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PREPARED FOR: ASOTIN, COLUMBIA, AND GARFIELD COUNTIES, THE CITY OF CLARKSTON, AND THE TOWN OF STARBUCK

Final Shoreline Master Program

Southeast Washington Coalition Shoreline Master Program Update

Prepared by:

ANCHOR QEA

8033 W. Grandridge Boulevard, Suite A
Kennewick, Washington 99336

Prepared with assistance from:

Oneza & Associates
Pineo Ecological Services, LLC

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SECTION I: Shoreline Goals and Policies (RCW 90.58.100)

1 Introduction

The Counties of Asotin, Columbia, and Garfield, along with the City of Clarkston (in Asotin County) and Town of Starbuck (in Columbia County), have formed the Southeast Washington (SE WA) Region Coalition[1] to update their Shoreline Master Programs (SMPs) to implement the requirements of the Washington State Shoreline Management Act (SMA) Revised Code of Washington (RCW) 90.58, the state SMA Guidelines (Chapter 173-26 Washington Administrative Code [WAC]; Guidelines), and the Shoreline Management Permit and Enforcement Procedures (WAC 173-27). This regional SMP is tailored to the unique and varying geographic, economic, and particular land uses in each of the five jurisdictions in the Coalition.

The SMA was enacted in 1971 to provide for the management and protection of shorelines of the state by regulating development in the shoreline area. The goal of the SMA is "to prevent the inherent harm in an uncoordinated and piecemeal development of the state's shorelines" (RCW 90.58.020). The SMA requires cities and counties to adopt an SMP to regulate shoreline development and accommodate "all reasonable and appropriate uses" consistent with "protection against adverse effects to the public health, the land and its vegetation and wildlife, and the waters of the state and their aquatic life…and public rights of navigation." Asotin County's current SMP was adopted in 1994, and the City of Clarkston has adopted Asotin County's 1994 SMP. Columbia County's and Garfield County's current SMPs were adopted in 1975. The Town of Starbuck's current SMP was adopted in 1975.

The Washington State Department of Ecology (Ecology) approved updated SMA Guidelines in 2003. The SMA and implementing SMP Guidelines require all towns, cities, and counties across the state to comprehensively update their SMPs. The Guidelines provide new requirements for environmental protections, including meeting no net loss of ecological functions, providing for public access, accounting for advancements in science and shoreline management practices, and establishing a clear relationship between the SMA and the Growth Management Act (GMA).

The updated version of the Coalition's SMP provides goals, policies, and regulations for the development of SE WA Region shorelines consistent with the SMA and guidelines.

2 Relationship between the Growth Management Act and Shoreline Management Act

An SMP contains goals, policies, regulations, and environment designation maps that guide shoreline development in accordance with state requirements. The Coalition's SMP is integrated with local land-use regulations in each of the Coalition jurisdictions. Consistent with RCW 36.70A.480, the goals and policies contained in this SMP shall be considered an element of local comprehensive plans required by the GMA. Asotin County is partially planning under

[1] In this report, the phrase "SE WA Region" refers to the area covered by this SMP update. The term "Coalition" refers to the Counties of Asotin, Columbia, and Garfield, the City of Clarkston, and the Town of Starbuck.

the GMA for natural resources and critical areas as required by RCW 36.70A.060. All other portions of this SMP, including the use regulations, are considered a part of local development regulations required by the SMA and GMA.

The Inventory, Analysis, and Characterization Report; Restoration Plan; Cumulative Impacts Analysis Report (which includes the "no net loss of shoreline ecological functions" analysis findings); and Public Participation Plan are supporting documents and are not adopted as part of this SMP or local Comprehensive Land Use Plans.

The Inventory, Analysis, and Characterization Report establishes the baseline against which the standard "no net loss of shoreline ecological functions" is measured. The Restoration Plan identifies and prioritizes shoreline ecological restoration opportunities that may be undertaken independently or in conjunction with mitigation for development impacts to improve shoreline ecological functions over time.

3 Profile of the Shoreline Jurisdiction within the SE WA Region

The Washington State SMA defines the shoreline of the state as "all 'shorelines' and 'shorelines of statewide significance' within the state" (RCW 90.58.030). The shoreline includes floodways, land within 200 feet of the ordinary high water mark (OHWM) of the waterways, floodplains up to 200 feet from the floodway edge, and associated wetlands.

3.1 Shoreline Jurisdiction Rivers

The Coalition's SMP encompasses shoreline along 15 rivers and streams. The Coalition's waterbodies that are defined as shorelines of the state are listed below in Table 1. Shoreline jurisdiction within the SE WA Region includes four rivers and streams that are considered shorelines of statewide significance (SSWS). See Section 3.2 for discussion on SSWS.

Table 1. Shoreline Jurisdiction Rivers and Streams

Stream Name	Total Length Proposed Shoreline
Asotin Creek (South Fork)	3.70 miles
Asotin Creek (North Fork)	7.55 miles
George Creek[1]	1.43 miles
Joseph Creek	8.41 miles
Touchet River (South Fork)	16.12 miles
Touchet River (North Fork)	14.89 miles
Touchet River	10.05 miles
Touchet River (Wolf Fork)[2]	7.70 miles
Panjab Creek	2.19 miles
Mill Creek	1.13 miles
Wenaha River (North Fork)	1.11 miles
Butte Creek	5.25 miles
Third Creek	3.43 miles

Stream Name	Total Length Proposed Shoreline
First Creek	0.89 mile
Crooked Creek	6.29 miles

Notes:
1 = Further evaluate inclusion/exclusion as shoreline jurisdiction waterbody in next comprehensive update
2 = Listed as Robinson Creek in WAC 173-18-110. Robinson Creek is listed as Touchet River, Wolf Fork on U.S. Geological Survey topography maps.

3.2 Shorelines of Statewide Significance

Shoreline jurisdiction within the SE WA Region includes four rivers that are considered SSWS, as listed in Table 2. The SMA designates certain shoreline areas in eastern Washington as SSWS, which are defined as "natural rivers or segments thereof" that have a mean annual flow of 200 cubic feet per second or more (and the portion downstream from the first 300 square miles of drainage area) and lakes, whether natural, artificial, or a combination thereof, of 1,000 acres or greater in surface area. Designation as SSWS for Asotin Creek, the Grande Ronde River, the Snake River, and the Tucannon River are based on the flow and upstream drainage area criteria.

Table 2. Shorelines of Statewide Significance

Stream Name	Total Length Proposed Shoreline
Asotin Creek	15.28 miles
Grande Ronde River	38.27 miles
Snake River	117.17 miles
Tucannon River	56.21 miles

The Coalition recognizes and protects the functions and values of the shoreline environments of statewide and local significance. For SSWS, protection and management priorities are to:

(1) Recognize and protect statewide interests over local interests

(2) Preserve the natural character of the shoreline

(3) Provide long-term over short-term benefits

(4) Protect the resources and ecology of the shoreline

(5) Increase public access to publicly owned areas of shoreline

(6) Increase recreational opportunities for the public in shoreline areas

4 Goals and Policies

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

The SMP goals and policies are categorized according to the SMP elements required in the SMA. The general goal and policy statements found within each SMP element provide the policy basis for local program administration.

4.1 Economic Development Element

(1) Goals

(a) Goal A: Encourage, sustain, and enhance existing economic activities such as agricultural, shipping, marina use, angling, hunting, and general recreation.

(b) Goal B: Develop, as an economic asset, the water-oriented tourism and recreational industry that would enhance the public enjoyment of the shoreline.

(c) Goal C: Promote economic growth that conserves natural resources and open spaces and maintains the environmental quality and rural character that make the SE WA region a preferred place to work.

(d) Goal D: Maintain and secure additional commercial and industrial facilities and infrastructure necessary for existing and future water-oriented development in shoreline areas where it is most feasible, while maintaining environmental quality and shoreline ecological functions.

(e) Goal E: Maintain and enhance natural resource-based industries within shoreline, including productive agriculture (commodity and specialty crop production and grazing), fisheries, and forest practices, while maintaining environmental quality. Discourage incompatible uses near the natural resource-based industries.

(f) Development within shoreline jurisdiction should recognize the economic values of the natural character and aesthetics of views and vistas to the shoreline.

(2) Policies

(a) Ensure healthy, orderly economic growth by providing for those economic activities that will be an asset to the local economy and for which the adverse effects on the quality of the shoreline and surrounding environment can be avoided or, where this is not possible, mitigated.

(b) Maintain current agricultural uses as a major economic strength of the region. Protect current agricultural land uses and provide for developing new agricultural uses in existing agricultural lands in shorelands.

(c) Maintain and protect existing water-dependent and water-related industries that support the SE WA region's economy. Provide opportunities for future expansions of such industries. Examples include grain and fuel loading, dams, navigation, and recreational fisheries based on steelhead, salmon, sturgeon, and introduced species.

(d) Allow diversion of water for agricultural purposes consistent with the State's water rights and watershed planning laws.

(e) Promote tourism and develop and maintain the recreation and tourism industry along shorelines in a manner that will enhance public enjoyment.

(f) Work with port districts and other agencies to ensure sustainable economic growth along the shoreline. Encourage cooperative use of existing port facilities, including docks and piers, where feasible and when they do not negatively affect public safety.

(g) Give preference to economic activities in undeveloped areas, which leave natural or existing shoreline features, such as trees, shrubs, grasses, and wildlife habitat intact. Where impacts are short-term, mitigate as appropriate through mitigation sequencing. Encourage new water-dependent, water-related, and water-enjoyment economic development in priority order.

(h) Ensure any economic activity taking place along the shoreline operates without causing irreparable harm to the site's ecological integrity and function and that of adjacent shorelands.

(i) Where possible, developments are encouraged to incorporate low-impact development techniques into new projects and to integrate architectural and landscape elements that recognize and are consistent with the river environment.

(j) Require commercial and recreational development that is not water-oriented to provide ecological restoration and public access as appropriate.

(k) Ensure new industrial, commercial, and agricultural uses will not result in a net loss of shoreline ecological functions or have significant adverse impacts on navigation, recreation, and public access.

4.2 Public Access and Recreation Element

(1) Goals

(a) Goal A: Promote, protect, and enhance physical and visual public access along the shoreline of Asotin Creek and the Grand Ronde, Snake, Tucannon, and Touchet rivers. Increase the amount and diversity of public access along the shoreline consistent with protecting private property rights, including both shorelands on all rivers and Asotin Creek, and aquatic lands on the Touchet and Tucannon rivers, and provide for public safety and the natural shoreline character.

(b) Goal B: Maintain and enhance existing physical and visual public access, and provide additional public access, where appropriate, according to the Coalition's Public Access Plan (under development), building upon the SE WA region's many types of shoreline public access and opportunities.

(c) Goal C: Provide new physical and visual public access as feasible and when new development creates demand for public access.

(d) Goal D: Encourage diverse, convenient, and adequate water-oriented recreational opportunities along the shoreline for the public, recognizing the significant sections of privately owned lands and aquatic waters on the Touchet and Tucannon rivers.

(e) Goal E: Give water-oriented shoreline recreational development priority within public lands on shoreline jurisdiction.

(2) Policies

(a) Protect and enhance visual and physical access to shorelines. Provide visual access, such as viewpoints or view corridors, in areas with limited physical access due to extensive private ownership, physical constraints such as steep slopes, port, and dam industrial areas, or the sensitive nature of the shoreline whenever possible.

(b) Ensure new developments, uses, and activities on or near shorelines do not impair or detract from the public's access to the water. Where practicable, public access to the shoreline should be enhanced.

(c) Design public access to minimize potential impacts to private property and individual privacy.

(d) Locate, design, manage, and maintain public access and recreation facilities in a manner that protects shoreline ecological functions and processes and the public's health and safety.

(e) Pursue opportunities for public access on publicly owned shorelines and in areas with extensive private ownership (primarily on the Tucannon and Tucannon rivers) consistent with the Coalition's Public Access Plan. Encourage federal, state, and local governments to provide public access and recreational uses on existing shoreline properties according to their management policies, such as existing state parks, trails, campsites, and U.S. Army Corps of Engineers (USACE) Habitat Management Units and parks along the Snake River. Preserve, maintain, and enhance public access afforded by shoreline street ends, public utilities, and rights-of-way. Provide for new opportunities, where feasible.

(f) Provide physical and visual public access in the shoreline jurisdiction in association with the following uses when feasible: residential developments with five or more dwellings; commercial development; and public agency recreational development.

(g) Provide public access and interpretive displays as part of publicly funded restoration projects where significant ecological impacts and restoration are addressed.

(h) Allow for passive and active shoreline recreation that emphasizes location along shorelines in association with Coalition members' and other public agency parks, recreation, wildlife habitat, and open-space plans.

(i) Encourage a variety of compatible recreational experiences and activities such as parks, boat lunches, docks, trail, and viewing platforms to satisfy the SE WA region's diverse recreational needs.

(j) Give water-dependent recreation priority over water-enjoyment recreation uses. Give water-enjoyment recreational uses priority over non-water-oriented recreational uses.

(k) Integrate and link recreation facilities with linear systems, such as water trails, walking trails, bicycle paths, easements, and scenic drives, when feasible, to connect waterbodies, roads, and trails, where appropriate, and capitalize on other opportunities.

(l) Promote non-intensive recreational uses, which avoid adverse effects to the natural environment, do not contribute to flood hazards, and avoid damage to the shoreline environment through modifications such as structural shoreline stabilization or native vegetation removal.

4.3 Circulation Element

(1) Goals

(a) Goal A: Develop safe, convenient, and multi-modal circulation (transportation) systems to ensure efficient movement of people, goods, and services, with minimal adverse impacts on the shoreline environment.

(2) Policies

(a) Provide safe, reasonable, and adequate road, trail, and water circulation systems to shorelines where routes will avoid or minimize adverse effects on unique or fragile shoreline features and existing ecological systems, while contributing to the functional and visual enhancement of the shoreline.

(b) Within the shoreline jurisdiction, locate land circulation systems that are not shoreline-oriented and as far from the land-water interface as practicable to reduce interference with either natural shoreline resources or other appropriate shoreline uses.

(c) Allow for maintenance and improvements to existing roads and parking areas. Allow for necessary new roads and parking areas where other locations outside of shoreline jurisdiction are not feasible.

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

(e) In the circulation network, plan for pedestrian, bicycle, equestrian, and public transportation, along with various water craft, where appropriate. Circulation planning and projects should support existing and proposed shoreline uses that are consistent with the SMP.

(f) Encourage relocation or improvement of those circulation elements that are functionally or aesthetically disruptive to the shoreline, public waterfront access, and ecological functions.

(g) Plan parking areas to achieve optimum use. Where possible, parking should serve more than one use (e.g., serving recreational use on weekends and commercial uses accessory to a water-dependent, water-related, or water-enjoyment use on weekdays).

(h) Encourage low-impact parking facilities such as those with gravels or permeable pavements and bio-swales.

(i) Encourage trail and bicycle paths and water trails along shorelines in a manner that does not damage the natural character, resources, and ecology of shorelines.

(j) Encourage the linkage of shoreline parks, recreation areas, and public access points with linear systems, such as hiking and bicycle paths, easements, and the many scenic drives along shoreland in the SE WA Coalition area.

4.4 Shoreline Uses and Modifications Element

(1) Goals

(2) Goal: Encourage shoreline development that recognizes the SE WA Region's natural and cultural values and its unique aesthetic qualities offered by its variety of shoreline environments. These include (but are not limited to) free-flowing and reservoir-bounded river segments, agricultural development, cliffs and breaks (very high steep slopes and escarpments), riverine wetlands, open views, and formal and informal public access. General Policies

(a) Maintain areas within SMP jurisdiction with unique attributes for specific long-term uses, including agricultural, commercial, industrial, residential, recreational, and open-space uses.

(b) Ensure proposed shoreline uses are distributed, located, and developed in a manner that will maintain or improve the health, safety, and welfare of the public when such uses occupy shoreline areas.

(c) Ensure activities and facilities are located so as to retain or improve shoreline natural character and ecological function. Encourage new developments to locate in areas already developed with similar uses that are consistent with this SMP.

(d) Ensure proposed shoreline uses do not infringe upon the rights of others, upon the rights of private ownership, upon the rights of the public under the Public Trust Doctrine or federal navigational servitude, and upon treaty rights of Native American tribes.

(e) Minimize the adverse impacts of shoreline uses and activities on the environment during all phases of development (e.g., design, construction, management, and use).

(3) Shoreline Environment Designation Policies

(a) Provide a comprehensive shoreline environment designation system to categorize the SE WA region's shoreline into environments based on the primary characteristics of shoreline areas to guide the use and management of these areas.

(b) Designate properties as Natural in order to protect and restore those shoreline areas that are relatively free of human influence or that include intact or minimally degraded shoreline functions that are sensitive to potential impacts from human use.

(c) Assign appropriate environment designation(s) to acknowledge and maintain support for existing agricultural land uses and, as applicable, for anticipated new agricultural development.

(d) Designate properties as Rural to accommodate low-density rural home sites and natural resource-based uses such as timber harvesting agricultural and rangeland uses. Provide a separation between urban and rural areas, and maintain an open-space character and density of use that provides opportunities for recreational uses.

(e) Assign appropriate environment designations to accommodate recreational uses. Ensure intense recreational uses, such as boat launches and parks, do not conflict with the sensitive nature of the shoreline (e.g., habitat management units and shoreline reaches with riparian and floodplain plant communities exhibiting high ecological integrity) where low-impact recreational uses are more appropriate.

(f) Assign properties as High Intensity to support energy generation, industrial, commercial, irrigation supply, transportation, and navigation activities while maintaining ecological functions. Ensure public services, such as irrigation and navigation uses, are separated from industrial uses.

(g) Designate properties as Shoreline Residential to accommodate higher density residential development and recognize existing and proposed land uses. This designation is appropriate for residential uses on lands with zoning classifications for detached and multi-family residences.

(h) Assign appropriate environment designations to preserve riparian, wetland, and upland ecosystems in shorelands, natural resources, and public agency operations.

(4) Agriculture Policies

(a) This SMP recognizes the importance of agriculture in the SE WA region and supports its continued economic viability. This SMP provides for ongoing agricultural activities and should protect agricultural lands from conflicting uses, such as intensive or unrelated residential, industrial, or commercial uses, while also maintaining shoreline ecological functions and processes.

(b) New agricultural development should be conducted in a manner that ensures no net loss of shoreline ecological functions and processes.

(c) Maintain native riparian and upland vegetative buffers between agricultural lands and streams or wetlands.

(d) Converting agricultural lands to other uses should comply with all policies and regulations for non-agricultural uses.

(5) Aquaculture Policies

(a) Aquaculture, which includes salmonid acclimation facilities, is a preferred water-dependent use of the shoreline. Acclimation facilities should support salmon recovery or other fisheries management objectives.

(b) Preference should be given to aquaculture operations that avoid or minimize environmental impacts. Aquaculture should control pollution, avoid adverse impacts to the environment, and preserve habitat for native species.

(c) Aquaculture should not be allowed in areas where it would impair navigation, or conflict with other water-dependent uses.

(d) Aquaculture facilities should be designed to minimize nuisance odors and noise, as well as visual impacts on surrounding shoreline development.

(e) The rights of treaty tribes to aquatic resources within their usual and accustomed areas should be addressed through the permit review process. Direct coordination between the applicant/proponent and the tribe is encouraged.

(6) Boating Facilities Policies

(a) Locate and design boating facilities so their structures and operations will be compatible with the area affected, such as environmental conditions, shoreline configuration, access, and neighboring upland and aquatic uses.

(b) Require restoration when substantial improvements or repair to existing boating facilities is planned.

(c) Boating facilities that minimize the amount of shoreline modification are preferred.

(d) Boating facilities should provide physical and visual public shoreline access and provide for multiple water-oriented uses, to the extent compatible with shoreline ecological functions and processes and adjacent shoreline use.

(e) Boating facilities should be located and designed to avoid adverse effects on riverine processes, such as erosion, littoral transport and accretion,

sediment transport, and channel migration. Installing boating facilities should enhance degraded riverine ecological and geomorphic functions.

(f) Locating and designing boating facilities should not unduly obstruct navigable waters and should avoid adverse effects to recreational opportunities such as fishing, pleasure boating, swimming, river beach walking, picnicking, and shoreline viewing.

(7) Breakwaters, Jetties, Groins, and Weirs Policies

(a) To the extent feasible, limit the use of breakwaters, jetties, groins, weirs, or other similar structures to those projects providing ecological restoration or other public benefits. These structures should only be located in the Snake River and should avoid ecological and fluvial geomorphic impacts. Impacts that cannot be avoided should be minimized. Minimized impacts should be mitigated.

(8) Dredging and Dredge Material Disposal Policies

(a) Dredging and dredge material disposal should avoid and minimize ecological impacts. Impacts that cannot be avoided should be minimized and mitigated.

(b) Design and locate new shoreline development to avoid the need for dredging.

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

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

(e) Ensure dredging operations are planned and conducted in a manner that will minimize interference with navigation and avoid adverse impacts to shoreland natural character and ecological functions.

(f) Dredging should not be proposed or approved for the purpose of flood reduction in urbanized areas unless it is demonstrated to be geomorphically sustainable and no other alternative is feasible.

(9) Fill Policies

(a) Limit fill waterward of the OHWM to support ecological restoration, such as river restoration, or to facilitate water-dependent or public access uses.

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

(10) Forest Practices

(a) Ensure compliance with the State's Forest Practices Act for all forest management activities on non-federal forest lands, including Class IV, general forest practices, where shorelines are being converted or are expected to be converted to non-forest uses.

(b) Conduct forest practices within shoreline areas to ensure water quality and the maintenance of vegetative buffer strips to protect fish populations and avoid erosion of streambanks.

(c) When forest lands are converted to another use, ensure no net loss of shoreline ecological functions or adverse impacts on other shoreline uses, resources, and values such as navigation, recreation, and public access.

(11) Industrial Development Policies

(a) Provide for future industrial and port facilities that are dependent upon a shoreline location in areas where the shoreline is already characterized by industrial development or planned for such uses.

(b) Locate and design industrial developments in a manner that ensures no net loss of shoreline ecological functions and that does not have significant adverse impacts to other shoreline resources and values.

(c) Encourage cooperative use of existing port facilities, including docks and piers when feasible, to reduce additional disruption to the shoreline.

(d) Limit non-water-oriented industrial development in the shoreline environment and only in areas physically separated from the shoreline, where navigability is restricted, or as part of a project that provides public access or ecological restoration benefits.

(12) In-stream Structures Policies

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

(b) In-stream structures shall be allowed when demonstrated to be a legitimate design component of stream restoration (e.g., rehabilitating natural channel morphology).

(13) Mining Policies

(a) Locate mining facilities outside shoreline jurisdiction whenever feasible.

(b) Do not allow mining in any location waterward of the OHWM.

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

(d) Gold prospecting and extraction activities, including, but not limited to, panning, dredging, placer mining, and related concentrating and extraction techniques and equipment use, shall conform to all regulations and equipment specifications in the Gold and Fish Pamphlet published by the Washington Department of Fish and Wildlife (WDFW) and regulations administered by all other local, state, and federal agencies.

(e) Gold prospecting and extraction activities shall be conducted in a manner which prevents damage to all other aspects of shoreline natural character, floodplain and upland ecosystems, and ecological functions.

(f) Gold prospecting and extraction activities shall be conducted in a manner which prevents impinging, limiting, or interfering with normal public use of shorelines, including, but not limited to, angling, boating, wading, and related activities.

(g) Gold prospecting and extraction activities shall be conducted in a manner which prevents turbidity, sedimentation, and any other short-term or long-term impacts to water quality.

(h) Mining activities should protect streams and rivers from pollution, including, but not limited to, sedimentation and siltation, chemical and petrochemical use, and spillage and storage/disposal of mining wastes and spoils.

(i) Mining operations should be located, designed, and managed so that other appropriate uses are not subjected to substantial or unnecessary adverse impacts from noise, dust, or other effects of the operation. The operator may be required to implement measures, such as buffers, limited hours, or other mitigating measures, for the purpose of minimizing adverse proximity impacts.

(14) Piers and Docks Policies

(a) Moorage for water-related and water-enjoyment uses or shared moorage for multi-family use should be allowed as part of a mixed-use development or where it provides public access.

(b) New moorage should be permitted when the applicant/proponent has demonstrated that a specific need exists to support the intended water-dependent or public access use.

(c) Docks, piers, and mooring buoys should avoid locations where they will adversely impact shoreline ecological functions or processes, including high-velocity currents and littoral drift.

(d) Moorage should be spaced and oriented in a manner that minimizes hazards and obstructions to public navigation rights and corollary rights thereto, such as, but not limited to, fishing, swimming, pleasure boating and private riparian rights of adjacent land owners.

(e) Moorage should be restricted to the minimum size necessary to meet the needs of the proposed use. The length, width, and height of piers and docks should be no greater than that required for safety and practicality for the primary use.

(f) Pile supports are preferred over fills because piles do not displace water surface or aquatic habitat and are removable and, thus, more flexible in terms of long-term use patterns. Floats may be less desirable than pile structures where aquatic habitat or littoral drift are significant.

(g) Piers and docks should be constructed of materials that will not adversely affect water quality or aquatic plants and animals in the long term.

(h) New pier and dock development should be designed not to interfere with lawful public access to or use of shorelines. Developers of new piers and shared moorage should be encouraged to provide physical or visual public access to shorelines whenever safe and compatible with the primary use and shoreline features.

(15) Recreational Development Policies

(a) Shoreline recreational development should be given priority for shoreline location to the extent that the use facilitates the public's ability 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. Where appropriate, such facilities should be dispersed along the shoreline in a manner that supports more frequent recreational access and aesthetic enjoyment of the shoreline for a substantial number of people.

(b) Recreational developments should facilitate appropriate use of shoreline resources while conserving them. These resources include, but are not

limited to, wetlands, soils, groundwater, surface water, native plant and animal life, and hydrologic processes.

(c) Recreation and associated facilities may be a combination of developed and undeveloped opportunities. Planning the location of recreational facilities and opportunities should consider the ecological function and sensitive nature of the shoreline in order to avoid adverse impacts. Constructed facilities should be located in existing compromised areas, while shorelands with high ecological integrity should be reserved for recreation not requiring any development.

(d) Recreational developments and plans should provide a varied and balanced choice of recreation experiences in appropriate locations. Public agencies and private interests should coordinate their plans and activities to provide a wide variety of recreational opportunities without needlessly duplicating facilities.

(e) Recreational development should facilitate and incorporate the linkage of shoreline parks, recreation areas, and public access points with linear systems such as hiking paths, bicycle paths, easements, and scenic drives.

(f) When feasible, recreation facilities should incorporate public education regarding shoreline ecological functions and processes, the role of human actions on the environment, and the importance of public involvement in shoreline management. Opportunities incorporating educational and interpretive information should be pursued in designing and operating recreation facilities.

(g) Recreational development should be located and designed to preserve, enhance, or create scenic views and vistas.

(16) Residential Development Policies

(a) Consider single-family residential development as a priority use.

(b) Locate and construct residential development in a manner that ensures no net loss of shoreline ecological functions.

(c) Ensure the overall density of development, lot coverage, and height of structures is appropriate to the physical capabilities of the site and consistent with the comprehensive plan.

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

(e) Make adequate provisions for services and infrastructure necessary to support residential development.

(f) Design and locate residential development to preserve existing shoreline vegetation, prevent erosion, and protect water quality.

(g) Design and locate new residences so that shoreline stabilization will not be necessary to protect structures and associated developments. Planning for newly created residential lots should demonstrate the lots can be developed without the following results:

(i) Constructing shoreline stabilization structures, such as bulkheads or riprap, and without otherwise interfering with natural rates of channel migration

(ii) Causing significant erosion or slope instability

(iii) Removing existing native vegetation within shoreline buffers

(17) Stream Corridor and Floodplain Ecosystem Rehabilitation and Adjacent Natural Systems Enhancement Projects Policies

(a) Include provisions for shoreline native plant community restoration or rehabilitation, fish and wildlife habitat enhancement, and low-impact development techniques in projects located within shoreline jurisdiction.

(b) Encourage and facilitate implementing ecological rehabilitation projects and programs included in the SMP Restoration Plan.

(18) Shoreline Stabilization Policies

(a) Locate and design new development, including subdivisions, to avoid potential future impingement on channel migration zones (CMZs), and eliminate the need for new shoreline modification or stabilization.

(b) Design and construct new or replacement structural shoreline stabilization measures to minimize and mitigate the impact of these modifications on the shorelines within the SE WA region Coalition area.

(c) Give preference to non-structural shoreline stabilization measures over structural shoreline stabilization, and give preference to biotechnical shoreline stabilization design approaches over fixed structural shoreline stabilization such as riprap or bulkheads.

(d) Allow location, design, and construction of riprap and other bank stabilization measures primarily to prevent damage to existing public infrastructure.

(19) Utilities Policies

(a) Allow for utility maintenance and extension with criteria for location and vegetation restoration as appropriate.

(b) Plan, design, and locate utility infrastructure to avoid or minimize harm to shoreline ecological functions, preserve the natural landscape, and minimize conflicts with present and future planned land and shoreline uses.

(c) Do not permit new non-water-dependent utility infrastructure, or parts of such infrastructure such as power plants, solid waste storage, or disposal facilities, within shoreline jurisdiction unless no other options are possible. Primary utility facilities, such as wastewater treatment plants, and expansion of existing facilities, should be located in shoreline jurisdiction only if no practical upland alternative or location exists. Such facilities and expansions should be designed and located to avoid or minimize impacts to shoreland ecological functions, including riparian, floodplain, and aquatic areas, and to the natural landscape and aesthetics. Consistent with the prioritized, preferred uses delineated in RCW 90.58.020, public health and safety should be a high priority for the planning, development, and operation of primary utility facilities.

(d) Locate utility transmission facilities for the conveyance of services, such as power lines, cables, and pipelines, outside of shoreline jurisdiction where possible. Where permitted within shoreline jurisdiction, such facilities should be located within existing or approved road crossings and rights-of-way, or in such a way as to avoid or minimize potential adverse impacts on shoreland. Joint use of rights-of-way and corridors in shoreline areas should be encouraged.

(e) Locate new utility facilities so as not to impinge on CMZs.

(f) Locate utility facilities and corridors to protect scenic views. Utilities and utility corridors should be placed underground and attached to or embedded within bridges.

(g) Design utility facilities and rights-of-way to preserve the natural landscape and to avoid or minimize conflicts with present and planned land uses.

(20) Existing Uses Policies

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

(b) Allow alterations of nonconforming structures, uses, and lots in consideration of historic development patterns when occupied by preferred uses and consistent with public safety and other public purposes.

(c) Encourage transitions from nonconforming uses to conforming uses.

(d) Allow for nonconforming structures to expand when they do not increase the nonconformity according to SMP requirements.

(e) Allow for existing roads, driveways, and utility lines to continue and expand when they do not increase the nonconformity according to SMP requirements.

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

4.5 Conservation Element

(1) Goals

(a) Goal A: Protect the natural shoreland ecosystems and ecological functions and scenic and recreational values of the SE WA region's shorelines.

(2) General Policies

(a) Develop and implement management practices that will ensure a sustained yield of renewable resources of the shorelines while preserving, protecting, and restoring unique shoreline resources, environments, or features that cannot be replaced or restored within the planning horizon of this SMP.

(b) Rehabilitate areas that are biologically and aesthetically degraded where feasible.

(c) Preserve scenic vistas, aesthetics, native endemic ecosystems, and other critical areas.

(d) Protect shoreline processes and ecological functions through regulatory and nonregulatory means that may include acquiring key properties, conservation easements, and regulating development shoreland. These measures should include incentives for private property owners, encouraging ecologically-sound design, and implementing best management practices.

(e) Protect and manage associated wetlands in shorelands, including maintaining sufficient volumes of surface and subsurface drainage into wetlands, to sustain existing vegetation and wildlife habitat.

(f) Work with other agencies and private entities to deal effectively with regional and watershed-wide natural environment issues to protect, preserve, and enhance shorelands and fish and wildlife habitats.

(g) Manage development to avoid risk and damage to property and loss of life from biophysical limitations, including flooding potential and geological hazards such as landslides, channel avulsion, frequent and periodic movement of woody debris, and similar natural events and processes.

(h) Regulate development within the SMP area of the 100-year floodplain to avoid risk and damage to property and loss of life. This regulation should also integrate with protecting ecological functions and CMZs in floodplains, as specified in (g) above.

(i) Prohibit the introduction of invasive non-native plant species along the shoreline, and encourage the removal of noxious and invasive weeds and trees. Protect, enhance, and maintain native plant communities.

(j) Rehabilitate areas that are biologically and aesthetically degraded, while maintaining appropriate use of the shoreline.

(3) Critical Areas Goals

(a) Goal A: Promote public health and welfare by instituting local measures to preserve the values of naturally occurring wetlands, critical aquifer recharge areas, Geologically Hazardous Areas, frequently flooded areas (see SMP Section I, 4.7: Flood Hazard Management goals and policies), and Fish and Wildlife Habitat Conservation Areas that exists in the Coalition's shoreline jurisdiction areas.

(b) Goal B: Reduce the threat posed to the health and safety of the Coalition's citizens from commercial, residential, or industrial development proposed for locations in areas of significant geologic hazard.

(c) Goal C: Identify categories of Fish and Wildlife Habitat Conservation Areas in the Coalition's shoreline jurisdiction areas, based in part on information supplied by WDFW's Priority Habitat and Species Program and other sources, as well as other local and regional experts.

(d) Goal D: Protect aquatic and terrestrial wildlife and reflect the needs and desires of local, regional, and state constituencies.

(4) Critical Areas Policies

(a) Recognize that critical areas may serve a variety of vital functions, including, but not limited to, flood storage and conveyance, water quality protection, recharge and discharge areas for groundwater, erosion control, sediment control, fish and wildlife habitat, recreation, education, and scientific research.

(b) Implement protection measures that protect identified values and functions of critical areas from future development proposals. However, these regulations shall not prohibit uses legally existing on any parcel prior to their adoption.

(c) Avoid unnecessary duplication with various legal means and levels of government that already protect wetlands, and promote cooperation and coordination whenever possible.

(d) Recognize that risks from geologic hazards can be avoided, minimized, or mitigated through engineering design or optimized construction practices. In other cases where technical efforts are not sufficient to reduce associated risks, building is best avoided. Cooperate with federal, state, and private agencies and individuals who have primary authority to manage specific Fish and Wildlife Habitat Conservation Areas within certain parts of the SE WA region to protect ecological functions and CMZs in floodplains.

(e) Preserve land necessary for aquatic and terrestrial wildlife species survival and that which preserve seasonal migration and daily wildlife movements for feeding, watering, resting, breeding, and thermal and escape cover.

4.6 Historic, Cultural, Scientific, and Educational Resources Element

(1) Goals

(a) Goal A: Protect areas and sites with historic, cultural, educational, or scientific value.

(2) Policies

(a) Identify, protect, preserve, and restore important archeological, historic, and cultural sites located in shoreline areas.

(b) Encourage educational projects and programs that foster a greater appreciation of the importance of good shoreline management environmental conservation, consistent with ensuring no net loss of ecological functions.

(c) Prevent public or private uses and activities from damaging, altering, removing, or destroying any site having historic, cultural, scientific, or educational value.

4.7 Flood Hazard Management Element

(1) Goals

(a) Goal A: Protect public safety within river and creek floodways and floodplains, and protect natural systems by preserving the flood storage and channel migration functions of floodplains.

(b) Goal B: Prevent potential hazards that may be caused by inappropriate development in areas where severe and costly flooding is anticipated to occur.

(2) Policies

(a) Manage development proposed within floodplains and floodways consistent with the SMA, Federal Emergency Management Agency (FEMA) standards, and Critical Areas Regulations for frequently flooded areas contained within this SMP.

(b) Implement protection measures designed to minimize hazards in frequently flooded areas that already exist for the SE WA region, as detailed in the local flood damage prevention ordinances as amended.

(c) Work with cities, towns, and state and federal agencies to deal effectively with regional flooding issues.

(d) Control stormwater runoff in a manner consistent with low-impact development practices, which utilize natural detention, retention, and recharge techniques.

(e) Prohibit any development within the floodplain that would individually or cumulatively cause any increase in the base flood elevation beyond FEMA standards.

4.8 Private Property Rights

(1) Goals

(a) Goal A: Recognize and protect private property rights in shoreline uses and developments consistent with the public interest.

(2) Policies

(a) Shoreline uses should be located and designed to respect private property rights in shorelands in the region, maintain privacy of private property, be compatible with the shoreline environment, protect ecological functions and processes, and protect aesthetic values of the shoreline.

(b) Public access to shorelines, such as trails, bikeways, or roads, should be designed and located to protect privacy of adjacent private property owners.

(c) Explore opportunities for providing additional public access on the lower Tucannon River and upper Touchet River North, South and Wolf forks, in coordination with private and public landowners.

SECTION II: Shoreline Regulations

Article I. Authority and Purpose

XX.XX.010 Authority

(1) The SMA of 1971, RCW 90.58, is the authority for the enactment and administration of this SMP.

XX.XX.020 Applicability

(1) This SMP shall apply to all of the shoreline areas, waters, and critical areas within the SE WA region shorelands and waters as described in SMP Section I, Shoreline Goals and Policies, Profile of the Shoreline Jurisdiction, within the Coalition.

(2) All proposed uses, activities, or development occurring within shoreline jurisdiction must conform to the intent and requirements of RCW 90.58, the SMA, and this SMP, whether or not a permit or other form of authorization is required. See the SMP Shoreline Goals and Policies section for the shoreline jurisdiction description and SMP Article VII for the definition of uses, activities, and development.

(3) The SMP applies to shorelands and aquatic lands within Asotin, Columbia, and Garfield Counties, including Urban Growth Areas (UGA), within the cities of Dayton and Asotin, and within the limits of the City of Clarkston and Town of Starbuck; this SMP does not apply within the city limits of Dayton and Asotin.

(4) Pursuant to WAC 173-27-060, federal agency activities may be required by other federal laws to meet the permitting requirements of RCW 90.58. This SMP shall apply to all nonfederal developments and uses undertaken on federal lands and on lands subject to nonfederal ownership, lease, or easement, even though such lands may fall within the external boundaries of federal ownership. All federal activities on nonfederal lands are subject to all of the provisions and administrative procedures of this SMP (WAC 173-27-060).

(5) As recognized by RCW 90.58.350, the provisions of this SMP shall not affect treaty rights of Native American tribes.

(6) Maps indicating the extent of shoreline jurisdiction areas and shoreline environment designations are for guidance only. They are to be used in conjunction with the most current scientific and technical information available, field investigations, and on-site surveys to accurately establish the location and extent of shoreline jurisdiction when a project is proposed. All areas meeting the definitions of shorelines of the state, whether mapped or not, are subject to the provisions of this SMP.

XX.XX.030 Purpose

(1) The purposes of this SMP are as follows:

(a) To promote the public health, safety, and general welfare of the Coalition jurisdictions by providing comprehensive policies and effective, reasonable regulations for development, use, and protection of jurisdictional shorelands

(b) To further assume and carry out the local government responsibilities established by the SMA in RCW 90.58.050, including planning and administering the regulatory program consistent with the policy and provisions of the SMA in RCW 90.58.020

(c) To provide a high-quality shoreline environment where:

(i) Recreational opportunities are abundant

(ii) The public enjoys access to and views of shoreline areas

(iii) Ecological functions of the shoreline are maintained and improved over time

(iv) Water-dependent uses are promoted consistent with the shoreline character and environmental functions

(d) To apply special conditions to those uses that are not consistent with the control of pollution and prevention of damage to the natural environment or are not unique to or dependent upon use of the state's shoreline

(e) To ensure no net loss of ecological functions associated with the shoreline

XX.XX.040 Relationship to Other Codes, Ordinances, and Plans

(1) All applicable federal, state, and local laws shall apply to properties in the shoreline jurisdiction. Where this SMP makes reference to any RCW, WAC, or other state or federal law or regulation, the most recent amendment or current edition shall apply.

(2) In the event that provisions of this SMP conflict with provisions of federal, state, or county regulations, the provision that is most protective of shoreline resources shall prevail. The provisions of this section may not allow development to occur at what otherwise might be a property's full zoning potential.

