Fish and Wildlife Habitat Conservation Areas within the City of Redmond shall be rated or classified according to their characteristics, function and value, and/or their sensitivity to disturbance.

(1) Core Preservation Areas. Core Preservation Areas include those areas of the City which are already protected through other regulatory mechanisms. They include Native Growth Protection Easements, Class I streams and their buffers, and Class II-IV streams and other areas similarly protected. They may also include lands where development rights have been sold and some lands with recorded open space easements, depending on the purpose of the easement. The Core Preservation Area includes wetlands and streams and their associated buffers as they become identified at a site specific level.

(2) Species Protection. Species of Concern, Priority Species, and Species of Local Importance shall be protected through management recommendations. Species of Concern includes those species listed as state endangered, threatened, sensitive, or candidate, as well as those species listed or proposed for listing by the federal government. Priorities Species are those species considered to be priorities for conservation and management and are identified in the Washington Department of

Fish and Wildlife Priority Habitat and Species (PHS) List. In Redmond, Species of Local Importance refers to the Great Blue Heron.

(3) Quality Habitat Areas. As sites are assessed for development, the Department shall evaluate each site for the presence of Quality Habitat using the following methodology. Sites will be qualitatively scored based upon several parameters indicative of habitat qualities. These parameters include size, community diversity, interspersion (spatial patterns), continuity, forest vegetation layers, forest age, and invasive plants. This assessment will allow the City to identify remaining Quality Habitat in the City, to protect remaining Quality Habitat by imposition of the performance standards outlined in Section 20D.140.20-070 so long as there is no significant adverse economic impact to the developer, and to provide incentives to preserve such Quality Habitat.

(4) Riparian Stream Corridors. Riparian stream corridors include Class I-IV streams and adjacent Riparian Habitat Areas (Stream Buffers). Streams shall be designated Class I, Class II, Class III, and Class IV according to the criteria in this section. When more than one classification is present in short alternating segments on the property in question it will be classified according to the stream class which is more restrictive.

(a) "Class I" are those streams identified as "Shorelines of the State" under the City of Redmond Shoreline Master Program.

(b) "Class II" are those natural streams that are not Class I and are either perennial or intermittent and have salmonid fish use or the potential for salmonid fish use.

(c) "Class III" are those natural streams that are not Class I or Class II and are either perennial or intermittent and have one of the following characteristics:

(i) Non-salmonid fish use or the potential for non-salmonid fish use; or

(ii) Headwater streams with a surface water connection to salmon bearing or potentially salmon bearing streams (Class I or II).

(d) "Class IV" are those natural streams that are not Class I, Class II, or Class III. They are either perennial or intermittent, do not have fish or the potential for fish, and are non-headwater streams.

(e) Intentionally Created Streams. These are manmade streams defined as such in these regulations, and do not include streams created as mitigation. Purposeful creation must be demonstrated to the Committee through documentation, photographs, statements and/or other evidence. Intentionally created streams may include irrigation and drainage ditches, grass-lined swales, or other artificial watercourses unless they are used by salmonid fish or created for the purpose of stream mitigation

(5) Classification of Fish and Wildlife Habitat Conservation Areas shall be determined by the Department based consideration of the following factors:

(a) Maps adopted pursuant to this chapter, including the Fish and Wildlife Habitat Conservation Area Core Preservation Areas map and Stream Classification map;

(b) Department of Fish and Wildlife Priority Habitat and Species Maps;

(c) Anadromous and resident salmonid distribution maps contained in the Habitat Limiting Factors Reports published by the Washington Conservation Commission;

(d) Federal and State information and maps related to Species of Concern;

(e) Application of the criteria contained in these regulations; and

(f) Consideration of the technical reports submitted by qualified consultants in connection with the applications subject to these regulations. (Ord. 2180; Ord. 1693. Formerly 20C.40.080)

20D.140.20-020 Stream Buffers.

(1) Stream buffers shall be sufficiently wide to achieve the full range of riparian and aquatic ecosystem functions, which include, but are not limited to protection of instream fish habitat through control of temperature and sedimentation in streams; preservation of fish and wildlife habitat; and connection of riparian wildlife habitat to other habitats.

(2) Stream buffers shall be measured from the ordinary high water mark.

(3) The following stream buffers are established for streams:

Riparian Stream Corridor Classification	Stream Buffer Width (feet)
Class I	
▪ Sammamish River north of PSE powerline crossing	▪ 150' inner buffer + 50' outer buffer
▪ Sammamish River south of PSE powerline crossing	▪ 150'
▪ Bear Creek west of Avondale Road	▪ 150'
▪ Bear Creek east of Avondale Road	▪ 150' inner buffer + 50' outer buffer
▪ Evans Creek	▪ 150' inner buffer + 50' outer buffer
Class II	100' + 50' outer buffer
Class III	100'
Class IV	

Riparian Stream Corridor Classification	Stream Buffer Width (feet)
▪ Perennial ▪ Intermittent	▪ 36' ▪ 25'

(4) Increased stream buffer widths. The recommended stream buffer widths may be increased as follows:

(a) When the Department determines that the recommended width is insufficient to prevent habitat degradation and to protect the structure and functions of the habitat areas;

(b) When the Frequently Flooded Area exceeds the recommended stream buffer width, the stream buffer shall extend to the outer edge of the Frequently Flooded Area;

(c) When the stream buffer is within a Landslide Hazard Area or its buffer, the stream buffer shall be the recommended distance, or the Landslide Hazard Area buffer, whichever is greater. Similarly if the stream buffer is within an Erosion Hazard Area, the stream buffer shall be the recommended distance or the extent of the Erosion Hazard Area.

(5) Reduced stream buffer widths. Stream buffer widths must meet the required width as described in the table above. This does not refer to stream buffer width averaging. See below provisions under which stream buffer width averaging is permitted.

(9) No structures or improvements shall be permitted within the stream buffer, including buildings, decks, docks, except as otherwise permitted or required under the City's adopted Shoreline Master Program, or under one of the following circumstances:

(a) When the improvements are part of an approved rehabilitation or mitigation plan; or

(b) For construction of new roads and utilities, and accessory structures, when no feasible alternative location exists; or

(c) Trails, according to the following criteria:

(i) Constructed of permeable materials;

(ii) Designed to minimize impact on the stream system;

(iii)Of a maximum trail corridor width of 5 feet; and

(iv)Located within the outer half of the buffer, i.e., the portion of the buffer that is farther away from the stream; or

See also RCDG 20D.150.180, *Shoreline Access*, for trail construction in Shorelines of the State.

(d) Footbridges; or

(e) Minor educational facilities, such as informational signs; or

(f) Stormwater conveyance systems.

(11)Nothing in this section shall be construed to require the removal of existing structures within stream buffers.

20D.140.20-040 Alteration of Riparian Stream Corridors.

(1) Relocation of a Class I, II, or III riparian stream corridors in order to facilitate general site design will not be allowed. Relocation of these riparian stream corridors may take place only when it is part of an approved mitigation or rehabilitation plan, and will result in equal or better habitat and water quality, and will not diminish the flow capacity of the stream.

(2) Bridges shall be used to cross Class I streams.

(3) Culverts are allowable only under the following circumstances:

(a) Only in Class II, III, and IV streams;

(b) When fish passage will not be impaired;

(c) When the design criteria of the Washington State Dept. of Fish and Wildlife, *Design of Road Culverts for Fish Passage, 2003*, are met; and

(d) The applicant or successors shall, at all times, keep any culvert free of debris and sediment to allow free passage of water and, if applicable, fish.

(4) Streambank stabilization to protect new structures from future channel migration is not permitted except when such stabilization is achieved through bioengineering or soft armoring techniques in accordance with an approved critical area report.

(5) Construction of roads and minor road bridging may be permitted in accordance with an approved critical area report subject to the following:

(a) There is no other feasible alternative route with less impact on the environment;

(b) The crossing minimizes interruption of downstream movement of wood and gravel;

(c) Roads in riparian habitat areas shall not run parallel to the water body;

(d) Crossings, where necessary, shall only occur as near to perpendicular with the waterbody as possible;

(e) Mitigation for impacts is provided pursuant to an approved mitigation plan; and

(f) Road bridges are designed according to the Department of Fish and Wildlife *Design of Culverts for Fish Passage, 2003*, and the National Marine Fisheries Service *Guidelines for Salmonid Passage at Stream Crossings, 2000.*

(6) The City may require that a stream be removed from a culvert as a condition of approval, unless the culvert is not detrimental to fish habitat or water quality, or removal would be detrimental to fish or wildlife habitat or water quality. (Ord. 1693. Formerly 20C.40.100(15)(b))

20D.140.20-050 Alteration of Fish and Wildlife Habitat Conservation Areas.

(1) Alterations of Core Preservation Areas shall be avoided, subject to RCDG 20D.140.10-190, *Reasonable Use Provision* and RCDG 20D.140.10-200, *Public Project Reasonable Use Provision.*

(2) Species Protection. Species management recommendations for development impacting Species of Concern, Priority Species, and Species of Local Importance shall be implemented. Management recommendations are based on the following factors: species recommendations on the Washington State Department of Fish and Wildlife; recommendations contained in the wildlife study submitted by a qualified consultant; and the nature and intensity of land uses and activities occurring on the site and on adjacent sites.

(3) Alteration of Quality Habitat Areas. *Fish and Wildlife Habitat Conservation Area Performance Standards*, RCDG 20D.140.20-070, shall apply to Quality Habitat Areas unless application of such standards would result in a significant adverse economic impact on the owner or developer.

20D.140.20-060 Riparian Stream Corridor Performance Standards.

(1) Use plants indigenous to the region (not introduced or foreign species);

(2) Use plants adaptable to a broad range of water depths;

(3) Plants should be commercially available or available from local sources;

(4) Plant species high in food and cover value for fish and wildlife must be used;

(5) Plant mostly perennial species;

(6) Avoid committing significant areas of the site to species that have questionable potential for successful establishment;

(7) Plant selection must be approved by a qualified consultant;

(8) Substrate should consist of a minimum of one foot, in depth, of clean (uncontaminated with chemicals or solid/hazardous wastes) inorganic/organic materials;

(9) Planting densities and placement of plants should be determined by a qualified consultant and shown on the design plans;

(10) The planting plan must be approved by the Department;

(11) Confine stockpiling to upland areas and ensure contract specifications should limit stockpiling of earthen materials to durations in accordance with City clearing and grading standards, unless otherwise approved by the Committee;

(12) Planting instructions shall be submitted which describe proper placement, diversity, and spacing of seeds, tubers, bulbs, rhizomes, sprigs, plugs, and transplanted stock;

(13) Apply controlled release non-phosphorus fertilizer at the time of planting and afterward only as plant conditions warrant (determined during the monitoring process);

(14) Install an irrigation system, if necessary, for the initial establishment period;

(15) Construction specifications and methods must be approved by a qualified consultant and the Department; and

(16) Construction management should occur by a qualified consultant and be inspected by the City. (Ord. 1693. Formerly 20C.40.120(05)(a))

(17)Limit the use of pesticides near streams.

20D.140.20-070. Fish and Wildlife Habitat Conservation Area Performance Standards.

The following standards shall apply to all sites where a species protected under this Chapter has been identified. These standards shall also apply to sites where Quality

Habitat has been identified unless application of any of these standards would result in a significant adverse economic impact on the owner or developer.

(1) Relevant performance standards from RCDG 20D.140.20-060 and 20D.140.30-040, as determined by the Department, shall be incorporated into mitigation plans.

(2) The following additional mitigation measures shall be reflected in mitigation planning:

(a) Consider habitat in site planning and design;

(b) Locate buildings and structures in a manner that preserves and minimizes adverse impacts to important habitat areas;

(c) Integrate retained habitat into open space and landscaping, consistent with the provisions of RCDG 20D.80.10;

(d) Where possible, consolidate habitat and vegetated open space in contiguous blocks;

(e) Locate habitat contiguous to other habitat, open space or landscaped areas to contribute to a continuous system or corridor that provides connections to adjacent habitat areas;

(f) Use native species in any landscaping of disturbed or undeveloped areas and in any enhancement of habitat or buffers;

(g) Emphasize heterogeneity and structural diversity of vegetation in landscaping;

(h) Remove and/or control any noxious weeds or animals as defined by the City; and

(i) Preserve significant trees, preferably in groups, consistent with RCDG 20D.80.10-060 and with achieving the objectives of these standards.

(3) Landscape plan shall be submitted consistent with the requirements of RCDG 20D.80.10-040 and with the goals and standards of this chapter. The plan shall reflect the report prepared pursuant to RCDG 20D.140.10-060. (Ord. 1693. Formerly 20C.40.120(05)(b))

20D.140.30 Wetlands

20D.140.30-010 Classification and Rating of Wetlands.

To promote consistent application of the standards and requirements of this chapter, wetlands within the City of Redmond shall be classified according to their characteristics,

function and value, and/or their sensitivity to disturbance. Wetlands shall be rated and regulated according to the categories defined by the Washington State Department of Ecology *Wetland Rating System for Western Washington* (Ecology Publication #04-06-025) as revised. This document contains the methods for determining the wetland category.

(1) Wetland Classification. Wetlands, as defined by this chapter, shall be designated Category I, Category II, Category III, and Category IV.

(a) Category I Wetlands are those wetlands that represent a unique or rare wetland type, are more sensitive to disturbance than most wetlands, are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime, or provide a high level of functions. All wetlands with one or more of the following criteria shall be considered a Category I wetland:

(i) Wetlands that are identified by scientists of the Washington Natural heritage Program/DNE as high quality, relatively undisturbed wetlands, or wetlands that support State listed threatened or endangered plants.; or

(ii) Bogs; or

(iii)Mature and old-growth forested wetlands over one acre in size; or

(iv)Wetlands that provide a very high level of functions as evidenced by a score of 70 points or more on the Western Washington Rating System form.

(b) Category II Wetlands are those wetlands that provide high levels of some functions which are difficult to replace. Category II wetlands meet the following criteria:

(i) Wetlands scoring between 51-69 points on the Western Washington Rating System form; or

(ii) Wetlands that do not meet the criteria of Category I.

(c) Category III Wetlands are those wetlands that provide a moderate level of functions. They are typically more disturbed and have less diversity or are more isolated from other natural resources in the landscape. Category III Wetlands meet the following criteria:

(i) Wetlands scoring between 30-50 points on the Western Washington Rating System form; or

(ii) Wetlands that do not meet the criteria of Category I.