(a) Local plans or programs include, but are not limited, to the following:

(i) Water Resource Inventory Area (WRIA) 32 and 35 watershed management plans

(ii) Snake River Salmon Recovery Plan

(iii) Flood damage prevention ordinances

(iv) Washington State Environmental Policy Act (SEPA) regulations

(v) Zoning, floodplain development, and GMA ordinances

(b) State and federal programs include, but are not limited to the following:

(i) Washington State Hydraulic Project Approval (HPA)

(ii) Washington State Pesticide Applicator License Requirements

(iii) Washington State Waste Discharge Permits

(iv) Washington State Water Quality Certification Requirements (401)

(v) USACE 404 Permits and Section 10 Permits

(3) The policies in the SMP, contained in the SMP Elements, state those underlying objectives that the regulations are intended to accomplish. The policies guide the interpretation and enforcement of the SMP regulations contained in this section. The policies are not regulations in themselves and, therefore, do not impose requirements beyond those set forth in the regulations.

(4) This SMP contains critical area regulations in Article V, applicable only in shoreline jurisdictions that provide a level of protection to critical areas ensuring no net loss of shoreline ecological functions necessary to sustain shoreline natural resources (RCW 36.70A.480). In the event of a conflict between the requirements of this code and any other code or ordinance of the Coalition members, the regulation that provides the greater protection for the particular critical area within shoreline jurisdiction shall apply.

(5) Projects in the shoreline jurisdiction that have either been deemed technically complete through the application process or have been approved through local and state reviews prior to the adoption of this SMP are considered accepted. Major changes or new phases of projects that were not included in the originally approved plan will be subject to the policies and regulations of this SMP.

XX.XX.050 Liberal Construction

(1) RCW 90.58.900 – SMA is exempted from the rule of strict construction, and it shall be liberally construed to give full effect to the objectives and purposes for which it was enacted.

XX.XX.060 Severability

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

XX.XX.070 Effective Date

(1) The SMP is hereby adopted on the 9 day of March 2017. This SMP and all amendments thereto shall become effective 14 days after final approval and adoption by Ecology.

Article II. Environment Designation

XX.XX.100 Environment Designations

(1) The Coalition has designated shorelines pursuant to RCW 90.58 by defining them, providing criteria for their identification, and establishing shoreline ecological functions to be protected. Project proponents are responsible for determining whether a shoreline exists and is regulated pursuant to this SMP. The SMP classifies Coalition shoreline areas into seven shoreline environment designations consistent with the purpose and designation criteria as follows:

(a) Aquatic

(b) Natural

(c) Rural

(d) Conservancy

(e) Recreation

(f) High Intensity

(g) Shoreline Residential

(2) Official Shoreline Maps

(a) Shoreline Area Designations are delineated on a map, hereby incorporated as a part of this SMP (Section XX.XX.870), that shall be known as the Official Shoreline Map. Maps indicating the extent of shoreline jurisdiction and shoreline environment designations are to be used in conjunction with the most current scientific and technical information available, field investigations, and on-site surveys to accurately establish the location and extent of shoreline jurisdiction when a project is proposed.

(3) Unmapped or Undesignated Shorelines

(a) All areas meeting the definition of a shoreline of the state or an SSWS, whether mapped or not, are subject to the provisions of this SMP.

(4) Interpretation of Environment Designation Boundaries

(a) Whenever existing physical features are inconsistent with boundaries on the Official Shoreline Map, the Shoreline Administrator shall interpret the boundaries. Appeals of such interpretations may be filed pursuant to Section XX.XX.810, Appeals.

(b) All shoreline areas waterward of the OHWM shall be designated Aquatic.

(c) Only one shoreline area designation shall apply to a given shoreland area. Parallel designations shall be divided along an identified linear feature. Such linear features shall be clearly noted in the metadata associated with the Official Shoreline Map.

(d) All areas within shorelines that are not mapped and/or designated are automatically assigned Conservancy designation.

(e) Environment designations for shorelines within UGA will be effective under the city or town's shoreline jurisdictions immediately upon annexation of the area into the city limits, except for cities of Dayton and Asotin.

XX.XX.110 Aquatic

(1) Purpose

(a) The purpose of the Aquatic shoreline environment designation is to protect, restore, and manage the unique characteristics and resources of the areas waterward of the OHWM.

(2) Designation Criteria

(a) An Aquatic shoreline environment designation is assigned to lands and waters waterward of the OHWM

(3) Management Policies

(a) In addition to the other applicable policies and regulations of this SMP, the following management policies shall apply:

(i) New over-water structures should be allowed only for water-dependent uses, public access, recreation, or ecological restoration.

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

(iii) In-water uses should be allowed where impacts can be mitigated to ensure no net loss of shoreline ecological functions. Permitted in-water uses must be managed to avoid impacts to shoreline ecological functions. Impacts must be minimized and mitigated.

(iv) On navigable waters or their beds, all uses and developments should be located and designed to meet all of the following requirements:

(A) Avoid or minimize interference with surface navigation

(B) Avoid or minimize impacts to public views

(C) Allow for the safe, unobstructed passage of fish and wildlife, particularly species dependent on daily movements among habitat types and seasonal migration.

(b) Multiple or shared use of over-water and water access facilities should be encouraged to reduce the impacts of shoreline development and increase effective use of water resources.

(c) Structures and activities permitted should be related in size, form, design, and intensity of use to those permitted in the immediately adjacent upland area. The size of new over-water structures should be limited to the minimum necessary to support the structure's intended use.

(d) Natural light should be allowed to penetrate to the extent necessary to support fisheries and nearshore aquatic habitat unless other illumination is required by state or federal agencies.

(e) Aquaculture practices should be encouraged in those waters and beds most suitable for such use. Aquaculture should be discouraged where it would adversely affect the strength or viability of native stocks or unreasonably interfere with navigation.

(f) Shoreline uses, development, activities, and modifications in the Aquatic shoreline environment designation requiring use of adjacent landside property should be in a shoreline environment designation that allows that use, development, activity, or modification.

XX.XX.120 Natural

(Public shorelands exhibiting high ecological integrity [e.g., cliff habitats on the Snake and Grande Ronde rivers, creeks, and Touchet and Tucannon River reaches in the Umatilla National Forest])

(1) Purpose

(a) The purpose of the Natural shoreline environment designation is to protect those shoreline areas that are relatively free of human influence or that include intact or minimally degraded shoreline ecological functions less tolerant of human use. These systems require that only very low-intensity uses be allowed in order to maintain the ecological functions and

ecosystem-wide processes. Consistent with the policies of the designation, restoration of degraded shorelines within this environment is appropriate.

(2) Designation Criteria

(a) The following criteria should be considered in assigning a Natural Environment Designation:

(i) The shoreline ecological functions have no or minimal human impacts and have a high opportunity for preservation and low technical and logistical opportunity for restoration.

(ii) The shoreline is generally in public or conservancy ownership or under covenant, easement, or a conservation tax program.

(iii) The shoreline contains little or no development or is planned for development that would have minimal adverse impacts to ecological functions or risk to human safety.

(iv) There are low-intensity agricultural or forested land uses and no active mining uses.

(v) The shoreline has high potential for low-impact, passive, or public recreation.

(vi) The shoreline is considered to represent ecosystems and geologic types that have high scientific and educational value.

(3) Management Policies

(a) In addition to other applicable policies and regulations, the following management policies shall apply:

(i) Any use beyond existing uses that would substantially degrade shoreline ecological functions or natural character of the shoreline area should not be allowed.

(ii) Scientific, historic, cultural, educational research, and low-impact, passive recreational uses are allowed, in addition to existing uses, while meeting no net loss of ecological function requirements.

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

(iv) Vegetation should remain undisturbed except for removal of noxious vegetation and invasive species through ongoing management activities or as part of a development proposal. Proposed subdivision or lot line adjustments, new development, or significant vegetation removal that would reduce the capability of vegetation to perform normal ecological functions should not be allowed.

(v) Uses that would deplete physical or biological resources or impair views to or from the shoreline over time should be prohibited.

(vi) Only physical alterations that serve to support an existing use, protect a significant or unique physical, biological, or visual shoreline feature that might otherwise be degraded or destroyed, or those alterations that are the minimum necessary to support a permitted use should be allowed.

(vii) Only the following types of signs should be considered for location in the shorelines: interpretive, directional, navigational, regulatory, and public.

XX.XX.130 Rural

(Private lands in working rural landscapes, including agricultural areas and rangelands, rural transportation corridors, timber lands, and other privately owned large parcels)

(1) Purpose

(a) The purpose of the Rural Environment Designation is to protect rural agricultural and working forest lands, rural transportation corridors, other privately owned large parcels, and working lands in public ownership from urban expansion; restrict intensive development along undeveloped spaces; protect shoreline ecological functions; conserve existing agricultural, rangeland, and forest resources in order to provide for sustained resource use; and maintain natural processes. In addition to existing and future agricultural, rangeland, and forest uses, examples of uses that are appropriate in the Rural shoreline environment designation include low- and higher intensity recreation uses, development in support of agricultural uses, and low-intensity residential development.

(2) Designation Criteria

(a) The following criteria are used to consider in Rural Environment Designation:

(i) The shoreline is located outside of incorporated municipalities.

(ii) The shoreline is not highly developed, and most development is agriculture, rangeland, forest, or low-density residential; and unimproved land is used for livestock grazing, logging, and/or harvesting of non-cultivated crops.

(iii) The shoreline has riparian vegetation with high to moderate ecological functions.

(iv) The shoreline has low to moderate potential for public, water-oriented recreation where ecological functions can be maintained or restored.

(v) The shoreline has high potential for agricultural uses.

(3) Management Policies

(a) In addition to the other applicable policies and regulations of this SMP, the following management policies shall apply:

(i) In addition to existing agriculture, forestry, or rangeland uses, other shoreline uses should be limited to those that sustain the shoreline area's physical and biological resources and do not substantially degrade shoreline ecological functions or the rural or natural character of the shoreline area.

(ii) New developments shall ensure no net loss of shoreline ecological functions and preserve the existing character of the shoreline consistent with the purpose of this designation (e.g., residential developments shall maintain low density, adequate buffer, and from the water and wetlands).

(iii) Encourage regulations that provide adequate buffers from the shoreline, promote water quality protection and native vegetation conservation, promote invasive species control or removal and replacement with native species, provide opportunities for restoration actions, and reduce the need for shoreline stabilization to ensure no net loss of shoreline ecological functions.

(iv) Water-dependent agriculture uses and facilities that conserve natural resources are preferred uses, provided that significant adverse impacts to the shoreline are avoided and impacts are minimized and mitigated.

(v) Developments and uses that would substantially degrade or permanently deplete the biological resources of the area should not be allowed.

(vi) New shoreline stabilization, flood-control measures, vegetation removal, and other shoreline modifications should be designed and managed consistent with these guidelines to ensure the natural shoreline functions are protected. Such shoreline modification should not be inconsistent with planning provisions for protecting or restoring shoreline ecological functions, as applicable.

XX.XX.140 Conservancy

(Publicly owned areas along the Snake River available for low-intensity recreational uses; also could include other rural areas not intensively farmed, e.g. the Washington State Department of Natural Resources (DNR) land on the Touchet River North and South forks, rangeland along Asotin Creek and portions of Tucannon and Touchet rivers, along with open-space areas within Clarkston and Starbuck)

(1) Purpose

(a) The purpose of the Conservancy Environment Designation is to protect shoreline ecological functions and conserve existing natural resource-based uses such as lower intensity agriculture, forestry, and valuable historic and cultural areas in order to provide for sustained resource use, achieve natural floodplain processes where applicable, and provide recreational opportunities. In addition to existing low-intensity agriculture or rangeland uses, examples of uses that are appropriate in a Conservancy shoreline environment designation include low-impact recreation, natural resource-based uses, and low-intensity residential development.

(2) Designation Criteria

(a) The following criteria are used to consider a Conservancy Environment Designation:

(i) The shoreline is located outside of incorporated municipalities;

(ii) The shoreline is not highly developed, and most development is related to forestry, low-density residential, and rangelands used for livestock grazing and harvesting non-cultivated crops;

(iii) Water-oriented recreation where ecological functions can be maintained or restored, or;

(iv) The shoreline has high scientific or educational value or unique historic or cultural resources value.

(3) Management Policies

(a) In addition to the other applicable policies and regulations of this SMP, the following management policies shall apply:

(i) In addition to existing uses, other shoreline uses should be limited to those that sustain the shoreline area's physical and biological resources and do not degrade shoreline ecological functions or the rural or natural character of the shoreline area.

(ii) Development shall ensure no net loss of shoreline ecological functions and preserve the existing character of the shoreline consistent with the purpose of this designation.

(iii) Encourage regulations that limit lot coverage, provide adequate setbacks from the shoreline, promote native vegetation conservation and invasive species control/removal and replacement with native species, reduce the need for shoreline stabilization, and maintain or improve water quality to ensure no net loss of shoreline ecological functions.

(iv) Water-dependent, water-related, and water-oriented recreation facilities that do not deplete the resource over time are preferred uses. Adverse impacts to the shoreline must be avoided. Impacts shall be avoided if technically possible, otherwise they shall be minimized and mitigated.

(v) Commercial and industrial uses, other than low-intensity agricultural practices and commercial forestry, shall be discouraged.

(vi) Development and uses that would substantially degrade or permanently deplete the biological resources of the area should not be allowed.

(vii) New shoreline stabilization, flood-control measures, vegetation removal, and other shoreline modifications should be designed and managed consistent with these guidelines to ensure the natural shoreline functions are protected, and consistent with restoring shoreline ecological functions, as applicable.

(viii) Where feasible and appropriate, visual and physical public access provisions may be included as consistent with Section XX.XX.260, Public Access.

XX.XX.150 Recreation

(Parks, boat launches, campgrounds, trails, etc. along most of the waterbodies)

(1) Purpose

(a) The purpose of the Recreation Environment Designation is to provide for water-oriented recreational uses with potential opportunity for commercial and/or residential (mixed) uses to support recreational uses while protecting existing ecological functions, conserving existing natural resources, and restoring ecological functions in areas that have been previously degraded.

(2) Designation Criteria

(a) The following criteria are used to consider a Recreation Environment Designation:

(i) The shoreline has low to moderate ecological function with low to moderate practical technical and logistical feasibility for ecological restoration.

(ii) The shoreline is highly developed, and most development is recreation-related with potential for additional recreation and recreation-related commerce or is suitable and planned for water-oriented uses.

(iii) The shoreline has existing recreation uses or moderate to high potential for public and private, water-oriented recreation where ecological functions can be maintained or enhanced.

(3) Management Policies

(a) In addition to the other applicable policies and regulations of this SMP, the following management policies shall apply:

(i) In regulating uses in the Recreation environment, first priority should be given to water-dependent recreational uses. Second priority should be given to water-related and water-enjoyment recreational uses. Non-water-oriented uses should not be allowed, except as part of mixed-use developments with a recreation focus.

(ii) Policies and regulations shall ensure no net loss of shoreline ecological functions as a result of new development. Consistent with the potential project impacts, new development may be required, as applicable, to include restoration of shoreline functions as part of project proposal mitigation.

(iii) Visual and physical public access should be required as provided for in Section XX.XX.260, Public Access. Recreational objectives should be enhanced by combining physical and visual public access opportunities with other recreational opportunities where feasible.

(iv) Water-oriented commercial uses should be allowed.

(v) Aesthetic objectives should be implemented by means such as sign-control regulations, appropriate development siting, screening, and architectural standards, and maintaining natural riparian and upland vegetative buffers.

XX.XX.160 High Intensity

(Lower Snake River dams, ports, treatment plants, other industrial uses, and non-industrial Port District commercial uses, i.e., hotels, restaurants in Clarkston)

(1) Purpose

(a) The purpose of the High Intensity Environment Designation is to provide for water-dependent public and private commercial and industrial uses. The preferred use emphasis is on water-dependent or water-oriented commerce and industry. Examples of uses that are appropriate in a High Intensity shoreline environment include hydro-electric power generation, irrigation water supply diversion or conveyance, transportation, navigation uses, grain elevators, fish hatcheries, barge and conveyance facilities, marinas, hotels and restaurants (when designed with water-enjoyment features), and similar uses. This environment may also provide for recreation, while protecting existing ecological functions and restoring ecological functions in areas that have been previously degraded.

(2) Designation Criteria

(a) Assign a High Intensity Environment Designation to shoreline areas in the following situations:

(i) The shoreline is significantly degraded with low opportunity for ecological enhancement or rehabilitation.

(ii) The shoreline is highly developed, and most development is related to public utility, infrastructure, navigation, industry, or commerce with potential for additional related development, facility rehabilitation, or upgrade modifications.

(iii) The uses depend on proximity to water, including high-intensity uses related to industrial production, conveyance, transportation, wastewater treatment, or navigation.

(3) Management Policies

(a) In addition to the other applicable policies and regulations of this SMP, the following management policies shall apply:

(i) In regulating uses in the High Intensity environment, first priority should be given to water-dependent industrial, commercial, or public-facility uses. Second priority should be given to water-related and water-enjoyment uses that are not in conflict with the surrounding industrial or commercial uses. Non-water-oriented uses are allowed as part of a water dependent or water related industrial or commercial operational needs.

(ii) Policies and regulations shall ensure no net loss of shoreline ecological functions as a result of redevelopment, facility upgrades, and new development. Where applicable, development shall include environmental cleanup and restoration of the shoreline to comply in accordance with any relevant state and federal laws.

(iii) Where feasible and appropriate, visual and physical public access provisions may be included as consistent with Section XX.XX.260, Public Access.

(iv) Aesthetic objectives should be implemented by means such as appropriate development siting, screening, and maintenance of natural vegetative buffers.

XX.XX.170 Shoreline Residential

(Residential areas within the Town of Starbuck and City of Clarkston, and within existing higher density-developed areas in Asotin County along the Snake River [Snake River Road], and Asotin Creek, in Columbia County in some similar areas along the Touchet and, Tucannon rivers and Asotin Creek)

(1) Purpose

(a) The purpose of the Shoreline Residential Environment Designation is to accommodate primarily residential development and appurtenant structures but also to allow other types of development consistent with this section. An additional purpose is to provide appropriate public access and recreational uses.

(2) Designation Criteria

(a) Assign a Shoreline Residential Environment Designation to shoreline areas in the following situations:

(i) The shoreline has low to moderate ecological function with low to moderate opportunity for restoration.

(ii) The shoreline contains mostly residential development at urban densities or in clusters in rural setting.

(iii) The shoreline has low to moderate potential for low-impact, passive, or active water-oriented recreation where ecological functions can be restored.

(3) Management Policies

(a) In addition to the other applicable policies and regulations of this SMP, the following management policies shall apply:

(i) Require regulations that ensure no net loss of shoreline ecological functions as a result of new development such as limiting lot coverage, providing adequate setbacks from the shoreline, promoting vegetation conservation, reducing the need for shoreline stabilization, and maintaining or improving water quality.

(ii) The scale and density of new uses and development should be compatible with the existing residential character of the area.

(iii) Public access and joint (rather than individual) use of recreational facilities should be promoted.

(iv) Access, utilities, and public services to serve proposed development within shorelines should be constructed outside shorelines to the extent feasible and be the minimum necessary to adequately serve existing needs and planned future development.

(v) Public or private outdoor recreation facilities should be provided with proposals for subdivision development and encouraged with all shoreline development if compatible with the character of the area. Priority should be given first to water-dependent and then to water-enjoyment recreation facilities.

(vi) Commercial development should be limited to water-oriented uses. Non-water-oriented commercial uses should only be allowed as part of mixed-used developments.

Article III. General Regulations

XX.XX.200 Shoreline Use and Modification

(1) Regulations

(a) SMP Table XX.XX.200 (3) indicates which shoreline activities, uses, developments, and modifications may be allowed or are prohibited in shoreline jurisdiction within each shoreline environment designation. Activities, uses, developments, and modifications are classified as follows:

(i) "Permitted Uses" require a Shoreline Substantial Development Permit or a Shoreline Exemption.

(ii) "Conditional Uses" require a Shoreline Conditional Use Permit per Section XX.XX.750.

(iii) "Prohibited" activities, uses, developments, and modifications are not allowed and cannot be permitted through a Variance or Shoreline Conditional Use Permit.

(iv) General Regulations (Section XX.XX, Article III) and Shoreline Modification and Uses Regulations (Section XX.XX, Article IV) shall be considered for additional limitations.

(b) All uses shall comply with the written provisions and regulations in this SMP and the shoreline use and modification matrix in Section XX.XX.200 (3). Where there is a conflict between the chart and the written provisions in this SMP, the written provisions shall control.

(2) General:

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

(b) Authorized uses and modifications shall be allowed only in shoreline jurisdictions where the underlying zoning allows for it and is subject to the policies and regulations of this SMP.

(c) A use is considered unclassified when it is not listed in Table XX.XX.200 (3) or in the Shoreline Modification and Uses Regulations (Section XX.XX, Article IV). Any proposed unclassified use may be authorized as a conditional use provided that the applicant can demonstrate consistency with the requirements of this SMP.

(d) If any part of a proposed activity, use, modification, or development is not eligible for exemption per Section XX.XX.770 (Exemptions from

Shoreline Substantial Development Permits), then a Shoreline Substantial Development Permit or Shoreline Conditional Use Permit shall be required for the entire proposed development project.

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

(f) Shoreline and critical areas buffers provided in Table XX.XX.210 (2-4) and described in Section XX.XX, Article V, apply to all uses and modifications unless stated otherwise in the regulations.

(g) Any uses allowed in the floodway in any environment designation, except as allowed by Section XX.XX.540, Frequently Flooded Areas.

(h) Administrative interpretation of these regulations shall be done according to Section XX.XX.710, Interpretation.

(3) Shoreline Use and Modification Matrix:

Table XX.XX.200 (3). Shoreline Use and Modification Matrix for the Southeast Washington Region

A = Allowed with Substantial Development Permit C = Conditional Use X = Prohibited NA = Not Applicable **Use/Modification**	**Aquatic**	**Natural**	**Rural**	**Conservancy**	**Recreation**	**High Intensity**	**Shoreline Residential**
Resource Uses							
Agriculture	X	X	A	A[1]	X	X	A
Aquaculture	A[2]	X	C	A[2], C	X	A[2], C	X
Forest practices	NA	C	A	A	C	X	C
Mining	X	X	C	C	X	C	X
Boating Facilities							
Public boat launch (motorized boats)	C	X	C	C	C	C	C
Private boat launch (motorized boats) – only allowed on Snake River south of Asotin	A	X	A	A	NA	A	A
Private boat launch (non-motorized boats—canoe/kayak; and drift boats on Snake River south of Asotin and Grande Ronde)	A	X	A	A	NA	A	A
Marina	A	X	C	C	A	A	C
Live-aboard vessels	A	X	C	C	A	A	C
Docks, Piers, Mooring Facilities							
Private and shared moorage	X	X	X	X	NA	X	X
Public moorage	A	X	C	A	A	A	A

A = Allowed with Substantial Development Permit C = Conditional Use X = Prohibited NA = Not Applicable **Use/Modification**	**Aquatic**	**Natural**	**Rural**	**Conservancy**	**Recreation**	**High Intensity**	**Shoreline Residential**
Covered moorage	C	X	X	X	X	C	X
Commercial Development							
Water-dependent	A	X	A	A	A	A	C
Water-related, water-enjoyment	X	X	A	C	A	A	C
Non-water-oriented	X	X	C[3]	C[3]	A[3]	A[3]	X
Dredging Activities							
Dredging	A	NA	NA	NA	NA	NA	NA
Dredge material disposal	C	X	C	C	C	C	C
Dredging and fill as part of ecological restoration/enhancement	A	A	A	A	A	A	A
Fill							
Fill waterward of OHWM and in floodways	C	C	C	C	C	C	C
Other upland fill	NA	C	A	A	A	A	A
Industrial Uses							
Water-dependent	X	X	X	X	X	A	X
Water-related, water-enjoyment	X	X	X	X	X	A	X
Non-water-oriented	X	X	X	X	X	A[3]	X
In-water Modifications							
Breakwater	C	X	C	C	C	C	C
Groins and weirs	C	X	C	C	C	C	C
In-stream structures	C[4]	C[4]	C[4]	C[4]	C[4]	C[4]	C[4]
Research and Monitoring							
Water-dependent	A	A	A	A	A	A	A
Water-related	A	A	A	A	A	A	A
Non-water-oriented	A	A	A	A	A	A	A
Recreational Development							
Water-dependent	A	A[5]	A	A[5]	A	A	A
Water-related, water-enjoyment (trails, accessory buildings)	C	A[5]	A	A[5]	A	A	A
Non-water-oriented	X	X	A	C	A	A	A[3]
Residential Development	X	C	A	A[5]	A	A[3]	A
Shoreline Habitat and Natural Systems Enhancement Projects	A	A	A	A	A	A	A
Flood Control and Shoreline Stabilization							
Flood Control							
Modification of existing flood-control facilities (dams, dikes, and levees), including replacement landward of existing location	A	A	A	A	A	A	A
New flood-control facilities (dams, dikes, and levees)	C	X	C	C	C	A	C

A = Allowed with Substantial Development Permit C = Conditional Use X = Prohibited NA = Not Applicable **Use/Modification**	**Aquatic**	**Natural**	**Rural**	**Conservancy**	**Recreation**	**High Intensity**	**Shoreline Residential**
Shoreline Stabilization							
New – Conventional (bulkheads, riprap)	C	X	C	C	C	C	C
New – Biotechnical	A	A	A	A	A	A	A
Replacement[6]	A	A	A	A	A	A	A
Transportation							
Highways, arterials, railroads (parallel to OHWM)	C	X	A	A	A	A	A
Secondary/ public access roads (parallel to OHWM)	NA	X	A	A	A	A	A
Roads perpendicular to the OHWM	X	C	A	A	A	A	A
Bridges (perpendicular to shoreline)	C	C	A	C	A	A	C
Existing bridges, trails, roads, and parking facilities: improvement or expansion[7]	A	A	A	A	A	A	A
New parking, primary	X	X	X	X	X	X	X
New parking, accessory	Takes permit types of primary use						
Utilities							
Above-ground and underground utilities (parallel and across shoreline)	C	C	A	A	A	A	A

Notes:
1 = Allowed when agricultural uses are passive, such as livestock grazing, harvesting of non-cultivated crops, or small-scale farms, or when ecological functions are degraded to the point where the land is functionally equivalent to cultivated land.
2 = Allowed for non-commercial net pens, rearing ponds, or acclimation facilities supporting salmon recovery efforts.
3 = New uses are allowed as part of mixed use or according to Section XX.XX.340 (2), Section XX.XX.380 (2), or as part of an existing use according to Article VI, Existing Uses, Structures and Lots
4 = Allowed for habitat restoration and/or fish habitat enhance purposes
5 = Low-intensity only
6 = Exempt for protective bulkhead common to single-family residences according to Section XX.XX.770 (4)(c) and when consistent with Section XX.XX.440 (5) and (6)
7 = Expansion not allowed within riparian habitat area buffer, unless mitigation report demonstrates no other feasible alternatives exist outside of the buffer; impacts shall be fully mitigated

XX.XX.210 Development Standards

(1) Regulations

(a) To preserve the existing and planned character of the shoreline consistent with the purposes of the shoreline environment designations, development standards are provided in the Table XX.XX.210 (2-1) below. These standards apply to all uses and modifications, unless indicated otherwise. In addition, shoreline developments shall comply with all other dimensional requirements of applicable local codes.

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

(c) No permit shall be issued for any new or expanded building or structure of more than 35 feet above average grade level on shorelines of the state that will obstruct the view of a substantial number of residences on areas adjoining such shorelines, except for Rural and High Intensity environments, or where the SMP does not prohibit the same, and then only when overriding considerations of the public interest will be served.

(2) Shoreline Development Standards Matrix

Table XX.XX.210 (2-1). Shoreline Development Standards for Asotin, Columbia, and Garfield Counties

Standard	Aquatic	Natural	Rural	Conservancy	Recreation	High Intensity	Shoreline Residential
Building height maximum in feet	15	35				As required	35
Impervious surface cover	NA	5%	Up to 10% for lots greater than 5 acres; up to 15% for lots 5 acres or less			NA	Up to 10% for lots greater than 5 acres; up to 15% for lots 5 acres or less
Trail width in feet	NA	Up to 10 feet or as required by ADA regulations. Trails on private properties and not open for public use shall be up to 5 feet wide.					

Notes:
ADA = Americans for Disabilities Act
NA = Not applicable

Table XX.XX.210 (2-2). Shoreline Development Standards for the City of Clarkston

Standard	Aquatic	Conservancy	Recreation	High Intensity	Shoreline Residential
Building height maximum in feet	NA	35		As required	35

Standard	Aquatic	Conservancy	Recreation	High Intensity	Shoreline Residential
Impervious surface cover	NA	15%	Up to 25%	Up to 35%	Up to 35%
Trail width in feet	NA	Up to 10 feet or as required by ADA regulations. Trails on private properties and not open for public use shall be up to 5 feet wide.[5]			

Note:
ADA = Americans for Disabilities Act
NA = Not applicable

Table XX.XX.210 (2-3). Shoreline Development Standards for the Town of Starbuck

Standard	Aquatic	Conservancy	Rural	Shoreline Residential
Building height maximum in feet	NA	35		
Impervious surface cover	NA	Up to 15%		Up to 35%
Trail width in feet	NA	Up to 10 feet or as required by ADA regulations. Trails on private properties and not open for public use shall be up to 5 feet wide[5].		

Notes:
ADA = Americans for Disabilities Act
NA = Not applicable

Table XX.XX.210 (2-4)
Southeast Washington Regional SMP
Reach-based Riparian Buffer Widths for all Jurisdictions

Waterbody/Reach/Jurisdiction (See Environment Designation with Reaches Map)	Riparian Buffer Width (Feet)[1,2]
Segments of All Waterbodies with Natural Environment Designation	• Entire SMA jurisdiction area
Segments of All Waterbodies with Conservancy Environment Designation (Except Starbuck and Clarkston)	• 150 feet
Asotin, George and Joseph Creeks; Grande Ronde, Snake, Tucannon and Touchet Rivers	• 75 feet for areas where riparian habitat area is 60 feet in width or less • Where a riparian habitat area width is greater than 60 feet but less than 135 feet, then the buffer extends 15 feet beyond the edge of the riparian area • 150 feet where riparian habitat area is 135 feet in width or greater • To the edge of the CREP lands contracted edge; no maximum buffer width applies to these lands
Snake River –High Intensity	• 35 feet
Tucannon River – Starbuck Reach	• 100 feet (Conservancy Environment Designation) • 75 feet (Rural Environment Designation) • 65 feet (Shoreline Residential)
Snake River – Clarkston Reach	• 65 feet (Conservancy) • 50 feet (Recreation) • 35 feet (High Intensity) • 65 feet (Shoreline Residential)

Notes:
1 = Measured from the OHWM or top of bank, on each side of the channel as applicable.
2 = Accompanied by stormwater management measures/facilities, geologic hazard protections, wetland buffers, priority habitat and species-specific management recommendations, and other Shoreline Master Program conditions, as applicable.
CREP = Conservation Reserve Enhancement Program
OHWM = ordinary high water mark
SMP = Shoreline Master Program

XX.XX.220 Archaeological and Historic Resources

(1) Permits issued in areas documented to contain archaeological resources may require a site inspection or evaluation by a professional archaeologist in coordination with affected Indian tribes.

(2) Upon receipt of application for a shoreline permit or application for a demolition permit within the shoreline area, or request for a statement of exemption for development on properties within 200 feet of a site known to contain a historic, cultural or archaeological resource(s), the Shoreline Administrator t may require a cultural resource site survey/assessment. The site assessment shall be conducted by a professional archaeologist or historic preservation professional, as applicable, to determine the presence of historic or significant archaeological resources, and be paid by the applicant.

(3) If the cultural resource site assessment identifies the presence of archaeological, or significant historic, cultural resources, recommendations shall be prepared by a professional archaeologist or historic preservation professional, as part of the survey/assessment. In the preparation of such plans, the professional archaeologist or historic preservation professional shall solicit comments from the Washington State Department of Archaeology and Historic Preservation, the affected Tribes. Comments received shall be incorporated into the conclusions and recommended conditions of the survey/assessment to the maximum extent practicable.

(a) A Cultural Resources survey/assessment shall contain the following elements, as applicable:

(i) The purpose of the project; a site plan for proposed on-site development; including indication of any existing building or structures on-site as well as any that are proposed for removal; depth and location of all ground disturbing activities including, but not limited to, utilities, paved areas, clearing and grading, landscaping or new landscape features (i.e. fencing, walls, etc.); an examination of project on-site design alternatives; and an explanation of why the proposed activity requires a location on, or access across and/or through, an historic or archaeological resource; and

(ii) A description of the historic/archaeological resources present, including any building or structure over 40 years of age affected by the proposal; and

(iii) An analysis of the significance of the historic resource and an analysis of the potential adverse impacts as a result of the activity;

(iv) An analysis of how these impacts will be/have been avoided; or

(v) A recommendation of appropriate mitigation measures if the resources cannot be avoided (Note: Some mitigation measure may require additional approval from DAHP). In the case of archaeological resources mitigation measures may include but are not limited to the following:

(A) Recording the site with the State Department of Archaeology and Historic Preservation, or listing the site in the National Register of Historic Places, Washington Heritage Register, as applicable, or any locally developed historic registry formally adopted by the [jurisdiction] Council;

(B) Adaptive re-use of buildings or structures according to the U.S. Secretary of the Interior's Standards for Rehabilitation.

(C) Preservation in place;

(D) Covering an archaeological site with a nonstructural surface to discourage pilferage (e.g., maintained grass or pavement);

(E) Excavation and recovery of archaeological resources;

(F) Inventorying prior to covering of archaeological resources with structures or development; and

(G) Archaeological monitoring of construction excavation.

(4) The Shoreline Administrator shall consult with the Washington State Department of Archaeology and Historic Preservation, and affected Tribes prior to approval and acceptance of the survey/assessment.

(5) Based upon consultation with DAHP and the affected Tribe(s), the Shoreline Administrator may reject or request revision of the conclusions reached in a survey/assessment when the Shoreline Administrator can demonstrate that the assessment is inaccurate or does not fully address the historic/archaeological resource management concerns involved.

(6) In all developments, if archaeological resources are uncovered during excavation, developers and property owners shall stop work immediately and notify the local government, and the Shoreline Administrator will then coordinate with the Department of Archaeology and Historic Preservation, and affected Indian tribes for guidance on complying with applicable state and federal laws and regulations. The Shoreline Administrator will work with the developer and property owners to verify compliance with applicable requirements.

XX.XX.230 Environmental Protection

(1) All project proposals, including those for which a Shoreline Substantial Development Permit is not required, shall comply with RCW 43.21C, the SEPA.

(2) Applicants shall apply the following mitigation sequencing steps in order of priority to avoid or minimize adverse effects and significant ecological impacts [with (a) being top priority]:

(a) Avoid the adverse impact altogether by not taking a certain action or parts of an action.

(b) Minimize adverse impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology or by taking affirmative steps to avoid or reduce impacts.

(c) Rectify the adverse impact by repairing, rehabilitating, or restoring the affected environment to the conditions existing at the time of the initiation of the project.

(d) Reduce or eliminate the adverse impact over time by preservation and maintenance operations.

(e) Compensate for the adverse impact by replacing, enhancing, or providing substitute resources or environments.

(f) Monitor the adverse impact and the compensation projects and taking appropriate corrective measures.

(3) Projects that cause significant adverse environmental impacts, as defined in WAC 197-11-794 and Section XX.XX.860, Definitions, are not allowed unless mitigated according to Section XX.XX.230 (2), above, to avoid reduction or damage to ecosystem-wide processes and ecological functions. As part of this analysis, the applicant shall evaluate whether the project may adversely affect existing hydrologic connections between streams and wetlands and either modify the project or mitigate any impacts as needed.

(4) When compensatory measures are appropriate pursuant to the mitigation priority sequence above, preferential consideration shall be given to measures that replace the adversely impacted functions directly and in the immediate vicinity of the adverse impact. However, alternative compensatory mitigation may be authorized within the affected drainage area or watershed that addresses limiting factors or identified critical needs for shoreline resource conservation based on watershed or resource management plans, including the SMP Restoration Plan, applicable to the area of adverse impact. Authorization of compensatory mitigation measures may require appropriate safeguards, terms, or conditions as necessary to ensure no net loss of ecological functions.

XX.XX.240 Shoreline Vegetation Conservation

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

(2) Regulations specifying shoreline buffers are located in the Section XX.XX, Article V, Critical Areas. Vegetation within shoreline buffers, other stream buffers, and wetlands and wetland buffers shall be managed consistent with the Section XX.XX, Article V.

(3) Vegetation outside of shoreline buffers, other stream buffers, wetlands and wetland buffers within shoreline jurisdiction shall be managed according to Section XX.XX.230, Environmental Protection, and any other regulations specific to vegetation management contained in other sections of this SMP.

(4) Vegetation clearing outside of wetlands and wetland and stream buffers shall be limited to the minimum necessary to accommodate approved shoreline development that is consistent with all other provisions of this SMP. Mitigation sequencing per Section XX.XX.230, Environmental Protection, shall be applied so that the design and location of the structure or development minimizes native vegetation removal.

(5) Removing noxious weeds and other invasive species shall be incorporated in management and mitigation plans, when applicable, to facilitate establishing a stable native plant community.

(6) Vegetation clearing and removal activities shall only be permitted in conjunction with a specific pre-existing or approved development that represents a permitted or legal existing use under this Program.

(7) Vegetation clearing, removal, or alteration within any shoreline buffer shall be discouraged and the applicant shall demonstrate by substantial evidence that such activities within a shoreline buffer are necessary to accommodate an allowed or permitted use, activity or development and that avoidance is not feasible

(8) All vegetation management, preservation, and rehabilitation or enhancement activities shall be designed and implemented to ensure effective maintenance of vegetation in ecologically intact shoreline areas and increase the integrity of vegetation in ecologically altered areas.

(9) Vegetation removal or clearing activities that would likely result in significant soil erosion or in the need for structural shoreline stabilization measures shall not be permitted.

(10) Soil bioengineering techniques shall be used during the restoration of any disturbed or degraded shoreline area. All such projects shall use native plant materials of a diversity and type similar to those that originally occupied the site.

XX.XX.250 Water Quality, Stormwater, and Nonpoint Pollution

(1) The location, design, construction, and management of all shoreline uses and activities shall not reduce the quality and quantity of surface runoff water, groundwater, and stormwater infiltration on and adjacent to the site.

(2) All shoreline development should comply with the requirements of the latest version of Ecology's Stormwater Management Manual for Eastern Washington.

(3) Best management practices (BMPs) for controlling erosion and sedimentation shall be implemented for all shoreline development.

(4) Potentially harmful materials, including, but not limited to, oil, chemicals, tires, or hazardous materials, shall not be allowed to enter any body of water or wetland, or to be discharged onto the land. Potentially harmful materials shall be maintained in safe and leak-proof containers.

(5) Within 25 feet of a waterbody, herbicides, fungicides, fertilizers, and pesticides shall be applied in strict conformance to the manufacturer's recommendations and in accordance with relevant state and federal laws. Further, pesticides subject to the final ruling in Washington Toxics Coalition, et al. v. EPA shall not be applied within 60 feet for ground applications or within 300 feet for aerial applications of the subject waterbodies and shall be applied by a qualified professional in accordance with state and federal law.

(6) New development shall provide stormwater management facilities designed, constructed, and maintained in accordance with the latest version of Ecology's Stormwater Management Manual for Eastern Washington, including the use of BMPs. Additionally, new development shall implement low-impact development techniques where feasible and necessary to fully implement the core elements of the Surface Water Design Manual.

(7) For new development with potential for adverse impacts on water quality or quantity in a stream or Fish and Wildlife Habitat Conservation Area, a Critical Area Report as prescribed in the Section XX.XX, Article V, Critical Areas, shall be prepared. Such reports should discuss the project's potential to exacerbate impaired water quality parameters and which total maximum daily loads (TMDLs) for pollutants have been established. The report shall prescribe any necessary mitigation and monitoring.

(8) All materials that may come in contact with water shall be constructed of materials, such as untreated wood, concrete, and approved plastic composites or steel, that will not adversely affect water quality or aquatic plants or animals.

Materials used for decking or other structural components shall be approved by applicable state agencies for contact with water to avoid discharge of pollutants from wave or boat wake splash, rain, or runoff. Wood treated with creosote, copper chromium arsenic, or pentachlorophenol, or other similarly toxic materials is prohibited in shoreline waterbodies.

XX.XX.260 Public Access

(1) Applicants required to provide shoreline public access shall provide physical access, or if this is not appropriate for safety or similar reasons, visual access, consistent with the Coalition's Public Access Plan and other agencies' management plans when applicable, unless specifically exempted in this section. Examples of physical and visual access are listed below:

(a) Visual Access. Visual public access may consist of view corridors, viewpoints, or other means of visual access to shorelines of the state.

(b) Physical Access. Physical public access may consist of a dedication of land or easement and a physical improvement in the form of a walkway, trail, bikeway, park, boat or canoe and kayak launching ramp, dock area, view platform, public right-of-way for county roads and state highways, or other areas serving as a means of physical approach to public waters.

(2) Except as provided in Section XX.XX.260 (3) below, new uses shall provide for safe and convenient public access to and along the shoreline where any of the following conditions are present:

(a) The development is proposed by a public entity or on public lands.

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

(c) The proposed use, activity, or development is not a water-oriented or other preferred shoreline use, activity, or development under the SMA such as a non-water-oriented commercial or recreational use.

(d) The proposed use, activity, or development may block or discourage normal public use, including, but not limited to, the use of customary and established public access paths, walkways, trails, public transportation rights-of-way for roads and highways, or corridors.

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

(f) The proposed use, activity, or development includes key areas for public access recommended in the Restoration Plan.

(g) The proposed activity is a publicly financed shoreline erosion-control measure that can accommodate public access without sacrificing long-term performance of the control measure and public safety.

(3) An applicant shall not be required to provide public access where one or more of the following conditions apply, provided such exceptions shall not be used to prevent implementing the access and trail provisions specified in the SE WA Coalition members' and other agencies' management plans. In evaluating the feasibility, desirability, or compatibility of public access in a given situation, the Shoreline Administrator shall consider alternative methods for providing public access. These may include adjacent off-site improvements, viewing platforms that do not impact shoreline ecological functions or natural character, separating uses through site planning and design, and restricting hours of public access:

(a) Single-family residential development that does not reduce visual access to the shoreline from public rights-of-way, including roads and highways and when individual single-family residences are not part of a development planned for more than four parcels.

(b) Proposed use is agricultural/ranching activities.

(c) Proposed use is within an area where public visual or physical access is not present, or is not proposed in the Public Access Plan, and where the use will not increase demand for public access, or reduce public access.

(d) The nature of the use, activity, or development or the characteristics of the site make public access requirements inappropriate due to health, safety (including consistency with Crime Prevention Through Environmental Design [CPTED] principles, where applicable), or environmental hazards. The proponent shall carry the burden of demonstrating by substantial evidence the existence of unavoidable or unmitigable threats or hazards to public health, safety, or the environment, that would be created or exacerbated by public access upon the site.

(e) An existing, new, or expanded road or utility crossing through shoreline jurisdiction shall not create the need for public access if the development being accessed or served by the road or utility is located outside of shoreline jurisdiction.

(f) Safe and convenient public access already exists on the same reach of the stream or river in the immediate vicinity, and agencies' plans show adequate public access at the property.

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

(h) The site is within or part of an overall development, a binding site plan, or a planned unit development, which has previously provided public access adequate to serve the project in full build-out through other application processes.

(4) Public access shall be located and designed to respect private property rights, be compatible with the shoreline environment, protect ecological functions and processes, protect aesthetic values of shoreline, and provide for public safety (including consistency with CPTED principles, where applicable).

(5) For any development where public access is not required, shared community access may be allowed if there is no existing or planned public access along the shoreline identified in the Coalition's Public Access Plan and other agency plans. Where provided, community access shall be subject to all applicable development standards of this section. Shared community access is not required when any of the conditions under Section XX.XX.260 (3) applies.

(6) General Performance Standards

(a) Uses, activities, and developments shall not interfere with the regular and established public use.

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

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

(d) Public access facilities shall accommodate persons with disabilities, unless determined physically or logistically infeasible by the Shoreline Administrator.

(7) Trails

(a) Existing improved and primitive public trails shall be maintained.

(b) Where public access is to be provided by dedication of public access easements along the OHWM, the minimum width of such easements shall be 20 feet.

(c) The total width of trails in High Intensity shoreline environments, including shoulders, shall be 10 feet maximum, or as required by Americans with Disabilities Act (ADA) regulations.

(d) Pervious pavings are encouraged for all trails.

(e) Trails should make use of an existing constructed grade such as those formed by an abandoned rail grade, road, or utility when feasible.

(f) Trails shall be located, constructed, and maintained so as to avoid removal and other impacts to perennial native vegetation.

(g) Trails on private properties and not open for public use shall be no more than 4 feet wide and shall meet applicable setbacks from the OHWM.

(8) Rights-of-way, Easements, and Streets for Public Access:

(a) The Coalition shall maintain public rights-of-way or easements as a means of retaining public access on the shoreline. Proposed uses, activities, or developments shall maintain public access provided by public street ends, public utilities, and rights-of-way.

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

(9) Where public access routes terminate, connections should be made with the nearest public street. Public access facilities required for an approved or permitted use, activity, or development shall be completed prior to occupancy and use of the site or operation of the activity. Public access shall make adequate provisions, such as screening, buffer strips, fences, and signs, to prevent trespass upon adjacent properties and to protect the value and enjoyment of adjacent or nearby private properties and natural areas.

(10) Off-site public access may be permitted by the Shoreline Administrator where it results in an equal or greater public benefit than on-site public access, or when on-site limitations of security, environment, compatibility, or feasibility are present. Off-site public access may include, but is not limited to, adequate access on public lands adjacent to the site, opportunity to increase public lands and access with adjoining or proximate public area, enhancing a designated public property (e.g., existing public recreation site, existing public access, or road abutting a body of water) in accordance with SMP standards, the Public Access Plan, or other related measures.

(11) Signage

(a) Signage to be approved by the Shoreline Administrator shall be conspicuously installed along public access easements, trails, walkways, corridors, and other facilities to indicate the public's right of use and the hours of operation. Public access and interpretive displays may be provided for publicly funded restoration projects where significant

ecological impacts are addressed. The proponent shall bear the responsibility for establishing and maintaining signs.

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

(c) All signs shall be located and designed to minimize interference vistas, viewpoints, and visual access to shoreline.

(d) Over-water signs should be related to water-dependent uses only and shall be on floats, piles, or part of the water-dependent use.

XX.XX.270 Flood Hazard Reduction

(1) Development in floodplains shall avoid significantly or cumulatively increasing flood hazards. Development shall be consistent with this SMP, as well as applicable guidelines of FEMA and Section XX.XX.540, Frequently Flooded Areas, and local Flood Damage Prevention ordinances.

(2) The CMZ is considered to be that area of the SE WA Region floodplains, across which the streams and rivers may naturally migrate over time as a result of normal and naturally occurring processes. These CMZs have been generally mapped consistent with WAC 173-26-221(3)(b). Applicants for shoreline development or modification may submit a site-specific CMZ study if they believe these conditions do not exist on the subject property and the map is in error. The CMZ study must be prepared consistent with WAC 173-26-221(3)(b). The CMZ study may include historical aerial photographs, topographic mapping, flooding records, and field verification. The CMZ must be prepared by a licensed fluvial geomorphologist with at least 5 years of applied experience in assessing fluvial geomorphic processes and channel response.

(3) The following uses and activities may be authorized within the CMZ:

(a) New development or redevelopment landward of existing legal, publicly owned, and maintained structures, such as levees, that prevent active channel movement and flooding.

(b) Development of new or expansion or redevelopment of existing bridges, utility lines, public stormwater facilities and outfalls, and other public utility and transportation structures where no other alternative exists. Where such structures are allowed, mitigation shall address impacted native plant communities and ecological functions and processes in the affected shoreline.

(c) New or redeveloped measures to reduce shoreline erosion, provided that:

(i) It is demonstrated by a licensed engineer, with at least 5 years applied experience, that the erosion rate exceeds that which would normally occur in a natural condition.

(ii) That the measures do not interfere with fluvial hydrological and geo-morphological processes normally acting in natural conditions and the measures include appropriate mitigation of adverse impacts on ecological functions associated with the river or stream.

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

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

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

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

(h) Forest practices, provided that activities are in compliance with XX.XX.380, Forest Practices, the Washington State Forest Practices Act and it implementing rules, and this SMP.

(4) Existing structural flood hazard reduction measures, such as levees, may be repaired and maintained as necessary to protect legal uses on the landward side of such structures. Increases in height of an existing levee, with any associated increase in width, that may be needed to prevent a reduction in the authorized level of protection of existing legal structures and uses shall be considered an element of repair and maintenance.

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

(6) New development and subdivisions. Approve new development or subdivisions when it can be technically determined by a qualified expert(s) in fluvial geomorphology that the development or use would not require structural flood hazard reduction measures within the CMZ or floodway during the life of the development or use consistent with the following (WAC 173-26-221(3)(c)(i)):

(a) Floodway

(i) New development and subdivisions shall be subject to applicable floodway regulations in Section XX.XX.540, Frequently Flooded Areas.

(b) Channel Migration Zone

(i) New development in the CMZ is allowed subject to the following conditions:

(A) Structures are located on an existing legal lot created prior to the effective date of this SMP.

(B) A feasible alternative location outside of the CMZ is not available on site.

(C) To the extent feasible, the structure and supporting infrastructure is located the farthest distance from the OHWM, unless the applicant can demonstrate that an alternative location is the least subject to risk.

(ii) New subdivisions in the CMZ may be allowed subject to the following conditions:

(A) All lots contain 5,000 square feet or more of buildable land outside of the CMZ.

(B) Access to all lots does not cross the CMZ.

(C) All infrastructure is located outside the CMZ, except that an on-site wastewater treatment system is allowed in the CMZ if a feasible alternative location is not available on-site, and the wastewater treatment system is located the farthest distance from the OHWM.

(D) Alternative on-site wastewater treatment systems, including composting toilets and greywater systems, shall be recognized acceptable alternatives to conventional septic tanks and drainfields, so long as they are properly designed, constructed, and installed by qualified professionals.

(7) New public and private structural flood hazard reduction measures shall be approved when a scientific and engineering analysis demonstrates the following:

(a) They are necessary to protect existing development.

(b) Non-structural measures such as setbacks, land-use controls, wetland restoration, dike removal, structure removal or relocation, biotechnical measures, and stormwater management programs are not possible.

(c) Adverse impacts on ecological functions and priority species and habitats can be successfully mitigated so as to ensure no net loss.

(d) Appropriate vegetation conservation actions are undertaken consistent with Section XX.XX.240, Shoreline Vegetation Conservation.

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

(9) New public structural flood hazard reduction measures, such as levees, shall dedicate and improve public access pathways.

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

(11) The removal of gravel or other riverbed material for flood management purposes shall be consistent with the Section XX.XX.350, Dredging and Dredge Material Disposal, and Section XX.XX.410, Mining, and be allowed only after a biological and geomorphological study shows that extraction has a long-term benefit to flood hazard reduction and does not result in a net loss of ecological functions.

(12) Roads shall be located outside the floodway, except necessary crossings, which shall be placed perpendicular to the waterbody as much as is physically feasible. New transportation facilities shall be designed so that the effective base flood storage volume of the floodplain is not reduced. The applicant shall provide all necessary studies, reports, and engineering analysis, which shall be subject to review and modification by the Shoreline Administrator. If proposed transportation facilities effectively provide flood control, they shall comply with policies and regulations of this section.

Article IV. Shoreline Modifications and Use Regulations

XX.XX.300 Agriculture

(1) The SMP shall not require modification of or limit agricultural activities occurring on agricultural lands consistent with RCW 90.58.065.

(2) For shoreline areas used for agriculture, new uses, activities, and development that are not existing and ongoing, agriculture shall be subject to the following requirements:

(a) Such uses, activities, and development shall be allowed or permitted in a manner to ensure maintenance of ecological functions and be consistent with local land-use plans.

(b) If the new use, activity, or development is more intensive than the existing land use, no significant vegetation removal, development, or grading shall occur in the shoreline buffer without associated mitigation, except as necessary to accommodate low-intensity, water-dependent uses, and public access that sustains ecological functions.

(c) New agricultural lands created by diking, draining, or filling wetlands or CMZs shall not be allowed.

(3) A Substantial Development Permit shall be required for all agricultural developments not specifically exempted by the provisions of Section XX.XX.770 (4)(e), except for agricultural developments in Shoreline Residential Environment Designation where a Shoreline Conditional Use Permit shall be required.

(4) SMP provisions shall apply in the following cases:

(a) New agricultural activities on land not meeting the definition of agricultural land

(b) Expansion of agricultural activities on non-agricultural lands

(c) Conversion of agricultural lands to other uses

(d) Other development on agricultural land that does not meet the definition of agricultural activities

(e) Agricultural development and uses not specifically exempted by the SMA

(5) New non-agricultural activities proposed on agricultural lands shall be consistent with the environment designation and the Shoreline Use and Modification Matrix table (Section XX.XX.200 (3)), as well as other applicable

shoreline use standards (e.g., commercial, Section XX.XX.340, or residential, Section XX.XX.440).

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

(7) New feedlots are prohibited in critical area buffers. Feed lots shall be located in such a manner as to prevent waste runoff from entering waterbodies or groundwater.

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

(9) Agricultural chemicals shall be applied in a manner consistent with BMPs for agriculture and Section XX.XX.250 (5).

(10) When developing new agricultural uses, existing native vegetation, and existing non-native vegetation that is not invasive or noxious as defined by the Weed Boards in each of the Coalition's jurisdictions, shall not be disturbed or removed within the riparian and wetland buffers established in this SMP. Agricultural development and activities shall conform to applicable state and federal policies and regulations.

XX.XX.310 Aquaculture

(1) Aquaculture for non-native species or for commercial or other purposes shall require a Shoreline Conditional Use Permit.

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

(a) Species to be reared

(b) Aquaculture method(s)

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

(d) Harvest and processing method and timing

(e) Method of waste management and disposal

(f) Best available background information and probable adverse impacts on water quality, biota, and any existing shoreline or water uses

(g) Method(s) of predator control

(h) A description of the proposed use of lights and noise-generating equipment and an assessment of adverse impacts upon surrounding uses

(i) Other pertinent information as required by the Shoreline Administrator

(3) Aquacultural activities shall meet all applicable federal, state, and county standards and regulations.

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

(5) No pesticides, herbicides, antibiotics, vaccines, growth stimulants, anti-fouling agents, or other chemicals shall be used until approved by all appropriate state and federal agencies. Those agencies shall include the WDFW, Washington State Department of Agriculture, Ecology, and the U.S. Food and Drug Administration. Evidence of such approval shall be submitted to the Shoreline Administrator.

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

(7) Aquaculture activities shall be subject to conditions and requirements for mitigation to ensure they do not result in a net loss of ecological function.

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

(9) Aquaculture facilities shall be designed to minimize nuisance, odors, and noise, as well as minimize visual impacts on surrounding shoreline development.

XX.XX.320 Boating Facilities

(1) General Requirements

(a) All boating uses, development, and facilities shall protect the rights of navigation.

(b) Boating facilities shall be sited and designed to ensure no net loss of shoreline ecological functions and shall meet DNR and USACE requirements and other state guidance if located in or over state-owned aquatic lands.

(c) Boating facilities shall be located on stable shorelines in areas where:

(i) Such facilities will not adversely affect flood channel capacity or otherwise create a flood hazard

(ii) Water depths are adequate to minimize spoil disposal, filling, beach enhancement, and other channel maintenance activities

(iii) Water depths are adequate to prevent the structure from grounding out at the lowest low water, or else stoppers are installed to prevent grounding out

(d) Boating facilities shall not be located where new dredging will be required

(e) Boating uses and facilities shall be located far enough from public swimming beaches and aquaculture harvest areas to alleviate any aesthetic or adverse impacts, safety concerns, and potential use conflicts.

(f) In-water work shall be scheduled to protect biological productivity, including, but not limited to, fish runs, spawning, and benthic productivity.

(g) Accessory uses at boating facilities shall be:

(i) Limited to water-oriented uses, including uses that provide physical or visual shoreline access for substantial numbers of the general public

(ii) Located as far landward as possible, while still serving their intended purposes.

(h) Parking and storage areas shall be landscaped or screened to provide visual and noise buffering between adjacent dissimilar uses or scenic areas, along with meeting other requirements provided in Section XX.XXX.470.

(i) Boating facilities shall locate where access roads are adequate to handle the traffic generated by the facility and shall be designed so that lawfully existing or planned public shoreline access is not unnecessarily blocked, obstructed, nor made dangerous.

(j) Joint-use moorage with ten or more berths is regulated under this section as a marina (See (5) below).

(k) All marinas and public launch facilities shall provide at least portable restroom facilities for boaters' use that are clean, well-lit, safe, and convenient for public use.

(l) Installation of boat waste disposal facilities, such as pump-outs and portable dump stations, shall be required at all marinas. The locations of

such facilities shall be considered on an individual basis in consultation with the Washington State Department of Health, Ecology, DNR, Washington State Parks, and WDFW, as necessary.

(m) All utilities shall be placed at or below dock levels or below ground, as appropriate.

(n) When appropriate, marinas and boat launch facilities shall install public safety signs, to include the locations of fueling facilities, pump-out facilities, and locations for proper waste disposal.

(o) Boating facilities shall be constructed of materials that will not adversely affect water quality or aquatic plants and animals over the long term. Materials used for submerged portions, decking, and other components that may come in contact with water shall be approved by applicable state agencies for use in water to avoid discharge of pollutants from wave splash, rain, or runoff. Wood treated with creosote, copper chromium, arsenic, pentachlorophenol, or other similarly toxic materials is prohibited for use in moorage facilities.

(p) Boating facilities in waters providing a public drinking water supply shall be constructed of untreated materials such as untreated wood, approved plastic composites, concrete, or steel (see Section XX.XX.250, Water Quality, Stormwater, and Nonpoint Pollution).

(q) Vessels shall be restricted from extended mooring on waters of the state except as allowed by state regulations and provided that a lease or permission is obtained from the Washington State Department of Natural Resources and impacts to navigation and public access are mitigated.

(r) Live-aboard vessels, including houseboats, shall be permitted only in marinas (See (5) below). Live-aboard vessels in other environment designations may be allowed through an approved conditional use permit as provided in Table XX.XX.200 (3). Impacts from live-aboard vessels must be substantially avoided, minimized, or mitigated.

(2) Public Piers and Docks

(a) Public piers and docks shall only be allowed for water-dependent uses and public access under the following criteria:

(i) Public's need for such a structure is clearly demonstrated;

(ii) The project including any required mitigation, will result in no net loss of ecological functions associated with critical saltwater habitat;

(iii) The project is consistent with the state's interest in resource protection and species recovery; and

(iv) Moorage at public docks is limited to recreational purposes and shall not extend more than one 24-hour period. Public docks may not be used for commercial or residential moorage.

(b) Pier and dock dimensions and grating.

(i) The maximum waterward intrusion of any portion of any pier or dock shall not extend further waterward than the average length of the piers or docks on lots abutting the location of the new dock as measured perpendicularly from the ordinary high water mark unless an alternative dimension is required in order to prevent impacts to critical areas. In no circumstances shall the maximum waterward intrusion of any portion of any pier or dock extend more than 36 feet from the ordinary high water mark, or the point where the water depth is eight feet below the elevation of the ordinary high water mark, whichever is reached first.

(ii) In order to minimize impacts on nearshore areas and avoid reduction in ambient light level:

(A) The width of piers, docks, and floats shall be the minimum necessary.

(B) Public piers and docks shall not exceed eight (8) feet in width.

(C) Floats shall not exceed eight (8) feet in width and 20 feet in length unless authorized by a variance.

(D) Dock surfaces designed to allow maximum light penetration shall be used on walkways or gangplanks in nearshore areas.

(E) The surface of new piers, docks and floats shall provide at least 50% functional grating.

(iii) Waterward of the ordinary high water mark, pier and dock height may not exceed a height of five (5) feet above water level, except that public piers may exceed the height limit an additional three (3) feet, and except pilings may extend a reasonable amount above dock height to provide for fluctuating water level conditions.

(c) Prohibited substances. No part of a pier, dock or other components that may come in contact with the water may be treated with or consist, in whole or in part, of creosote, oil based paints, toxic chemicals, or other

substances that would be harmful to the aquatic environment, unless specifically permitted and authorized by appropriate state and federal regulatory agencies.

(3) Public Boat Launch Facilities

(a) Public boat launch facilities may be allowed in areas consistent with the SE Washington SMP Update Public Access Plan.

(b) Public boat launch and haul-out facilities, such as ramps, marine travel lifts and marine railways, and minor accessory buildings, shall be designed and constructed in a manner that minimizes adverse impacts on fluvial processes, biological functions, aquatic and riparian habitats, water quality, navigation, and neighboring uses.

(c) Public boat launch facilities shall be designed and constructed using methods/technology that have been recognized and approved by state and federal resource agencies as the best currently available.

(4) Private Boat Launch Facilities:

(a) Allowed only with a Substantial Development Permit and restricted to the Snake River upstream of Asotin and along the Grande Ronde River. All private boat launches shall comply with applicable federal and state agency standards and requirements, such as WDFW, USACE, National Marine Fisheries Service, and others.

(b) Boat launch facilities shall be designed by a qualified professional and constructed:

(i) In a manner that minimizes adverse impacts on fluvial processes, biological functions, aquatic and riparian habitats, water quality, navigation, and neighboring uses.

(ii) In a manner that public use and access to beaches is not blocked or made unsafe, and so public use of the surface waters is not unduly impaired.

(iii) Using methods/technology that have been recognized and approved by state and federal resource agencies as the best currently available.

(c) No more than one private boat launch facility or structure shall be permitted on a single residential parcel or lot.

(d) New private boat launches or existing private boat launch upgrades shall demonstrate, in plans prepared by a qualified professional, that:

(i) Water depths are adequate to avoid the need for dredging during construction or maintenance dredging, and eliminate or minimize potential loss of shoreline ecological functions or other shoreline resources.

(ii) The site is geomorphically stable, and not along a braided or meandering channel, where the channel is subject to change, or on point bars or accretion beaches

(iii) Mitigation procedures have been applied consistent with Section XX.XX.230

(iv) The boat ramp or access roadway shall in no instance exceed 12 feet in width.

(v) Any turnaround or parking facilities must be located outside of the riparian buffer as provided in Section XX.XX.210, except for a tee-type turnaround with minimal dimensions that is a minimum of 30 feet from the OHWM, has an impervious surface, requires minimal grading, and will avoid impacts to water quality.

(vi) Stormwater management measures are required to prevent direct discharge of stormwater to the river during construction and for the duration and use of the boat launch.

(vii) An approved road access permit must be acquired from the county unless already served by an existing legally approved access approach.

(viii) The total area of impervious surface for the boat launch development (including parking, access drive, and launch) shall not exceed 400 square feet.

(ix) The total area of woody vegetation removal for the boat launch development (including parking, access drive, and launch) shall not exceed a corridor width of 15 feet and will require on-site mitigation, consistent with Sections XX.XX.230 and 240.

(5) Marinas

(a) Marinas shall be designed to meet all of the following requirements:

(i) Provide flushing of all enclosed water areas

(ii) Allow the free movement of aquatic life in shallow water areas

(iii) Avoid and minimize any interference with geohydraulic processes and disruption of existing shore forms.

(b) Open pile or floating breakwater designs shall be used unless it can be demonstrated that riprap or other solid construction would not result in any greater net impacts to shoreline ecological functions, processes, fish passage, or shoreline features.

(c) Wet-moorage marinas shall locate a safe distance from domestic sewage or industrial waste outfalls.

(d) To the maximum extent possible, marinas and accessory uses, including occupants of live-aboard vessels, shall share parking facilities.

(e) New marina development shall provide public access amenities such as viewpoints, interpretive displays, and public access to accessory water-enjoyment uses (e.g., restaurants).

(f) If a marina is to include gas- or oil-handling facilities, such facilities shall be separate from main centers of activity in order to minimize the fire and water pollution hazards and to facilitate fire and pollution control. Marinas shall have adequate facilities and procedures for fuel handling and storage, and the containment, recovery, and mitigation of spilled petroleum, sewage, other potentially harmful or hazardous materials, and toxic products.

(g) The marina operator shall be responsible for the collection and dumping of sewage, solid waste, and petroleum waste.

(h) Live-aboard vessels, including houseboats, shall be permitted in marinas. No more than 15% of the surface area of a marina or 15% of its slips, whichever is less, shall be devoted to live-aboard vessels, including houseboats, except that the percentage of live-aboard vessels in marinas may be increased as an approved conditional use. Live-aboard vessels must comply with all marine regulations, policies, and procedures of the Coast Guard, federal and state governments which pertain to health, safety, and/or environmental protection.

(6) Multi-family residences, hotels, motels, and other commercial developments proposing to provide moorage facilities shall meet the criteria for a marina. Use of the moorage must be open to the general public on the same basis as residents or occupants and shall provide public access. If approved, no more than one joint-use moorage facility may be provided for a parcel or development.

(7) Applications for docks or piers serving single commercial or industrial enterprises shall demonstrate that:

(a) The facility serves a water-dependent use.

(b) The facility is the minimum size required to serve the proposed use, provided that provisions for expansion or future joint use may be provided.

(c) The facility minimizes impacts to the extent feasible. Where impacts are unavoidable, the facility mitigates impacts to navigation; aquatic habitat; upland habitat; public access to the water for recreation, fishing and similar use; and public access to publicly accessible lands below the OHWM.

(8) Commercial or industrial moorage facilities shall demonstrate that:

(a) The dock or pier shall be the minimum length required to serve the use.

(b) Access from the shoreline to piers or floats shall minimize water cover in order to minimize impacts to shallow water habitat.

(c) Piers and ramps shall be elevated to provide the maximum feasible light penetration.

(d) Grating or clear translucent material shall be used to the maximum extent feasible to provide light penetration.

(e) Floats shall be constructed and attached so that they do not ground out on the substrate.

(f) Pile spacing shall be the maximum feasible to minimize shading and avoid a "wall" effect that would block or baffle wave patterns, currents, littoral drift, or movement of aquatic lifeforms or result in structure damage from driftwood impact or entrapment.

(g) Pile diameter shall be minimized while meeting structural requirements.

(h) Covered structures may be permitted only to serve a water-dependent use where it is demonstrated that adequate upland sites are not feasible, and it is demonstrated that the area covered is the minimum necessary to serve the use.

XX.XX.330 Breakwater, Jetties, Groins, and Weirs

(1) Breakwaters shall be allowed in environments defined in Section XX.XX.200 (3), Shoreline Use and Modification Matrix, with a Shoreline Substantial Development Permit.

(2) New, expanded, or replacement groins and weirs shall only be permitted if the applicant demonstrates that the proposed groin or weir will not result in a net loss of shoreline ecological functions and the structure is necessary for

water-dependent uses, public access, shoreline stabilization, or other specific public purposes.

(3) Groins and weirs shall require a Substantial Development Permit and shall only be approved when no other stream restoration or shoreline stabilization design approach, employed singly or in combination, is technically possible for the affected reach.

(4) Groins and weirs shall be located, designed, constructed, and operated consistent with mitigation sequencing principles, including avoiding critical areas, as provided in Section XX.XX.230, Environmental Protection.

XX.XX.340 Commercial Development

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

(2) Non-water-oriented commercial uses shall be allowed if they can demonstrate at least one or more of the following:

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

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

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

(3) Non-water-oriented uses, including, but not limited to, residential uses, may be located with water-oriented commercial uses, provided:

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

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

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

(d) Navigability is severely limited at the proposed site.

(e) Public access is provided and/or ecological restoration is provided as a public benefit.

(4) Review Criteria. The Shoreline Administrator shall use the following information in its review of all commercial development applications:

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

(b) Whether the proposed commercial use is consistent with the Shoreline Use and Modification Matrix (Section XX.XX.200 (3))

(c) Whether the application has the ability to enhance compatibility with the shoreline environment and adjacent uses

(d) Whether adequate provisions are made for public and private visual and physical shoreline access

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

(5) Commercial development shall be designed and maintained in a manner compatible with the character and features of surrounding areas. Developments shall incorporate low-impact development techniques into new developments. Architectural and landscape elements shall be employed that recognize the river and lake environments. The Shoreline Administrator may prescribe and modify project dimensions, screening standards, setbacks, or operation intensities to achieve this purpose.

(6) Restaurants and lodging facilities shall be oriented to provide views to the waterfront, when such view is available from the site.

(7) Commercial uses shall provide for public access as a condition of approval, unless such public access is demonstrated by the proponent to be infeasible or inappropriate for the shoreline pursuant to Section XX.XX.260, Public Access.

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

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

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

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

(12) Development shall be located, designed, and constructed in a manner that ensures no net loss of shoreline ecological functions and has no adverse impacts on other preferred land uses and public access features.

(13) Water-enjoyment and water-related commercial uses are required to provide public access and ecological restoration where feasible and avoid impacts to existing navigation, recreation, and public access.

XX.XX.350 Dredging and Dredge Material Disposal

(1) Dredging

(a) New dredging shall be permitted only where it is demonstrated that the proposed water-dependent or water-related uses will not result in ongoing adverse impacts to water quality, shoreline ecological functions, Fish and Wildlife Habitat Conservation Areas and other critical areas, flood holding capacity, natural fluvial processes, drainage and water circulation patterns, significant plant communities, prime agricultural land, and public access to shorelines. When such impacts are unavoidable, they shall be minimized and mitigated such that they result in no net loss of shoreline ecological functions.

(b) Dredging and dredge disposal shall be prohibited on or in archaeological sites that are listed on the National Register of Historic Places and the Washington Heritage Register until such time that they have been reviewed and approved by the appropriate agency.

(c) Dredging techniques that cause minimum dispersal and broadcast of bottom material shall be used, and only the amount of dredging necessary shall be permitted.

(d) Dredging shall be permitted only:

(i) To establish, expand, relocate or reconfigure navigation channels where needed to accommodate existing navigational uses and then only when significant ecological impacts are minimized and when mitigation is provided.

(ii) In conjunction with a water-dependent use of waterbodies or adjacent shoreline areas

(iii) As part of an approved stream or river rehabilitation or habitat improvement project

(iv) In conjunction with a bridge, navigational structure, or wastewater treatment facility for which there is a documented public need and where other feasible sites or routes do not exist

(v) Maintenance dredging of established navigation channels and basins restricted to maintaining previously dredged and/or existing authorized location, depth, and width.

(e) Dredging for fill is prohibited except where the material is necessary for restoration of shoreline ecological functions.

(f) New development siting and design avoids the need for new and maintenance dredging.

(2) Dredge Material Disposal

(a) Upland dredge material disposal within shoreline jurisdiction is prohibited, except under the following circumstances and conditions:

(i) Shoreline ecological functions and processes will be preserved, restored, or enhanced, including protecting surface, hyporheic, and groundwater.

(ii) Erosion, sedimentation, floodwaters, or runoff will not increase adverse impacts on shoreline ecological functions and processes or property.

(iii) The site will ultimately be suitable for a use allowed by this SMP.

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

(c) Dredge material disposal within areas assigned an Aquatic Environment Designation may be approved only when authorized by applicable agencies, which may include the USACE pursuant to Section 404 (Clean Water Act) permits, WDFW, HPA, and/or the Dredged Material Management Program of the Washington State DNR, and when one of the following conditions apply:

(i) Land disposal is not feasible, inconsistent with this SMP, or prohibited by law.

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

(d) Dredge materials approved for disposal within areas assigned an Aquatic Environment Designation shall comply with the following conditions:

(i) Aquatic habitat will be protected, restored, or enhanced.

(ii) Adverse effects on water quality or biologic resources from contaminated materials will be mitigated.

(e) Upland disposal sites shall be planted with vegetation native to the shoreline location, or that which would be present in an undisturbed condition.

(f) Dredge material disposal operating periods and hours shall be limited to those stipulated by the WDFW and hours from 7:00 a.m. to 5:00 p.m., Monday through Friday, except in time of emergency as authorized by the Shoreline Administrator. Provisions for buffers at land disposal or transfer sites, in order to protect public safety and other lawful interests and to avoid adverse impacts, shall be required.

(3) Submittal Requirements: The following information shall be required for all dredging applications:

(a) A description of the purpose of the proposed dredging and analysis of compliance with the policies and regulations of this SMP, and other applicable requirements including compliance with the U.S. Army Corps of Engineers Lower Snake River Programmatic Sediment Management Plan, as applicable.

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

(i) A site plan map outlining the perimeter of the proposed dredge area, including the existing bathymetry (water depths that indicate the topography of areas below the OHWM), and having data points at a minimum of 2-foot depth increments

(ii) A Critical Area Report

(iii) A mitigation plan, if necessary, to address any identified adverse impacts on ecological functions or processes

(iv) Information on stability of areas adjacent to proposed dredging and spoils disposal areas

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

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

(B) Chemical analysis of material to be dredged (e.g., volatile solids; chemical oxygen demand; grease and oil content; and mercury, lead, and zinc content)

(C) Biological analysis of material to be dredged

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

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

(e) Frequency and quantity of project maintenance dredging.

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

(i) Dredge material disposal area

(ii) Physical characteristics, including location, topography, existing drainage patterns, and surface and groundwater

(iii) Size and capacity of disposal site

(iv) Means of transportation to the disposal site

(v) Proposed dewatering and stabilization of dredged material

(vi) Methods of controlling erosion and sedimentation

(vii) Future use of the site and conformance with land-use policies and regulations

(g) Total estimated initial dredge volume.

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

(i) Hydraulic modeling studies sufficient to identify existing geohydraulic patterns and probable effects of dredging.

(4) This SMP recognizes that stream and river restoration and rehabilitation projects may require excavation and material placement which would otherwise meet the definitions for dredging and relocation of dredged materials. Descriptive and reporting requirements specified in Section (3) above shall be waived for earth moving (including streambed materials) and relocation that are design elements of stream and river restoration projects.

(5) Stream and river restoration projects shall be designed to rehabilitate natural fluvial geomorphic and ecological functions and processes.

XX.XX.360 Fill and Excavation

(1) Fill and excavation is allowed only in association with a permitted use. Where allowed, fill and excavation shall be the minimum necessary to accommodate the development.

(2) Fill of the OHWM, except fill to support ecological restoration, requires a Conditional Use Permit and may only be permitted in one of the following circumstances:

(a) In conjunction with water-dependent or public access uses allowed by this SMP

(b) In conjunction with a bridge or transportation facility of statewide significance, for which there is a demonstrated public need and where no feasible upland sites, design solutions, or routes exist

(c) In conjunction with implementation of an interagency environmental cleanup plan to clean up and dispose of contaminated sediments

(d) Disposal of dredged material considered suitable under, and conducted in accordance with, the Washington State Dredged Material Management Program

(e) In conjunction with any other environmental restoration or enhancement project

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

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

(a) Result in significant ecological damage to water quality, fish, and/or wildlife habitat

(b) Adversely alter natural drainage and circulation patterns, currents, or river flows or significantly reduce floodwater capacities

(c) Alter channel migration, geomorphic, or hydrologic processes

(d) Significantly reduce public access to the shoreline or significantly interfere with shoreline recreational uses

(5) Fills are prohibited in the floodway, except when required in conjunction with uses allowed by this SMP.

(6) Fills are allowed in floodplains outside of the floodway only where they would not alter the hydrologic characteristics or flood storage capacity or inhibit channel migration.

(7) Fill shall be of the minimum amount and extent necessary to accomplish the purpose of the fill.

(8) Excavation waterward of the OHWM or within wetlands shall be considered dredging for purposes of this SMP.

(9) Fills or excavation shall not be located where streambank stabilization will be necessary to protect materials placed or removed. Disturbed areas shall be immediately stabilized and revegetated, as applicable.

XX.XX.380 Forest Practices

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

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

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

(4) Proponents of a forest practice or activity shall supply the following information in their application for shoreline permit:

(a) Documentation describing how the activity will protect water quality and meet any applicable standards

(b) Plan for maintaining vegetative buffer strips to protect fish populations and other aquatic life

(c) Description of other measures to prevent erosion of streambanks

XX.XX.390 Industrial Development

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

(2) Non-water-oriented industrial uses shall be allowed if they can demonstrate one or more of the following:

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

(b) Navigability is severely limited at the proposed site, including opportunities for non-motorized boating or other water-oriented uses.

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

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

(3) Where industrial use is proposed for location on land in public ownership, public access should be required unless such public access is demonstrated by the proponent to be infeasible or inappropriate for the shoreline pursuant to Section XX.XX.260, Public Access.

(4) Industrial uses shall provide for suitable measures to rehabilitate and enhance the shoreline ecology as a condition of approval.

(5) Non-water-oriented industrial uses shall not be allowed over water in any shoreline environment.

(6) All industrial loading and service areas shall be located upland or away from the shoreline, except when loading services are water-dependent, such as barge facilities. Provisions shall be made to screen upland loading areas with walls, fences, and landscaping and to minimize aesthetic impacts.

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

(8) Industrial development will be located, designed, or constructed in a manner that ensures no net loss of shoreline ecological functions and such that it does not have significant adverse impacts to other shoreline resources and values.

XX.XX.400 In-stream Structures

(1) In-stream structures are those structures, placed by humans, within a stream or river waterward of the OHWM that either cause or have the potential to cause water impoundment or the diversion, obstruction, or modification of water flow. In-stream structures may include those for hydroelectric generation, irrigation, water supply, flood control, transportation, utility service transmission, structures primarily intended for fisheries management, or other purposes. Docks, piers, and marinas are not regulated as in-stream structures under this section of the SMP. See Section XX.XX.470, Transportation: Trails, Roads, and Parking, and Section XX.XX.480, Utilities, for regulations governing road and utility crossings of streams.

In-stream structures can also be placed as components of stream and river restoration and rehabilitation projects where the explicit purpose is ecological restoration and enhancement. These may include a variety of lithic and woody structures, including engineered logjams, boulder arrays, and other structures designed to replicate natural habitat, flow, and sediment transport conditions in degraded streams and rivers. This SMP and the following provisions recognize that in-stream structures associated with stream restoration work are designed to improve geomorphic and ecological functions.

(2) General

(a) The location, planning, and design of in-stream structures shall be compatible with the following:

(i) The full range of public interests; existing agricultural activities; USACE Snake River dam projects operations, maintenance, and facility upgrade activities; providing for public access to shorelines; desire for protection from floods; and need for preserving historic and cultural resources

(ii) Protecting and preserving ecosystem-wide processes and ecological functions, including, but not limited to, fish and wildlife, with special emphasis on protecting and restoring priority habitats and species, and water resources within the context of the hydrology and water management effects of the Snake River operations, as applicable

(b) New structures shall be designed, located, and constructed consistent with mitigation sequencing principles in Section XX.XX.230, Environmental Protection, and as otherwise limited by floodplain regulations found in Section XX.XX.270, Flood Hazard Reduction, and Section XX.XX.540, Frequently Flooded Areas.

(c) New structures shall be designed and located to minimize removal of riparian vegetation and, if applicable, to return flow to the stream in as short a distance as possible.

(d) In-stream structures shall provide for adequate upstream and downstream migration of resident fish, as applicable, and shall not adversely affect native resident and anadromous aquatic wildlife or adversely modify aquatic wildlife habitat, as applicable.

(e) Utilities and transmission lines shall be located so as to minimize obstruction or degradation of views and comply with applicable provisions of the Utilities section of this SMP.

(f) Mitigation shall be required of the proponent for the loss of ecological functions and processes pursuant to Section XX.XX.230, Environmental Protection, and Section XX.XX, Article V, Critical Areas. No net loss in function, value, or acreage shall occur from such development.

(g) In-stream structures, which are components of stream restoration projects, shall be designed to appear like natural river features and to replicate natural stream channel morphology and distribution of woody debris.

(3) Submittal Requirements. In addition to the standard requirements listed in Section XX.XX.730, Application Requirements, all permit applications for in-stream structures shall contain, at a minimum, the following additional information:

(a) A site suitability analysis, which provides sufficient justification for the proposed site; the analysis must fully address alternative sites for the proposed development.

(b) Proposed location and design of primary and accessory structures, transmission equipment, utility corridors, and access/service roads.

(c) A plan that describes the extent and location of vegetation, which is proposed to be removed to accommodate the proposed facility, and any site revegetation plan required by this SMP.

(d) An analysis prepared by a licensed professional engineer or fluvial geomorphologist that sufficiently describes the project's potential effects on fluvial geomorphology and channel form, including potential changes in base flood elevation, velocity and volume of flows, and sediment transport.

(e) Biological resource inventory and analysis that sufficiently describes the project's effects on aquatic and terrestrial ecosystems, prepared by a qualified professional, as defined in the Critical Areas section of this SMP.

(f) Provision for erosion control, protecting water quality, and aquatic and terrestrial ecosystems during construction.

(g) Long-term management plans that describe in sufficient detail the provisions for protection of in-stream resources during construction and operation; the plan shall include means for monitoring its success.