(d) Category IV Wetlands are those wetlands that provide the lowest level of function. These wetlands score less than 30 points on the Western Washington Rating System form.

(2) Classification of wetlands shall be determined by the Committee based on consideration of the following factors:

(a) Maps adopted pursuant to this chapter, including the Wetland map, which identifies the approximate location and extent of wetlands. This map shall be used as a general guide only for the assistance of property owners and other interested parties; boundaries are generalized. The actual type, extent, and boundaries of wetlands shall be determined in the field by a qualified consultant according to the procedures, definition, and criteria established by this Chapter. In the event of any conflict between the critical area location and designation shown on the City's map and the criteria or standards of this section, the criteria and standards shall prevail;

(b) National Wetlands Inventory Maps prepared by the US Fish and Wildlife Service;

(c) Application of the criteria contained in these regulations; and

(d) Consideration of the technical reports submitted by qualified consultants in connection with applications subject to these regulations. (Ord. 2180; Ord. 1693. Formerly 20C.40.080)

20D.140.30-020 Wetland Buffers.

(1) Required buffer widths shall reflect the sensitivity of the particular wetland or the risks associated with development and, in those circumstances permitted by these regulations, the type and intensity of human activity and site design proposed to be conducted on or near the critical area.

(2) Wetland buffers shall be measured from the wetland edge as delineated and marked in the field using the DOE Wetland Manual. Wetland buffers shall be established as follows:

Wetland Category and Characteristics	**Buffer Width (feet) by Impact of Land Use* (see below)**	**Other Measures Recommended for Protection**
Category I		
Forested	Buffer size to be based on score for habitat functions or water quality functions	If forested wetland scores high for habitat, need to maintain connectivity to

Wetland Category and Characteristics	**Buffer Width (feet) by Impact of Land Use* (see below)**	**Other Measures Recommended for Protection**
		other natural areas. Restore degraded parts of buffer.
High level of function for habitat (score for habitat 29-36 pts.)	Low: 150 Moderate: 225 High: 300	Maintain connectivity to other natural areas. Restore degraded parts of buffer.
Moderate level of function for habitat (score for habitat 20-28 pts.)	Low: 75 Moderate: 110 High: 150	No recommendations at this time.
High level of function for water quality improvement (24-32 pts.) and low for habitat (less than 20 pts.)	Low: 50 Moderate: 75 High: 100	No additional discharges of untreated runoff.
Not meeting any of the above criteria	Low: 50 Moderate: 75 High: 100	No recommendations at this time.
Category II		
High level of function for habitat (score for habitat 29-36 pts.)	Low: 150 Moderate: 225 High: 300	Maintain connectivity to other natural areas.
Moderate level of function for habitat (score for habitat 20-28 pts.)	Low: 75 Moderate: 100 High: 150	No recommendations at this time.
High level of function for water quality improvement and low for habitat (score for water quality 24-32 pts.; habitat less than 20 pts.)	Low: 50 Moderate: 75 High: 100	No additional discharges of untreated runoff.
Not meeting above criteria	Low: 50 Moderate: 75 High: 100	No recommendations at this time.
Category III		
Moderate level of function for habitat (score for habitat 20-28 pts.)	Low: 75 Moderate: 110 High: 150	No recommendations at this time.
Not meeting above criteria	Low: 40 Moderate: 60 High: 80	No recommendations at this time.
Category IV		
Score for functions less than 30 pts.	Low: 25 Moderate: 40	No recommendations at this time.

Wetland Category and Characteristics	Buffer Width (feet) by Impact of Land Use* (see below)	Other Measures Recommended for Protection
	High: 50	

* Consistent with the Department of Ecology classification system identified above, high, medium and low impact land uses are defined as follows:

(a) High impact land uses include: commercial, industrial, institutional, retail sales, high-intensity recreation (golf courses, ball fields), and residential uses with a density of more than one dwelling unit per acre.

(b) Medium impact land uses include residential uses with a density of one unit per acre or less, moderate-intensity open space (parks), and paved trails.

(c) Low impact land uses include: low-intensity open space (such as passive recreation and natural resources preservation) and unpaved trails.

(3) The buffer for a wetland created, restored, or enhanced as compensation for approved wetland alterations shall be that required for the category of the wetland.

(4) Increased buffer widths. The Department may extend the width of the buffer in accordance with the recommendations of a qualified wetland professional and the best available science on a case-by-case basis when a larger buffer is necessary to protect wetland functions and values based on site-specific characteristics.

(5) Reduction of buffer widths. The Department may allow the standard wetland buffer width to be reduced in accordance with the best available science on a case-by-case basis when it is determined that a smaller area is adequate to protect the wetland functions and values based on site-specific characteristics.

(a) Reduction in buffer width based on reducing the intensity of impacts from proposed land uses. The buffer widths recommended for land uses with high-intensity impacts to wetlands can be reduced to those widths recommended for moderate-intensity impacts under the following conditions:

(i) For wetlands that score moderate or high for habitat (20 points or more), the width of the buffer around the wetland can be reduced if both the following criteria are met:

(A) A relatively undisturbed vegetated corridor at least 100 feet wide is protected between the wetlands and any other Priority Habitats as defined by the Washington State Department of Fish and Wildlife. The corridor must be protected for the entire distance between the wetland and the Priority Habitat via

some type of legal protection such as a conservation easement; and

(B) Measures to minimize the impacts of different land uses on wetlands, such as those developed by the Department of Ecology under BAS, are applied.

(ii) For wetlands that score less than 20 points for habitat, the buffer width can be reduced to that required for moderate land use impacts if measures to minimize the impacts of different land uses on wetlands, such as those developed by the Department of Ecology under BAS, are applied.

(b) Reductions in buffer widths where existing roads or structures lie within the buffer. Where a legally established, non-conforming use of the buffer exists, proposed actions in the buffer may be permitted as long as they do not increase the degree of non-conformity. In terms of wetlands, this means no increase in the impacts to the wetland from activities in the buffer.

(6) Wetland buffer width averaging. Wetland buffer widths may be modified by averaging buffer widths as set forth herein. The Department may allow modification of the standard wetland buffer width in accordance with the best available science on a case-by-case basis by averaging buffer widths. Averaging buffer widths may only be allowed where a qualified wetland professional demonstrates that:

(a) It will not reduce the functions or values;

(b) The wetland contains variations in sensitivity due to existing physical characteristics or the character of the buffer varies in slope, soils, or vegetation, and the wetland would benefit from a wider buffer in places and would not be adversely impacted by a narrower buffer in other places.

(c) The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer; and

(d) The buffer width is not reduced more than twenty-five (25) percent of the width or fifty (50) feet, whichever is less, except for buffers between Category IV wetlands and low or moderate intensity land uses.

(7) Buffer widths may be reduced by buffer width reduction or buffer width averaging as stated above. However, the use of either of these mechanisms or a combination of these mechanisms shall not result in a buffer width less than 75% of the standard buffer required as identified in 20D.140.30-020(2) above.

(8) Storm water management facilities, such as biofiltration swales and outfalls, may be located within the outer twenty-five (25) percent of the buffer, provided that no other

location is feasible, and the location of such facilities will not degrade the functions or values of the wetland. Stormwater ponds must be located outside of the required buffer.