XX.XX.410 Mining

(1) Mining shall be prohibited waterward of the OHWM.

(2) Mining facilities shall be located within shoreline jurisdiction (Shorelands) only when no feasible sites are available outside shoreline jurisdiction.

(3) All gold and other mineral prospecting, concentration, and extraction activities shall strictly conform to requirements of the Gold and Fish Pamphlet for those activities which are limited to the scope, techniques, and equipment specified in the pamphlet. Compliance with the Gold and Fish Pamphlet does not necessarily preclude the requirement for a Substantial Development Permit for mineral prospecting, concentration, and extraction activities.

(4) All similar activities, which exceed the criteria and parameters specified in the Gold and Fish Pamphlet, shall be designed and conducted to avoid impacts to shoreline natural character and ecological functions, including, but not limited to, riparian and floodplain plant communities and ecosystems and ecological functions.

(5) Determining when mining facilities may or may not be located within Shorelands shall be based on an evaluation of geologic factors such as the distribution and availability of mineral resources for that jurisdiction; the need for such mineral resources; and economic, transportation, and land-use factors. This demonstration may rely on analysis or studies prepared for purposes of comprehensive plan designations and may be integrated with any relevant environmental review conducted under State Environmental Policy Act (SEPA; RCW 43.21C) or otherwise be shown in a manner consistent with RCW 90.58.100(1) and WAC 173-26-201(2)(a), as amended.

(6) Mining facilities and associated activities shall be designed and located to prevent loss of ecological function.

(7) Application for approval of mining operations shall be accompanied by operation plans, reclamation plans, and analysis of environmental impacts sufficient to make a determination as to whether the project will result in net loss of shoreline ecological functions and processes. These evaluations and plans shall address these functions and processes during the course of mining and after reclamation, and how impacts will be mitigated to achieve no net loss of these functions. Creation, restoration, and habitat enhancement and the

future productivity of the site may be considered in determining no net loss of ecological functions.

(8) Preference shall be given to mining uses that result in the creation, restoration, or enhancement of habitat and are coordinated with Washington State Surface Mining Reclamation Act requirements.

XX.XX.430 Recreational Development

(1) General Preferences

(a) Recreational uses and facilities shall include features that relate to access, enjoyment, and use of local shorelines.

(b) Both passive and active shoreline recreation uses are allowed.

(c) Water-oriented recreational uses and activities are preferred in shoreline jurisdiction. Water-dependent recreational uses shall be preferred as a first priority and water-related and water-enjoyment recreational uses as a second priority.

(d) Existing passive recreational opportunities, including hunting, angling, nature appreciation, primitive trails where motorized vehicles are not allowed, and environmental interpretation, shall be maintained.

(e) Preference shall be given to developing and enhancing public access to the shoreline to enhance opportunities for angling (fishing), boating, and other water-dependent and water-related recreational opportunities.

(2) General Performance Standards

(a) The potential adverse impacts of all recreational uses shall be mitigated and adequate provisions for shoreline rehabilitation shall be made part of any proposed recreational use or development to ensure no net loss of shoreline ecological function.

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

(c) Use of chemical fertilizers and pesticides should be avoided at recreational developments in shoreline environments. New recreational developments shall be designed to avoid their use. Where their use is required, such use shall be minimized. Measures shall be taken to avoid pesticides and fertilizers leaching into soils and nearshore hyporheic zones in shorelines.

The proponent shall specify the BMPs to be used to prevent these applications and resultant leachate from entering adjacent waters. Recreational developments shall be located and designed to preserve, enhance, or create scenic views and vistas.

(d) In approving shoreline recreational developments, the Shoreline Administrator shall ensure the development will maintain, enhance, or restore desirable shoreline features, including unique and fragile areas, scenic views, and aesthetic values. The Shoreline Administrator may, therefore, adjust or prescribe project dimensions, on-site location of project components, intensity of use, screening, lighting, parking, and setback requirements.

(3) Signs indicating the public's right to access shoreline areas shall be installed and maintained in conspicuous locations at all points of access.

(4) Recreational developments shall provide facilities for non-motorized access to the shoreline, such as pedestrian and bicycle paths and equestrian access, as applicable. New motorized vehicle access shall be located and managed to protect riparian, wetland, and shrub-steppe habitat functions and value.

(5) Proposals for recreational developments shall include a landscape plan indicating how native, self-sustaining plant communities are incorporated into the proposal to maintain ecological functions. The removal of on-site native vegetation shall be limited to the minimum necessary for the development of permitted structures or facilities and shall be consistent with provisions of Section XX.XX.240, Shoreline Vegetation Conservation, and Section XX.XX, Article V, Critical Areas.

(6) Accessory uses and support facilities such as maintenance facilities, utilities, and other non-water-oriented uses shall be consolidated and located in upland areas outside shoreline, wetland, and riparian buffers unless such facilities, utilities, and uses are allowed in shoreline buffers based on the regulations of this SMP.

(7) The placement of picnic tables, playground apparatus, and other similar minor components within the floodways shall be permitted, provided such structures are located and installed in such a manner as to prevent them from being swept away during a flood event.

(8) Recreational facilities shall make adequate provisions, such as screening, landscaping buffer strips, fences, and signs, to prevent trespass upon adjacent properties and to protect the value and enjoyment of adjacent or nearby private properties and natural areas, as applicable.

(9) Recreational facilities or structures are only allowed to be built over water when they provide public access or facilitate a water-dependent use and shall be the minimum size necessary to accommodate the permitted activity.

(10) Recreational developments shall make adequate provisions for all of the following:

(a) On-site and off-site access and, where appropriate, equestrian access

(b) Appropriate water supply and waste disposal methods

(c) Security and fire protection

(11) Structures associated with recreational development shall not exceed 35 feet in height, except for as noted in Section XX.XX.210, Development Standards, when such structures document that the height beyond 35 feet will not obstruct the view of a substantial number of adjoining residences.

(12) Recreational development shall minimize effective impervious surfaces in shoreline jurisdiction and incorporate low-impact development techniques.

XX.XX.440 Residential Development

(1) Single-family residential development is a preferred use when it is developed in a manner consistent with SMP provisions.

(2) Residential development shall be located and constructed to result in no net loss of shoreline ecological function.

(3) Lots for residential use shall have a maximum density no greater than that which will be consistent with local comprehensive plans and zoning regulations.

(4) Lot density and number for residential use may be further limited by other provisions, including goals, policies, and use regulations of this SMP.

(5) Accessory uses and structures shall be located outside of the riparian buffer, unless the structure is or supports a water-dependent use. Storage structures to support water-related uses are not water-dependent uses and, therefore, shall be located outside of the riparian buffer.

(6) All residential development shall be located or designed in such a manner as to prevent measurable degradation of water quality from stormwater runoff. Adequate mitigation measures shall be required and implemented where there is the reasonable potential for such adverse effect on water quality.

(7) New shoreline residences and appurtenant structures shall be sufficiently set back from steep slopes and shorelines vulnerable to erosion so that structural improvements, including bluff walls and other shoreline stabilization and flood-control structures, are not necessary to protect proposed residences and associated uses.

(8) New floating residences and overwater residential structures are prohibited in shoreline jurisdiction.

(9) New, multi-unit residential development, including duplexes, fourplexes, and the subdivision of land into five or more lots, shall make adequate provisions for public access consistent with the regulations set forth in Section XX.XX.260, Public Access.

(10) Fences associated with single-family residences and multi-family structures and their appurtenances shall not obstruct existing visual access to shorelines from public rights-of-way.

(11) New residential development shall connect with sewer systems, when available.

(12) All new residential development shall meet the vegetation management provisions contained in Section XX.XX.240, Shoreline Vegetation Conservation, and Section XX.XX.560, Fish and Wildlife Habitat Conservation Areas.

(13) Residential development clustering may be required by the Shoreline Administrator, where appropriate, to minimize ecological and visual impacts on shorelines, including minimization of impacts on shoreline vegetation consistent with Section XX.XX.240, Shoreline Vegetation Conservation.

XX.XX.450 Ecological Restoration and Shoreline Habitat Enhancement

(1) Shoreline restoration and enhancement should be designed to holistically and comprehensively restore, rehabilitate, or enhance shoreline ecological processes and functions, and native plant and animal communities, including those which are targeted toward, and funded for the purpose of restoring sensitive and/or regionally important species.

(2) Shoreline ecological restoration, enhancement, and mitigation activities shall be designed to facilitate recovery of sustainable ecosystems and natural processes, toward the objective of achieving no net loss of shoreline ecological functions.

(3) Restoration activities shall be carried out in accordance with the Shoreline Restoration Plan required as an adjunct to this SMP, which will reference the Snake River Salmon Recovery Plan (Snake River Salmon Recovery Board 2013 or latest version of this plan), the Columbia Basin Fish and Wildlife Compensation Program, watershed-based water quality restoration programs and grant funds administered by the federal EPA and Ecology, and other state and federal ecological restoration and habitat linkage plans, and in accordance with the provisions of this SMP.

(4) To the extent possible, restoration, enhancement, and mitigation activities shall be integrated and coordinated with other parallel natural resource management efforts, such as those identified in the Shoreline Restoration Plan.

(5) Habitat creation, expansion, restoration, and enhancement projects may be authorized, subject to required state or federal permits when the applicant has demonstrated that:

(a) The primary objective is clearly restoration or enhancement of the natural character or ecological function of the shoreline.

(b) The project will not adversely impact spawning, nesting, or breeding in Fish and Wildlife Habitat Conservation Areas.

(c) Upstream or downstream properties or Fish and Wildlife Habitat Conservation Areas will not be adversely affected.

(d) Water quality will not be degraded.

(e) Flood storage capacity will not be degraded.

(f) Flood conveyance capacity will not be degraded.

(g) Impacts to critical areas and buffers will be avoided and, where unavoidable, minimized and mitigated.

(h) The project will not interfere with the normal public use of shorelines of the state.

(i) Stream and floodplain restoration projects shall be based on a watershed scale, process-based analysis of fluvial geomorphology, and hydrology.

(j) Stream and floodplain restoration projects shall be designed to restore fluvial processes, including sediment transport, recruitment, and distribution of woody debris, channel migration within identified channel migration zones, and re-development or enhancement of native plant communities.

(k) Stream and floodplain restoration projects shall employ current best technical and scientific design and practices.

(6) The Shoreline Administrator shall review the projects for consistency with this SMP in an expeditious manner and shall issue a decision, along with any conditions, within 45 days of receiving all materials necessary to review the request for exemption from the Substantial Development Permit submitted by the applicant (see Section XX.XX.770, Exemptions from Shoreline Substantial Development Permits).

XX.XX.460 Shoreline Stabilization

(1) Shoreline restoration and enhancement activities designed to restore shoreline ecological functions and processes and/or shoreline features should be targeted toward meeting the needs of sensitive and/or regionally important plant, fish, and wildlife species and shall be given priority.

(2) Except for USACE Snake River dam facilities and operations, new shoreline stabilization for new development is prohibited unless it can be demonstrated that reasonable use of existing uses and structures created prior to the effective date of this SMP is precluded without shoreline protection or is necessary to restore ecological functions or hazardous substance remediation.

(3) Proposed designs for new or expanded shoreline stabilization shall be designed using biotechnical design approaches and techniques in accordance with applicable state guidelines unless a qualified engineer and biotechnical bank protection practitioner demonstrates that only conventional riprap or bulkheading will stabilize the shoreline.

(4) Shoreline stabilizations must incorporate the most current scientific and technical information available. They must demonstrate that future stabilization measures would not be required on the project site or adjacent properties or cause significant impact to adjacent or down-current properties and shoreline areas and must be certified by a qualified professional.

(5) Except where stabilization is needed to protect allowed uses where no alternative locations are available and no net loss of ecological functions will result, land subdivisions, lot line adjustments and new development shall be designed to ensure future development of the newly created lots will not require structural stabilization over the life of the development.

(6) Except for USACE Snake River dam facilities and operations, new or expanded structural shoreline stabilization is prohibited except when necessity is demonstrated consistent with the requirements of WAC 173-26-231(3)(a)(iii). Necessity is demonstrated through conclusive evidence documented by a geotechnical analysis that there is a significant possibility that the structure will be damaged within 3 years as a result of shoreline erosion caused by wind/wave action or other hydraulic forces and only when significant adverse impacts are mitigated to ensure no net loss of shoreline ecological functions and/or processes.

(7) Replacement of an existing shoreline stabilization structure with a similar structure is permitted if there is a demonstrated need to protect existing primary uses, structures, or public facilities, including roads, bridges, railways, irrigation, and utility systems from erosion caused by stream undercutting or wave action. The existing shoreline stabilization structure will be removed from the shoreline as part of the replacement activity. Replacement walls or

bulkheads shall not encroach waterward of the OHWM or existing structure unless the facility was occupied prior to January 1, 1992, and there are overriding safety or environmental concerns. Proposed designs for new or expanded shoreline stabilization shall be in accordance with applicable state guidelines and certified by a qualified professional.

(8) Shoreline stabilization projects that are part of a fish habitat enhancement project meeting the criteria of RCW 77.55.181 will be authorized through an exemption from the requirement for a Substantial Development Permit.

(9) Small-scale shoreline stabilization projects (e.g., tree planting projects or other minimally intrusive enhancements) shall be reviewed by a qualified professional to ensure the project has been designed using the most current scientific and technical information available.

(10) Large-scale or more complex shoreline stabilization projects (e.g., projects requiring fill or excavation, placing objects in the water, or hardening the bank) shall be designed by a qualified professional using the most current scientific and technical information available. The applicant may be required to have a qualified professional oversee construction or construct the project.

(11) New stabilization structures, when found to be necessary, will implement the following standards:

(a) Limit the size of the project to the minimum amount necessary

(b) Include measures to ensure no net loss of shoreline ecological functions

(12) Use biotechnical bank stabilization techniques unless those are demonstrated to be infeasible or ineffective before implementing conventional structural stabilization measures such as riprap or bulkheading.

XX.XX.470 Transportation: Trails, Roads, and Parking

(1) New or expanded motor vehicle and rail transportation facilities shall not be located within shoreline jurisdiction, unless one of the following conditions occurs:

(a) The proponent demonstrates that no feasible upland alternatives exist.

(b) The project represents the minimum development necessary to serve another specific, localized, and permitted shoreline use.

(c) In the case of a water crossing, the proponent demonstrates that the project is necessary to further a substantial public interest.

(2) When new roads or road expansions are unavoidable in shoreline jurisdiction, proposed transportation facilities shall be planned, located, and designed to achieve the following objectives:

(a) Meet mitigation sequencing provisions of Section XX.XX.230, Environmental Protection

(b) Avoid adverse impacts on existing or planned water-oriented uses

(c) Set back from the OHWM to allow for a usable shoreline area for vegetation conservation and any preferred shoreline uses unless infeasible

(d) First avoid and then minimize grading, vegetation clearing, and alterations of the natural topography

(e) Use BMPs for preventing erosion and degradation of surface water quality

(3) Improvements to existing motor vehicle and rail transportation facilities shall not interfere with pedestrian and bicycle access and shall, whenever possible, provide for expanding and enhancing pedestrian and bicycle transportation facilities.

(4) Transportation facilities and services for motor vehicles and rail shall use existing transportation corridors whenever possible.

(5) Developing, improving, and expanding pedestrian and bicycle transportation facilities are allowed within all environments except the Natural Environment Designation. Pedestrian and bicycle transportation facilities are a preferred use wherever they are compatible with protecting the natural character, resources, and ecology of the shoreline and preventing any net loss of ecological function.

(6) Pedestrian and bicycle transportation facilities shall be designed, located, and constructed consistent with the policies and regulations for public access as provided in Section XX.XX.260, Public Access, of this SMP. Linkage among shoreline parks, recreation areas, and public access points is encouraged, when feasible.

(7) Parking facilities are not a water-dependent use and shall only be permitted in the shoreline jurisdiction to support an authorized use where it can be demonstrated to the satisfaction of the Shoreline Administrator that there are no feasible alternative locations away from the shoreline. Parking as a primary use shall not be allowed within 50 feet of edge of riparian vegetation corridor. Accessory parking facilities shall be subject to the same permit type as the primary use.

(8) Accessory parking facilities shall be planned to avoid or minimize adverse effects on unique or fragile shoreline features and shall not result in a net loss of shoreline ecological functions or adversely affect existing or planned

water-dependent uses. Parking facilities shall be located upland of the principal structure, building, or development they serve and preferably outside of shoreline jurisdiction, except:

(a) Where the proponent demonstrates that an alternate location would reduce adverse impacts on the shoreline and adjacent uses,

(b) Where another location is not feasible, and/or

(c) Except when ADA standards require otherwise.

In such cases, the applicant shall demonstrate use of measures to reduce adverse impacts of parking facilities in shoreline jurisdiction, such as low-impact development techniques, buffering, or other measures approved by the Shoreline Administrator.

Minimized, unavoidable adverse impacts to shoreline resources and ecological function associated with developing ADA-compliant parking shall be fully mitigated under the provisions of this SMP.

(9) Parking facilities shall be landscaped in a manner to minimize adverse visual and aesthetic impacts on adjacent shoreline and abutting properties.

(10) All forms of transportation facilities shall, wherever feasible, consolidate water crossings and make joint use of rights-of-way with existing or planned future primary utility facilities and other transportation facility modalities.

(11) Improvements to all existing transportation facilities shall provide for the re-establishment and enhancement of natural vegetation along the shoreline when appropriate.

(12) If located in the side yard or waterward side of a structure, loading areas shall be screened from view of pedestrians on either side of the waterway. The visual screen shall be composed of a fence or wall with trees and shrubs consistent with local landscape standards.

(13) Shoreline crossings and culverts shall be designed to minimize adverse impacts on upland, riparian, and aquatic habitat within shoreline jurisdiction, and shall be designed and constructed to maintain or re-establish fish passage. See Section XX.XX.560, Fish and Wildlife Habitat Conservation Areas, for regulations governing crossings of non-shoreline streams located in shoreline jurisdiction.

(14) Trails shall be designed consistent with public access requirements in Section XX.XX.260, Public Access.

XX.XX.480 Utilities

(1) Non-water-oriented utility production, processing, and transmission facilities are permitted in shoreline jurisdiction only if no practical upland alternative or location exists. New primary utility production and processing facilities or parts of those facilities, such as power plants, solid waste storage, or disposal facilities that are non-water-oriented, should not be permitted within shoreline jurisdiction unless no other options are feasible.

(2) The principal uses permitted by this section include facilities within the High Intensity designation (e.g., hydropower generating dams) and other facilities, including sewage collection, holding, transfer and treatment pipelines, tanks, structures, containment facilities, and buildings. Accessory facilities are also permitted, including, but not limited to:

(a) Plant monitoring and control facilities and on-site administrative offices

(b) Plant access and logistical facilities such as storage areas and material handling ramps and facilities, including utility delivery (electrical and communication) facilities

(c) Plant security and safety features such as fences and signage

(d) Other accessory or auxiliary uses or features, necessary to the effective and efficient operation of the plant, which cannot feasibly be located outside the shoreline jurisdiction

(3) Expansion of existing primary utility facilities within shoreline jurisdiction must demonstrate:

(a) The expansion is designed to protect adjacent shorelands from erosion, pollution, or other environmentally detrimental factors during and after construction.

(b) The project is planned to fit existing natural topography as much as practical and avoid alteration of the existing natural environment.

(c) Debris, overburden, and other construction waste materials shall be disposed of so as to prevent erosion or pollution of a waterbody.

(4) New primary utility facilities and expansions shall include provisions to control the quantity and quality of surface water runoff to natural waterbodies, using BMPs to retain natural flow rates. A maintenance program to ensure continued proper functioning of such new facilities shall be required.

(5) Applications for installation of utility facilities other than water-dependent facilities within the High Intensity Environment Designation shall include all of the following (at a minimum):

(a) Reason why the utility facility must be in shoreline jurisdiction

(b) Alternative locations considered and reasons for their elimination

(c) Location of the same, similar, or other utility facilities in the vicinity of the proposed project

(d) Proposed method(s) of construction

(e) Plans for reclamation of areas to be disturbed during construction

(f) Landscape plans

(g) Methods to achieve no net loss of ecological function and minimize clearing of native vegetation

(h) Consistency with local plans for utilities, where such plans exist

(6) Applications for installation of utility facilities shall include all of the following (at a minimum):

(a) Proposed method(s) of construction

(b) Plans for reclamation of areas to be disturbed during construction

(c) Landscape plans

(d) Methods to achieve no net loss of ecological function and minimize clearing of native vegetation

(7) Where feasible, utilities shall be consolidated within a single easement and use existing rights-of-way. Any utility, which must cross shoreline jurisdiction, shall be designed and operated to reserve the option of general public recreational use of the right-of-way in the future. This option shall be exercised by the public only where:

(a) The public will not be exposed to dangers from the utility equipment, and

(b) The utility itself will not be subjected to unusual risks of damage by the public.

(8) In areas where utilities must cross shoreline jurisdiction, they shall do so by the most direct route feasible, unless such a route would negatively affect an environmentally critical area, obstruct public access to the shoreline, or interfere with the navigability of a waterbody regulated by this SMP. See Section XX.XX.560, Fish and Wildlife Habitat Conservation Areas, for regulations governing crossings of streams with less than 20 cubic feet per second mean annual flow located in shoreline jurisdiction.

(9) Utility facilities shall be designed and located in a manner that protects scenic views and minimizes adverse aesthetic impacts.

(10) New utilities, which must be constructed across shoreline jurisdiction in previously undisturbed areas, must submit a mitigation plan demonstrating the restoration of the shoreline to at least its existing condition. Upon completion of utility installation or maintenance, any disturbed areas shall be regraded to be compatible with the natural terrain of the area and revegetated with appropriate native plants to prevent erosion.

(11) Outside of the High Intensity Environment Designation, all underwater pipelines or those paralleling the waterway transporting liquids potentially injurious to aquatic life or water quality shall be prohibited, unless no other alternative exists to serve a public interest. In those limited instances where permitted, shut-off valves shall be provided at both sides of the waterbody except for public sanitary sewers of a gravity or siphon nature. In all cases, no net loss of ecological functions shall be maintained.

(12) Where utilities cannot cross a shoreline waterbody via a bridge or other existing water crossing, the utilities shall evaluate site-specific habitat conditions and demonstrate whether impacts can be mitigated to negatively impact substrate or whether utilities will need to be bored beneath the waterbody such that the substrate is not disturbed. Construction of pipelines placed under aquatic areas shall be placed in a sleeve to avoid the need for excavation in the event of a failure in the future.

(13) Minor trenching to allow the installation of necessary underground pipes or cables is allowed if no alternative, including boring, is feasible, and if:

(a) Impacts on fish and wildlife habitat are avoided to the maximum extent possible.

(b) The utility installation shall not increase or decrease the natural rate, extent, or opportunity of channel migration.

(c) Appropriate BMPs are employed to prevent water quality impacts or other environmental degradation.

(14) Utility installation and maintenance operations shall be conducted in a manner that does not negatively affect surface water quality or quantity. Applications for new utility projects in shoreline jurisdiction shall include a list of BMPs to protect water quality.

Article V. Critical Areas

XX.XX.500 General Provisions

(1) Purpose and Goals

(a) Purpose. The purpose of SMP, Article V is to:

(i) Define, identify, and protect critical areas as required by the GMA of 1990 (Chapter 17, Laws of 1990) and the SMA (RCW 90.58) through the application of the most current scientific and technical information available.

(ii) The Coalition shall regulate in shoreline jurisdiction all uses, activities, and development within, adjacent to, or likely to affect one or more critical areas.

(iii) The critical area regulations shall apply in addition to other SMP requirements as an overlay and in addition to zoning and other regulations adopted by the Coalition.

(b) Goals

(i) 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.

(ii) Maintain healthy, functioning ecosystems through the protection of unique, fragile, and valuable elements of the environment, including ground and surface waters, wetlands, and fish and wildlife and their habitats, and to conserve the biodiversity of plant and animal species.

(iii) Direct activities not dependent on shorelands and critical areas resources to less ecologically sensitive sites and mitigate impacts to critical areas by regulating alterations in and adjacent to critical areas.

(iv) Prevent cumulative adverse environmental impacts to water quality, wetlands, and fish and wildlife habitat and maintain no net loss of ecological functions.

(2) Relationship to Other Regulations and Permits

(a) Compliance with the provisions of this section does not constitute compliance with other federal, state, and local regulations and permit requirements that may be required (for example, Shoreline Substantial

Development Permits, Hydraulic Project Approval permits, USACE Section 404 permits, and National Pollutant Discharge Elimination System permits). The applicant is responsible for complying with these requirements apart from the SMP compliance process established in this section.

(3) Jurisdiction – Critical Areas in Shoreline Jurisdiction

(a) Critical areas regulated by this section include:

(i) Wetlands

(ii) Critical aquifer recharge areas

(iii) Frequently flooded areas

(iv) Geologically Hazardous Areas, as designated

(v) Fish and Wildlife Habitat Conservation Areas

(b) All areas within the Coalition's shoreline jurisdiction meeting the definition of one or more critical areas, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this section.

(c) Protection of Critical Areas. Any action taken pursuant to Article V, Critical Areas, shall result in maintaining no net loss of ecological function of the critical areas associated with the proposed action, as determined by the most current scientific and technical information. All actions and developments shall be designed and constructed in accordance with Mitigation Sequencing, per Section XX.XX.230(2), to avoid, minimize, and restore all adverse impacts. Applicants must first demonstrate an inability to avoid or reduce impacts before restoration and compensation of impacts will be allowed. No activity or use shall be allowed that results in a net loss of the functions or values of critical areas.

(4) Authorizations Required. Prior to fulfilling the requirements of this section, the Coalition shall not grant any approval or permission of permits to alter the condition of any land, water, or vegetation, or to construct or alter any structure or improvement including, but not limited to, the following:

(a) Building Permit

(b) Conditional Use Permit

(c) Shoreline Conditional Use Permit

(d) Shoreline Substantial Development Permit

(e) Shoreline Variance

(f) Binding Site Plan

(g) Short Subdivision

(h) Subdivision

(i) Zoning Variance

(j) Rezone

(k) Any other adopted permit or required approval not expressly exempted by this section.

(5) Most Current Scientific and Technical Information

(a) WAC 173.26.201(2)(a) requires the Coalition to identify and assemble the most current, accurate, and complete scientific and technical information available regarding the development of policies related to identification of and policies governing management recommendations for critical areas.

(b) Critical Area Reports, mitigation plans, and decisions to permit the alteration of critical areas within the shoreline jurisdiction shall rely on the most current scientific and technical information to ensure the protection of the ecological functions and values of critical areas and must give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fish and their habitat.

(c) The most current scientific and technical information shall be consistent with criteria established in WAC 173.26.201(2)(a) and may include the following:

(i) Critical area maps included in the Coalition's Comprehensive Plans

(ii) Maps and reference documents in the Coalition's SMP Inventory, Characterization, and Analysis Report, as applicable

(iii) U.S. Geological Survey (USGS) topographic quadrangle maps

(iv) Washington State DNR Geologic Hazard, Mine Hazard Area, and Water Type map

(v) U.S. Bureau of Land Management Mine Hazard Area map

(vi) Aerial photographs

(vii) Soil Survey of Asotin, Garfield, and Columbia counties, Washington, by the U.S. Department of Agriculture, Soil Conservation Service

(viii) National Wetland Inventory maps

(ix) WDFW Priority Habitats and Species maps

(d) The Critical Area Overlay Maps include all of the following:

(i) FEMA 100-year flood map(s)

(ii) Geologically hazardous map(s)

(iii) Critical aquifer recharge map(s)

(iv) Wetland map(s)

(v) Other maps as appropriate

(e) Applicability of reference maps. In some cases, the Critical Area Overlay Maps identified herein display general locations and approximate boundaries of potential critical areas. Further field determination and analysis may be necessary for specific development proposals to establish exact location, extent, and nature of critical areas. Fish and Wildlife Habitat Conservation Areas are identified using the references, maps, and criteria established in Section XX.XX.560, Fish and Wildlife Habitat Conservation Areas.

(6) General Review Process

(a) The County shall follow the process outlined below:

(i) Verify the information submitted by the applicant for the applicable permit.

(ii) Evaluate the project area and vicinity for critical areas.

(iii) Determine whether the proposed project is likely to impact the functions or values of critical areas.

(iv) Determine if the proposed project adequately addresses the impacts and avoids impacts to the critical area associated with the project.

(b) The Shoreline Administrator will review each shoreline permit application in accordance with this SMP and determine if the provisions of Article V, Critical Areas, will be applied to the project. In making the determination, the Shoreline Administrator may use any of the most current scientific

information and the critical area reference maps and/or inventories identified in Section XX.XX.500 (5)(e).

(c) Minimum Standards. Any proposed activity shall be conditioned as necessary to mitigate impacts to critical areas to ensure no net loss of ecological function and conformity to the performance standards required by this section and Section XX.XX.230, Environmental Protection. Any project that cannot adequately mitigate its impacts to critical areas or meet the performance standards required by Section XX.XX.520 through 560 shall be denied.

(d) Critical areas present, but no impact – waiver.

(i) If the Shoreline Administrator determines that there are critical areas within or adjacent to the Area of Project Review, but the proposed activity is unlikely to degrade the functions or values of the critical area, the Shoreline Administrator may waive the requirement for a report or other applicable information (with written approval or other assistance from a federal, state, or local resource agency). A waiver may be granted if there is substantial evidence that all of the following requirements will be met:

(A) There will be no alteration of the critical area or buffer.

(B) The development proposal will not impact the critical area in a manner contrary to the purpose, intent, and requirements of this SMP.

(C) The proposal is consistent with other applicable regulations and standards.

(ii) In making the determination, the Shoreline Administrator may use any of the most current scientific information and the critical area reference maps and/or inventories identified in Section XX.XX.500 (5)(e).

(e) Critical Areas Present and Potential Impact Likely. If the Shoreline Administrator determines that the proposed project is within, adjacent to, or is likely to impact a critical area, the Shoreline Administrator shall:

(i) Notify the applicant that a Critical Area Report, SEPA Checklist, or other applicable information must be submitted prior to further review of the project and indicate each of the critical area types that should be addressed.

(ii) Require a Critical Area Report or other applicable information from the applicant that has been prepared by a qualified

professional. Additional information and requirements may be obtained within this SMP.

(iii) Review and evaluate the Critical Area Report and other applicable information to determine whether the development proposal conforms to the purpose and performance standards of this SMP.

(iv) Assess potential impacts to the critical area and determine if they are necessary and unavoidable.

(v) Determine if any mitigation proposed by the applicant is sufficient to protect the critical area and meet the standards for no net loss of ecological functions and public health, safety, and welfare concerns.

(vi) A summary of this analysis and the findings shall be included in any decision on the underlying permit(s). Critical area review findings may result in: no adverse impacts to critical area(s), a list of applicable critical area(s) protection conditions for the underlying permit(s), or denial of permit based upon unavoidable impacts to critical area(s) ecological functions and values.

(7) Critical Area Report Requirements

(a) Incorporating the most current scientific and technical information. The report shall use scientifically valid methods and studies in the analysis of data and field reconnaissance and reference the source of information used. The report shall evaluate the proposal and all probable impacts to critical areas in accordance with the provisions of this SMP.

(b) Minimum report contents. At a minimum, the report shall contain the following:

(i) Resume of the principal author(s), which disclose(s) their technical training and experience and demonstrates their stature as a qualified professional; the study shall be performed by a professional who is licensed or qualified as an expert in the critical resources at issue.

(ii) Identification and characterization of the critical area and associated buffers.

(iii) Assessment of any potential hazards associated with the proposed development.

(iv) Assessment of the impacts of the development proposal on any critical area.

(v) Mitigation plan which reduces impacts on the critical area(s) to an insignificant level and specifies maintenance, monitoring, and bonding measures (where necessary) per Section XX.XX.510.

(vi) Additional information and requirements that may be required within each section under Article V of this SMP.

(8) Exempt Uses and Activities.

(a) Exempt activities under Article V, Critical Areas, shall avoid impacts to critical areas and critical area buffers. Exempt activities shall use reasonable methods (reasonable methods include BMPs) to avoid potential impacts to critical areas. Being exempt from this section does not give permission to degrade a critical area or ignore risk from natural hazards. Any incidental damage to, or alteration of, a critical area that is not a necessary outcome of the exempted activity shall be restored, rehabilitated, or replaced at the responsible party's expense.

(b) In addition to Section XX.XX.770, Exemptions from Shoreline Substantial Development Permits, the following are exemptions to provisions of Article V, Critical Areas; however, the listed exemptions may not be exempt from other state or federal regulations or permit requirements.

(i) Normal and routine maintenance of public streets, state highways, public utilities, and public park facilities. Maintenance and repair does not include any modification that changes the character, scope, or size of the original structure, facility, or improved area, nor does it include construction of a maintenance road or dumping of maintenance debris. (This means no expansion into new unused areas).

(ii) Removal of hazardous trees and vegetation and, when necessary, implementation of measures to control or prevent a fire or halt the spread of disease or damaging insects consistent with the State Forest Practices Act, RCW 76.09, provided that no vegetation shall be removed from a critical area or its buffer without approval from the Shoreline Administrator.

(iii) Activities involving artificially created wetlands or streams intentionally created from non-wetland sites, including, but not limited to, grass-lined swales, irrigation and drainage ditches, detention facilities, and landscape features, except those features that provide critical habitat for anadromous fish and those features that were created as mitigation for projects or alterations subject to the provisions of this section.

(iv) Existing and ongoing agricultural activities normal or necessary to general farming conducted according to industry-recognized BMPs, particularly as advocated by the Natural Resources Conservation Service (NRCS; refer to the NRCS Field Office Technical Guides for Asotin, Garfield, or Columbia County, Washington).

(A) Wetlands. Existing and ongoing agricultural activities do not include removing trees, diverting or impounding water, excavation, ditching, draining, culverting, filling, grading, and similar activities that introduce new adverse impacts to wetlands or other aquatic resources. Conversion of wetlands that are not currently in agricultural use, regardless of their wetland ratings, to a new agricultural use should be subject to the same regulations that govern new development.

(B) Fish and Wildlife Habitat Conservation Areas. Existing and ongoing agricultural activities do not include tree cutting, road building, new agriculture, grazing, clearing, earth moving, mining, filling, burning, or construction of buildings or other facilities in Fish and Wildlife Habitat Conservation Areas.

(v) Passive recreational activities, including, but not limited to, fishing, bird watching, boating, swimming, hiking, and use of nature trails, provided the activity does not alter the critical area or its buffer.

(vi) The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops, provided the harvesting does not require tilling soil, planting crops, or changing existing topography, water conditions, or water sources.

(vii) Educational and scientific research, provided the activity does not alter the critical area or its buffer.

(9) Subdivisions

(a) Any subdivision of land that creates a lot greater in size than 5 acres and is located in a critical area or associated buffer shall comply with the following requirements:

(i) Land that is located wholly within a wetland, Fish and Wildlife Habitat Conservation Area, Geologically Hazardous Area, floodway, or the buffers required for these critical areas may not be subdivided.

(ii) Land that is located partially within a wetland, Fish and Wildlife Habitat Conservation Area, Geologically Hazardous Area, floodway, or the buffers required for these critical areas may be subdivided, provided that an accessible, contiguous, and buildable portion of each new lot meets the following requirements:

(A) Located outside of the wetland, Fish and Wildlife Habitat Conservation Area, Geologically Hazardous Area, floodway, and the buffers required for these critical areas

(B) Meets the minimum buildable site requirements of the local zoning ordinances, as amended

(iii) Access roads and utilities serving the proposed subdivision may be permitted within the wetland, Fish and Wildlife Habitat Conservation Area, Geologically Hazardous Area, or the buffers required for these critical areas only if the Shoreline Administrator determines that no other feasible alternative exists consistent with this SMP.

(10) 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 the Asotin, Garfield, or Columbia County records and elections division according to the direction of the appropriate county. The notice shall state the presence of the critical area and/or buffer on the property, of the application of this 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) This notice on title shall not be required for a development proposal by a public agency or public or private utility under any of the following circumstances:

(i) Within a recorded easement or right-of-way

(ii) Where the agency or utility has been adjudicated the right to an easement or right-of-way

(iii) On the site of a permanent public facility

(c) The applicant shall submit proof that the notice has been filed for public record before the Coalition jurisdiction approves any development proposal for the property, or in the case of subdivisions, short subdivisions, planned unit developments, and binding site plans, at or before recording.

XX.XX.510 General Mitigation Requirements

(1) General Mitigation Standards

(a) This section provides general mitigation requirements applicable to alteration of critical areas. Additional specific mitigation requirements are found under the sections for the particular type of critical area.

(b) All proposed alterations to critical areas or associated buffers shall require mitigation sufficient to maintain no net loss of ecological function of the critical area, or to prevent risk from a critical area hazard, and shall give adequate consideration to the reasonable economically viable use of the property. Mitigation of one critical area impact should not result in unmitigated impacts to another critical area. Mitigation may include buffers, setbacks, limits on clearing and grading, BMPs for erosion control and maintenance of water quality, or other conditions appropriate to avoid or mitigate identified adverse impacts.

(c) Any approval of mitigation to compensate for impacts on a critical area or its buffer shall be supported by the most current, accurate, and complete scientific and technical information available.

(2) Mitigation Sequencing

(a) Mitigation includes avoiding, minimizing, or compensating for adverse impacts to regulated critical areas or their buffers, unless part of a restoration plan for significantly degraded wetland or stream buffer. The preferred sequence of mitigation shall be according to Section XX.XX.230 (2).

(3) Mitigation Timing. Mitigation shall be completed immediately following disturbances and prior to use or occupancy of the activity or development or when seasonally appropriate. Construction of mitigation projects shall be timed to reduce impacts on existing fisheries, wildlife, and water quality.

(4) Restoration/Rehabilitation Requirements:

(a) Restoration/rehabilitation is required when a critical area or its buffers have been altered on a site in violation of Coalition regulations prior to development approval, and, as a consequence, its ecological functions have been degraded. Restoration is also required when the alteration occurs in violation of Coalition regulations during the construction of an approved development proposal. At a minimum, all impacted areas shall be restored to their previous condition pursuant to an approved mitigation plan.

(b) Restoration/rehabilitation is required when the critical area or its buffers will be temporarily altered during the construction of an approved development proposal. At a minimum, all impacted areas shall be restored to their previous condition pursuant to an approved mitigation plan.

(5) Compensation. The goal of compensation is to achieve no net loss of critical area or buffer functions on a development site. Compensation includes replacement or enhancement of the critical area or its buffer depending on the scope of the approved alteration and what is needed to maintain or improve the critical area or buffer functions. Compensation for approved critical area or buffer alterations shall meet the following minimum performance standards and shall occur pursuant to an approved mitigation plan:

(a) The buffer for a created, restored, or enhanced critical area, proposed as compensation for approved alterations, shall be the same as the buffer required for the existing critical area.

(b) On-site and In-kind. Except as noted below or otherwise approved, all critical area impacts shall be compensated through restoration of creation of replacement areas that are in-kind, on-site, and of similar or better critical area category. Mitigation shall be timed prior to or concurrent with the approved alteration and shall have a high probability of success.

(c) Off-site and In-kind. The Shoreline Administrator may consider and approve off-site compensation where the applicant demonstrates that greater biological and hydrological functions and values will be achieved. The preferred location for off-site mitigation is areas within or adjoining designated fish and wildlife habitat corridors or as part of other applicable habitat restoration efforts. The compensation may include restoration, creation, or enhancement of critical areas. The compensation ratios specified under the on-site compensation section for each critical area shall also apply for off-site compensation. The Shoreline Administrator may request contractual linkage to the off-site parcel to ensure its availability and landowner willingness.

(d) Increased Replacement Ratios. The Shoreline Administrator may increase the ratios under any of the following circumstances:

(i) Uncertainty exists as to the probably success of the proposed restoration or creation due to an unproven methodology or proponent

(ii) A significant time period will elapse between impact and replication of critical area functions

(iii) The impact was unauthorized

(e) Decreased Replacement Ratios. The Shoreline Administrator may decrease the ratios required in the on-site ratios specified under the compensation section of each critical area when all the following criteria are met:

(i) A minimum replacement ratio of 1:1 will be maintained.

(ii) Documentation by a qualified professional demonstrates that the proposed mitigation actions have a very high rate of success.

(iii) Documentation by a qualified professional demonstrated that the proposed mitigation actions will provide ecological functions and values that are significantly greater than the critical area being impacted.

(iv) The proposed mitigation actions are conducted in advance of the impact and have been shown to be successful.