20D.140.30-030 Alteration of Wetlands.

(1) Wetland alteration shall result in no net loss of wetland area, except where the following criteria are met:

(a) The lost wetland area provides minimal functions and the mitigation action(s) results in a net gain in wetland functions as determined by a site-specific assessment; or

(b) The lost wetland area provided minimal functions as determined by a site-specific functional assessment and other replacement habitats provide greater benefits to the functioning of the watershed, such as riparian habitat restoration and enhancement.

(2) Category I Wetlands: Alterations of Category I wetlands shall be prohibited subject to the reasonable use provisions of this chapter.

(3) Category II, III, and IV Wetlands.

(a) Any proposed alteration and mitigation shall comply with the mitigation performance standards and requirements of these regulations; and

(b) No net loss of wetland function and value may occur.

(c) Where enhancement or replacement is proposed, ratios shall comply with the requirements of RCDG 20D.140.30-030(7). (Ord. 1693. Formerly 20C.40.100(15)(a))

(4) Mitigation for alterations to wetlands shall achieve equivalent or greater biological functions. Mitigation plans shall be consistent with the Department of Ecology *Guidance on Wetland Mitigation In Washington State, Part 2: Guidelines for Developing Freshwater Wetlands Mitigation Plans and Proposals*, April, 2004, as revised.

(5) Mitigation actions shall address functions affected by the alteration to achieve functional equivalency or improvement, and shall provide similar wetland functions as those lost except when:

(a) The filled/impacted wetland provides minimal functions as determined by a site-specific function assessment and the proposed mitigation action(s) will provide equal or greater functions or will provide functions shown to be

limiting within a watershed through a formal watershed assessment plan or protocol, or

(b) Out-of-kind replacement will best meet formerly identified regional goals, such as replacement of historically diminished wetland types.

(6) Mitigation actions that require compensation by replacing, enhancing, or substitution shall occur in the following order of preference:

(a) Preserving high-quality wetlands that are under imminent threat.

(b) Restoring wetlands on upland sites that were formerly wetlands.

(d) Creating wetlands on disturbed upland sites such as those with vegetative cover consisting primarily of exotic introduced species.

(c) Enhancing significantly degraded wetlands.

(7) Wetland Replacement Ratios.

(a) Where wetland alterations are permitted by the City, the applicant shall restore or create areas of wetlands in order to compensate for wetland losses. Equivalent areas shall be determined according to acreage, function, type, location, timing factors, and projected success of restoration or creation.

(b) When creating or enhancing wetlands, the following acreage replacement ratios shall be used:

Category and Type of Wetland	**Creation or Re-Establishment**	**Rehabilitation (Restoration)**	**Re-Establishment or Creation (R/C) and Enhancement**	**Enhancement Only**
Category I Forested	6:1	12:1	1:1 R/C and 10:1 E	24:1
Category I based on score	4:1	8:1	1:1 R/C and 6:1 E	16:1
Category II	3:1	8:1	1:1 R/C and 4:1 E	12:1
Category III	2:1	4:1	1:1 R/C and 2:1 E	8:1
Category IV	1.5:1	3:1	1:1 R/C and 2:1 E	6:1

(c) Increased replacement ratio. The Department may increase the ratios under the following circumstances:

(i) Uncertainty exists as to the probable success of the proposed restoration or creation; or

(ii) A significant period of time will elapse between impact and replication of wetland functions; or

(iii) Proposed mitigation will result in a lower category wetland or reduced functions relative to the wetland being impacted; or

(iv) The impact was an unauthorized impact.

(d) Decreased replacement ratio. The Department may decrease these ratios under the following circumstances:

(i) Documentation by a qualified wetland specialist demonstrates that the proposed mitigation actions have a very high likelihood of success.

(ii) Documentation by a qualified wetland specialist demonstrates that the proposed mitigation actions will provide functions and values that are significantly greater than the wetland being impacted; or

(iii) The proposed mitigation actions are conducted in advance of the impact and have been shown to be successful.

(e) Enhanced and created wetlands shall be appropriately classified and buffered. (Ord. 1693. Formerly 20C.40.110)

20D.140.30-040 Wetlands Performance/Design Standards.

(1) Use plants indigenous to the Pacific Northwest region (not introduced or foreign species);

(2) Use plants adaptable to a broad range of water depths;

(3) Plants should be commercially available or available from local sources;

(4) Plant species high in food and cover value for fish and wildlife must be used;

(5) Avoid committing significant areas of the site to species that have questionable potential for successful establishment;

(6) Plant selection must be approved by a qualified wetland specialist;

(7) Water depth is not to exceed six and one-half feet (two meters);

(8) The grade or slope that water flows through the wetland is not to exceed six percent for wetland creation sites;

(9) Slopes within the wetland basin and the buffer zone may not be steeper than 3:1 (horizontal to vertical) for wetland creation sites;

(10)Substrate should consist of a minimum of one foot, in depth, of clean (uncontaminated with chemicals or solid/hazardous wastes) inorganic/organic materials for wetland creation sites;

(11)Planting densities and placement of plants should be determined by a qualified wetland professional and shown on the design plans;

(12)The planting plan must be approved by the Department;

(13)Confine stockpiling to upland areas and ensure contract specifications limit stockpiling of earthen materials to durations in accordance with City clearing and grading standards, unless otherwise approved by the Committee;

(14)Planting instructions shall be submitted which describe proper placement, diversity, and spacing of seeds, tubers, bulbs, rhizomes, sprigs, plugs, and transplanted stock;

(15)Apply controlled release non-phosphorus fertilizer at the time of planting and afterward only as plant conditions warrant (determined during the monitoring process);

(16)Install an irrigation system, if necessary, for the initial establishment period;

(17)Construction specifications and methods must be approved by a qualified consultant and the Department; and

(18)Construction management should occur by a qualified consultant and be inspected by the City. (Ord. 1693. Formerly 20C.40.120(05)(a))

20D.140.40 Frequently Flooded Areas

20D.140.40-010 Classification and Rating of Frequently Flooded Areas.

To promote consistent application of the standards and requirements of this chapter, Frequently Flooded Areas within the City of Redmond shall be rated or classified according to their characteristics, function and value, and/or their sensitivity to disturbance.

(1) Frequently Flooded Areas Classifications. Frequently Flooded Areas shall be classified according to the criteria in this section.

(a) Floodplain. The total area subject to inundation by the base flood (the flood that has a one percent chance of occurring in any given year).

(b) Flood Fringe. The portion of the floodplain outside of the floodway which is generally covered by flood waters during the base flood; it is generally associated with standing water rather than rapidly flowing water.

(c) FEMA Floodway. The channel of the stream and that portion of the adjoining floodplain which is necessary to contain and discharge the FEMA base flood flow without increasing the FEMA base flood elevation more than one foot.

(d) Zero-Rise Floodway. The channel of the stream and that portion of the adjoining floodplain which is necessary to contain and discharge the base flood flow without increasing the base flood elevation. The zero-rise floodway will always include the FEMA floodway.

(2) Classification of Frequently Flooded Areas shall be determined by the Committee based on consideration of the following factors:

(a) Maps adopted pursuant to this chapter including the Frequently Flooded Areas map, which identified the approximate location and extent of the 100 year floodplain. This map shall be used as a general guide only for the assistance of property owners and other interested parties; boundaries are generalized. The actual type, extent, and boundaries of Frequently Flooded Areas shall be determined in the field by a qualified consultant according to the procedures, definition, and criteria established by this Chapter. In the event of any conflict between the critical area location and designation shown on the City's map and the criteria or standards of this section, the criteria and standards shall prevail.

The City will employ hydrologic models to define the extent of the zero-rise floodway. If the zero-rise floodway has not yet been defined for the property in question, the applicant will be responsible for modeling the base flood elevation and delineating the extent of the zero-rise floodway, consistent with the assumptions in the Bear Creek Basin Plan as adopted by the City. In the absence of a City hydrologic model, FEMA data will be acceptable. (Ord. 2180; Ord. 1693. Formerly 20C.40.050);

(b) Flood Insurance Rate Maps published by the Federal Emergency Management Agency;

(c) Application of the criteria contained in these regulations; and

(d) Consideration of the technical reports submitted by qualified consultants in connection with applications subject to these regulations. (Ord. 2180; Ord. 1693. Formerly 20C.40.080)

20D.140.40-020 Alteration of Frequently Flooded Areas.

Alteration of Frequently Flooded Areas may only be permitted subject to the criteria in RCDG 20D.140.20-040 through 050, 20D.140.30-030, 20D.140.40-030, 20D.140.50-030, and 20D.140.60-040. (Ord. 1693. Formerly 20C.40.100(15))

20D.140.40-030 Flood Hazard Areas – Development Standards.

(1) Flood Hazard Areas Generally. For all new structures or substantial improvements, the applicant must provide certification by a qualified consultant of the actual as-built elevation of the lowest floor, including basement, and, if applicable, the actual as-built elevation to which the structure is flood-proofed. If the structure has a basement, this must be indicated.

(2) The Flood Fringe Outside the Zero-Rise Floodway.

(a) Except for downtown development along the Sammamish River in the 100 year floodplain from the Puget Sound Energy transmission line crossing to SR 520, development shall not reduce the effective base flood storage volume of the floodplain. Grading or other activity which would reduce the effective storage volume must be mitigated by creating compensatory storage on the site. Off-site compensatory storage may be permitted if binding legal arrangements assure that the effective compensatory storage volume will be preserved over time.

(b) No structure shall be allowed which would be at risk due to stream bank destabilization including that associated with channel relocation or meandering.

(c) All elevated construction must be designed and certified by a professional structural engineer registered in the State of Washington and must be approved by the City prior to construction.

(d) Subdivisions, short subdivisions, binding site plans, site plan review, special development permits, and general development permits shall follow the following requirements:

(i) New building lots shall contain 3,600 square feet or more of buildable land outside the zero rise floodway and building setback lines shall be shown on the face of the plat to restrict permanent structures to the area so defined;

(ii) All utilities and facilities such as a sewer, gas, electrical, telephone, cable communications and water systems shall be located and constructed consistent with paragraph (2)(i) below;

(iii) Base flood data and flood hazard notes shall be shown on the face of the recorded plat, including, but not limited to, the base flood

elevation, required flood protection elevations, and the boundaries of the floodplain and the floodway, if determined; and

(iv) The following note shall be recorded with the King County Department of Records and Elections for all affected lots:

NOTICE

Lots and structures located within flood hazard areas may be inaccessible by emergency vehicles during flood events. Residents and property owners should take appropriate advance precautions.

(e) New residential construction and substantial improvement shall meet the following criteria:

(i) The lowest floor shall be elevated to the flood protection elevation.

(ii) Portions of the building that are below the flood protection elevation shall not be fully enclosed. The areas below the lowest floor shall be designed to automatically equalize hydrodynamic flood forces on exterior walls by allowing the entry and exit of floodwaters. Designs for meeting this requirement must meet or exceed the following minimum criteria:

(A) Minimum of two openings on opposite walls having a total open area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided;

(B) The bottom of all openings shall be no higher than one foot above grade.

(iii) Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the unrestricted entry and exit of floodwaters.

(f) New nonresidential construction and substantial improvement of any existing commercial, industrial, or other nonresidential structure shall meet the elevation requirements of residential construction.

(g) All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.

(h) For all mobile and manufactured homes, all standards for flood hazard protection for conventional residential construction shall apply. All manufactured and mobile homes must be anchored and shall be installed using methods and practices that minimize flood damage. All new and replacement

water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.

(i) Utilities shall meet the following criteria:

(i) All new and replacement utilities, including sewage treatment facilities, shall be flood-proofed to, or elevated above, the flood protection elevation.

(ii) New on-site sewage disposal systems shall be located outside the limits of the 100-year floodplain. The installation of new on-site sewage disposal systems in the floodplain is prohibited.

(iii) Sewage and agricultural waste storage facilities shall be flood-proofed to the base flood elevation plus three feet.

(iv) Above-ground utility transmission lines, other than electrical transmission lines, shall only be allowed for the transport of nonhazardous substances.

(v) 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 at a minimum depth of four feet below the maximum depth of scour for the base flood predicted by a professional civil engineer licensed by the State of Washington and shall achieve sufficient negative buoyancy so that any potential for flotation or upward migration is eliminated.

(j) Critical facilities may be allowed within the flood fringe of the floodplain. All such proposed uses shall be evaluated through a special development permit. Critical facilities constructed within the flood fringe shall have the lowest floor elevated to three or more feet above the base flood elevation. Flood-proofing and sealing measures must be taken to ensure that hazardous or toxic substances will not be displaced by or released into floodwaters. Access routes elevated to the flood protection elevation shall be provided to all critical facilities to the nearest maintained public street or roadway located outside of the floodplain.

(k) The Committee shall review all development permits to determine that all necessary permits have been obtained as required by Federal or State law, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334, as required by Section 60.3(a)(2) of 44 CFR.

(l) Storage and containment of hazardous or dangerous chemicals, substances or materials, as those terms are determined by applicable State and Federal

regulations, shall be prohibited provided that existing uses involving storage, etc., shall conform to the flood protection elevation when applying for any permit.

(3) Development in the Zero-Rise Floodway.

(a) Activities allowed within the zero-rise floodway must conform to the requirements of this section, as well as the requirements that apply to the flood fringe outside the zero-rise floodway as identified in subsection (2).

(b) No development activity shall reduce the effective storage volume of the floodplain.

(c) No development, including permitted new construction or reconstruction, shall cause any increase in the zero rise base flood elevation.

(d) No temporary structures or storage of materials hazardous to public health, safety and welfare shall be permitted in the zero-rise floodway.

(e) Construction of new residential or nonresidential structures is permitted in the zero-rise floodway only in the following circumstances:

(i) The structure must be on a lot legally in existence at the time the ordinance codified in this chapter becomes effective;

(ii) The structure must be on a lot that contains less than 3,600 square feet of buildable land outside the zero-rise floodway; and

(iii)The structure must meet the construction standards set forth in subsections (2) and (3)(b), (3)(c), and (3)(d).

(f) New lots that include part of the zero-rise floodway may be created only if the lots meet the requirements of subsection (2)(d) and administrative rules, or are declared as nonbuilding lots on the face of the plat.