(6) Critical Area Enhancement as Mitigation

(a) Impacts on wetland and stream functions may be mitigated by enhancement of existing significantly degraded areas. Applicants proposing to use enhancement must produce a Critical Area Report that identifies how enhancement will increase the functions of the degraded resource and how this increase will adequately mitigate for the loss of critical area and its function at the impact site. An enhancement proposal must also show whether existing critical area functions will be reduced by the enhancement actions.

(7) Monitoring

(a) The Shoreline Administrator shall require long-term monitoring of development proposals, unless otherwise accepted where alteration of critical areas or their buffers are approved. Such monitoring shall be an element of the required mitigation plan and shall document and track impacts of development on the ecological functions and values of critical areas, as well as the success and failure of mitigation requirements. Monitoring may include, but is not limited, to:

(i) Establishing vegetation transects or plots to track changes in plant species composition over time

(ii) Using aerial or other photography to evaluate vegetation community response

(iii) Sampling surface and groundwater to determine pollutant loading

(iv) Measuring base flow rates and stormwater runoff to model and evaluate water quantity predictions

(v) Measuring sedimentation rates

(vi) Sampling fish and wildlife populations to determine habitat utilization, species abundance, and diversity

(vii) Sampling of water temperatures for wetlands and streams.

(b) The Shoreline Administrator may require that a qualified professional, at the applicant's expense, monitor the development proposal site during construction and for a sufficient period of time after construction to ensure satisfactory mitigation of impacts on the critical area. The qualified professional shall monitor per the provisions outlined in the approved mitigation plan based on the conditions or restrictions imposed.

(c) Performance Bond. Prior to issuance of any permit or approval that authorizes site disturbance, the Shoreline Administrator may require performance security as specified in Section XX.XX.510 (11), Mitigation Security.

(8) Contingencies/Adaptive Management. When monitoring reveals a significant deviation from predicted impacts or a failure of mitigation measures, the applicant shall be responsible for appropriate corrective action. Contingency plans developed as part of the original mitigation plan shall apply but may be modified to address a specific deviation or failure. Contingency plan measures shall be subject to the monitoring requirement to the same extent as the original mitigation measures.

(9) Mitigation Plan. All proposed mitigation components shall be included in the Critical Area Report. In addition to applicable mitigation plan requirements included in Section XX.XX.520 to 560, proposed mitigation components shall include:

(a) A description of specific proposed mitigation, including a delineation of critical areas lost and critical areas gained

(b) An analysis of avoidance, minimization, reduction, and compensation of impacts to maintain critical area function

(c) An analysis of how the proposed mitigation will maintain the critical area function and values

(d) A statement of any ongoing monitoring and/or inspection measures and schedule that may be required, including specification of method and frequency of submittal of reports on results to the Coalition

(e) A statement of any required critical area expertise necessary to install, monitor, or inspect the proposed mitigation

(f) A listing of any other security required to ensure performance and/or maintenance of the proposed mitigation

(g) The Shoreline Administrator shall make the final determination regarding required mitigation. Required mitigation shall be included in an approved mitigation plan.

(10) Buffers

(a) As described in more detail in each relevant section, buffers have, in some cases, been determined to be necessary and appropriate to protect critical areas and their functions or to prevent risk from a critical area hazard. In those sections where specific buffers are identified, those buffers are deemed "required" or "standard" buffers. See Section XX.XX.560 (6) and Table XX XX.210 (2-4) for riparian buffers, and SMP XX.XX.520 for wetland buffers. If a project or activity does not propose any alteration to those buffers or to the associated critical area, then additional mitigation will not be required to protect the critical area.

(b) If, however, based on unique features of the particular critical area or its buffer or of the proposed development, the Shoreline Administrator determines that additional buffers and/or mitigation measures beyond these standard buffers are necessary to adequately protect the function of the critical area or to prevent risk of a hazard from the critical area, the Shoreline Administrator may impose such additional mitigation requirements, provided the Shoreline Administrator can demonstrate, based on the most current, accurate, and complete scientific or technical information available, why that additional mitigation or buffering is required to adequately protect the critical area function or to prevent a hazard from a critical area.

(c) If portions of a parcel that contain a proposed development activity have not had their critical areas and associated buffers delineated because they were outside the project or area affected by the project, pursuant to Section XX.XX.500(6) and (7), General Review Process and Critical Area Report Requirements, then additional critical area assessments may be required in the future prior to any change in use or development activity for that portion of the site.

(d) Further, if the applicant seeks a variance to reduce these buffers or to alter the critical area or its required buffer, then the applicant shall demonstrate, based on the most current, accurate, and complete scientific or technical information available, why such buffer and/or critical area modification, together with such alternative mitigation proposed in the Critical Area

Report, is sufficient to achieve no net loss of critical area function. If necessary, variances shall provide for long-term buffer protection. Variance requests shall be reviewed pursuant to Section XX.XX.760, Shoreline Variance.

(e) The Critical Area Report and the conditions of approval shall provide for long-term buffer protection. Regarding land division, critical areas and their associated buffers may be placed in separate tracts to be owned by all lot owners in common, by a homeowners' association, or some other separate legal entity such as a land trust. However, critical areas and/or buffers identified and defined in this section do not require any provisions for public access, and appropriate restrictions may be included in the easement or title documents. Critical areas and/or buffers identified are, however, subject to periodic inspection by the Shoreline Administrator, upon prior notification to the landowner, to ensure long-term protection.

(11) Mitigation Security

(a) The Shoreline Administrator shall have the discretion to withhold issuance of a development permit or approval until required mitigation has been completed. Alternatively, the Shoreline Administrator may require a refundable cash payment that will ensure compliance with the approved mitigation plan if there will be activity (e.g., monitoring or maintenance) or construction to take place after the issuance of the shoreline permit or other approval. The amount of the cash payment shall not exceed 150% of the estimated cost of the uncompleted actions or construction as determined by the Shoreline Administrator. When the Shoreline Administrator determines that the mitigation plan has been successfully completed, the cash payment shall be refunded to the applicant. If the mitigation plan is not successfully completed, the Coalition shall be entitled to keep all or part of the cash payment to the extent necessary to rectify the deficiencies regarding the completion of the mitigation plan.

(12) Protection of Designated Critical Areas

(a) Identification and Recording of Critical Areas. Approval of development projects and other land-use activities that require a Critical Area Report pursuant to Sections XX.XX.500 (6) and (7), General Review Process and Critical Area Report Requirements, shall be subject to the identification and designation of all critical areas and their buffers identified in the assessment process. Each critical area shall be clearly defined and labeled to show calculated area and type and/or class of critical area within each lot. The Shoreline Administrator shall require of the applicant that such designated critical areas be recorded on the final plat map or site plan, clearly showing the locations of critical areas, existing vegetation, and buffers.

(i) Construction Marking. During construction, clearly visible, temporary marking, such as flagging and staking, shall be installed and maintained along the outer limits of the proposed site disturbance outside of the critical area. Such field markings may be field-approved by the Shoreline Administrator prior to the commencement of permitted activities. Markings shall be maintained throughout the duration of any construction activities.

(ii) Mitigation Signing and Fencing. The Shoreline Administrator may require permanent signing and/or fencing where it is determined a necessary component of a mitigation plan. The intent of this subsection is to provide clear and sufficient notice, identification, and protection of critical areas on-site where damage to a critical area or buffer by humans or livestock is probable due to the proximity of the adjacent activity.

(iii) Sign, Marker, and Fence Maintenance. It shall be the responsibility of the landowner to maintain, including replacement of, the markers, signs, and fences required under this section in working order throughout the duration of the development project or land-use activity. Removal of required markers, signs, and fences without written approval of the Shoreline Administrator shall be considered a violation of this section.

XX.XX.520 Wetlands

(1) Purpose

(a) The purpose of this section is to promote public health and welfare by instituting local measures to preserve naturally occurring wetlands that exist in the Coalition's shoreline jurisdiction for their associated value. These areas may serve a variety of vital functions, including, but not limited to, hydrologic functions, flood storage and conveyance, water quality protection, recharge and discharge areas for groundwater, erosion control, sediment control, fish and wildlife habitat, recreation, education, and scientific research.

(2) Classification and Designation

(a) Wetlands shall be identified and delineated using the methods and standards set forth in the currently approved 1987 USACE Federal Wetlands Delineation Manual, as amended, and its regional applicable regional supplements, as amended. (The Arid West Final Regional Supplement was last updated in 2008 at the time of SMP adoption).

(b) Classification and rating of wetlands will be done using the Washington State Wetlands Rating System for Eastern Washington, Ecology Publication #14-06-030 (October 2014), as amended. The most current

copy of this document should be used in classifying wetlands and developing wetland mitigation plans.

(c) The following wetlands within the Coalition's shoreline jurisdiction may not be further regulated by this section:

(i) Areas that may meet the definition of "artificial wetlands" as described herein that are managed and owned by the U.S. Bureau of Reclamation.

(ii) Wetland areas identified on the National Wetland Inventory maps with an artificial designation when it can be shown that the area(s) noted was (were) intentionally created from a non-wetland site.

(3) Determination Process

(a) The following progressive steps will occur upon a determination by the Coalition, per Sections XX.XX.500 (6) and (7), General Review Process and Critical Area Report Requirements, that a wetland area may exist on a site proposed for a shoreline permit.

(i) The Shoreline Administrator will determine if the proposed activity is within an Area of Project Review and if there are any possible wetland areas on-site. This determination shall be made following a review of information available, as well as a site inspection and/or a consultation with a qualified wetland biologist, if deemed necessary by the Coalition. If no wetland area is determined to be present, this section shall not apply to the review of the proposed development, unless wetlands are discovered to be present during project development.

(A) If it is determined by the Shoreline Administrator that wetland areas may be present, a site inspection and consultation with a qualified wetland biologist shall be conducted to more definitively determine if a wetland area exists on the site. If yes, the applicant shall complete a Critical Area Report consistent with Section XX.XX.500 (7), Critical Area Report Requirements, and Section XX.XX.520 (4) and conduct a wetland delineation using the approved Federal Wetlands Delineation Manual and applicable regional supplement and the 2008 USACE Arid West Supplement to the 1987 Wetlands Delineation Manual.

(4) Critical Area Report/Wetland Management and Mitigation Plan

(a) As determined necessary, provided for in this section, a wetland management and mitigation plan shall be required when impacts to a wetland are unavoidable during project development.

(b) Wetland management and mitigation plans shall be prepared by a qualified professional as described in Section XX.XX.860, Definitions, and be prepared per Section XX.XX.510 (9) in addition to the requirements included in this section.

(c) The following guidance documents are encouraged to be used in mitigation planning documents:

(i) Wetland Mitigation in Washington State, Part 1: Agency Policies and Guidance (Version 1, Publication #06-06-011a, March 2006)

(ii) Wetland Mitigation in Washington State, Part 2: Developing Mitigation Plans (Version 1, Publication #06-06-011b, March 2006)

(d) The wetland management and mitigation plan shall demonstrate, when implemented, that there shall be no net loss of the ecological function and values or acreage of the wetland.

(e) The wetland management and mitigation plan shall identify how impacts from the proposed project shall be mitigated, as well as the necessary monitoring and contingency actions for the continued maintenance of the wetland and its associated buffer. See Section XX.XX.510 for General Mitigation Requirements. Monitoring shall be for a period necessary to establish that performance standards have been met. Generally, plans shall include a 5-year monitoring plan unless a longer timeline is required during the review process. Forested or scrub-shrub communities shall include an 8-year monitoring plan unless a longer time is established during the review process.

(f) The wetland management and mitigation plan shall be developed to be consistent with Section XX.XX.510, General Mitigation Requirements, and contain a report that includes, but is not limited to, the following information:

(i) Location maps, regional 1:24,000 and local 1:4,800.

(ii) A map or maps indicating the boundary delineation of the wetland; the width and length of all existing and proposed structures, utilities, roads, and easements; wastewater and stormwater facilities; adjacent land uses, zoning districts, and comprehensive plan designations.

(iii) A description of the proposed project, such as the nature, density, and intensity of the proposed development and the associated grading, structures, utilities, and stormwater facilities, in sufficient detail to allow analysis of such land-use change upon the identified wetland.

(iv) A detailed description of vegetative, faunal, and hydrologic conditions, soil and substrate characteristics, and topographic features within and surrounding the wetland.

(v) A detailed description of vegetative, faunal and hydrologic conditions, soil and substrate characteristics, and topographic features within any compensation site.

(vi) A detailed description of the proposed project's effect on the wetland and the associated hydrology, and a discussion of any federal, state, or local management recommendations that have been developed for the area.

(vii) A discussion of the following mitigation alternatives as they relate to the proposal. The mitigation alternatives shall be proposed in a manner that considers the sequence of steps per Section XX.XX.230, Environmental Protection, to avoid or minimize significant adverse effects and significant ecological impacts.

(viii) A plan by the applicant that explains how any adverse impacts created by the proposed development will be mitigated, including, without limitation, the following techniques:

(A) Establishment of buffer zones

(B) Preservation of critically important plants and trees

(C) Limitation of access to the wetland area

(D) Seasonal restriction of construction activities

(E) Establishment of a monitoring program within the plan

(F) Drainage and erosion control techniques

(ix) A detailed discussion of ongoing management practices, which will protect the wetland after the project site has been fully developed, including proposed monitoring, contingency, maintenance, and surety programs.

(x) All reports will be provided in an electronic format (word processor) and all geographic entities (e.g., maps) will be provided in a geo-coded format for use in GIS systems (e.g., ArcView, MapInfo, and AutoCAD).

(g) Mitigation ratios shall be used when impacts to wetlands cannot be avoided. As identified below, the first number specifies the acreage of replacement wetlands, and the second number specifies the acreage of wetlands altered. The mitigation ratios by wetland type are shown in Table XX.XX.520 (4)(i).

(h) Wetlands enhancement as mitigation

(i) Impacts to wetlands may be mitigated by enhancement of existing wetlands. Applicants proposing to enhance wetlands must produce a Critical Area Report that identifies how enhancement will increase the functions of the wetland and how this increase will adequately mitigate for the loss of wetland area and function at the impact site. An enhancement proposal must also show if existing wetland functions will be reduced by the enhancement actions.

(i) Mitigation Ratios

Table XX.XX.520(4)(i). Mitigation Ratios (for Eastern Washington)

Category and Type of Wetland Impacts	Re-establishment or Creation	Rehabilitation Only[1]	Re-establishment or Creation and Rehabilitation[1]	Re-establishment or Creation and Enhancement[1]	Enhancement Only[1]
All Category IV	1.5:1	3:1	1:1 R/C and 1:1 RH	1:1 R/C and 2:1 E	6:1
All Category III	2:1	4:1	1:1 R/C and 2:1 RH	1:1 R/C and 4:1 E	8:1
All other Category II	3:1	6:1	1:1 R/C and 4:1 RH	1:1 R/C and 8:1 E	12:1
Category I based on score for functions	4:1	8:1	1:1 R/C and 6:1 RH	1:1 R/C and 12:1 E	16:1

Category and Type of Wetland Impacts	Re-establishment or Creation	Rehabilitation Only[1]	Re-establishment or Creation and Rehabilitation[1]	Re-establishment or Creation and Enhancement[1]	Enhancement Only[1]
Category I Natural Heritage site	Not considered possible[2]	6:1 Rehabilitation of a Natural Heritage site	R/C not considered possible[2]	R/C not considered possible[2]	Case-by-case

Notes:
1. These ratios are based on the assumption that the rehabilitation or enhancement actions implemented represent the average degree of improvement possible for the site. Proposals to implement more effective rehabilitation or enhancement actions may result in a lower ratio, while less effective actions may result in a higher ratio. The distinction between rehabilitation and enhancement is not clear-cut. Instead, rehabilitation and enhancement actions span a continuum. Proposals that fall within the gray area between rehabilitation and enhancement will result in a ratio that lies between the ratios for rehabilitation and the ratios for enhancement.
2. Natural Heritage sites, alkali wetlands, and bogs are considered irreplaceable wetlands because they perform some functions that cannot be replaced through compensatory mitigation. Impacts to such wetlands would, therefore, result in a net loss of some functions no matter what kind of compensation is proposed.
E = Enhancement
R/C = Re-establishment or Creation
RH = Rehabilitation

Reference:
Washington State Department of Ecology, U.S. Army Corps of Engineers Seattle District, and U.S. Environmental Protection Agency Region 10, March 2006. *Wetland Mitigation in Washington State – Part 1: Agency Policies and Guidance (Version 1).* Washington State Department of Ecology Publication #06-06-011a. Olympia, Washington.

(5) Management Recommendation and Standards

(a) Wetlands shall be protected based on their quality established from the rating system and from alterations, which may create adverse impacts. The greatest protection shall be provided to Category I and II Wetlands.

(b) Alteration shall not mean BMPs for agriculture which, by design, could not be considered a change in land use, including, but not limited to, improved chemical application or practice, which is intended to improve crop production and enhance areas adjacent to wetlands.

(c) Activities and construction necessary on an emergency basis to prevent threats to public health and safety may be allowed if reasonable justification warrants cause for a waiver. These activities should avoid impacts to the extent practicable, and mitigation for unavoidable wetland impacts shall be required upon remedy of the emergency.

(d) The Coalition will coordinate wetland preservation strategy and effort with appropriate state and federal agencies and private conservation organizations to take advantage of both technical and financial assistance and to avoid duplication of efforts.

(e) Criteria for Wetland Alterations

(i) A regulated wetland or its required buffer can only be altered if the wetlands Critical Area Report pursuant to Section XX.XX.520 (4) shows that the proposed alteration does not degrade the quantitative and qualitative functioning of the wetland, or any degradation can be adequately mitigated to protect the wetland function, and maintain no net loss of wetland ecological functions and values as a result of the overall project. Any alteration approved pursuant to this section shall include mitigation necessary to mitigate the impacts of the proposed alteration on the wetland.

(f) Wetland buffers widths presume the existence of a relatively intact native vegetation community in the buffer zone adequate to protect the wetland ecological functions and values at the time of the proposed activity. If the vegetation is inadequate, then the buffer width shall be increased or the buffer should be planted to maintain the standard width. Required standard wetland buffers, based on wetland category and land-use intensity, are provided in Table XX.XX.520 (5)(f)(ii), Buffer Widths.

(i) The Land Use Intensity Table XX.XX.520 (5)(f)(i) describes the types of proposed land use that can result in high, moderate, and low levels of impacts to adjacent wetlands.

Table XX.XX.520 (5)(f)(i). Land Use Intensity Table

Level of Impact from Proposed Change in Land Use	Types of Land Use Based on Common Zoning Designations
High	• Commercial • Urban • Industrial • Institutional • Retail sales • Residential (more than 1 unit/acre) • High-intensity recreation (e.g., golf courses and ball fields)

Level of Impact from Proposed Change in Land Use	Types of Land Use Based on Common Zoning Designations
Moderate	• Residential (1 unit/acre or less) • Moderate-intensity open space (e.g., parks with biking and jogging) • Paved driveways and gravel driveways serving three or more residences • Paved trails
Low	• Low-intensity open space (e.g., hiking, bird-watching, and preservation of natural resources) • Timber management • Gravel driveways serving two or fewer residences • Unpaved trails • Utility corridor without a maintenance road and little or no vegetation management

(ii) Buffer widths, based on the types of land use, are provided in Table XX.XX.520 (5)(f)(ii).

Table XX.XX.520 (5)(f)(ii). Wetland Buffer Widths

Wetland Characteristics	Buffer Width by Impact of Proposed Land Use	Other Measures Recommended for Protection
Category IV Wetlands (For wetlands scoring less than 16 points for all functions)		
Score for all three basic functions is less than 16 points	Low – 25 feet Moderate – 40 feet High – 50 feet	No recommendations at this time
Category III Wetlands (For wetlands scoring 16 to 18 points or more for all functions)		
Moderate level of function for habitat (score for habitat 5 to 7 points) *If wetland scores 8 to 9 habitat points, use Category II buffers	Low – 75 feet Moderate – 110 feet High – 150 feet	No recommendations at this time
Score habitat for 3 to 4 points	Low – 40 feet Moderate – 60 feet High – 80 feet	No recommendations at this time
Category II Wetlands (For wetlands scoring 19 to 21 points or more for all functions or having the "Special Characteristics" identified in the rating system)		
High level of function for habitat (score for habitat 8 to 9 points)	Low – 100 feet Moderate – 150 feet High – 200 feet	Maintain connections to other habitat areas
Moderate level of function for habitat (score for habitat 5 to 7 points)	Low – 75 feet Moderate – 110 feet High – 150 feet	No recommendations at this time

Wetland Characteristics	Buffer Width by Impact of Proposed Land Use	Other Measures Recommended for Protection
High level of function for water quality improvement and low for habitat (score for water quality 8 to 9 points; habitat less than 5 points)	Low – 50 feet Moderate – 75 feet High – 100 feet	No additional surface discharges of untreated runoff
Riparian forest	Buffer width to be based on score for habitat functions or water quality functions	Riparian forest wetlands need to be protected at a watershed or subbasin scale; other protection based on needs to protect habitat and water quality functions
Not meeting above characteristic	Low – 50 feet Moderate – 75 feet High – 100 feet	No recommendations at this time
Vernal pool	Low – 100 feet Moderate – 150 feet High – 200 feet Or develop a regional plan to protect the most important vernal pool complexes; buffers of vernal pools outside protection zones can then be reduced to: Low – 40 feet Moderate – 60 feet High – 80 feet	No intensive grazing or tilling of wetland
Category I Wetlands (For wetlands scoring 22 points or more for all functions or having the "Special Characteristics" identified in the rating system)		
Wetlands of High Conservation Value	Low – 125 feet Moderate – 190 feet High – 250 feet	No additional surface discharges to wetland or its tributaries; no septic systems within 300 feet of wetland; restore degraded parts of buffer
High level of function for habitat (score for habitat 8 to 9 points)	Low – 100 feet Moderate – 150 feet High – 200 feet	Restore degraded parts of buffer; maintain connections to other habitat areas
Moderate level of function for habitat (score for habitat 5 to 7 points)	Low – 75 feet Moderate – 110 feet High – 150 feet	No recommendations at this time
High level of function for water quality improvement (8 to 9 points) and low for habitat (less than 5 points)	Low – 50 feet Moderate – 75 feet High – 100 feet	No additional surface discharges of untreated runoff
Not meeting above characteristics	Low – 50 feet Moderate – 75 feet High – 100 feet	No recommendations at this time

(g) Wetland buffers shall be retained in their natural conditions unless change is proposed in a portion of a wetland buffer that will have a positive effect on the wetland or adequate mitigation cannot or will not be provided by pre-development conditions. Integrity of the wetland shall be maintained as a function of the buffer.

(h) Buffer Averaging

(i) Standard buffer widths may be modified by the Shoreline Administrator for an averaging to improve wetland protection when all of the following conditions are met:

(A) Buffer averaging is necessary to avoid hardship to the person seeking this option, which is caused by circumstances peculiar to the property, to accomplish the purposes of the proposed development or land-use activity, and no reasonable alternative is available.

(B) The wetland contains variation in sensitivity due to existing physical characteristics, as confirmed in a Critical Area Report, and the reduction from standard buffer widths will occur only contiguous to the area of the wetland determined to be least sensitive.

(C) The wetland has significant differences in characteristics that affect its habitat functions, such as a wetland with a forested component adjacent to a degraded emergent component, or a "dual-rated" wetland with a Category I area adjacent to a lower rated area.

(D) The buffer is increased adjacent to the higher functioning area of habitat or more sensitive portion of the wetland and decreased adjacent to the lower functioning or less sensitive portion.

(E) The wetland contains variation in sensitivity due to existing physical characteristics, as confirmed in a Critical Area Report, and the reduction from standard buffer widths will occur only contiguous to the area of the wetland determined to be least sensitive.

(F) Buffer width averaging will not adversely impact wetland ecological functions and values.

(G) The total area of the buffer after averaging is equal to the area required without averaging.

(H) The buffer at its narrowest point is never less than 3/4 of the required width.

(i) Allowed uses in buffers. Low-impact uses and activities, which are consistent with the purpose and function of the habitat buffer and do not detract from its integrity, may be permitted within the buffer depending on the sensitivity of the habitat involved, provided that such activity shall not result in a decrease in wetland ecological functions and values and shall not prevent or inhibit the buffer's recovery to at least pre-altered condition or function. Examples of uses and activities, which may be permitted in appropriate cases, as long as the activity does not retard the overall recovery of the buffer, include removal of noxious vegetation, pedestrian trails, and viewing platforms.

(i) Trails. Public and private trails may be allowed within wetland buffers where they can be demonstrated in a Critical Area Report that the wetland and wetland buffer ecological functions and values will not be degraded by trail construction or use. Trail planning, construction, and maintenance shall adhere to all of the following criteria:

(A) Permeable surface trail alignment shall be located only in the outer 25% of a wetland buffer width, except as needed to access viewing platforms or to cross the wetland. Private trails shall be a maximum of 5 feet wide, but public trails may be as wide as 7 feet if they are part of a regional trail network. Trails may be placed on existing levees, railroad grades, or road grades where those features exist in any part of a wetland buffer and may occupy the full width of the levee, railroad grade, or road grade.

(B) Trails and associated viewing platforms shall be constructed of pervious materials, unless impervious surfaces are necessary for conformance to the ADA. The trail surface shall meet all other requirements, including water quality standards set forth in the Stormwater Management Manual for Eastern Washington (September 2004) or as revised.

(C) Trail alignment shall avoid trees in excess of 6 inches in diameter of any tree trunk at a height of 4.5 feet above the ground on the upslope side of the tree where feasible.

(D) Access trails to viewing platforms within the wetland may be provided. Trail access and platforms shall be aligned and constructed to minimize disturbance to valuable

functions of the wetland, or its buffer and other habitat elements, and still provide enjoyment of the resource.

(E) Buffer widths shall be increased, where possible, equal to the width of the trail corridor, including disturbed areas.

(ii) Utilities. The criteria for alignment, construction, and maintenance within the wetland buffers and Section XX.XX.480, Utilities, shall apply to utility corridors within wetland buffers. In addition, corridors shall not be aligned parallel with any stream channel unless the corridor is outside the buffer, and crossings shall be minimized. Installation shall be accomplished by boring beneath the scour depth and hyporheic zone of the waterbody where feasible. Crossings shall be contained within the existing footprint of an existing or new road or utility crossing where possible. Otherwise, crossings shall be at an angle greater than 60 degrees to the centerline of the channel. The criteria for stream crossings shall also apply.

(iii) Stormwater Management Facilities. Stormwater management facilities are limited to stormwater dispersion outfalls and bio-swales. They may be allowed within the outer 25% of the buffer of Category III or IV wetlands only, provided that:

(A) No other location is feasible, and

(B) The location of such facilities will not degrade the functions or values of the wetland.

(iv) Stormwater management facilities are not allowed in buffers of Category I or II wetlands.

(j) Activities or uses that would strip the shoreline of vegetative cover, cause substantial erosion or sedimentation, or affect aquatic life should be prohibited.

XX.XX.530 Critical Aquifer Recharge Areas

(1) Purpose

(a) The purpose and intent of this section is to safeguard groundwater resources within the shoreline jurisdiction from hazardous substance and hazardous waste pollution by controlling or abating future pollution from new land uses or activities.

(2) Classification. Aquifer recharge areas shall be classified as following:

(a) Wellhead Protection Areas. Wellhead protection areas may be defined by the boundaries of the 10-year time of groundwater travel or boundaries established using alternate criteria approved by the Washington State Department of Health in those settings where groundwater time of travel is not a reasonable delineation criterion, in accordance with WAC 246-290-135.

(b) Sole Source Aquifers. Sole source aquifers are areas designated by the U.S. Environmental Protection Agency pursuant to the Federal Safe Water Drinking Act.

(c) Susceptible Groundwater Management Areas. Susceptible groundwater management areas have been designated in an adopted groundwater management program developed pursuant to WAC 173-100.

(d) Special Protection Areas. Defined pursuant to WAC 173-200-090.

(e) Moderately, highly vulnerable, or highly susceptible aquifer recharge areas. Aquifer recharge areas that are moderately, highly vulnerable, or highly susceptible to degradation or depletion due to hydrogeologic characteristics are delineated by a hydrogeologic study prepared in accordance with Ecology guidelines or criteria.

(3) Determination Process

(a) The following progressive steps will occur upon a determination by the Coalition, per Sections XX.XX.500 (6) and (7), General Review Process and Critical Area Report Requirements, that a critical aquifer recharge area may exist on a site proposed for a shoreline substantial development permit:

(i) The Shoreline Administrator will determine if the proposed development activity is within an Area of Project Review.

(ii) If it is determined by the Shoreline Administrator that the proposed development activity is within an Area of Project Review, compliance with Sections XX.XX.500 (6) and (7), General Review Process and Critical Area Report Requirement, of this SMP and development of a Critical Area Report is required.

(4) Standards. The following standards will apply to development proposals determined to be located within critical aquifer recharge areas, as defined and described herein:

(a) Regulated Activities. A site analysis and Critical Area Report is required for uses and activities within shoreline jurisdiction that have the potential to impact aquifer recharge areas.

(b) Activities proposed within an Area of Project Review for Critical Aquifer Recharge, shall comply with local, state, and federal agency requirements for each of the following: connections to sanitary sewer systems; on-site sewage disposal systems; connections to public water supplies; existing and proposed wells; and water rights-related issues.

(c) Surface impoundments, defined by WAC 173-303, are not allowed in shoreline jurisdiction.

(d) Regulated activities and uses may only be permitted in a critical aquifer recharge area if the applicant can show that the proposed activity will not adversely affect the recharging of the aquifer and that the proposed activity will not cause contaminants to enter the aquifer.

(e) Regulated activities must, at a minimum, comply with the water source protection requirements and recommendations of the federal Environmental Protection Agency, Washington State Department of Health, and the local Health Department, as applicable.

(f) Activities proposed within a critical aquifer recharge area that have a high potential for contamination are not allowed unless it is demonstrated that no other options are feasible. A hydrogeologic study for these proposed activities shall be required and shall be prepared by a qualified geologist. The study shall focus, at a minimum, on the following:

(i) Geologic setting, site location map, topography, and well logs for the surrounding area

(ii) Current available data on springs or seeps for the surrounding area

(iii) Background water quality data

(iv) Water source/supply to facility

(v) Depth/location of any perched water tables or geological features that could form perch water tables if recharge is increased

(vi) Groundwater flow direction and gradient

(vii) An analysis of physical parameters of the aquifer to include:

(A) Soil types

(B) Hydraulic conductivity

(C) Annual recharge

(D) Depth to water

(E) Importance of the Vadose Zone based on the geology above the aquifer

(viii) Description (both qualitative and quantitative) of the impacts the project will have on surrounding wells

(ix) Discussion of the effects of proposed project on groundwater resources

(x) Other information required by the Shoreline Administrator in consultation with other agencies of expertise

(g) Mitigation measures for groundwater protection may be required. Implementation of protection measures to prevent contamination is required. A qualified professional shall discuss potential mitigation measures if the proposed project should have an adverse impact on groundwater resources.

(h) Parks, Schools, and Recreation Facilities. Fertilizer and pesticide management practices of schools, parks, other recreation facilities, and similar uses shall use BMPs as prescribed in Section XX.XX.250 (5).

(i) All major and minor developments shall have an informational note placed on the face of plat stating, "This subdivision is located within an aquifer recharge area. BMPs shall be used for the containment of stormwater and the application of pesticides and fertilizers."

XX.XX.540 Frequently Flooded Areas

(1) Purpose

(a) The purpose of this section is to promote the public health, safety, and welfare of the community by recognizing potential hazards that may be caused by development in areas where severe flooding is anticipated to occur. The intent of this section is to assist with minimizing public and private losses due to flood hazards by avoiding development in frequently flooded areas within the shoreline jurisdiction and implementing protective measures contained in the Coalition's SMP and local Flood Hazard Protection Ordinances, as updated.

(2) Classification. Classification of frequently flooded areas, according to FEMA minimum requirements, should include, at a minimum, the 100-year floodplain designations of FEMA and the National Flood Insurance Program. The following categories of frequently flooded areas established for the purpose of classification are:

(a) Floodways. The channel of a stream, plus any adjacent floodplain areas, that must be kept free of encroachment so the base flood can be carried without substantial increases in flood heights.

(b) Floodplains. The floodway, special flood hazard areas, and CMZs, as applicable.

(c) Special Flood Hazard Areas. The area adjoining the floodway, which is subject to a 1% or greater chance of flooding in any given year and determined by the Federal Insurance and Mitigation Administration.

(3) Designation. The Area of Project Review for the purposes of this section include all Coalition lands and waters within the shoreline jurisdiction that meet the following criteria:

(a) Currently identified as frequently flooded areas by the Federal Insurance & Mitigation Administration in a scientific and engineering report titled the Flood Insurance Study for the respective county, city, or town with accompanying flood insurance rate maps (FIRMs). If and when this study becomes updated to reflect new conditions, designation of frequently flooded areas will include the changes.

(b) Within the 100-year floodplain, or having experienced historic flooding or CMZ identified through mapping developed as part of the 2014 SMP update. The CMZ is considered to be that area of a stream channel, which may erode as a result of normal and naturally occurring processes and has been mapped consistent with WAC 173-26-221(3)(b).

(4) Determination Process

(a) The following progressive steps will occur upon a determination by the Coalition, per Sections XX.XX.500 (6) and (7), General Review Process and Critical Area Report Requirements, that a frequently flooded area may exist on a site proposed for a development permit:

(i) The Shoreline Administrator will determine if the proposed development activity is within an Area of Project Review.

(ii) If it is determined by the Shoreline Administrator that the proposed development activity is within an Area of Project Review, compliance with the local Flood Damage Prevention Ordinance, as amended, is required. Completion of a Critical Area Report is not required for frequently flooded areas.

(5) Management Recommendations and Protection Standards. The following management recommendations and standards will apply to development proposals determined to be located within frequently flooded areas, as defined and described herein:

(a) New development is permitted when sited and designed in a manner that does not alter the direction, velocity, or volume of floodwaters in a manner that adversely impacts other properties within or adjacent to frequently flooded areas.

(b) All developments must follow the provisions of the local jurisdiction's Flood Damage Prevention provisions, as amended and listed below:

(i) Asotin County 2009 Flood Damage Prevention Ordinance (Asotin County and City of Clarkston)

(ii) Garfield County 2008 Critical Areas Ordinance Section 12.0, Frequently Flooded Areas

(iii) Columbia County Code, Chapter 16.20, Flood Damage Prevention (Columbia County and Town of Starbuck)

(c) Water quality standards for frequently flooded areas shall correspond with appropriate state and federal standards.

(d) CMZs shall be regulated consistent with this section and provisions in Section XX.XXX.270(2).

XX.XX.550 Geologically Hazardous Areas

(1) Purpose

(a) The purpose of this section is to reduce the threats to public health and safety posed by geologic hazards within the shoreline jurisdiction. The intent is to reduce incompatible development in areas of significant geologic hazard. Development incompatible with geologic hazards may not only place itself at risk, but also may increase the hazard to surrounding development. Some geologic hazards can be reduced or mitigated by engineering, design, or modified construction or altering mining practices so risks to health and safety are minimized. When technology cannot reduce the risks to acceptable levels, development in the hazard area is best to be avoided.

(2) Identification and Designation

(a) Geologically Hazardous Areas shall be designated consistent with the definitions provided in WAC 365-190-080(4). Geologically Hazardous Areas shall include all of the following:

(i) Erosion hazards

(ii) Landslide hazards

(iii) Mine hazards

(iv) Seismic hazards

(b) Erosion Hazard Areas. Those areas identified as having high or very high water erosion hazard by the U.S. Department of Agriculture Natural Resources Conservation Service as designated by the Natural Resources Conservation Service local office.

(c) Landslide Hazard Areas. Those areas potentially subject to landslides based upon the following combination of geologic, topographic, and hydrologic factors are as follows:

(i) Areas of historic failure with all of the following characteristics:

(A) Areas having a 30% slope or steeper, a vertical relief of 30 feet or more, and soil types identified by the Natural Resource Conservation Service as unstable and prone to landslide hazard

(B) Areas designated as quaternary slumps, earthflows, mudflows, lahars, or landslides on maps or technical reports published by USGS, such as topographic or geologic maps, or the Geology and Earth Resources Division of the Washington DNR, or other documents authorized by government agencies.

(ii) Areas with all of the following characteristics:

(A) A gradient of 15% or greater

(B) Hillsides intersecting geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrock

(C) Springs or groundwater seepage

(D) Areas that have shown movement during the Holocene Epoch or which are underlain or covered by mass wastage debris of the epoch

(E) Slopes that are parallel or sub-parallel to planes of weakness (such as bedding planes, joint systems, and fault planes) in subsurface materials

(F) Slopes having gradients greater than 80% subject to rockfall during seismic shaking

(G) Areas potentially unstable as a result of rapid stream incision and streambank erosion

(H) Areas located in a canyon or on an active alluvial fan, presently or potentially subject to inundation by debris flows or catastrophic flooding

(I) Any area with a slope of 40% or steeper and with a vertical relief of 10 or more feet, except areas composed of solid rock. A slope is delineated by establishing its toe and top and measured by averaging the inclination over at least 10 feet of vertical relief.

(d) Mine Hazard Areas. Those areas that fall within 100 horizontal feet of a mine opening at the surface or an area designated as a mine hazard area by the Washington State DNR.

(e) Seismic Hazard Areas. Those areas subject to severe risk of damage as a result of earthquake-induced ground shaking, slope failure, settlement, soil liquefaction, or surface faulting, include the following characteristics:

(i) Areas described in Section XX.XX.550 (2)(b) and (c) or having a potential for soil liquefaction and soil strength loss during ground shaking.

(ii) Areas located on a Holocene fault line identified by USGS investigative maps and studies.

(f) Seismic hazards shall be identified in the Washington State DNR seismic hazard susceptibility maps for Eastern Washington and other geologic resources.

(3) Mapping of Geologically Hazardous Areas

(a) The approximate location and extent of Geologically Hazardous Areas are shown in the adopted critical area maps. The adopted critical area maps include all of the following:

(i) USGS landslide hazard, seismic hazard, and volcano hazard maps

(ii) DNR slope stability maps

(iii) FEMA flood insurance maps

(iv) Locally adopted maps

(b) These maps are to be used as a guide for the Coalition, project applicants, and/or property owners, and may be continuously updated as new critical

areas are identified. They are a reference and do not provide a final critical area designation.

(4) Determination Process

(a) Determination of Need for Geologic Hazard Area Report. A Geologic Hazard Area Detailed Study of a geologic hazard area shall be required if the following indicators are present:

(i) The project area is listed in the resources in Section XX.XX.550 (5) as possessing either a Known or Suspected Risk for erosion, landslide, flood, seismic, or mine hazard.

(ii) The project area is listed in the resources in Section XX.XX.550 (5) as possessing an Unknown Risk for erosion, landslide, flood, seismic, or mine hazard and any of the following conditions are identified by the applicant or Coalition:

(A) A qualified geologist finds that any of the following exist: evidence of past significant events of the hazard in question on or adjacent to the site; the presence of necessary and sufficient factors for events of the hazard in question on or adjacent to the site; or reasonable uncertainty concerning the hazard the potential for significant risk to or from the proposed activity.

(B) The Shoreline Administrator possesses a reasonable belief that a geologic hazard may exist. Such reasonable belief shall be supported by a site visit and subsequent consultation with a qualified geologist.

(5) Geotechnical Report. The Shoreline Administrator may require a Geotechnical Report prepared by a civil engineer or geologist who is licensed to practice in the State of Washington. The Geotechnical report shall include the following information:

(a) A detailed narrative describing the project, including, but not limited to, associated grading and filling, structures, and utilities.

(b) Classification of the type of hazard that exists.

(c) Site plan that depicts the following information: location of all proposed improvements; height of slope; slope gradient; cross section of the site; location of springs, seeps, or other surface expressions of groundwater; and any evidence of surface or stormwater runoff.

(d) A geotechnical evaluation that includes, at a minimum, a description and/or evaluation of all of the following information:

(i) Site location, topography, drainage, and surface waterbodies.

(ii) Soils and geologic units underlying the site.

(iii) An assessment of the geologic characteristics and engineering properties of the soils, sediments, and/or rock of the subject property and potentially affected adjacent properties. Soil analysis shall be accomplished in accordance with the Unified Soil Classification System.

(iv) Determination of height of slope and slope gradient, including slope cross sections.

(v) A description of load intensity, including surface and groundwater conditions, public and private sewage disposal systems, fills and excavations, and all structural development.