(g) The following circumstances are presumed to produce no increase in base flood elevation and shall not require special studies to establish this fact:

(i) Substantial improvement on existing residential structures outside the zero-rise floodway where the building footprint is not increased.

(ii) Substantial improvement of an existing residential structure shall meet the requirements for new residential construction set forth in subsection (2)(e).

(h) Reconstruction of an existing residential structure shall meet the requirements for new residential construction set forth in subsection (2)(e).

(i) Utilities and roads are permitted in the zero-rise floodway only when no other location is practicable, or when mitigating measures achieve zero-rise floodway elevations, and shall meet the minimum criteria set forth in subsection (2)(i) and the following requirements:

(i) Construction of sewage treatment facilities shall be prohibited.

(ii) Utility transmission lines transporting hazardous substances shall be buried at a minimum depth of four feet below the maximum depth of scour for the base flood as predicted by a professional civil engineer licensed by the State of Washington and shall achieve sufficient negative buoyancy so that any potential for flotation or upward migration is eliminated.

(j) Critical facilities shall not be constructed in the zero-rise floodway.

(k) Floodway Dependent Structures: Installations or structures that are floodway dependent may be located in the floodway provided that the development proposal receives approval from all other agencies with jurisdiction and meets all standards in RCDG 20D.140.20-040 and 20D.140.30-030. Such installations include but are not limited to:

(i) Dams or diversions for water supply, flood control, hydroelectric production, irrigation or fisheries enhancement;

(ii) Flood damage reduction facilities such as levees and pumping stations;

(iii) Stream bank stabilization structures where no feasible alternative exists to protecting public or private property;

(iv) Stormwater conveyance facilities subject to the requirements of the development standards for streams and wetlands, and other relevant City of Redmond development standards;

(v) Boat launches, docks and related recreation structures;

(vi) Bridge piers and abutments; and

(vii) Fisheries enhancement or stream restoration projects.

(l) Development of the area located downstream of Redmond Way on Bear Creek may be allowed when (a) mitigating measures achieve zero-rise floodway elevations, or (b) when surface water elevations are not increased

over one foot provided no significant unmitigated upstream, downstream, or on-site environmental impacts are created.

(4) Development in the FEMA Floodway.

(a) Construction or placement of new residential or nonresidential structures is prohibited within the FEMA floodway. Shoreline protective structures, bridges, roads, trails and railroads are permitted within the FEMA floodway.

(b) No development subject to these regulations, including permitted new construction or reconstruction, shall cause any increase in the FEMA base flood elevation.

(c) Substantial improvement of an existing residential structure located in the floodway must meet the requirements set out in WAC 173-158-070 as amended. Such substantial improvement is presumed to produce no increase in base flood elevation and shall not require special studies to establish this fact. (Ord. 1955; Ord. 1693. Formerly 20C.40.100(15)(f))

20D.140.50 Critical Aquifer Recharge Areas

20D.140.50-010 Classification and Rating of Critical Aquifer Recharge Areas.

To promote consistent application of the standards and requirements of this chapter, Critical Aquifer Recharge Areas within the City of Redmond shall be rated or classified according to their characteristics, function and value, and/or their sensitivity to disturbance.

(1) Critical Aquifer Recharge Areas Classification. Critical Aquifer Recharge Areas are those areas with a critical recharging effect on aquifers used for potable water. Wellhead protection involves the management of activities that have a potential to degrade the quality of groundwater produced by a supply well. The City of Redmond is classified into four wellhead protection zones based on proximity to and travel time of groundwater to the City's public water source wells, and are designated using guidance from the Washington Department of Health Wellhead Protection Program pursuant to Chapter 256-290 WAC.

(a) Wellhead Protection Zone 1 represents the land area overlying the six-month time-of-travel zone of any public water source well owned by the City.

(b) Wellhead Protection Zone 2 represents the land area that overlies the one-year time-of-travel zone of any public water source well owned by the City, excluding the land area contained within Wellhead Protection Zone 1.

(c) Wellhead Protection Zone 3 represents the land area that overlies the five-year and 10-year time-of-travel zones of any public water source well owned by

the City, excluding the land area contained within Wellhead Protection Zones 1 or 2.

(d) Wellhead Protection Zone 4 represents all the remaining land area in the City, not included in Wellhead Protection Zones 1, 2, or 3.

(2) Classification of wellhead protection zones shall be determined in accordance with the City's adopted Wellhead Protection Zone Map, which serves to designate Zones 1 through 4. The Committee, at its discretion, may consider the following factors:

(a) Maps adopted pursuant to this chapter;

(b) Application of the criteria contained in these regulations; and

(c) Consideration of the technical reports submitted by qualified consultants in connection with applications subject to these regulations. (Ord. 2180; Ord. 1693. Formerly 20C.40.080)

20D.140.50-020 Alteration of Critical Aquifer Recharge Areas.

Alteration of Critical Aquifer Recharge Areas may only be permitted subject to the criteria in RCDG 20D.140.20-040 through 050, 20D.140.30-030, 20D.140.40-030, 20D.140.50-030, and 20D.140.60-040. (Ord. 1693. Formerly 20C.40.100(15))

20D.140.50-030 Prohibited Activities in Wellhead Protection Zones.

(1) Land uses or activities for new development or redevelopment that pose a significant hazard to the City's groundwater resources resulting from storing, handling, treating, using, producing, recycling, or disposing of hazardous materials or other deleterious substances shall be prohibited in Wellhead Protection Zones 1 and 2. These land uses and activities include, but are not limited to:

(a) On-site community sewage disposal systems, as defined in Chapter 248-272 WAC;

(b) Hazardous liquid pipelines as defined in Chapter 81.88 RCW and Chapter 20A.20 RCDG;

(c) Solid waste landfills;

(d) Solid waste transfer stations;

(e) Liquid petroleum refining, reprocessing, and storage;

(f) Bulk storage facilities as defined in Chapter 20A.20 RCDG;

(g) The storage or distribution of gasoline treated with the additive MTBE;

(h) Hazardous waste treatment, storage, and disposal facilities except those defined under permit by rule for industrial wastewater treatment processes per WAC 173-303-802(5)(c);

(i) Chemical manufacturing, including but not limited to organic and inorganic chemicals, plastics and resins, pharmaceuticals, cleaning compounds, paints and lacquers, and agricultural chemicals;

(j) Dry cleaning establishments using the solvent perchloroethylene;

(k) Primary and secondary metal industries that manufacture, produce, smelt, or refine ferrous and non-ferrous metals from molten materials;

(l) Wood preserving and wood products preserving;

(m) Mobile fleet fueling operations;

(n) Class I, Class III, Class IV and the following types of Class V wells: 5F1, 5D3, 5D4, 5W9, 5W10, 5W11, 5W31, 5X13, 5X14, 5X15, 5W20, 5X28, and 5N24 as regulated under Chapter 90.48 RCW, and Chapters 173-200 and 173-218 WAC as amended; and

(2) Other land uses and activities that the City determines would pose a significant groundwater hazard to the City's groundwater supply.

(3) Wellhead Protection Zones. Development within the City of Redmond shall implement the performance standards contained in RCDG 20D.140.50.050 that apply to the zone in which it is located. (Ord. 2180; Ord. 1693. Formerly 20C.40.100(15)(e))

20D.140.50-040 Wellhead Protection Zone Performance Standards.

Any uses or activities locating in the City of Redmond which involve storing, handling, treating, using, producing, recycling, or disposing of hazardous materials or other deleterious substances shall comply with the following standards that apply to the zone in which they are located. Residential uses of hazardous materials or deleterious substances are exempt from the following standards.

If a property is located in more than one Wellhead Protection Zone, the Director of Public Works shall determine which standards shall apply based on an assessment evaluation of the risk posed by the facility or activity. The assessment evaluation shall include, but not be limited to: (a) the location, type, and quantity of the hazardous materials or deleterious substances on the property; (b) the geographic and geologic characteristics of the site; and (c) the type and location of infiltration on the site.

(1) Development within Wellhead Protection Zones 1 or 2 shall implement the following performance standards:

(a) Secondary Containment.

(i) The owner or operator of any facility or activity shall provide secondary containment for hazardous materials or other deleterious substances in aggregate quantities equal to or greater than 20 gallons liquid or 200 pounds solid or in quantities specified in the Redmond Fire Code (Chapter 20E.100 RCDG), whichever is smaller.

(ii) Hazardous materials stored in tanks that are subject to regulation by the Washington State Department of Ecology under Chapter 173-360 WAC (Underground Storage Tank Regulations) are exempt from the secondary containment requirements of this section; provided, that documentation is provided to demonstrate compliance with those regulations.

(b) Vehicle Fueling, Maintenance, and Storage Areas. Fleet and automotive service station fueling, equipment maintenance, and vehicle washing areas shall have a containment system for collecting and treating all runoff from such areas and preventing release of fuels, oils, lubricants, and other automotive fluids into soil, surface water, or groundwater. Appropriate emergency response equipment shall be kept on-site during transfer, handling, treatment, use, production, recycling or disposal of hazardous materials or other deleterious substances.

(c) Loading and Unloading Areas. Secondary containment or equivalent best management practices, as approved by the Director of Public Works, shall be required at loading and unloading areas that store, handle, treat, use, produce, recycle, or dispose of hazardous materials or other deleterious substances in aggregate quantities equal to or greater than 20 gallons liquid or 200 pounds solid.

(d) Storm Water Infiltration Systems. Design and construction of new storm water infiltration systems must address site-specific risks of releases posed by all hazardous materials on-site. These risks may be mitigated by physical design means or equivalent best management practices in accordance with an approved Hazardous Materials Management Plan. Design and construction of said storm water infiltration systems shall also be in accordance with RCDG 20E.90.10-020 and the City of Redmond Technical Notebook and shall be certified for compliance with the requirements of this section by a professional engineer or engineering geologist registered in the State of Washington.

(e) Well construction and operation shall comply with the standards in RCDG 20E.90.10-095.

(f) Protection Standards During Construction. The following standards shall apply to construction activities occurring where construction vehicles will be refueled on-site and/or the quantity of hazardous materials that will be stored, dispensed, used, or handled on the construction site is in aggregate quantities equal to or greater than 20 gallons liquid or 200 pounds solid, exclusive of the quantity of hazardous materials contained in fuel or fluid reservoirs of construction vehicles. As part of the City's project permitting process, the City may require any or all of the following items:

(i) A development agreement;

(ii) Detailed monitoring and construction standards;

(iii) Designation of a person on-site during operating hours who is responsible for supervising the use, storage, and handling of hazardous materials and who has appropriate knowledge and training to take mitigating actions necessary in the event of fire or spill;

(iv) Hazardous material storage, dispensing, refueling areas, and use and handling areas shall be provided with secondary containment adequate to contain the maximum release from the largest volume container of hazardous substances stored at the construction site;

(v) Practices and procedures to ensure that hazardous materials left on-site when the site is unsupervised are inaccessible to the public. Locked storage sheds, locked fencing, locked fuel tanks on construction vehicles, or other techniques may be used if they will preclude access;

(vi) Practices and procedures to ensure that construction vehicles and stationary equipment that are found to be leaking fuel, hydraulic fluid, and/or other hazardous materials will be removed immediately or repaired on-site immediately. The vehicle or equipment may be repaired in place, provided the leakage is completely contained;

(vii) Practices and procedures to ensure that storage and dispensing of flammable and combustible liquids from tanks, containers, and tank trucks into the fuel and fluid reservoirs of construction vehicles or stationary equipment on the construction site are in accordance with the Redmond Fire Code (Chapter 20E.100 RCDG); and

(viii) Practices and procedures, and/or on-site materials adequate to ensure the immediate containment and cleanup of any release of hazardous substances stored at the construction site. On-site cleanup materials

may suffice for smaller spills whereas cleanup of larger spills may require a subcontract with a qualified cleanup contractor. Releases shall immediately be contained, cleaned up, and reported if required under Section 13.07.120 of the Redmond Municipal Code. Contaminated soil, water, and other materials shall be disposed of according to state and local requirements.

(g) Fill Materials. Fill material shall comply with the standards in RCDG 20E.90.10-095.

(h) Cathodic Protection Wells. Cathodic protection wells shall be constructed following the standards in RCDG 20E.90.10-095.

(i) Underground Hydraulic Elevator Cylinders. All underground hydraulic elevator pressure cylinders shall be constructed following the standards in RCDG 20E.90.10-095.

(j) Best Management Practices. All development or redevelopment shall implement best management practices (BMPs) for water quality and quantity, as approved by the Technical Committee, such as biofiltration swales and use of oil-water separators, BMPs appropriate to the particular use proposed, clustered development, and limited impervious surfaces.

(2) Development within Wellhead Protection Zone 3 shall implement the following performance measures:

(a) Compliance with the performance standards for vehicle fueling, maintenance and storage areas; loading and unloading areas; well construction and operation; cathodic protection wells; underground hydraulic elevator cylinders, and best management practices in subsections (1)(b), (c), (e), (h), (i), and (j) of this section; and

(b) Fill materials shall not contain concentrations of contaminants that exceed cleanup standards for soil specified in WAC 173-340-740, Model Toxics Control Act, regardless of whether all or part of the contamination is due to natural background levels at the fill source site.

(3) Development within Wellhead Protection Zone 4 shall implement best management practices (BMPs) for water quality and quantity as approved by the Technical Committee.

(4) An incremental environmental improvement to a system protective of groundwater shall not alter, expand, or intensify an existing nonconformance but may proceed without having to meet the following City codes, with prior approval from the Director of Public Works or his/her designee:

(a) Restrictions associated with critical areas and critical area buffers, if the footprint of the original system protective of groundwater is located within the same critical area buffer and it can be demonstrated through best available science that there will be no significant adverse impacts to the critical area and its buffer;

(b) Any requirement to bring a portion of the facility up to current building, fire, or land use codes that is triggered by the value or design of the incremental environmental improvement to a system protective of groundwater;

(c) The incremental improvement shall not qualify as a redevelopment that would otherwise be prohibited by RCDG 20D.140.50-030(1). (Ord. 2180; Ord. 1693. Formerly 20C.40.120(05)(d))

20D.140.60 Geologically Hazardous Areas

20D.140.60-010 Classification and Rating of Geologically Hazardous Areas.