(vi) An estimate of slope stability and the effect construction and placement of structures will have on the slope throughout the estimated life of the structure.

(vii) An estimate of the bluff retreat rate, which recognizes and reflects potential catastrophic events such as seismic activity or a 100-year storm event.

(viii) An assessment describing the extent and type of vegetation.

(ix) A detailed description of the project, its relationship to geologic hazard(s), and its potential impact upon the hazard area, the subject property, and affected adjacent properties.

(e) A proposed mitigation plan pursuant to Section XX.XX.510 (9).

(f) Qualifications of Qualified Geotechnical Professional. Critical Area Reports prepared pursuant to this section shall be prepared by a professional engineer registered in the State of Washington, trained and qualified to analyze geologic, geotechnical, hydrologic, and groundwater flow systems, or a geologist or geotechnical engineer who has received a degree from an accredited 4-year college or university and who has relevant training and experience in analyzing geologic, geotechnical, hydrologic, and groundwater flow systems. Such qualifications shall be demonstrated to the satisfaction of the Shoreline Administrator.

(g) The Shoreline Administrator shall evaluate documentation submitted pursuant to this section and condition permit approvals to minimize risk on both the subject property and proposed improvements, as well as affected adjacent properties. All conditions on approvals shall be based on known, available, and reasonable methods of prevention, control, and

treatment. Evaluation of geotechnical reports may also constitute grounds for denial of the proposal. Any Coalition permits or approvals issued shall contain a statement on the face of the permit notifying the permit recipient that the permit involves work within or adjacent to a geologic hazard and/or its buffer and that the permit recipient assumes the risk and associated liability for such activity.

(6) Protection Standards

(a) Erosion and Landslide Hazard Areas

(i) Grading

(A) Clearing, grading, and other construction activities shall not aggravate or result in slope instability or surface sloughing.

(B) Undergrowth shall be preserved to the extent practicable.

(C) No dead vegetation, fill, or other foreign material shall be placed within a landslide hazard area, other than that approved for bulkheads or other methods of stabilization, unless a geotechnical report shows that the activity will not exacerbate landslide hazards.

(D) Ground disturbance shall be minimized to the extent practicable.

(ii) Ground Surface Erosion Control Management

(A) There shall be minimum disturbance of vegetation in order to minimize erosion and maintain existing stability of hazard areas.

(B) Vegetation removal on the slopes of banks between the OHWM and the top of the banks shall be minimized.

(C) Vegetation and organic soil material shall be removed from a fill site prior to the placement of clean earthen material.

(D) Vegetative cover shall be re-established on any disturbed surface to the extent practicable.

(E) To the extent practicable, soil stabilization materials, such as filter fabrics, riprap, and similarly designed materials, shall be placed on any disturbed surface when future erosion is likely.

(iii) Drainage

(A) Surface drainage, including downspouts, shall not be directed across the face of a hazard area; if drainage must be discharged from the top of a hazard area to its toe, it shall be collected above the top and directed to the toe by tight line drain and provided with an energy-dissipative device at the toe for discharge to a swale or other acceptable natural drainage areas.

(B) Stormwater retention and detention systems, including infiltration systems utilizing buried pipe, may be used if a geotechnical assessment indicates such a system shall not affect slope stability and the system is designed by a licensed civil engineer; the licensed civil engineer shall also certify that the system is installed as designed.

(iv) Buffers

(A) An undisturbed 30-foot buffer, as measured on the top surface, is required from the top, toe, and along all sides of any existing landslide or erosion hazard areas.

(B) Based on the results of a geotechnical assessment, the Shoreline Administrator may increase or decrease the buffer.

(C) The buffer shall be clearly staked before any construction or clearing (grading) takes place.

(D) Normal non-destructive pruning and trimming of vegetation for maintenance purposes, or thinning of limbs of individual trees to provide a view corridor, shall not be subject to these buffer requirements.

(v) Design Guidelines

(A) Foundations shall conform to the natural contours of the slope and foundations should be stepped or tiered where possible to conform to existing topography.

(B) Roads, walkways, and parking areas shall be designed with low gradients or be parallel to the natural contours of the site.

(C) To the extent practicable, access shall be in the least sensitive area of the site.

(D) Structures and improvements shall be clustered to avoid Geologically Hazardous Areas and other critical areas.

(E) Structures and improvements shall minimize alterations to the natural contours of the slope, and foundations shall be tiered where possible to conform to existing topography.

(F) Structures and improvements shall be located to preserve the most critical portion of the site and its natural landforms and vegetation.

(G) The proposed development shall not result in greater risk or a need for increased buffers on neighboring properties.

(H) New development that would require structural shoreline stabilization throughout the life of the development is prohibited except when the applicant can demonstrate that stabilization is necessary to protect allowed uses where no alternative locations are available and no net loss of ecological functions will result.

(I) The use of a retaining wall that allows the maintenance of existing natural slopes is preferred over graded artificial slopes.

(J) Development shall be designed to minimize impervious lot coverage.

(K) New development, or the creation of new lots, that would cause foreseeable risk from geological conditions to people or improvements during the life of the development is prohibited.

(b) Additional Standards for Erosion and Landslide Hazard Areas

(i) No critical facilities shall be constructed or located within an erosion or landslide hazard area.

(ii) No new structures shall be located on a permanent foundation within an erosion or landslide hazard area, unless the foundation is located at a distance landward of the OHWM that is greater than or equal to the amount of land that is expected to erode within the next 30 years as determined by the Shoreline Administrator.

(iii) New septic system drainfields in an erosion hazard area shall be located landward of any new structure.

(c) Mine Hazard Areas. Development within a mine hazard area is prohibited.

(d) Seismic Hazard Areas. Development within areas that meet the classification criteria for seismic hazard areas shall comply with the Uniform Building Code requirements for Seismic Risk Zone 2a.

(e) Mitigation. When mitigation is required by this section, a mitigation plan shall be prepared by a Qualified Geotechnical Professional and shall include the following information:

(i) A discussion on how the project has been designed to avoid and minimize the impacts to Geologically Hazardous Areas

(ii) A recommendation for the minimum building setback from any bluff edge and/or other geologic hazard, based upon the Geotechnical Report

(iii) The location and methods of drainage, locations and methods of erosion control, a vegetation management and/or restoration plan, and/or other means for maintaining long-term stability of slopes

(iv) Address the potential impact of mitigation on the hazard area, the subject property, and proposed improvements and affected adjacent properties

(v) A temporary erosion and sedimentation control plan

(vi) A drainage plan for the collection, transport, treatment, and discharge of surface water

(vii) Demonstration of compliance with this section

XX.XX.560 Fish and Wildlife Habitat Conservation Areas

(1) Purpose

(a) The purpose of this section is to provide a framework to evaluate the development, design, and location of buildings to ensure critical fish and wildlife habitat within the shoreline jurisdiction is preserved and protected, in order to ensure no net loss of ecological function and avoid habitat fragmentation. These regulations seek to protect critical habitat areas so populations of endangered, threatened, and sensitive species are given consideration during the shoreline development review process.

(2) Identification and Designation

(a) The following information, data, and resources are used by the Coalition to identify and designate Fish and Wildlife Habitat Conservation Areas, as defined below.

(i) Areas within which federal and/or state-listed threatened or endangered fish or wildlife species exist, or state-sensitive, state-candidate, and state-monitor species have a primary association, and as designated under the Federal Endangered Species Act or within the WAC 232-12 (Priority Species and Habitats). Also see Section XX.XX.500 (5).

(ii) Riparian Habitat Areas. For the protection of habitat along rivers, streams, and lakes, the buffer widths provided in Table XX.XX.210 (2-4) apply.

(iii) Naturally occurring ponds fewer than 20 acres and their submerged aquatic beds that provide fish or wildlife habitat.

(iv) The following important habitat areas, which are not based on use by a specific species, include those areas protected by their conservation ownership or management status, in addition to the protection standards within this section:

(A) National wildlife refuges, national monuments, natural area preserves, or any preserve or reserve designated under WAC 332-30-151

(B) State natural area preserves or natural resource conservation areas identified by state law and managed by DNR

(v) Mapping information sources for identification of Fish and Wildlife Habitat Conservation Areas include, but are not limited, to:

(A) WDFW Priority Habitat and Species maps

(B) Wetlands mapped under the National Wetland Inventory by the U.S. Department of Interior, Fish and Wildlife Service

(C) WDFW/DNR, Washington Rivers Inventory System maps

(D) Maps and reference documents in the Coalition SMP Inventory, Analysis, and Characterization Report, as applicable

(vi) The Coalition allows for the nomination of Species/Habitats of Local Importance. In order to nominate Species/Habitats of Local Importance as candidates for designation within the category of Important Habitat Areas, an individual or organization must:

(A) Demonstrate a need for special consideration

(B) Propose relevant management strategies considered effective and within the scope of this section

(C) Provide species habitat location(s) on a map (scale of 1:24,000)

(vii) It is recognized that the list of Fish and Wildlife Habitat Conservation Areas (including species and habitats) will change from time to time. Further, the locations of species may also change over time. With this, the Shoreline Administrator will maintain and update, as necessary, a list and mapping data of federal and state threatened, endangered, sensitive, monitoring, and candidate species and habitats for the SE WA region. Coordination with the necessary federal and state agencies will need to occur to obtain the applicable data updates. Restrictions may apply as to the Coalition's ability to disseminate, both written and mapped sensitive fish and wildlife information, to the general public.

(3) Determination Process

(a) The Shoreline Administrator will review each development permit application in accordance with Sections XX.XX.500 (6) and (7), General Review Process and Critical Area Report Requirements, of this SMP to determine if the provisions of this section will be applied to the project.

(b) In making the determination, the Shoreline Administrator may use any of the inventories or reference maps identified in Section XX.XX.500 (5) and Section XX.XX.560 (4).

(c) The following progressive steps will occur upon a determination by the Shoreline Administrator, per Sections XX.XX.500 (6) and (7), General Review Process and Critical Area Report Requirements, that Fish and Wildlife Habitat Conservation Area may exist on a site proposed for a development permit.

(i) The Shoreline Administrator will determine if the proposed development activity is within an Area of Project Review. If the proposal is in or near an Area of Project Review, a site inspection and consultation with federal and/or state wildlife agency personnel or a qualified biologist may be conducted to more definitively determine if a Fish and Wildlife Habitat Conservation Area exists on the site if deemed necessary by the Coalition.

(ii) If it is determined by the Shoreline Administrator that the proposed development activity is within an Area of Project Review, compliance with Sections XX.XX.500 (6) and (7), General Review Process and Critical Area Report Requirements, of this SMP and

development of a Critical Area Report is required. If it is determined that the activity is not in an Area of Project Review, this section shall not apply to the review of the proposed permit activity.

(4) Fish/Wildlife Habitat Assessment and Identification

(a) If it is determined through the process identified herein that a Fish and Wildlife Habitat Conservation Area exists on a site that is the subject of a development permit application, a fish/wildlife habitat boundary survey and evaluation shall be conducted by a professional biologist, as appropriate, who is knowledgeable of fish and wildlife habitat within the region. The fish and wildlife habitat boundary shall be field staked, as necessary, by the biologist and identified on all final plats, maps, and associated documentation.

(b) The fish/wildlife habitat boundary and any associated buffer shall be identified on all plats, maps, plans, and specifications submitted for the project.

(5) Fish/Wildlife Habitat Management and Mitigation Plan

(a) A fish/wildlife habitat management and mitigation plan is required for all proposed developments determined to be within a Fish and Wildlife Habitat Conservation Area.

(b) When required, a fish/wildlife habitat management and mitigation plan shall be prepared by a professional biologist who is knowledgeable of fish and wildlife habitat within the region.

(c) The fish/wildlife habitat management and mitigation plan shall demonstrate, when implemented, that the net loss of ecological function of habitat requirement is met.

(d) Based on the most current scientific and technical information, per Section XX.XX.500 (5), the fish/wildlife habitat management and mitigation plan shall identify how impacts from the proposed project shall be mitigated, as well as the necessary monitoring and contingency actions for the continued maintenance of the Fish and Wildlife Habitat Conservation Area and any associated buffer.

(e) The fish/wildlife habitat management and mitigation plan shall include maps and narrative descriptions that address the mitigation sequencing per Section XX.XX.230 (2).

(f) A plan by the applicant that explains how any adverse impacts created by the proposed development will be mitigated, shall include, but not be limited to, the following techniques:

(i) Use of any federal, state, or local management recommendations which have been developed for the species or habitats in the area

(ii) Application of appropriate and adequate buffers (see Table XX.XX.210 (2-4))

(iii) Preservation of critically important plants and trees

(iv) Limitation of access to the habitat conservation area

(v) Seasonal restriction of construction activities

(vi) Establishment of a timetable for periodic review of the plan

(g) A detailed discussion of ongoing management practices which will protect the habitat conservation area after the project site has been fully developed, including proposed monitoring, contingency, maintenance, and surety programs.

(6) Protection Standards

(a) No development permit or approval pursuant to this section shall be granted unless adverse effects to Fish and Wildlife Habitat Conservation Areas resulting from proposed development activities located within shoreline jurisdiction and within a designated Fish and Wildlife Habitat Conservation Areas are mitigated pursuant to Sections XX.XX.510 and XX.XX.560 (7).

(b) Fish and Wildlife Habitat Conservation Areas shall be protected in accordance with the Shoreline Administrator's determination of appropriate conditions and site-specific information supplied by the applicant. In making such a determination, the Shoreline Administrator may solicit and consider comments and recommendations provided by Ecology, WDFW, and any Technical Interdisciplinary Team participating in review for the proposed development. Possible conditions may include the following:

(i) Applying buffers

(ii) Preservation of critically important vegetation

(iii) Limitation of access to the habitat conservation area

(iv) Seasonal restriction(s) for construction activities

(c) Buffers. Fish and Wildlife Habitat Conservation Area Buffers shall be applied consistent with the methodology provided in paragraph (h) below and standard provided in Table XX.XX.210 (2).

(d) Special Provisions – Anadromous Salmonids

(i) Activities, uses, and alterations proposed to be located in waterbodies used by anadromous salmonids, or in areas that affect such waterbodies, shall give special consideration to the preservation and enhancement of anadromous salmonid habitat, including, but not limited to, the following:

(A) Activities shall be timed to occur only during the allowable work window, as designated by the WDFW.

(B) The activity is designed so that it will minimize the degradation of the functions or values of the fish habitat or other critical areas.

(C) Any impact on the ecological functions and values of the habitat conservation area are mitigated in accordance with an approved Critical Area Report.

(ii) Structures that prevent the migration of anadromous salmonids shall not be allowed in the portion of the waterbodies currently used by salmonids. Fish bypass facilities shall be provided that allow the upstream migration of adult fish and prevent juveniles migrating downstream from being trapped or harmed.

(iii) Fills waterward of the OHWM, when authorized, shall minimize the adverse impacts on anadromous salmonids and their habitat, shall mitigate any unavoidable impacts, and shall only be allowed for water-dependent uses or for uses that enable public access or recreation for significant numbers of the public.

(e) Special Provisions – Wildlife. Bald eagle habitat shall be protected pursuant to the Washington State Bald Eagle Protection Rules (WAC 232-12-292).

(f) Special Provisions – Wetland Habitats. All proposed activities within or adjacent to habitat conservation areas containing wetlands shall, at a minimum, conform to the wetland development performance standards set forth in Section XX.XX.520, Wetlands, in addition to meeting the habitat conservation area standards in this section.

(g) Special Provisions – Riparian Habitat. Unless otherwise allowed in this section, all structures and activities shall be located outside of the riparian habitat buffers.

(h) Variable Buffer Widths

The methodology for applying a variable buffer approach to determine buffer widths includes the following steps:

(i) Determine (approximate) the location of the OHWM or top of bank (as applicable) for the parcel of the proposed development. For this method, the OHWM is assumed to be the area next to the stream channel where the vegetation stops and the rock and cobble of the channel begins, or the top of bank in steep bank conditions, as applicable. Aerial imagery provided to the Counties as part of the dataset developed for the SMP update is the imagery that is to be used to identify the OHWM or top of bank. A site visit, in addition to consulting aerial imagery, is recommended.

(ii) Confirm the development proposal is outside of 150 feet of the shoreline approximated OHWM, or outside of established CREP contract or conservation easement. If the development is outside of these boundaries, then no further work to identify riparian areas is required. If a development is proposed within 150 feet of the approximated OHWM, then proceed to Step iii.

(iii) Determine the presence of any known or suspected wetland, steep slope areas, CMZs, priority habitat or species mapping, or other potential condition identified next to or along the shoreline adjacent to the proposed development. If yes, then address requirement(s) associated with one or more of these conditions, and apply applicable protection conditions. Is the development still expected to occur within 150 feet of the OHWM? If yes, then go to Step iv. If no, then stop this procedure, as these other requirements are also protective of riparian functions.

(iv) Is there a functional break wholly within 150 feet of the OHWM (established road, railroad bed, parking area or other similar continuous development feature that provides a continuous functional break in the riparian area) that extends along the edge of the proposed development area/parcel between the site development area and the waterbody? If no, proceed to Step v. If yes, then establish the riparian area upland boundary to the waterward edge of the facility maintenance area (disturbed area). Development would need to be located on the landward side of the functional break.

(v) Delineate the upland extent of the riparian area as defined above—the area where there is a distinct change in species composition and vegetation structure—using the 2013 aerial imagery (as provided in the GIS dataset provided to each of the Counties as part of the SMP update). Measure directly adjacent and waterward of the proposed development on a horizontal plane from the

approximate OHWM to the edge of the riparian area. The line along the edge of the riparian area could be highly variable within a given parcel, as the area where the change in vegetation occurs is based on the underlying topographic elevation and area where the waterbody influences riparian vegetation growth. For example, in some areas, the vegetation could extend out to 150 feet or more and in others it could be much narrower.

(vi) Add 15 feet beyond the edge of the riparian area (up to 150 feet) and draw a line delineating the preliminary location of the riparian buffer outer boundary.

(vii) Share findings with Ecology for review and comment.

(viii) Address Ecology's comments and come to agreement on the riparian area extent and associated outer riparian buffer boundary.

(ix) Condition the development to occur outside the riparian buffer and apply other conditions as applicable, and copy Ecology on the approval with conditions documentation.

(x) Additional setbacks for structures or other facilities would be added on to identified buffer width, as applicable.

(xi) Buffers in Conjunction with Other Critical Areas. Where other critical areas defined in this section fall within the waterbody buffer, the buffer area shall be the most beneficial of the buffers applicable to any applicable critical area.

(i) Administrative Buffer Width Averaging. The required buffer widths established in this SMP may be modified by the Shoreline Administrator for a development on existing legal lots of record in place at the time of adoption of this SMP, in accordance with the provisions of this section only where the applicant demonstrates all of the following:

(i) Averaging is necessary to avoid an extraordinary hardship to the applicant caused by circumstances peculiar to the property.

(ii) The designated buffer area contains variations in sensitivity to ecological impacts due to existing physical characteristics or the character of the buffer varies in slope, soils, or vegetation.

(iii) The total area contained within the buffer after averaging is no less than that contained within the standard buffer prior to averaging.

(iv) The buffer area width is not reduced by more than 25% in any location at its narrowest point.

(v) The buffer width averaging does not result in a net loss of ecological function.

(j) Shoreline Buffer Reductions. Shoreline buffers may be administratively modified as outlined below:

(i) Where a legally established road or railway, or other type of continuous development, crosses or extends along a shoreline or critical area buffer and is wider than 20 feet, the Shoreline Administrator may approve a modification of the minimum required buffer width to the waterward edge of the improved continuous development, provided the upland side of the continuous development area meets all of the following criteria:

(A) Does not provide additional protection of the shoreline waterbody or stream

(B) Provides little (less than 20%) to no biological, geological, or hydrological buffer functions relating to the riparian and upland portions of the buffer

(ii) Standard Buffer Reduction. Reductions of up to 25% of the standard buffer may be approved if the applicant demonstrates to the satisfaction of the Shoreline Administrator that a mitigation plan developed by a qualified professional pursuant to Section XX.XX.510 (9) indicates that enhancing the buffer (by removing invasive plants or impervious surfaces, planting native vegetation, installing habitat features, or other means) will result in a reduced buffer that functions at a higher level than the standard buffer.

(k) In-fill Development. In an effort to facilitate in-fill development in approved plats, the Coalition may approve requests to reduce the standard shoreline buffers up to a maximum of 50% for a new single-family residence and appurtenant structures in accordance with the following criteria:

(i) Where there are single-family residences within 150 feet on either side of the proposed residence in an existing plat, the buffer shall be determined as the greater of one of the following three options:

(A) A common line drawn between the nearest corners of the nearest residence,

(B) A common line calculated by the average of the nearest residence's existing buffer, or

(C) A 50% reduction of the standard buffer.

(ii) Where there is only a residence located within 150 feet on one side of the proposed residence in an existing plat, the standard buffer shall be determined as the greater of one of the following three options:

(A) A common line drawn between the nearest corner of the nearest residence and the nearest point of the standard buffer on the adjacent vacant lot,

(B) A common line calculated by the average of the nearest residence's setback and the standard buffer for the adjacent vacant lot, or

(C) A 50% reduction of the standard buffer.

(l) Proposed developments or land-use activities located within the shoreline jurisdiction and within a designated Habitat Conservation Area shall be reviewed for potential habitat impacts, considering the recommendations provided by Ecology, WDFW, and any Technical Interdisciplinary Team participating in review for the proposed development.

(m) Allowed uses in Fish and Wildlife Habitat Conservation Areas and Riparian Habitat Area Buffers.

(i) Roads, Bridges, and Utilities. Road, bridge, and utility maintenance, repair, and construction may be permitted across a Fish and Wildlife Habitat Conservation Area and/or buffers under all of the following conditions:

(A) It is demonstrated to the Shoreline Administrator that there are no alternative routes that can be reasonably used to achieve the proposed development.

(B) The activity will have minimum adverse impact to the Fish and Wildlife Habitat Conservation Area.

(C) The activity will not significantly degrade surface or groundwater.

(D) The intrusion into the Fish and Wildlife Habitat Conservation Area and its buffers is fully mitigated to achieve no net loss of ecological functions.

(ii) Limited park or recreational access to a Fish and Wildlife Habitat Conservation Area and/or stream buffers, provided that all of the following are satisfied:

(A) The access is part of a public park or a recreational resort development that is dependent on the access for its location and recreational function.

(B) The access is limited to the minimum necessary to accomplish the recreational function.

(C) The intrusion is fully mitigated to achieve no net loss of ecological functions.

(iii) Low-impact uses and activities that are consistent with the purpose and function of the stream setback and do not detract from its integrity. Examples of low-impact uses and activities include removal of noxious vegetation and stormwater management facilities such as grass-lined swales.

(n) Temporary and permanent erosion and sedimentation controls shall be provided to prevent the introduction of sediments or pollutants to waterbodies or watercourses within the Habitat Conservation Area.

(o) Clearing and grading shall be limited to that necessary for establishment of the use or development and shall be conducted to avoid significant adverse impacts and minimize the alteration of the volume, rate, or temperature of freshwater flows to or within the Habitat Conservation Area and any buffer required by this section.

(p) The proposed development shall not discharge hazardous substances to the Habitat Conservation Area that would have significant adverse impacts on that area.

(q) Stream flows shall be protected from changes to the normal flow, temperature, turbidity, and discharge to the maximum extent practicable.

(r) Septic drainfields and any required replacement drainfield area shall be at least 100 feet from the edge of any Habitat Conservation Area.

(s) Exceptions to the above protection standards may be allowed by the Shoreline Administrator based on a special report prepared by a qualified professional that demonstrates that such exception would not adversely impact the habitat system and achieve no net loss of ecological function of the Habitat Conservation Area.

(t) Activities may only be permitted in a stream or stream buffer if the applicant can show that the proposed activity will not degrade the ecological functions and values of the stream, stream buffer, or other critical area.

(u) Stream Crossings. Stream crossings shall be minimized, but when necessary, they shall conform to the applicable provisions of this SMP and other laws (see WDFW or Ecology).

(v) Stormwater Conveyance Facilities. Stormwater conveyance facilities may be permitted, provided that they are only located in the buffer when no practicable alternative exists outside the buffer. Stormwater facilities shall be planted with native plantings where feasible to provide habitat, and/or less intrusive facilities should be used.

(w) Floodway-dependent Structures. Floodway-dependent structures or installations may be permitted within streams or their buffers if allowed or approved by other ordinances or other agencies with jurisdiction. See Section XX.XX.540, Frequently Flooded Areas, for more information on allowed uses and activities within flood hazard areas.

(x) Trails. The criteria for alignment, construction, and maintenance of trails within wetlands and their buffers shall apply to trails within stream buffers. Outer buffer trails may not exceed 10 feet in width and may be constructed with impermeable surface materials if on-site infiltration is utilized.

(y) Utilities. The criteria for alignment, construction, and maintenance within the wetland buffers shall apply to utility corridors within stream buffers. In addition, corridors shall not be aligned parallel with any stream channel unless the corridor is outside the buffer and crossings shall be minimized. Installation shall be accomplished by boring beneath the scour depth and hyporheic zone of the waterbody where feasible. Crossings shall be contained within the existing footprint of an existing or new road or utility crossing where possible. Otherwise, crossings shall be at an angle greater than 60 degrees to the centerline of the channel. The criteria for stream crossings shall also apply.

(z) No net effective impervious surfaces may be created in the outer buffer area beyond what is otherwise permitted.

(aa) No structures or related improvements, including buildings or decks, shall be permitted within the stream buffer except as otherwise allowed in Section XX.XX.500, General Provisions, or in this SMP.

(7) Vegetation Management Actions. Vegetation management activities are regulated within a riparian habitat area buffer, and some activities are allowed without approval while others require an approved vegetation management plan.

(a) Activities that do not require a vegetation management plan and are allowed without a shoreline permit or letter of exemption include:

(i) Invasive species/noxious weed control within riparian buffers, if the criteria listed below are met:

(A) Hand removal or spraying of plants only;

(B) No area-wide vegetation removal/grubbing;

(C) Avoid impacts to native vegetation; and

(D) Reseed and replant with native plants (see approved list).

(ii) Trimming of tree branches located up to 6 feet vertically off the ground.

(iii) Removal of hazard trees as necessary due to dead, dying or disease, danger or impacts to property, provided the removed trees are replaced at a 2:1 ratio with species per the attached list. A determination of a hazard tree must be made by a qualified professional.

(b) Projects that propose to remove healthy native and non-native vegetation (excluding noxious/invasive species) within a shoreline riparian buffer shall provide a vegetation management plan consistent with requirements in section (7)(a), and meet the following standards:

(i) Applicant must demonstrate to the Shoreline Administrator's satisfaction that the proposed vegetation removal is consistent with No Net Loss and Mitigation Sequencing.

(ii) Vegetation shall be replaced per the following:

(A) 1:1 area ratio for herbaceous vegetation;

(B) 2:1 stem ratio for shrubs and saplings; and

(C) 3:1 ratio for trees greater than 6 inches in diameter at chest height

(iii) All removed native vegetation shall be replaced with native vegetation; removed ornamental species or other desirable non-native vegetation may be replaced with similar species;

(iv) Approved vegetation removal actions may include the development of:

(A) Up to one 20-foot-wide water-view corridor per lot.

(B) Access to the water (up to 5 feet wide) for private trails or paths, provided there is associated mitigation implemented to offset impacts on a 2:1 replacement ratio.

(C) Access to the water (up to 12 feet wide) for permitted private boat launches, provided there is associated mitigation implemented to offset impacts on a 2:1 replacement ratio.

(c) Vegetation management plan requirements and standards:

(i) The vegetation management plan shall be prepared by a qualified professional (certified arborist, ecologist, licensed landscape architect, or similar professional) submitted for projects.

(ii) A vegetation management plan shall be required for activities that propose to remove either of the following anywhere within the riparian buffer:

(A) One or more mature, healthy trees greater than 6 inches in diameter at chest height; or

(B) More than 10 square feet of native shrubs and/or native ground cover at any one time by clearing, grading, cutting, burning, chemical means, or other activities.

(C) None of the above shall be allowed more than once per calendar year

(iii) A vegetation management plan shall contain the following:

(A) The distribution of existing plant communities in the area proposed for clearing and/or grading;

(B) Areas to be preserved;

(C) Areas to be cleared; and

(D) Trees to be removed along with species and size.

(E) A description of the existing vegetative condition of the site that addresses the following:

1. Plant species;
2. Plant density;
3. Relative health of the plant community;
4. Presence and extent of any natural or man-made disturbances;

5. Presence of vegetation overhanging the shoreline; and
6. The presence and distribution of noxious weeds.

(F) A mitigation planting plan showing proposed planting, including the species, distribution, and density of plants.

(G) Monitoring and maintenance plans, including performance standards and survivability goals consistent with the requirements of Section 510 (6) and (7).

(d) Vegetation Management for Existing Utility Corridors

(i) Vegetation management plans for public right-of-way maintenance corridors associated with under- or above-ground utilities are required, and shall be submitted to the Shoreline Administrator, for review and comment prior to vegetation maintenance activities being conducted.

(ii) The plan should identify measures to avoid, minimize, and reduce adverse vegetation and habitat effects while allowing maintenance necessary for the utilities to reliably function.

(iii) A period of at least 30 days must be provided for the Shoreline Administrator review and comment on the plan prior to maintenance activities beginning.

Article VI. Existing Uses, Structures, and Lots

XX.XX.600 Applicability

(1) All nonconforming uses in shoreline jurisdiction shall be subject to the provisions of this article. For nonconformance of use, structures, and lots within shoreline critical areas, Section XX.XX, Article V, Critical Areas, applies. When there is a conflict between this section and the Critical Areas Section as applicable to critical areas, the more restrictive standards shall apply.

(2) The provisions of this section do not supersede or relieve a property owner from compliance with either of the following requirements:

(a) International Building and Fire Codes

(b) The provisions of the SMP beyond the specific nonconformance addressed by this section.

(3) A change in the required permit review process (e.g., Shoreline Substantial Development Permit versus a Shoreline Conditional Use Permit) shall not create a nonconformance.

(4) Any nonconformance that is brought into conformance for any period of time shall forfeit status as nonconformance, except as specified in Section XX.XX.610, Nonconforming Uses.

(5) A nonconforming lot, use, or structure may be deemed legally nonconforming by providing documentation that the use in question occurred prior to the effective date of this SMP, from one of the following:

(a) Local agency permit

(b) Orthophotograph, aerial photograph, or planimetric mapping recognized as legitimate by the agency

(c) Tax record

XX.XX.610 Nonconforming Uses

(1) If, at the effective date of the SMP and any later amendment to it, a lawful use of land exists that is made no longer permissible under the terms of this SMP or future amendments to it, such use may be continued as a nonconforming use so long as it remains otherwise lawful subject to the following conditions:

(a) No nonconforming use shall be intensified, enlarged, increased, or extended to occupy a greater area of land than was occupied on the effective date of the SMP or amendment that made the use no longer permissible. Provided that a nonconforming use may be enlarged,

increased, or extended in conformance with applicable bulk and dimensional standards of this SMP upon approval of a Shoreline Conditional Use Permit.

(b) No nonconforming use shall be moved in whole or in part to any other portion of the lot that contains the nonconforming use.

(c) If any nonconforming use of land ceases for any reason for a period of 1 year, any subsequent use of such land shall conform to the regulations specified by this SMP for the use environment in which such land is located.

(d) A structure, which is being or has been used for a nonconforming use, may be used for a different nonconforming use only upon a finding that all of the following criteria are met:

(i) No reasonable alternative conforming use is practical.

(ii) The proposed use is equally or more appropriate to the shoreline environment than the existing nonconforming use and is at least as consistent with the policies and provisions of the SMA and the SMP.

(iii) Such a change of use shall be subject to a Shoreline Conditional Use Permit approval. Conditions may be attached to the permit as are deemed necessary to ensure compliance with the above findings, the requirements of the SMP and the SMA, and to ensure the use will not become a nuisance or a hazard.

XX.XX.620 Nonconforming Structures

(1) If, at the effective date of the SMP or any amendment thereto, a lawful structure or other improvement exists, which is made no longer permissible under the terms of this SMP or amendment thereto, such structure or other improvement may be continued as a nonconforming structure or other improvement so long as it remains otherwise lawful, subject to the following conditions:

(a) No nonconforming structure or other improvement shall be altered or changed in a way that increases its nonconformity except as allowed in Section XX.XX.620 (1)(b).

(b) Expansions of structures that are nonconforming with respect to a required shoreline buffer:

(i) May not encroach any farther waterward into the required shoreline buffer.

(ii) Expansions parallel to or landward of shoreline may be allowed in the buffer, provided that said enlargement does not increase the extent of other applicable bulk and dimension standard nonconformities by farther encroaching upon or extending into areas where construction or use would not be allowed for new development or uses. Parallel or landward expansion within the shoreline buffer shall restore a portion of the shoreline buffer with riparian vegetation at a 1:1 area ratio to offset the potential adverse impact. When expansions occur upland of an existing levee or other structure that provides an ecological break in buffer functions, the applicant's Critical Area Report may justify a smaller ratio provided that the study demonstrates no net loss of ecological functions.

(c) All expansion, extension, maintenance, or repair activities of nonconforming structures or improvements shall be consistent with all other provisions of this SMP, provided the cumulative cost of such maintenance or repair within any 12-month period shall not exceed 50% of the assessed valuation of such building, structure, or land (as applicable) at the time such maintenance is completed.

(d) When damaged, a nonconforming structure may be restored to the configuration existing immediately prior to the time that the structure was damaged, provided that:

(i) The structure is damaged to an extent not exceeding 50% of the replacement cost of the original development.

(ii) The applicant applies for permits needed to restore the development within 6 months of the date the damage occurred.

(iii) Reconstruction is started within 2 years and is completed within 3 years of the date of damage, unless an extension of time is granted by the Shoreline Administrator upon written petition substantiating to the satisfaction of the Shoreline Administrator due cause for such extension.

(iv) The degree of the nonconforming use, building, or structure is not increased.

(e) Nothing in this section will prohibit vertical expansion up to the height allowed in the applicable use environment, provided all other applicable requirements of local development regulations are met.

(f) Upkeep, repairs, and maintenance of a nonconforming structure or other improvement shall be permitted.

(2) Should such structure or other improvement be moved for any reason and for any distance, it shall thereafter conform to the regulations for the use environment in which it is located. Conformance shall be required when one of the following situations occurs:

(a) A change of use is proposed.

(b) The use is terminated or discontinued for more than 1 year, or the structure(s) that houses the use is vacated for more than 1 year.

(c) The structure(s) or activity that occurs on the land in which the use is conducted is proposed for relocation.

(3) Residential structures and appurtenant structures that were legally established and are used for a conforming use, but that do not meet standards for the following, shall be considered a conforming structure: setbacks, buffers, or yards; area; bulk; height; or density.

(4) For purposes of this section, "appurtenant structures" refer to garages, sheds, and other legally established structures. Appurtenant structures do not include bulkheads and other shoreline modifications or overwater structures.

Article VII. Administration and Enforcements

XX.XX.700 Roles and Responsibilities

(1) Shoreline Administrator

(a) The Shoreline Administrator for the individual members of the Coalition or his/her designee shall serve as the Shoreline Administrator. The Shoreline Administrator shall issue written Shoreline Exemptions as appropriate and, in the case of a Shoreline Substantial Development Permit, grant or deny the permit. The Shoreline Administrator shall administer the shoreline permit, and notification systems and shall be responsible for coordinating the administration of shoreline regulations with zoning enforcement, building permits, and all other regulations regarding land use and development in the respective jurisdiction.

(b) The Shoreline Administrator shall be familiar with regulatory measures pertaining to shorelines and their use, and, within the limits of his or her authority, shall cooperate in the administration of these measures. Permits issued under the provisions of this shoreline regulation shall be coordinated with other applicable land use and development regulatory measures of the respective jurisdiction. The Shoreline Administrator shall establish procedures that advise all parties seeking building permits or other development authorization of the need to consider possible shoreline applications. It is the intent of the Coalition, consistent with regulatory obligations, to simplify and facilitate the processing of Shoreline Substantial Development Permits.

(c) The Shoreline Administrator shall ensure proposed regulatory or administrative actions shall be liberally construed in the legal context, which is to give full effect to the objectives and purposes of the SMA and this SMP, as set forth in RCW 90.58.900.

(d) The Shoreline Administrator shall ensure proposed regulatory or administrative actions do not unconstitutionally infringe upon private property rights. Shoreline goals and policies should be pursued through the regulation of development of private property only to an extent that is consistent with all relevant constitutional and other legal limitations (where applicable, statutory limitations such as those contained in RCW 82.02 and RCW 43.21C.060) on the regulation of private property.

(e) The Shoreline Administrator shall apply Section XX.XX.500, General Provisions, for shoreline critical areas.

(2) Planning Commissions/Asotin County Shoreline Commission (Shoreline Commission)

(a) The Planning/Shoreline Commissions are vested with the responsibility to review the SMP as part of regular SMP updates required by RCW 90.58.080 as a major element of the local jurisdiction's planning and regulatory program and make recommendations for amendments thereof to the County Commissioners, or City or Town Councils, as applicable.

(b) The Planning/Shoreline Commissions review Shoreline Variances and Shoreline Conditional Use Permits, following an open-record hearing, and send a recommendation to the County Commission, or City or Town Councils, except as noted in Section XX.XX.700(3) below.

(3) Hearing Examiner. For Columbia County, the Hearing Examiner reviews and approves the variance following an open-record hearing.

(4) County Commissions/City and Town Councils. The County Commissions, or City or Town Councils are vested with authority to:

(a) Initiate an amendment to this SMP according to the procedures prescribed in WAC 173-26-100.

(b) Adopt all amendments to this SMP, after consideration of the recommendation of the Planning Commission. Substantive amendments shall become effective immediately upon adoption by Ecology.

(c) Approve or deny all Shoreline Variance and Conditional Use Permits forwarded by the Planning Commission pursuant to Section XX.XX.700(2).

(d) Conduct appeal of any recommendation of the Planning Commission.

(e) Decide on appeals from the administrative decisions issued by the Shoreline Administrator.

XX.XX.710 Interpretation

(1) Under the administrative provisions, the Shoreline Administrator shall have authority to interpret this SMP, when such interpretation is clearly consistent with the goals and policies of this SMP and the SMA.

(2) The Shoreline Administrator shall consult with Ecology if formal written interpretations are developed as a result of a lack of clear guidance in the SMA, the SMP Guidelines, or this SMP to ensure any are consistent with the purpose and intent of RCW 90.58 and WAC 173-26.

XX.XX.720 Statutory Noticing Requirements

(1) At a minimum, the Shoreline Administrator shall provide notice in accordance with WAC 173.27-110 and may provide for additional noticing requirements.

XX.XX.730 Application Requirements

(1) A complete application for a Shoreline Substantial Development, Shoreline Conditional Use, or Shoreline Variance shall contain, at a minimum, the information listed in WAC 173-27-180.

(2) The Shoreline Administrator shall provide written informational materials, procedures, instructions, and forms required to submit an application for a Shoreline Substantial Development Permit, Shoreline Variance, or Conditional Use Permit.

(3) These materials should include: a plan coversheet, a Joint Aquatic Resource Permits Application (JARPA) form, SEPA checklist, fee schedule, review criteria, and the process and timelines to assist potential applicants and interested parties on the permit application submittal and review process.

(4) The Shoreline Administrator may vary or waive these requirements according to administrative application requirements on a case-by-case basis.

(5) The Shoreline Administrator may require additional specific information depending on the nature of the proposal and the presence of sensitive ecological features or issues related to compliance with other applicable requirements and the provisions of this SMP.

XX.XX.740 Shoreline Substantial Development Permits

(1) A Shoreline Substantial Development Permit shall be required for all development on shorelines, unless the proposal is specifically exempted from the requirement for this permit as set forth in Section XX.XX.770. Shoreline Substantial Development permits shall be processed as an administrative permit.

(2) Shoreline Administrator shall review Substantial Development Permit applications, as required in Section XX.XX.730, and approve or deny the permit.

(3) Shoreline Administrator shall provide notice in accordance with WAC 173.27-110 and may provide additional notice, according to local noticing requirements.

(4) A Shoreline Substantial Development Permit shall be granted only when the development proposed is consistent with all of the following:

(a) The policies and procedures of the Act, RCW 90.58

(b) The applicable provisions of WAC 173-27

(c) This SMP

(5) The Shoreline Administrator may attach conditions to the approval of permits as necessary to ensure consistency of the project with the SMA and this SMP.

(6) Nothing shall interfere with the Shoreline Administrator's ability to require compliance with all other applicable plans and laws.