To promote consistent application of the standards and requirements of this chapter, Geologically Hazardous Areas within the City of Redmond shall be rated or classified according to their characteristics, function and value, and/or their sensitivity to disturbance.

(1) Geologically Hazardous Area Classifications. Geologically Hazardous Areas shall be classified according to the criteria in this section.

(a) Erosion Hazard Areas. Erosion Hazard Areas are lands or areas underlain by soils identified by the U.S. Department of Agriculture Soil Conservation Service (SCS) as having "severe" or "very severe" rill and inter-rill erosion hazards. This includes, but is not limited to, the following group of soils when they occur on slopes of 15 percent or greater: Alderwood-Kitsap (AkF), Alderwood gravely sandy loam (AgD), Kitsap silt loam (KpD), Everett (EvD) and Indianola (InD).

(b) Landslide Hazard Areas. Landslide Hazard Areas are areas potentially subject to significant or severe risk of landslides based on a combination of geologic, topographic, and hydrogeologic factors. They include areas susceptible because of any combination of bedrock, soil, slope, slope aspect, structure, hydrology, or other factors. They are areas of the landscape that are at a high risk of failure or that presently exhibit downslope movement of soil and/or rocks and that are separated from the underlying stationary part of the slope by a definite plane of separation. The plane of separation may be thick or thin and may be composed of multiple failure zones depending on local conditions including soil type, slope gradient, and groundwater regime.

Landslide Hazard Areas include:

(i) Areas of historic failures, such as

(A) areas designated as quaternary slumps or landslides on maps published by the United States Geologic Survey (USGS); or

(B) Those areas designated by the United States Department of Agriculture (USDA) Soil Conservation Service (SCS) as having a "severe" limitation for building site development.

(ii) Areas containing a combination of slopes steeper than fifteen percent (15%), springs or groundwater seepage, and hillsides intersecting geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrock;

(iii) Areas that have shown movement during the Holocene epoch (from 10,00 years ago to the present) or which are underlain or covered by mass wastage debris of that epoch;

(iv) Slopes that are parallel or subparallel to planes of weakness in subsurface materials;

(v) Slopes having gradients steeper than eighty percent (80%) subject to rockfall during seismic shaking;

(vi) Areas potentially unstable as a result of rapid stream incision, stream bank erosion, and undercutting by wave action; or

(vii) Any area with a slope forty percent (40%) or steeper with a vertical relief of ten (10) feet or more.

(c) Seismic Hazard Areas. Seismic Hazard Areas are lands subject to severe risk of damage as a result of earthquake-induced ground shaking, slope failure, settlement, soil liquefaction, or surface faulting.

(2) Classification of Geologically Hazardous Areas shall be determined by the Committee based on consideration of the following factors:

(a) Maps adopted pursuant to this chapter; including the Landslide Hazard Area, Erosion Hazard Area, and Seismic Hazard Areas maps, which identified the approximate location and extent of these hazard areas. These maps shall be used as a general guide only for the assistance of property owners and other interested parties; boundaries are generalized. The actual type, extent, and boundaries of Geologically Hazardous Areas shall be determined in the field by a qualified consultant according to the procedures, definition, and criteria established by this Chapter. In the event of any conflict between the critical

area location and designation shown on the City's map and the criteria or standards of this section, the criteria and standards shall prevail;

(b) Maps published by other governmental agencies; such as

(i) USGS landslide hazard and seismic hazard maps;

(ii) Department of Natural Resources (DNR) seismic hazard maps for western Washington and slope stability maps.

(c) Application of the criteria contained in these regulations; and

(d) Consideration of the technical reports submitted by qualified consultants in connection with applications subject to these regulations. (Ord. 2180; Ord. 1693. Formerly 20C.40.080)

20D.140.60-020 Landslide Hazard Area Buffers.

(1) Landslide Hazard Area buffers shall be measured from the top and toe and along sides of the slope (Ord. 1955; Ord. 1693. Formerly 20C.40.090(05), (10))

(2) Minimum Landslide Hazard Area Buffer. Required buffers shall be 50 feet. The width of the buffer shall reflect the sensitivity of the Landslide Hazard Area in question and the types and density of uses proposed on or adjacent to the geologic hazard. In determining the appropriate buffer width, the Committee shall consider the recommendations contained in any technical report required by these regulations and prepared by an applicant's qualified consultant.

(3) Buffer Reduction. Buffers may be reduced to a minimum of 15 feet when a qualified professional demonstrates through technical studies that the reduction will adequately protect the proposed and surrounding development from the critical landslide hazard. (Ord. 1693. Formerly 20C.40.090(15)(d))

(4) Increased Buffer. The buffer may be increased where the Technical Committee determines a larger buffer is necessary to prevent risk of damage to proposed and existing development.

20D.140.60-050 Geologically Hazardous Area Performance Standards.

(1) Relevant performance standards from RCDG 20D.140.20-060 through 070 and 20D.140.30-040, as determined by the Committee, shall be incorporated into mitigation plans.

(2) Development within a Geologically Hazardous Area shall meet the following basic requirements unless it can be demonstrated that an alternative design that deviates from one or more of these standards provides equivalent or greater long-term slope

stability. The following performance standards shall be reflected in proposals within Landslide and Erosion Hazard Areas:

(a) Geotechnical studies shall be prepared by a qualified consultant to identify and evaluate potential hazards and to formulate mitigation measures;

(b) Construction methods will reduce or not adversely affect geologic hazards;

(c) Structures and improvements shall minimize alterations to the natural contour of the slope and foundations shall be tiered where possible to conform to existing topography;

(d) Structures and improvements shall be located to preserve the most critical portion of the site and its natural landforms and vegetation;

(e) Structures and improvements shall be clustered to avoid Geologically Hazardous Areas;

(f) Unless otherwise provided or as part of an approved alteration, removal of vegetation from an Erosion or Landslide Hazard Area or related buffer shall be prohibited;

(g) Development shall be designed to minimize impervious surface coverage;

(h) Disturbed areas should be replanted as soon as feasible pursuant to an approved landscape plan;

(i) Clearing and grading regulations as set forth by the City shall be followed;

(j) Use of retaining walls that allow maintenance of existing natural slope areas are preferred over graded artificial slopes;

(k) Temporary erosion and sedimentation controls, pursuant to an approved plan, shall be implemented during construction;

(l) A master drainage plan shall be prepared for large projects as required by the City Engineer;

(m) A monitoring program shall be prepared for construction activities permitted in Geologically Hazardous Areas;

(n) Development shall not increase instability or create a hazard to the site or adjacent properties, or result in a significant increase in sedimentation or erosion; and (Ord. 1693. Formerly 20C.40.120(05)(c))

(o) Point discharges from surface water facilities and roof drains onto or upstream from an Erosion or Landslide Hazard Area shall be prohibited except as follows:

(i) Conveyed via continuous storm pipe downslope to a point where there are no Erosion Hazard Areas downstream from the discharge;

(ii) Discharged at flow durations matching predeveloped conditions, with adequate energy dissipation, into existing channels that previously conveyed stormwater runoff in the predevelopment state; or

(iii)Dispersed discharge upslope of the steep slope onto a low-gradient undisturbed buffer demonstrated to be adequate to infiltrate all surface and stormwater runoff, and where it can be demonstrated that such discharge will not increase the saturation of the slope.

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