XX.XX.750 Shoreline Conditional Use Permits

(1) Uses specifically classified or set forth in this SMP as conditional uses shall be subject to review and condition by the Shoreline Administrator and/or Asotin County Shoreline Commission, as applicable, and by Ecology. Planning/Shoreline Commission reviews Shoreline Conditional Use Permits, following an open-record hearing, and sends a recommendation to the County Commission or City/Town Council. Applications for a Shoreline Conditional Use Permit shall be processed by the Shoreline Administrator pursuant to Columbia County Code 18.80 for Columbia County and the Town of Starbuck. For Garfield County, applications for a Shoreline Conditional Use Permit shall be reviewed by the Planning Commission.

(2) Other uses that are not classified or listed or set forth in this SMP may be authorized as conditional uses provided the applicant can demonstrate consistency with the requirements of this section and the requirements for conditional uses contained in this SMP.

(3) Uses that are specifically prohibited by this SMP may not be authorized as a conditional use.

(4) Review Criteria for SCUP. Uses that are classified or set forth in the applicable SMP as conditional uses may be authorized provided that the applicant demonstrates all of the following:

(a) The proposed use is consistent with the policies of RCW 90.58.020 and the SMP.

(b) The proposed use will not interfere with the normal public use of public shorelines.

(c) The proposed use of the site and design of the project is compatible with other authorized uses within the area and with uses planned for the area under the comprehensive plan and SMP.

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

(e) The public interest suffers no substantial detrimental effect.

(5) In the granting of all Conditional Use Permits, consideration shall be given to the cumulative impact of additional requests for like actions in the area. For example, if Conditional Use Permits were granted for other developments in the area where similar circumstances exist, the total of the conditional uses shall also remain consistent with the policies of RCW 90.58.020 and shall not produce substantial adverse effects to the shoreline environment.

(6) In authorizing a conditional use, special conditions may be attached to the permit by the Shoreline Administrator or Ecology to prevent undesirable effects of the proposed use and/or to ensure consistency of the project with the SMA and this SMP.

(7) Nothing shall interfere with the Shoreline Administrator's ability to require compliance with all other applicable plans and laws.

XX.XX.760 Shoreline Variance

(1) The purpose of a shoreline variance is to grant relief to specific bulk or dimensional requirements set forth in this SMP where there are extraordinary or unique circumstances relating to the property such that the strict implementation of this SMP would impose unnecessary hardships on the applicant or thwart the policies set forth in RCW 90.58.020. Variances from the use regulations of the SMP are prohibited. Applications for a Shoreline Variance shall be processed by the Planning Commission and/or Asotin County Shoreline Commission, as applicable. Planning/Shoreline Commission reviews Shoreline Variances, following an open-record hearing, and sends recommendations to the County Commission or City/Town Council.

(2) Applications for a Shoreline Variance shall be reviewed by the Hearing Examiner pursuant to Columbia County Code 18.05.050 for Columbia County and the Town of Starbuck. For Garfield County, applications for a Shoreline Variance shall be reviewed by the Planning Commission.

(3) Review Criteria

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

(b) Variances for development and/or uses that will be located landward of the OHWM, as defined in RCW 90.58.030(2)(b), and/or landward of any wetland, as defined in RCW 90.58.030(2)(h), may be authorized provided the applicant can demonstrate all of the following:

(i) The strict application of the bulk, dimensional, or performance standards set forth in the SMP precludes, or significantly interferes with, reasonable use of the property.

(ii) The hardship described in criterion Section XX.XX.760 (3)(b)(i) of this subsection is specifically related to the property and is the result of unique conditions, such as irregular lot shape, size, or natural features, and the application of the SMP, and not, for example, from deed restrictions or the applicant's own actions.

(iii) The design of the project is compatible with other authorized uses within the area and with uses planned for the area under the comprehensive plan and SMP and will not cause adverse impacts on the shoreline environment.

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

(v) The variance requested is the minimum necessary to afford relief.

(vi) That the public interest will suffer no substantial detrimental effect.

(c) Variances for development and/or uses that will be located waterward of the OHWM, as defined in RCW 90.58.030(2)(b), or within any wetland, as defined in RCW 90.58.030(2)(h), may be authorized provided the applicant can demonstrate all of the following:

(i) The strict application of the bulk, dimensional, or performance standards set forth in the applicable SMP precludes all reasonable use of the property.

The proposal is consistent with the criteria established under Section XX.XX.760 (3)(b).

(ii) That the public rights of navigation and use of the shorelines will not be adversely affected.

(d) In the granting of all variances, consideration shall be given to the cumulative impact of additional requests for like actions in the area. For example, if variances were granted to other developments and/or uses in the area where similar circumstances exist, the total of the variances shall also remain consistent with the policies of RCW 90.58.020 and shall not cause substantial adverse effects to the shoreline environment.

XX.XX.770 Exemptions from Shoreline Substantial Development Permits

(1) An exemption from the Shoreline Substantial Development Permit process is not an exemption from compliance with the SMA or this SMP, or from any

other regulatory requirements. All proposed uses, activities, or development occurring within shoreline jurisdiction must conform to the intent and requirements of RCW 90.58, the SMA, and this SMP, whether or not a permit or other form of authorization is required.

(2) Letters of exemption shall be issued by the Shoreline Administrator when an exemption applies or when a letter of exemption is required by the provisions of WAC 173-27-050 and as follows:

(a) Any person claiming exemption from the Substantial Development Permit requirements shall make an application to the Shoreline Administrator for such an exemption in the manner prescribed by the Shoreline Administrator, except that no written statement of exemption is required for emergency development pursuant to WAC 173-27-040(2)(d).

(b) The Shoreline Administrator is authorized to grant or deny requests for statements of exemption from the Shoreline Substantial Development Permit requirement for uses and developments within shorelines that are specifically listed in Section XX.XX.770 (4). The statement shall be in writing and shall indicate the specific exemption of this SMP that is being applied to the development and shall provide a summary of the Shoreline Administrator's analysis of the consistency of the project with this SMP and the SMA. The letter shall be sent to the applicant and maintained on file in the offices of the Shoreline Administrator.

(c) Letters of exemption may contain conditions and/or mitigating measures of approval to achieve consistency and compliance with the provisions of this SMP and the SMA.

(d) A denial of an exemption shall be in writing and shall identify the reason(s) for the denial. The Shoreline Administrator's decision may be appealed pursuant to Section XX.XX.810, Appeals.

(e) Exempt activities requiring a JARPA shall not be conducted until a statement of exemption has been obtained from the Shoreline Administrator.

(3) Interpretations of Exemptions

(a) Exemptions shall be construed narrowly. Only those developments that meet the precise terms of one or more of the listed exemptions may be granted exemption from the Shoreline Substantial Development Permit process.

(b) A development or use that is listed as a conditional use pursuant to this SMP, or is an unlisted use, must obtain a Shoreline Conditional Use Permit even though the development or use does not require a Shoreline Substantial Development Permit. When a development or use is proposed

that does not comply with the bulk, dimensional, and performance standards of this SMP, such development or use can only be authorized by approval of a Shoreline Variance.

(c) The burden of proof that a development or use is exempt from the permit process is on the applicant.

(d) If any part of a proposed development is not eligible for exemption, then a Shoreline Substantial Development Permit is required for the entire proposed development project.

(e) The Shoreline Administrator may attach conditions to the approval of exempted developments and/or uses as necessary to ensure consistency of the project with the SMA and this SMP. Additionally, nothing shall interfere with each responsible local government's ability to require compliance with all other applicable laws and plans.

(4) The Shoreline Administrator shall exempt from the Shoreline Substantial Development Permit requirement the shoreline developments listed below:

(a) Any development of which the total cost or fair market value does not exceed $6,416 or as adjusted by the State Office of Financial Management, if such development does not materially interfere with the normal public use of the water or shorelines of the state. For purposes of determining whether or not a permit is required, the total cost or fair market value shall be based on the value of development that is occurring on shorelines of the state as defined in RCW 90.58.030 (2)(c). The total cost or fair market value of the development shall include the fair market value of any donated, contributed, or found labor, as well as equipment or materials.

(b) Normal maintenance or repair of existing legally established structures or developments, including damage by accident, fire, or elements. 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.

(c) Construction of a normal protective bulkhead common to single-family residences. A "normal protective" bulkhead includes those structural and non-structural developments installed at or near, and parallel to, the OHWM for the sole purpose of protecting an existing single-family residence and appurtenant structures from loss or damage by erosion. A normal protective bulkhead is not exempt if constructed for the purpose of

creating dry land. When a vertical or near vertical wall is being constructed or reconstructed, not more than 1 cubic yard of fill per 1 foot of wall may be used as backfill. When an existing bulkhead is being repaired by construction of a vertical wall fronting the existing wall, it shall be constructed no farther waterward of the existing bulkhead than is necessary for construction of new footings. When a bulkhead has deteriorated such that an OHWM has been established by the presence and action of water landward of the bulkhead, then the replacement bulkhead must be located at or near the actual OHWM. Bioengineered erosion-control projects may be considered a normal protective bulkhead when any structural elements are consistent with the above requirements and when the project has been approved by WDFW.

(d) Emergency construction necessary to protect property from damage by the elements. An emergency is an unanticipated and imminent threat to public health, safety, or the environment that requires immediate action within a time too short to allow full compliance with this section. Emergency construction does not include development of new permanent protective structures where none previously existed. Where new protective structures are deemed by the Shoreline Administrator to be the appropriate means to address the emergency situation, and upon abatement of the emergency situation, the new structure shall be removed and any permit that would have been required, absent an emergency, pursuant to RCW 90.58 these regulations, or this SMP, shall be obtained. All emergency construction shall be consistent with the policies and requirements of this section, RCW 90.58, and this SMP. As a general matter, flooding or other seasonal events that can be anticipated and may occur but that are not imminent are not an emergency.

(i) The following criteria shall exist to qualify any action under an emergency provision:

(A) There must be an immediate threat to life, or public or private property, or an immediate threat of serious environmental degradation arising from a natural condition or non-natural accident or incident.

(B) The emergency response shall be confined to the action necessary to protect life or property from damage.

(C) The scope of the emergency response must be limited to the work necessary to relieve the immediate threat.

(D) The emergency response applies only to the period of time in which the actual emergency exists.

(ii) Once the emergency is abated or dissipated as deemed by jurisdictional authorities, compliance with the requirements of this section is required.

(iii) Emergency actions shall use reasonable methods that minimize the impact to critical areas and their buffers. Persons who take emergency action shall notify the Shoreline Administrator within 1 working day following commencement of the emergency activity. Following such notification, the Shoreline Administrator shall determine if the action taken was within the scope and definition of emergency actions as defined above. If the Shoreline Administrator determines that the action taken or any part of the action taken was beyond the scope and definition of allowed emergency actions, then the enforcement provisions of Section XX.XX.830 Enforcement shall apply.

(e) Construction and practices normal or necessary for farming, irrigation, and ranching activities, including agricultural service roads and utilities on shorelands and the construction and maintenance of irrigation structures including, but not limited to, head gates, pumping facilities, and irrigation channels. A feedlot of any size, all processing plants, other activities of a commercial nature, and alteration of the contour of the shorelands by leveling or filling, other than that which results from normal cultivation, shall not be considered normal or necessary farming or ranching activities.

(f) Construction or modification of navigational aids such as channel markers and anchor buoys.

(g) Construction on shorelands by an owner, lessee, or contract purchaser of a single-family residence or appurtenance for their own use or for the use of their family, which residence does not exceed a height of 35 feet above average grade level and which meets all other local requirements, other than requirements imposed pursuant to RCW 90.58. Construction authorized under this exemption, shall be located landward of the OHWM.

(h) Construction of a dock, including a community dock designed for pleasure craft only and for the private non-commercial use of the owner, lessee, or contract purchaser of a single-family or multiple-family residence. This exception applies when the fair market value of the dock does not exceed $10,000, but if subsequent construction having a fair market value exceeding $2,500.00 occurs within 5 years of completion of the prior construction, the subsequent construction shall be considered a substantial development for the purpose of this section.

(i) Operation, maintenance, repair, or construction of canals, waterways, drains, reservoirs, or other facilities that now exist or are hereafter created or developed as a part of an irrigation system for the primary purpose of

making use of system waters, including return flow and artificially stored groundwater from the irrigation of lands.

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

(k) Operation and maintenance of existing and future systems of dikes, drains, or other facilities existing on September 8, 1975 (where water is being drained from irrigation runoff or shallow groundwater levels artificially recharged through irrigation), which are created, developed or used primarily as a part of an agricultural drainage or diking system.

(l) Any project with a certification from the governor pursuant to RCW 80.50 (certification from the State Energy Facility Site Evaluation Council).

(m) Site exploration and investigation activities are prerequisite to preparation of an application for development authorization under this section, if:

(i) The activity does not interfere with the normal public use of surface waters.

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

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

(iv) A private entity seeking development authorization under this section first posts a performance bond or provides other evidence of financial responsibility to the local jurisdiction to ensure the site is restored to preexisting conditions.

(n) The process of removing or controlling aquatic noxious weeds, as defined in RCW 17.26.020, through the use of an herbicide or other treatment methods applicable to weed control published by the Departments of Agriculture or Ecology jointly with other state agencies under RCW 43.21C.

(o) Watershed restoration projects as defined in RCW 89.08.460.

(p) A public or private project that is designed to improve fish or wildlife habitat or fish passage when all of the following apply:

(i) The project has been approved by WDFW.

(ii) The project has received HPA by WDFW pursuant to RCW 77.55.

(iii) The Shoreline Administrator has determined that the project is substantially consistent with the local SMP. The Shoreline Administrator shall make such determination in a timely manner and provide it by letter to the applicant.

(iv) Fish habitat enhancement projects that conform to the provisions of RCW 77.55.181 are determined to be consistent with local SMPs.

(q) Any person conducting a remedial action at a facility pursuant to a consent decree, order, or agreed order issued pursuant to RCW 70.105D or to Ecology when it conducts a remedial action under RCW 70.105D.

(r) Other than conversions to non-forest land use, forest practices regulated under RCW 76.09 are not subject to additional regulations under the SMA or this SMP (90.58.030(2)(d)(ii)).

XX.XX.780 Duration of Permits

(1) The duration of permits shall be consistent with WAC 173-27-090 as follows:

(a) Construction activities shall be commenced or, where no construction activities are involved, the use or activity shall be commenced within 2 years of the effective date of a substantial development permit. The Shoreline Administrator may authorize a single extension for a period not to exceed 1 year based on reasonable factors if a request for extension has been filed before the expiration date and notice of the proposed extension is given to parties of record on the substantial development permit and to the department.

(b) Authorization to conduct development activities shall terminate 5 years after the effective date of a substantial development permit. However, the Shoreline Administrator may authorize a single extension for a period not to exceed 1 year based on reasonable factors if a request for extension has been filed before the expiration date and notice of the proposed extension is given to parties of record and to the department.

XX.XX.790 Initiation of Development

(1) Each permit for a Substantial Development, Shoreline Conditional Use, or Shoreline Variance issued by local government shall contain a provision that construction pursuant to the permit shall not begin and is not authorized until 21 days from the date of receipt with Ecology as defined in RCW 90.58.140(6) and WAC 173-27-130, or until all review proceedings initiated within 21 days from the date of receipt of the decision. The date of filing for a Substantial Development Permit is the date of actual receipt by Ecology of a local

government's final decision on the permit. With regard to a permit for a Shoreline Variance or a Shoreline Conditional Use, date of filing means the date a responsible local government or applicant receives the written decision of Ecology. When a Substantial Development Permit and a Conditional Use or Shoreline Variance are required for a development, the submittal on the permits shall be made concurrently.

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

(3) A permit datasheet shall be submitted to Ecology with each shoreline permit. The permit datasheet form shall be consistent with WAC 173-27-990.

XX.XX.800 Review Process

(1) After local approval of a Shoreline Conditional Use or Variance, the Shoreline Administrator shall submit the permit to Ecology for approval, approval with conditions, or denial. Ecology shall render and transmit to the County, City or Town, and the applicant its final decision approving, approving with conditions, or disapproving the permit within 30 days of the date of submittal by the Shoreline Administrator pursuant to WAC 173-27-110.

(2) Ecology shall review the complete file submitted by the Shoreline Administrator on Shoreline Conditional Use or Variances and any other information submitted or available that is relevant to the application. Ecology shall base its determination to approve, approve with conditions, or deny a Conditional Use Permit or Variances on consistency with the policy and provisions of the SMA and except as provided in WAC 173-27-210 and the criteria in WAC 173-27-160 and 173-27-170.

(3) The Shoreline Administrator shall provide timely notification of Ecology's final decision to those interested persons having requested notification from local government pursuant to WAC 173-27-130.

XX.XX.810 Appeals

(1) Appeals of Shoreline Permit Decisions. The County, City, or Town decisions on shoreline permits may be appealed to the following "bodies" in this sequence:

(a) The County Commission, City or Town Council for decisions made by the Shoreline Administrator, and/or the Hearing Examiner (For Columbia County). Decisions made by the County Commission shall be appealed according to Section XX.XX.810(b) through (f) below.

(b) State Shorelines Hearings Board (SHB) in Tumwater.

(c) SHB decisions may be appealed to superior court.

(d) Superior court decisions may be appealed to the Court of Appeals.

(e) Appeals Court decisions may be appealed to the Washington Supreme Court.

(f) Appeals to the SHB and courts are governed by RCW 90.58.180, RCW 43.21B.001, RCW 34.05 Part V, and WAC 461.08.

(2) All requests for review of any final permit decisions under RCW 90.58 and WAC 173-27 are governed by the procedures established in RCW 90.58.180, WAC 461-08, and the rules of practice and procedure of the SHB.

XX.XX.820 Amendments to Permits

(1) A permit revision is required whenever the applicant proposes substantive changes to the design, terms, or conditions of a project from that is approved in the permit. Changes are substantive if they materially alter the project in a manner that relates to its conformance to the terms and conditions of the permit, the SMP, and/or the policies and provisions of RCW 90.58. Changes that are not substantive in effect do not require approval of a revision.

(2) Revisions to permits shall be considered consistent with WAC 173-27-100.

XX.XX.830 Enforcement

(1) The SMA provides for a cooperative program between the Coalition members and Ecology to implement and enforce the provisions of the SMA and this SMP. This section provides for a variety of means of enforcement, including civil and criminal penalties, orders to cease and desist, and orders to take corrective action, in accordance with WAC 173-27-270, 173-27-280, 173-27-290, and 173-27-300. The enforcement means and penalties provided herein are not exclusive and may be taken or imposed in conjunction with, or in addition to, any other civil enforcement actions and civil penalties, injunctive or declaratory relief, criminal prosecution, actions to recover civil or criminal penalties, or any other action or sanction authorized by this section, or any other provision of the SMP, or any other provision of state or federal law and regulation.

(2) The Shoreline Administrator, with the assistance of the County, City, or Town attorney, shall have authority to commence and prosecute any enforcement action authorized by this section. In determining the appropriate enforcement actions to be commenced and prosecuted, the Shoreline Administrator shall consider all of the following factors:

(a) The nature of the violation

(b) The extent of damage or potential future risk to the shoreline environment and its ecological functions or to the public health and safety, caused by or resulting from, whether directly or indirectly, the alleged violation

(c) The existence of knowledge, intent, or malice on behalf of the violator

(d) The economic benefit or advantage that accrued to the violator(s) as a result of the violation

(e) The estimated actions and costs of providing adequate mitigation, restoration, rehabilitation, or enhancement to repair or minimize any substantial adverse impacts upon the shoreline environment and its ecological functions or the public health and safety

(3) The Shoreline Administrator may commence and prosecute enforcement action jointly with Ecology. Pursuant to WAC 173-27, Ecology may initiate and prosecute enforcement action separate from the Shoreline Administrator.

XX.XX.840 Cumulative Effects of Shoreline Developments

(1) The Coalition will periodically evaluate the effectiveness of the SMP update for achieving no net loss of shoreline ecological functions with respect to shoreline permitting and exemptions. At the end of the first full year after adoption, and at the end of every other year thereafter, the Shoreline Administrator shall prepare a report documenting shoreline development permits, conditional permits, and variances, including the exempt use activity approvals and the locations and effects of each by type and classifications. The report should include activities involving development, conservation, restoration, mitigation, and enforcement. It should summarize the net change of developments (including new development and decommissioning of structures and protected areas) using indicators such as linear length of stabilization and flood hazard structures, number of overwater structures (e.g., piers and docks), road length within shoreline, number of waterbody road crossings, number of levees/dikes, acres of impervious surface areas, acres of vegetation, acres of permanently protected areas, or areas with limited development. Compliance and enforcement activity will also be tracked.

(2) The Shoreline Administrator, will, to the extent feasible, coordinate with other local government departments or adjacent jurisdictions, as applicable, to assess cumulative effects of shoreline development.

XX.XX.850 Amendments to Shoreline Master Program

(1) Amendments to the SMP shall be processed as legislative decisions pursuant to WAC 173-26-110.

(2) Any locally approved amendments to the SMP will not become effective until approved by Ecology.

XX.XX.860 Definitions

(1) "Act" means the Washington State SMA, RCW 90.58.

(2) "Active fault" means a fault that is considered likely to undergo renewed movement within a period of concern to humans. Faults are commonly considered to be active if the fault has moved one or more times in the last 10,000 years.

(3) "Additions" means improvements to an existing building or structure, the cost of which does not exceed 50% of the assessed value of the total structure or result in an increase greater than 25% of the building footprint (up to a maximum of 500 square feet) before the addition is started. Additions must share a common wall (one full side) with the original structure.

(4) "Adjacent," for purposes of applying Article V, Critical Areas, means immediately adjoining (in contact with the boundary of the influence area) or within a distance less than that needed to separate activities from critical areas to ensure protection of the functions and values of the critical areas. Adjacent shall mean any activity or development located:

(a) On-site immediately adjoining a critical area, or

(b) A distance equal to or less than the required critical area buffer width and building setback.

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

(6) "Agricultural products" includes, but is not limited to: horticultural, viticultural, floricultural, and vegetable, fruit, berry, grain, hops, hay, straw, turf, sod, seed, and apiary products; feed or forage for livestock; Christmas trees; hybrid cottonwood and similar hardwood trees grown as crops and harvested within 20 years of planting; and livestock, including both the animals themselves and animal products including, but not limited to, meat, upland finfish, poultry and poultry products, and dairy products.

(7) "Agricultural equipment" includes, but is not limited to, the following items used in agricultural operations:

(a) Equipment; machinery; constructed shelters, buildings, and ponds; fences; upland finfish rearing facilities; and water diversion, withdrawal, conveyance, and use equipment and facilities including, but not limited to, pumps, pipes, tapes, canals, ditches, and drains

(b) Corridors and facilities for transporting personnel, livestock, and equipment to, from, and within agricultural lands

(c) Farm residences and associated equipment, lands, and facilities

(d) Roadside stands and on-farm markets for marketing fruit or vegetables.

(8) "Agricultural facilities." See "Agricultural equipment."

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

(10) "Alteration" for purposes of applying Article V, Critical Areas, means any human-induced change in an existing condition of a critical area or its buffer. Alterations include grading, filling, dredging, channelizing, clearing (vegetation), applying pesticides, discharging waste, construction, compaction, excavation, modifying for stormwater management, relocating, or other activities that change the existing landform, vegetation, hydrology, wildlife, or habitat value of critical areas.

(11) "Amendment" means a revision, update, addition, deletion, and/or reenactment to an existing SMP.

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

(13) "Approval" means an official action by a local government legislative body agreeing to submit a proposed SMP or amendments to Ecology for review and official action pursuant to this SMP or an official action by Ecology to make a local government SMP effective, thereby incorporating the approved SMP or amendment into the SMP.

(14) "Aquaculture" means the culture or farming of fish or other aquatic plants and animals, and includes salmonid acclimation facilities.

(15) "Aquifer recharge area" means an area through which precipitation and surface water infiltrate the soil and are transmitted through rocks and soil to create groundwater storage. They are also areas where an aquifer that is a source of drinking water is vulnerable to contamination that would affect the potability of water.

(16) "Area of Project Review" means the area within shoreline jurisdiction surrounding and including one or more critical areas within which activities and developments are subject to the provisions of this SMP**.**

(17) "Area of special flood hazard" means the land in the floodplain within a community subject to a 1% or greater chance of flooding in any given year. Designation on maps always includes the letters A or V.

(18) "Assessed value" means assessed valuation shall be as established by the County assessor's office, unless otherwise provided by a market appraisal institute appraisal.

(19) "Associated wetlands" are those wetlands that are in proximity to and either influence or are influenced by a stream subject to the SMA.

(20) "Average grade level" means the average of the natural or existing topography of the portion of the lot, parcel, or tract of real property, which will be directly under the proposed building or structure. In the case of structures to be built over water, average grade level shall be the elevation of the OHWM. 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.

(21) "Base flood" means a flood having a 1% chance of being equaled or exceeded in any given year. Also referred to as the "100-year flood." Designated on FIRMs with the letters A or V.

(22) "Base flood elevation" means the water surface elevation of the base flood. It shall be referenced to the North American Vertical Datum of 1988.

(23) "Best management practices (BMPs)" means conservation practices or systems of practice and management measures that meet all of the following criteria:

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

(b) Minimize adverse impacts on surface water and groundwater flow, circulation patterns, and the chemical, physical, and biological characteristics of wetlands

(c) Protect trees and vegetation designated to be retained during and following site construction

(d) Provide standards for proper use of chemical herbicides within critical areas

(24) "Best Management Practices (BMPs), Agricultural" means systems of practices, schedules of activities, prohibitions, maintenance procedures, and management measures that prevent or minimize adverse impacts to the environment. Such practices may be subject to varying conditions, which include geographical location, weather, soil, or mineral types and conditions, type of crop or livestock, type of mining, and management systems. Generally accepted agricultural BMPs include those practices historically carried out in the region and those practices defined by the State of Washington, Department of Agriculture, recommendations by the U.S. Department of Agriculture, and other agricultural organizations.

(25) "Biotechnical bank protection" means any combination of techniques employing lithic (naturally occurring geological materials, including angular rock, cobbles and other sediments), soils, woody debris, geotechnical fabrics, and native plant materials employed to stabilize and/or reconstruct stream and riverbanks.

(26) "Boating facilities" include boat launches and upland boat storage, marinas, and other boat moorage structures or uses. For the purposes of this SMP, boating facilities excludes docks serving four or fewer single-family residences.

(27) "Boat launch" includes graded slopes, slabs, pads, planks, or rails used for launching boats by means of a trailer, hand, or mechanical device.

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

(29) "Buffer, Critical Areas," means an area that provides the margin of safety through protection of slope stability, attenuation of surface water flows and landslide hazards reasonably necessary to minimize risk to the public from loss of life or well-being or property damage resulting from natural disasters, or an area that is an integral part of a stream or wetland ecosystem and provides shading, input of organic debris and coarse sediments, room for variation in stream or wetland boundaries, habitat for wildlife, and protection from harmful intrusion necessary to protect the public from losses suffered when the functions and values of aquatic resources are degraded.

(30) "Channel migration zone (CMZ)" means the area along a river within which the channel(s) can be reasonably predicted to migrate over time as a result of natural and normally occurring hydrological and related processes when

considered with the characteristics of the river and its surroundings. (The SMP regulatory CMZ is mapped and on file at each County in the Coalition and the Town of Starbuck.)

(31) "Coalition" refers to the counties of Asotin, Columbia, and Garfield, the City of Clarkston; and the Town of Starbuck.

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

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

(34) "Community access" means a shoreline access available to a group or community (e.g., homeowners association), which may not be accessible to the general public.

(35) "Compensation project" means actions specifically designed to replace project-induced critical area and buffer losses. Compensation project design elements may include land acquisition, planning, construction plans, monitoring, and contingency actions.

(36) "Compensatory mitigation" means types of mitigation used to replace project-induced critical areas and buffer losses or impacts.

(37) "Critical aquifer recharge area" means those areas that are:

(a) Designated as "Wellhead Protection Areas" pursuant to WAC 246-290-135(4) and the groundwater contribution area in WAC 246-291-100 (2)(e). Wellhead Protection Areas shall, for the purpose of this regulation, include the identified recharge areas associated with either Group A public water supply wells and those Group B wells with a wellhead protection plan filed with the local County Health District.

(b) Identified in the soil surveys for the counties as having high potential for aquifer recharge, including those soil types identified by the Shoreline Administrator.

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

(39) "Cultural and historic resources" means buildings, sites, and areas having archaeological, historic, cultural, or scientific value or significance.

(40) "Designated floodway" means the regulatory floodway that has been delineated on the County's FIRM.

(41) "Developable area" means a site or portion of a site that may be used as the location of development, in accordance with the rules of this SMP.

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

(43) "Development permit" means any permit issued by a county, city or town or other authorized agency for construction, land use, or the alteration of land.

(44) "Dock" means, as a general term, a structure or group of structures that provides boat moorage or other uses. A dock may be made up of piers (which are structures on fixed piles) and floats (which float on the water's surface and are typically attached to piles so that they may rise and fall with changes in the water's elevation).

(45) "Ecological functions" or "shoreline functions" means the work performed or role played by the physical, chemical, and biological processes and species that contribute to the maintenance of the aquatic and terrestrial environments that constitute the shoreline's natural ecosystem.

(46) "Ecosystem-wide processes" means the suite of naturally occurring physical and geologic processes of erosion, transport, and deposition and specific chemical processes that shape landforms within a specific shoreline ecosystem and determine both the types of habitat and the associated ecological functions.

(47) "Erosion" means the detachment and movement of soil or rock by water, wind, ice, or gravity.

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

(49) "Feasible" means, for the purpose of this SMP, that an action, such as a development project, mitigation, or preservation requirement, meets all of the following conditions: (a) the action can be accomplished with technologies and methods that have been used in the past in similar circumstances, or studies or tests have demonstrated in similar circumstances that such approaches are currently available and likely to achieve the intended results; (b) the action provides a reasonable likelihood of achieving its intended purpose; and (c) the action does not physically preclude achieving the project's primary intended legal use. In cases where these guidelines require certain actions, unless they are infeasible, the burden of proving infeasibility is on the applicant. In determining an action's infeasibility, the Shoreline Administrator may weigh

the relative public costs and public benefits, considered in a long-term time frame, as required by RCW 90.58.020(3).

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

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

(52) "Fish and Wildlife Habitat Conservation Areas" means areas necessary for maintaining species in suitable habitats within their natural geographic distribution so that isolated subpopulations are not created as designated by WAC 365-190-080(5). Fish and Wildlife Habitat Conservation Areas do not include all attributes of shoreline natural character and ecological function as defined in the SMA and this SMP. Fish and Wildlife Habitat Conservation Area" include:

(a) Areas within which state and federal endangered and threatened species exist, or state sensitive, candidate, and monitor species have a primary association

(b) Priority Habitat and Species Areas identified by the WDFW

(c) Habitats and species of local importance that have been designated by the County at the time of application

(d) Naturally occurring ponds fewer than 20 acres and their submerged aquatic beds that provide fish or wildlife habitat. These do not include ponds deliberately designed and created from dry sites such as canals, detention facilities, wastewater treatment facilities, farm ponds, temporary construction ponds of less than a 3-year duration, and landscape amenities. Naturally occurring ponds may include those artificial ponds intentionally created from dry areas in order to mitigate conversion of ponds, if permitted by a regulatory authority

(e) Waters of the state as defined by WAC 222-16

(f) Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity

(g) Areas with which anadromous fish species have a primary association

(h) State natural area preserves and natural resources conservation areas

(53) "Flood" or "flooding" mean a general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland

waters and/or the unusual and rapid accumulation of runoff or surface waters from any source.

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

(55) "Flood insurance rate map (FIRM)" means the official map on which the Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to counties, city, or town.

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

(57) "Flood protection elevation" means an elevation that is 1 foot or more above the base flood elevation.

(58) "Floodplain" is synonymous with 100-year floodplain and means that land area susceptible to inundation with a 1% chance of being equaled or exceeded in any given year. The limit of this area shall be based on flood ordinance regulation maps or a reasonable method which meets the objectives of the SMA.

(59) "Floodway" means the area, as identified in a master program, that either: (i) Has been established in federal emergency management agency flood insurance rate maps or floodway maps; or (ii) consists of those portions of a river valley lying streamward from the outer limits of a watercourse upon which flood waters are carried during periods of flooding that occur with reasonable regularity, although not necessarily annually, said floodway being identified, under normal condition, by changes in surface soil conditions or changes in types or quality of vegetative ground cover condition, topography, or other indicators of flooding that occurs with reasonable regularity, although not necessarily annually. Regardless of the method used to identify the floodway, the floodway shall not include those lands that can reasonably be expected to be protected from flood waters by flood control devices maintained by or maintained under license from the federal government, the state, or a political subdivision of the state;

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

(61) "Geologically Hazardous Areas" means areas that, because of their susceptibility to erosion, sliding, earthquake, or other geologic events, are not suited to the siting of commercial, residential, or industrial development consistent with public health or safety concerns. Geologically Hazardous Areas include Erosion Hazards, Landslide Hazards, Mine Hazards, and Seismic Hazards, as defined herein and specified in Section XX.XX.550.

(62) "Geotechnical Report" or "geotechnical analysis" means a scientific study or evaluation conducted by a qualified expert that includes a description of the ground and surface hydrology and geology; the affected landform and its susceptibility to mass wasting, erosion, and other geologic hazards or processes; conclusions and recommendations regarding the effect of the proposed development on geologic conditions; the adequacy of the site to be developed; the impacts of the proposed development; alternative approaches to the proposed development; and measures to mitigate potential site-specific and cumulative geological and hydrological impacts of the proposed development, including the potential adverse impacts on adjacent and down-current properties. Geotechnical Reports shall conform to accepted technical standards and must be prepared by qualified professional engineers or geologists who have professional expertise about the regional and local shoreline geology and processes.

(63) "Grading" means stripping, cutting, filling, or stockpiling of land, including the land in its cut or filled condition to create new grade.

(64) "Groin" means a barrier type of structure extending from the streambank into a waterbody for the purpose of the protection of a shoreline and adjacent uplands by influencing the movement of water or deposition of materials.

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

(66) "Hazard areas" means areas designated as frequently flooded or Geologically Hazardous Areas due to potential for erosion, landslide, seismic activity, mine collapse, or other geologically hazardous conditions, including steep slopes.

(67) "Hazardous substance(s)" means all of the following:

(a) A hazardous substance as defined by Section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act; any substance designated pursuant to Section 311(b)(2)(A) of the Clean Water Act (CWA); any hazardous waste having the characteristics identified under or listed pursuant to Section 3001 of the Solid Waste Disposal Act (but not including any waste the regulation of which under the Solid Waste Disposal Act has been suspended by Act of Congress);

any toxic pollutant listed under Section 307(a) of the CWA; or any imminently hazardous chemical substance or mixture with respect to which the United States Environmental Protection Agency has taken action pursuant to Section 7 of the Toxic Substances Control Act.

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

(68) "High Intensity land use" means land uses consisting of commercial, urban, industrial, institutional, retail, residential with more than 1 unit per acre, agricultural (dairies, nurseries, raising and harvesting crops, requiring annual tilling, and raising and maintaining animals), high-intensity recreation (golf courses, ball fields), and hobby farms.

(69) "Heavy equipment" means such construction machinery as backhoes, treaded tractors, dump trucks, and front-end loaders.

(70) "Hydraulic project approval (HPA)" means a permit issued by WDFW for modification to waters of the state in accordance with RCW 75.20.

(71) "Impervious surface area" means a hard surface area, which either prevents or retards the entry of water into the soil mantle as under natural conditions prior to development. Impervious surface shall also include a hard surface area that causes water to run off the surface in greater quantities or at an increased rate of flow from the flow present under natural conditions prior to development. Common impervious surfaces include rooftops, walkways, patios, driveways, parking lots or storage areas, concrete or asphalt paving, gravel roads with compacted subgrade, packed earthen materials, and oiled, macadam, or other surfaces, which similarly impede the natural infiltration of stormwater. Open, uncovered retention/detention facilities shall not be considered as impervious surfaces.

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

(73) "Invasive, non-native vegetation species" means the plants listed for Eastern Washington in Washington State Noxious Weed Board Publication # 820-264E (N/6/09), the latest version of this document, and any other non-native vegetation, which is not endemic to the SE Washington Coalition ecoregion and which expands into native plant communities (e.g., yellow star-thistle, cheatgrass, and knapweed species).

(74) "Landslide" means down slope movement of a mass of soil, rock, snow, or ice, including, but not limited to, rock falls, slumps, mudflows, debris flows, torrents, earth flows, and snow avalanches.

(75) "Landslide hazard areas" means those areas potentially subject to landslides based upon a combination of geologic, topographic, and hydrologic factors.

(76) "Live-aboards" means a vessel licensed and designed for use as a mobile structure with adequate self-propulsion and steering equipment to be operated as a vessel, but which is principally used as an over-water residence. Principal use as an over-water residence means essentially full-time occupancy for a total of more than sixty (60) days, whether or not consecutive, in any calendar year.

(77) "Low-intensity land use" includes forestry and open space (such as passive recreation and natural resources preservation).

(78) "May" means the action is acceptable, provided it conforms to the provisions of this SMP.

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

(a) Avoiding the impact altogether by not taking a certain action or parts of an action

(b) Where impact on critical areas or their buffers will not be avoided, demonstrating that the impact meets the criteria for granting a Shoreline Variance or other administratively approved alteration

(c) Minimizing impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology or by taking affirmative steps to avoid or reduce impacts

(d) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment

(e) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action

(f) Compensating for the impact by replacing, enhancing, or providing substitute resources or environments

(g) Monitoring the impact and the compensation projects and taking appropriate corrective measures

(80) "Mixed-use" or "Mixed-use development" means a combination of uses within the same building or site as a part of an integrated development project with functional interrelationships and coherent physical design that includes a mix of water-oriented and non-water-oriented uses.

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

(82) "Must" means a mandate; the action is required.

(83) "Native vegetation" means plant species that are indigenous to the region.

(84) "New agricultural activities" are activities that meet the definition of agricultural activities but are proposed on land not in agricultural use at the adoption date of this SMP.

(85) "New construction" means structures for which the start of construction commenced on or after the effective date of the ordinance codified in this SMP.

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

(87) "Normal maintenance" means those usual acts that are necessary to prevent a property's decline, lapse, or cessation from a lawfully established condition.

(88) "Normal repair" means to restore a structure or development to a state comparable to its original condition including, but not limited to, its size, shape, configuration, location, and external appearance, within a reasonable period after decay or partial destruction, except where repair causes substantial adverse impacts on shoreline resources or environment. Replacement of a structure or development may be authorized as repair where such replacement is the common method of repair for the type of structure or development, and the replacement structure or development is comparable to the original structure or development including, but not limited to, its size, shape, configuration, location, and external appearance, and the replacement does not cause substantial adverse impacts on shoreline resources or environment.

(89) "Ordinary high water mark (OHWM)" means that mark that will be found by examining the bed and banks and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland, in respect to vegetation as that condition exists on June 1, 1971, as it may naturally change thereafter in accordance with permits issued by a local government or the department. Where the OHWM cannot be found, it shall be the line of mean high water. For braided streams, the OHWM is found on the banks forming the outer limits of the depression within which the braiding occurs.

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

(91) "Primitive trail" means an unimproved and unpaved but physically defined pathway for non-motorized movement.

(92) "Priority habitat" means a habitat type with unique or significant value to one or more species. An area classified and mapped as priority habitat must have one or more of the following attributes:

(i) Comparatively high fish or wildlife density

(ii) Comparatively high fish or wildlife species diversity

(iii) Fish spawning habitat

(iv) Important wildlife habitat

(v) Important fish or wildlife seasonal range

(vi) Important fish or wildlife movement corridor

(vii) Rearing and foraging habitat

(viii) Refugia habitat

(ix) Limited availability

(x) High vulnerability to habitat alteration

(xi) Unique or dependent species

A priority habitat may be described by a unique vegetation type or by a dominant plant species that is of primary importance to fish and wildlife. A priority habitat may also be described by a successional stage (such as old growth and mature forests). Alternatively, a priority habitat may consist of a specific habitat element (such as caves or snags) of key value to fish and wildlife. A priority habitat may contain priority and/or non-priority fish and wildlife.

(93) "Priority species" means species requiring protective measures and/or management guidelines to ensure their persistence at genetically viable population levels. Priority species are those that meet any of the following criteria:

(a) Criterion 1. State-listed or state-proposed species. State-listed species are those native fish and wildlife species legally designated as endangered

(WAC 232-12-014), threatened (WAC 232-12-011), or sensitive (WAC 232-12-011). State-proposed species are those fish and wildlife species that will be reviewed by the WDFW (POL-M-6001) for possible listing as endangered, threatened, or sensitive according to the process and criteria defined in WAC 232-12-297.

(b) Criterion 2. Vulnerable aggregations. Vulnerable aggregations include those species or groups of animals susceptible to significant population declines, within a specific area or statewide, by virtue of their inclination to congregate.

(c) Criterion 3. Species of recreational, commercial, and/or tribal importance. Native and non-native fish and wildlife species of recreational or commercial importance and recognized species used for tribal ceremonial and subsistence purposes that are vulnerable to habitat loss or degradation.

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

(94) "Provisions" means any definition, policy, goal, regulation, requirement, standard, authorization, prohibition, guideline criteria, or environment designations.

(95) "Public Access" means physical and visual access. Public access includes 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. The following are examples of public access:

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

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

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

(97) "Public utility" means a public service corporation performing some public service subject to special governmental regulations or a governmental agency performing similar public services, either of which are paid for directly by the recipients thereof. Such services shall include water supply, electric power, gas, and transportation for persons and freight.

(98) "Qualified professional" means a person with experience and training in the pertinent discipline, and who is a qualified expert with expertise appropriate for the relevant critical area or shoreline subject. A qualified professional must have obtained a B.S., B.A., or equivalent degree or certification in biology, engineering, environmental studies, fisheries, geomorphology, landscape architecture, forestry or a related field and have 2 years of related work experience.

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

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

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

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

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

(f) A qualified archaeologist must be a person qualified for addressing cultural and historic resources protection and preservation, with a degree in archaeology, anthropology, history, classics, or other germane disciplines with a specialization in archaeology and/or historic preservation and with a minimum of 2 years of experience in preparing cultural resource site assessments reports.

(99) "Recreational development" means the modification of the natural or existing environment to accommodate commercial and public facilities designed and used to provide recreational opportunities to the public. Commercial recreational development should be consistent with commercial development defined herein.

(100) "Recreational vehicle" means a vehicle designed primarily for recreational camping, travel, or seasonal use that has its own mode of power or is mounted on or towed by another vehicle, including, but not limited to, travel trailers, folding camping trailers, truck campers, motor homes, motorized boats, and multi-use vehicles or any structure inspected, approved, and designated a recreational vehicle by and bearing the insignia of the State of Washington or any other state or federal agency having the authority to approve recreational vehicles.

(101) "Research and Monitoring" includes activities associated with identifying, collecting, monitoring, and evaluating scientific data and information to support water, fisheries, and other ecological services management, restoration, and operational activities. Example activities that could be included under this category include installing and operating stream and water quality monitoring gages, collecting fisheries data using a trap or other devices, setting up and using equipment to collect sediment data, and other data collection activities that need to use the shoreline and waters of the state to meet public objectives.

(102) "Residential development" entails one or more buildings, structures, lots, parcels, or portions thereof that are designed, used, or intended to be used as a place of abode for human beings. These include single-family residences, residential subdivisions, short residential subdivisions, attached dwellings, and all accessory uses or structures normally associated with residential uses. Accessory residential uses include garages, sheds, tennis courts, swimming pools, parking areas, fences, cabanas, saunas, and guest cottages. Hotels, motels, dormitories, or any other type of overnight or transient housing are excluded from the residential category and must be considered commercial uses depending on project characteristics.

(103) "Restore," "Restoration," or "ecological restoration" means the re-establishment or upgrading of impaired natural or enhanced 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 pre-aboriginal or pre-European settlement conditions.

(104) "Riparian Habitat Area" means for this SMP, the boundary of an area that begins adjacent to a waterbody (Ordinary High Water Mark or OHWM) and extends to the zone where a noticeable or distinct change in vegetation occurs[2]:

- In the mix of plant species present (e.g., species composition of trees and shrubs compared to the adjacent upland area (grasses, sagebrush, and lower density forested areas);
- In the physical structure of the plant species present, such as health, vigor, or robustness of growth patterns compared to similar adjacent upland areas. Growth patterns include the health, compactness, crowding, size, structure, and/or numbers of individual plants.

[2] This change can often be seen with a change in land use at the edge of a floodplain, where an agricultural use or other land uses/development begins.

- The upland edge of the Riparian Area shall be identified as the area where the riparian trees and herbaceous species end and where the upland grasslands, shrub-steppe, or scrub/shrub terrestrial habitat begins.

(105) "Salmonid" means a member of the fish family Salmonidae, including king, Chinook, coho, chum, sockeye, and pink salmon; cutthroat, brook, brown, rainbow, and steelhead trout; kokanee; and native char (bull trout and Dolly Varden).

(106) "Section 404 Permit" means a permit issued by USACE for the placement of dredge or fill material waterward of the OHWM or clearing in waters of the United States, including wetlands, in accordance with 33 United States Code Section 1344.

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

(108) "Shall" means a mandate; the action must be done.

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

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

(111) "Shoreline modifications" means those actions that modify the physical configuration or qualities of the shoreline area, usually through the construction of a physical element such as a dike, breakwater, pier, weir, dredged basin, fill, bulkhead, or other shoreline structure. They can include other actions, such as clearing, grading, or application of chemicals.

(112) "Shoreline stabilization" means actions taken to address erosion impacts to property and dwellings, businesses, or structures caused by natural processes such as current, flood, wind, or wave action. These actions include structural and non-structural methods. Non-structural methods include building setbacks, relocation of the structure to be protected, groundwater management, and planning and regulatory measures to avoid the need for structural stabilization.

(113) "Should" means that the particular action is required unless there is a demonstrated, compelling reason, based on policy of the SMA and this SMP, against taking the action.

(114) "Significant adverse environmental impacts" (as used in SEPA) means a reasonable likelihood of more than a moderate adverse impact on environmental quality (WAC 197-11-794).

(115) "Significant vegetation removal" means the removal or alteration of trees, shrubs, and/or ground cover by clearing, grading, cutting, burning, chemical means, or other activity that causes significant ecological impacts on functions provided by such vegetation. The removal of invasive or noxious weeds does not constitute significant vegetation removal. Tree pruning, not including tree topping, where it does not affect ecological functions, does not constitute significant vegetation removal.

(116) "Site Assessment Requirements" means requirements for Critical Area Report.

(117) "Silviculture" is the art and science of controlling the establishment, growth, composition, health, and quality of forests and woodlands to meet the diverse needs and values of landowners and society on a sustainable basis.

(118) "Snag" means the remaining trunk of a dying, diseased, or dangerous tree that is reduced in height and stripped of all live branches.

(119) "Special flood hazard area" means an area subject to a base or 100-year flood; areas of special flood hazard are shown on a flood hazard boundary map or FIRM as Zone A, AO, A1-30, AE, A99, and AH.

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

(121) "Species, threatened and endangered" means those native species that are listed by WDFW pursuant to RCW 77.12.070 as threatened (WAC 232-12-011) or endangered (WAC 232-12-014) or that are listed as threatened or endangered under the Federal Endangered Species Act (16 United States Code 1533).

(122) "Start of construction" means and includes substantial improvement and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement, or other improvement was within 180 days of the permit issuance date. For cumulative tracking, the permit may extend beyond the specified time frame to the time of permit completion. The actual start means either the first placement of permanent construction of a structure on a site such as the pouring of slab or footings, the

installation of piles, the construction of columns, or any work beyond the stage of excavation, or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling, nor does it include the installation of streets and/or walkways, nor does it include excavation for a basement, footings, piers, or foundation or the erection of temporary forms, nor does it include the installation on the property of accessory buildings such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

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

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

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

(126) "Substantial damage" means damage of any origin, including intentional and unintentional demolition, sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50% of the assessed value of the structure before the damage occurred.

(127) "Substantial improvement" means any rehabilitation, repair, reconstruction, addition, or other improvement of a building when the cost of the improvement equals or exceeds 50% of the market value of the building before start of construction of the improvement. The term includes buildings that have incurred substantial damage or damage of any origin sustained by a building when the cost of restoring the building to its pre-damaged condition would equal or exceed 50% of the market value before the damage occurred. Substantial improvement does not include any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications, which have been identified by the local code enforcement

official and are the minimum necessary to ensure safe living conditions or any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure.

(128) "Substantially degrade" means to cause significant ecological impact.

(129) "Technical Interdisciplinary Team" includes representatives from the county, city, and town departments, such as Community Development, Public Works, Health, and Emergency Management, as well as Resource Agency Personnel having technical expertise in the subject of interest.

(130) "Thinning" means the evenly spaced non-commercial removal of up to 40% of trees and woody shrubs.

(131) "Topping" means the severing of main trunks or stems of vegetation at any place above 25% of the vegetation height.

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

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

(134) "Trees" means any living woody plant characterized by one main stem or trunk and many branches and having a diameter of 4 inches or more, measured 24 inches above ground level.

(135) "Unavoidable" means adverse impacts that remain after all appropriate and practicable avoidance and minimization have been achieved.

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

(137) "Vegetation" means plant life growing below, at, and above the soil surface.

(138) "Vegetation alteration" means any clearing, grading, cutting, topping, limbing, or pruning of vegetation.

(139) "Water-dependent use" means a use or portion of a use that cannot exist in a location that is not adjacent to the water and that is dependent on the water by reason of the intrinsic nature of its operations.

(140) "Water-enjoyment use" means a recreational use or other use that facilitates public access to the shoreline as a primary characteristic of the use or a use that provides for recreational use or aesthetic enjoyment of the shoreline for a substantial number of people as a general characteristic of the use, and which through location, design, and operation ensures the public's ability to enjoy the physical and aesthetic qualities of the shoreline. In order to qualify as a water-enjoyment use, the use must be open to the general public and the shoreline-oriented space within. The project must be devoted to the specific aspects of the use that fosters shoreline enjoyment.

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

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

(143) "Water-related use" means a use or portion of a use which is not intrinsically dependent on a waterfront location but whose economic viability is dependent upon a waterfront location because of one of the following scenarios:

(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.

(b) The use provides a necessary service supportive of the water-dependent uses, and the proximity of the use to its customers makes its services less expensive and/or more convenient.

(144) "Water Resources Inventory Area (WRIA)" means one of 62 watersheds in the State of Washington, each composed of the drainage areas of a stream or streams, as established in WAC 173-500 as it existed on January 1, 1997.

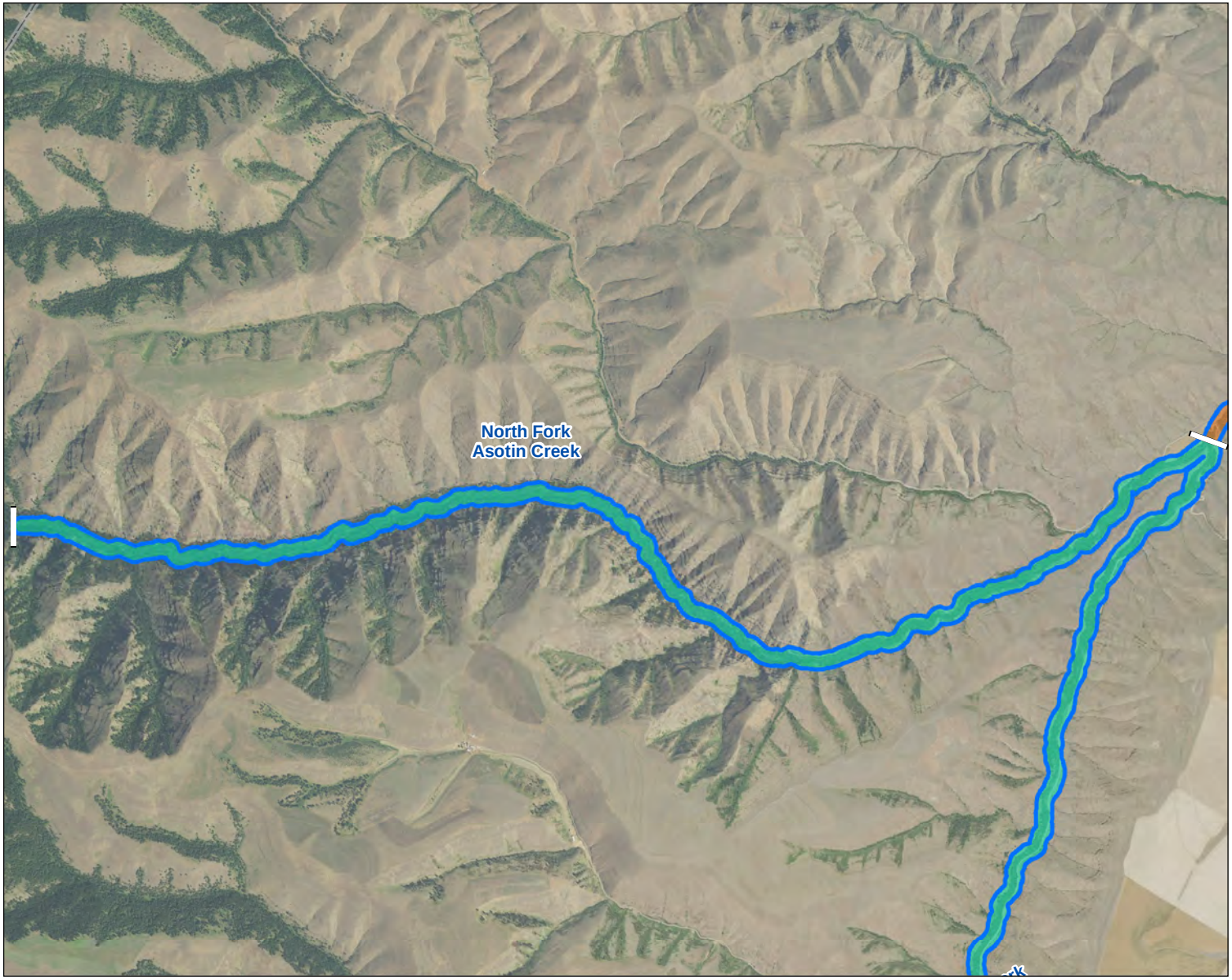
(145) "Weir" means a structure generally built perpendicular to the shoreline for the purpose of diverting water or trapping sediment or other moving objects transported by water.

(146) "Wetlands" are areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and that under normal circumstances do support a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from non-wetland sites, including, but not limited to,

irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from non-wetland areas to mitigate the conversion of wetlands.

XX.XX.870 Shoreline Environment Designation Maps

XX.XX.880 Reference List of Native Plant Species Associated with Vegetation Enhancement



LEGEND

- County Reach and Subreach (SR) Breaks
- SE WA County Coalition County Boundary
- SMA Jurisdiction

Environment Designation

- Conservancy
- Rural

NOTES:

1. This information is to be used for planning purposes only. Data is displayed as is and without any guarantee of accuracy or completeness.
2. Aerial image courtesy of USDA NAIP (2015).
3. Ordinary high water data acquired from Washington Department of Ecology, SEA Program, Shorelines of the State.
4. All islands designated as Natural.

ANCHOR QEA

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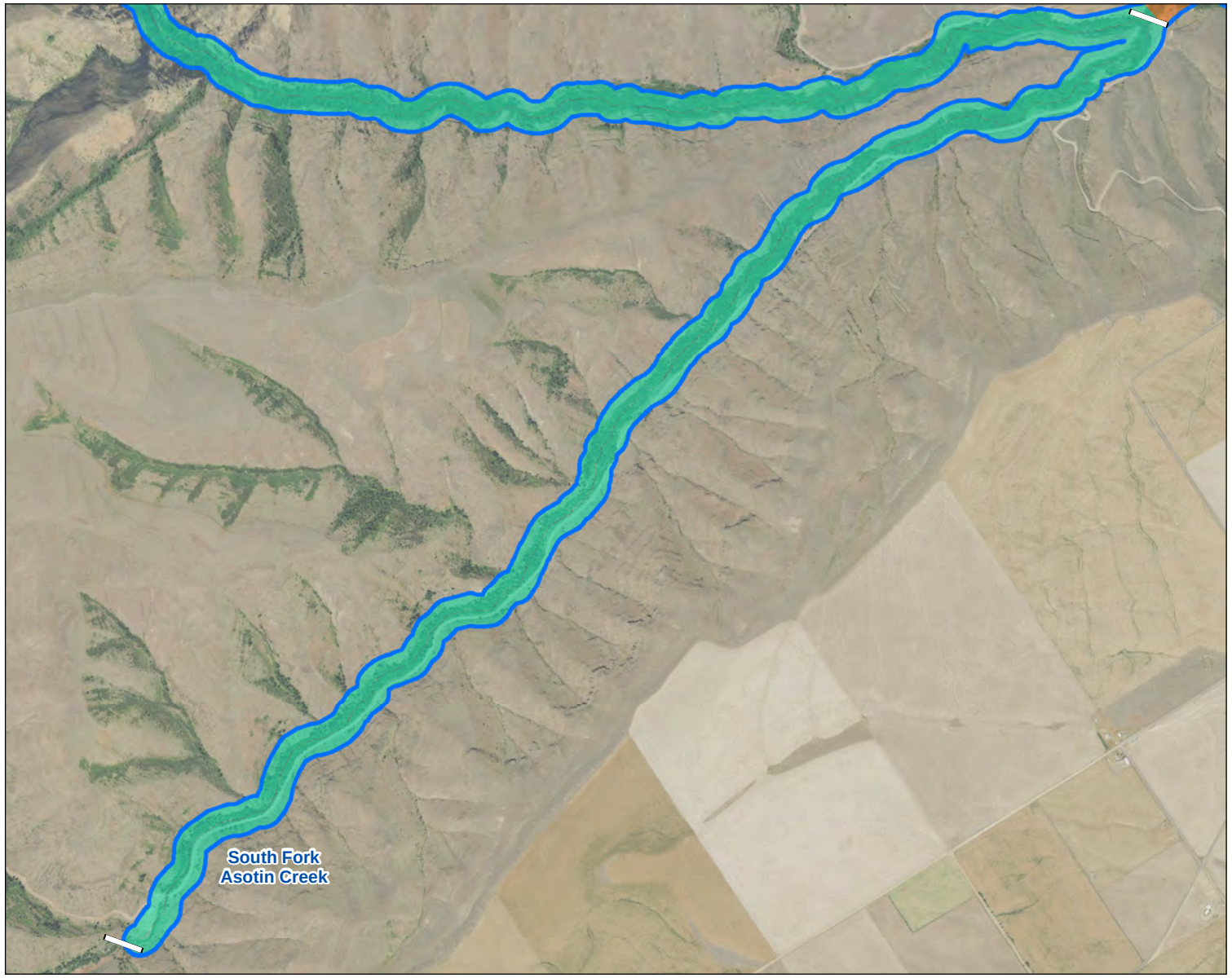
0 0.65 1.3

Map 1
North Fork Asotin Creek Reach
SE WA Coalition Environment Designations



LEGEND

- County Reach and Subreach (SR) Breaks
- SE WA County Coalition County Boundary
- SMA Jurisdiction

Environment Designation

- Conservancy
- Rural

NOTES:

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2. Aerial image courtesy of USDA NAIP (2015).
3. Ordinary high water data acquired from Washington Department of Ecology, SEA Program, Shorelines of the State.
4. All islands designated as Natural.

ANCHOR QEA

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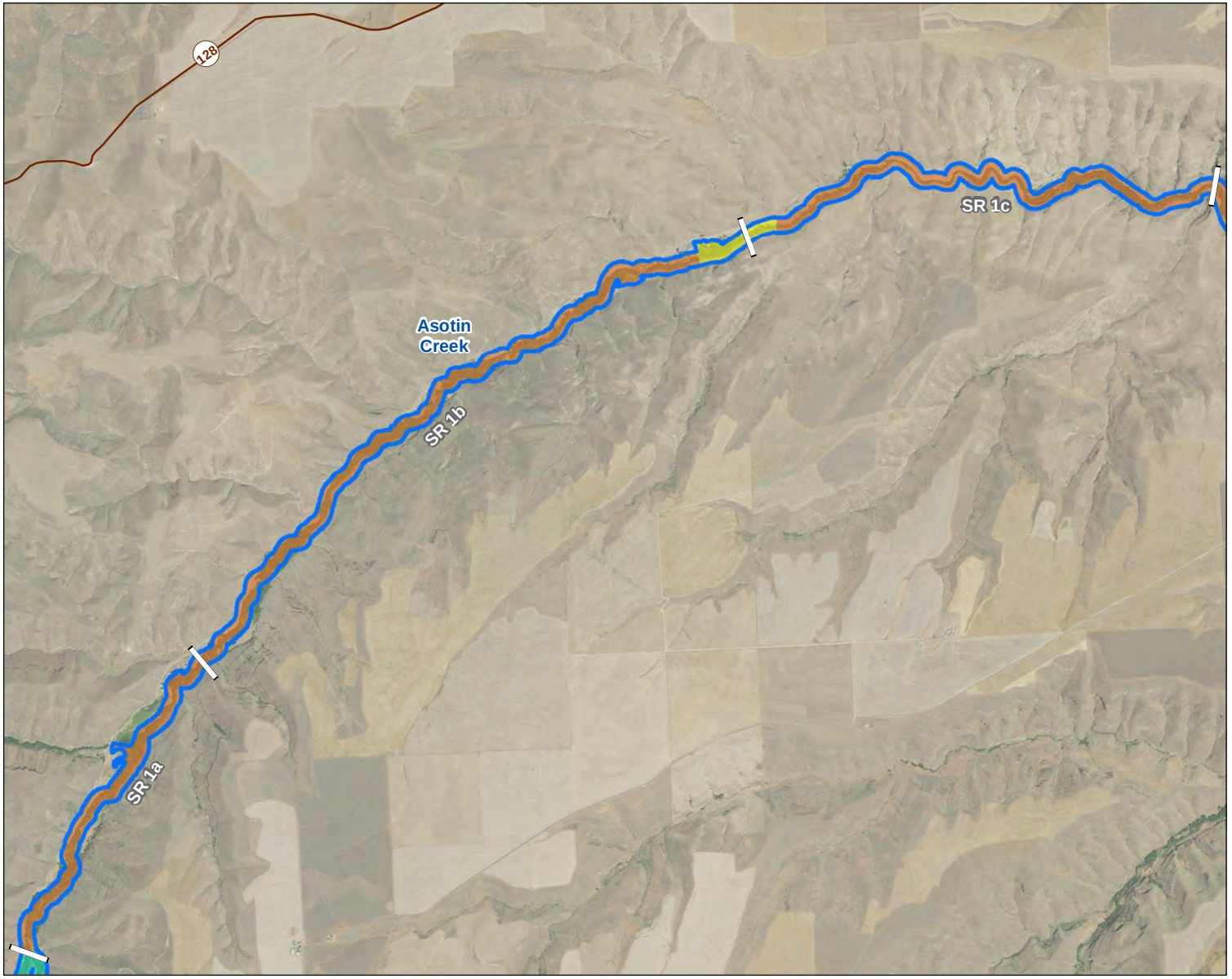
Map 2
South Fork Asotin Creek Reach
SE WA Coalition Environment Designations



LEGEND

- County Reach and Subreach (SR) Breaks
- Major Road
- SE WA County Coalition County Boundary
- SMA Jurisdiction

Environment Designation

- Conservancy
- Recreation
- Rural

NOTES:

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2. Aerial image courtesy of USDA NAIP (2015).
3. Ordinary high water data acquired from Washington Department of Ecology, SEA Program, Shorelines of the State.
4. All islands designated as Natural.

ANCHOR QEA

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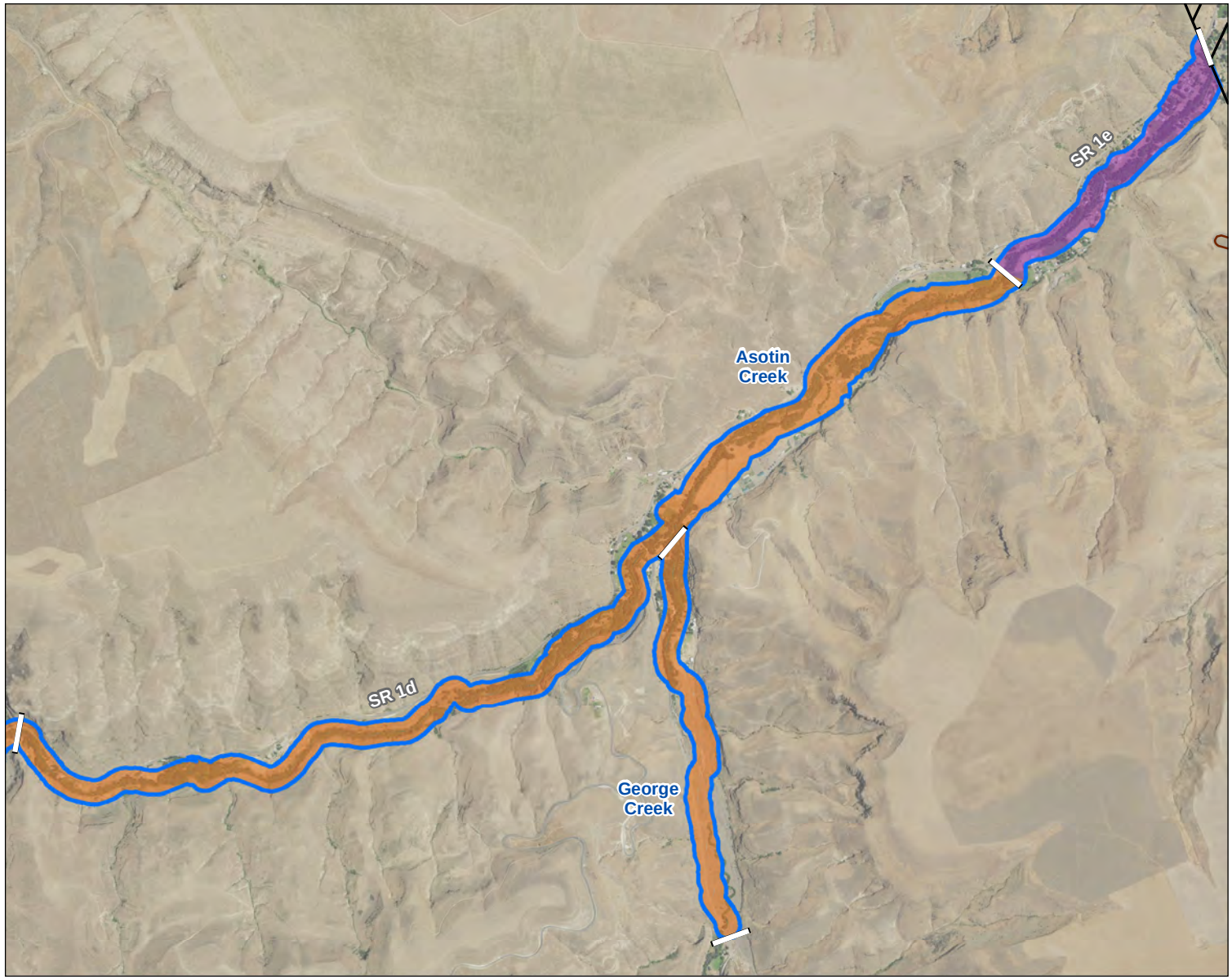
Map 3
Asotin Creek SR 1a - 1c
SE WA Coalition Environment Designations



LEGEND

- County Reach and Subreach (SR) Breaks
- Major Road
- Incorporated City
- SE WA County Coalition County Boundary
- SMA Jurisdiction

Environment Designation

- Rural
- Shoreline Residential

NOTES:

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2. Aerial image courtesy of USDA NAIP (2015).
3. Ordinary high water data acquired from Washington Department of Ecology, SEA Program, Shorelines of the State.
4. All islands designated as Natural.

ANCHOR QEA

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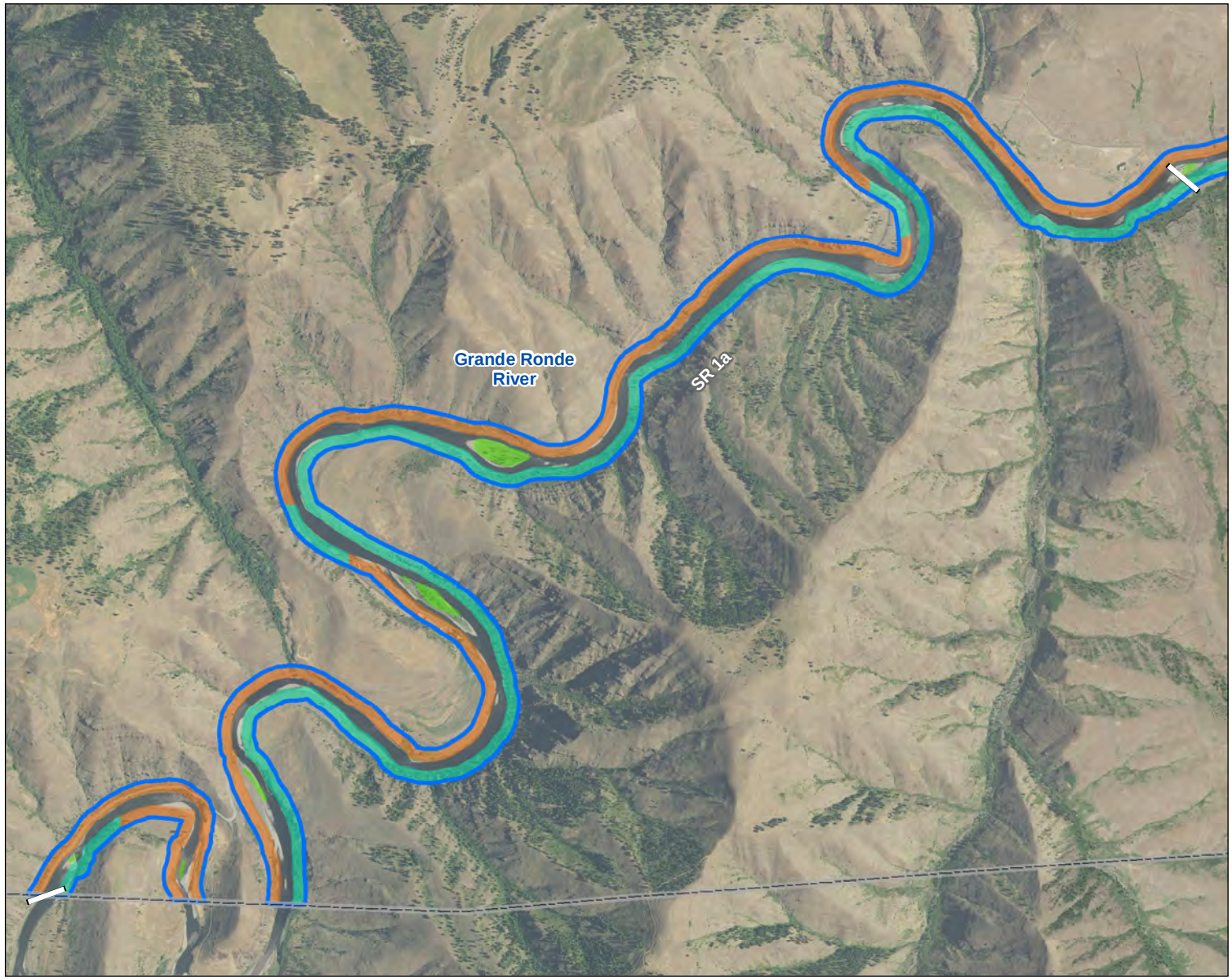
Map 4
Asotin Creek SR 1d and 1e, and George Creek Reach
SE WA Coalition Environment Designations



LEGEND

- County Reach and Subreach (SR) Breaks
- SE WA County Coalition County Boundary
- SMA Jurisdiction

Environment Designation

- Conservancy
- Natural
- Rural

NOTES:

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2. Aerial image courtesy of USDA NAIP (2015).
3. Ordinary high water data acquired from Washington Department of Ecology, SEA Program, Shorelines of the State.
4. All islands designated as Natural.

ANCHOR QEA

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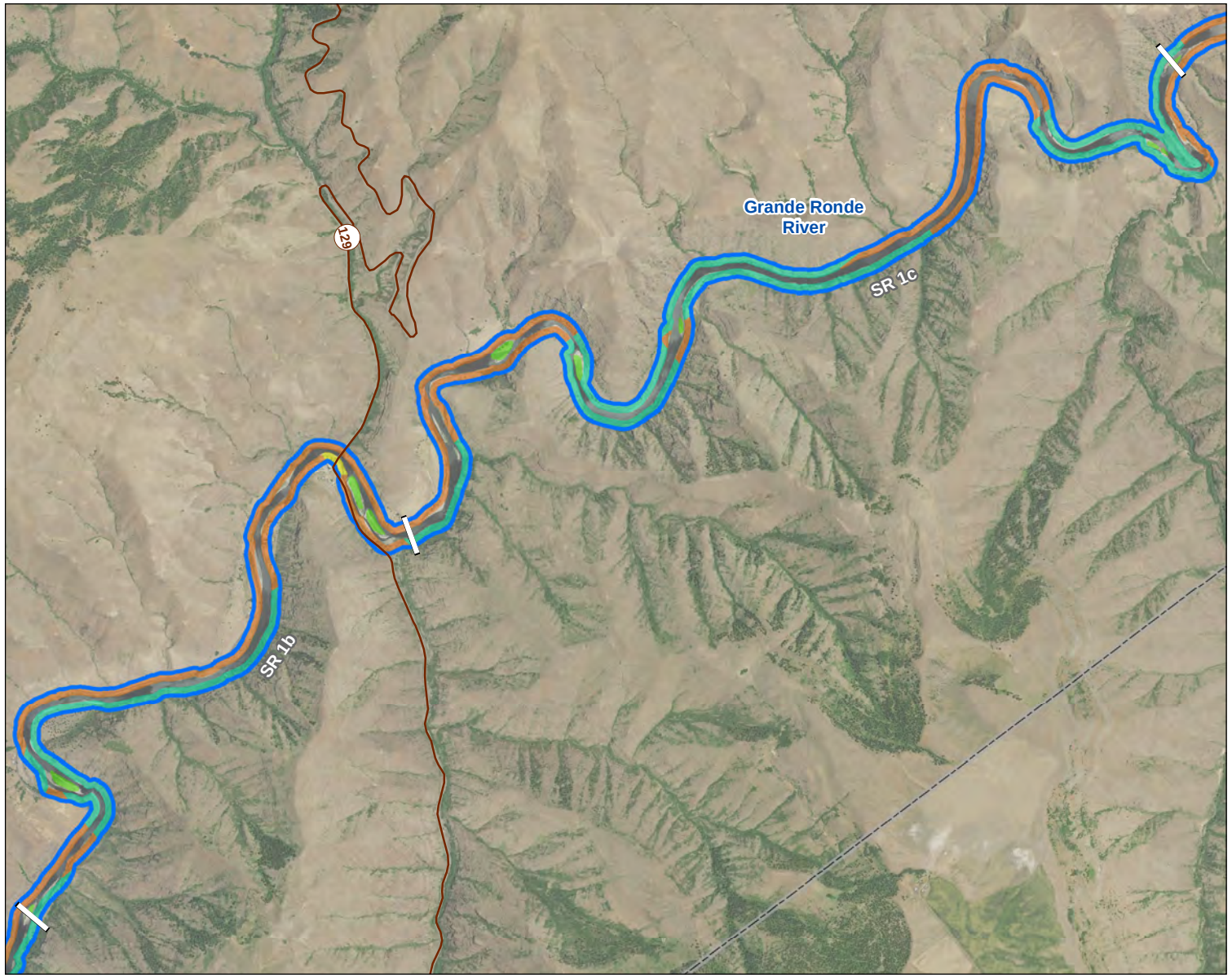
Map 5
Grande Ronde River SR 1a
SE WA Coalition Environment Designations



LEGEND

- County Reach and Subreach (SR) Breaks
- Major Road
- SE WA County Coalition County Boundary
- SMA Jurisdiction

Environment Designation

- Conservancy
- Natural
- Recreation
- Rural

NOTES:

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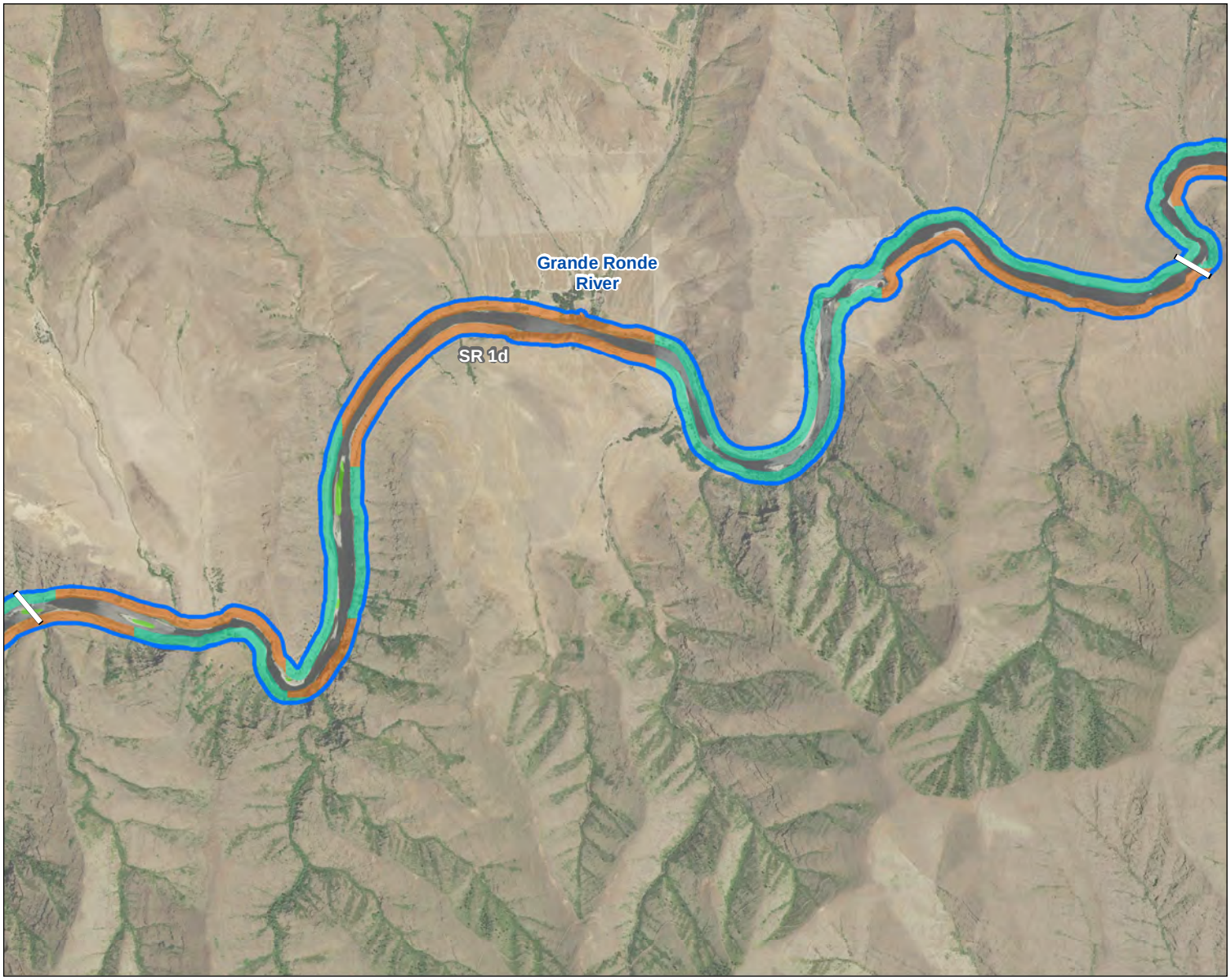
2. Aerial image courtesy of USDA NAIP (2015).
3. Ordinary high water data acquired from Washington Department of Ecology, SEA Program, Shorelines of the State.
4. All islands designated as Natural.

ANCHOR QEA

Miles
0 0.65 1.3

Map 6
Grande Ronde River SR 1b and 1c
SE WA Coalition Environment Designations



LEGEND

- County Reach and Subreach (SR) Breaks
- SE WA County Coalition County Boundary
- SMA Jurisdiction

Environment Designation

- Conservancy
- Natural
- Rural

NOTES:

1. This information is to be used for planning purposes only. Data is displayed as is and without any guarantee of accuracy or completeness.
2. Aerial image courtesy of USDA NAIP (2015).
3. Ordinary high water data acquired from Washington Department of Ecology, SEA Program, Shorelines of the State.
4. All islands designated as Natural.

ANCHOR QEA

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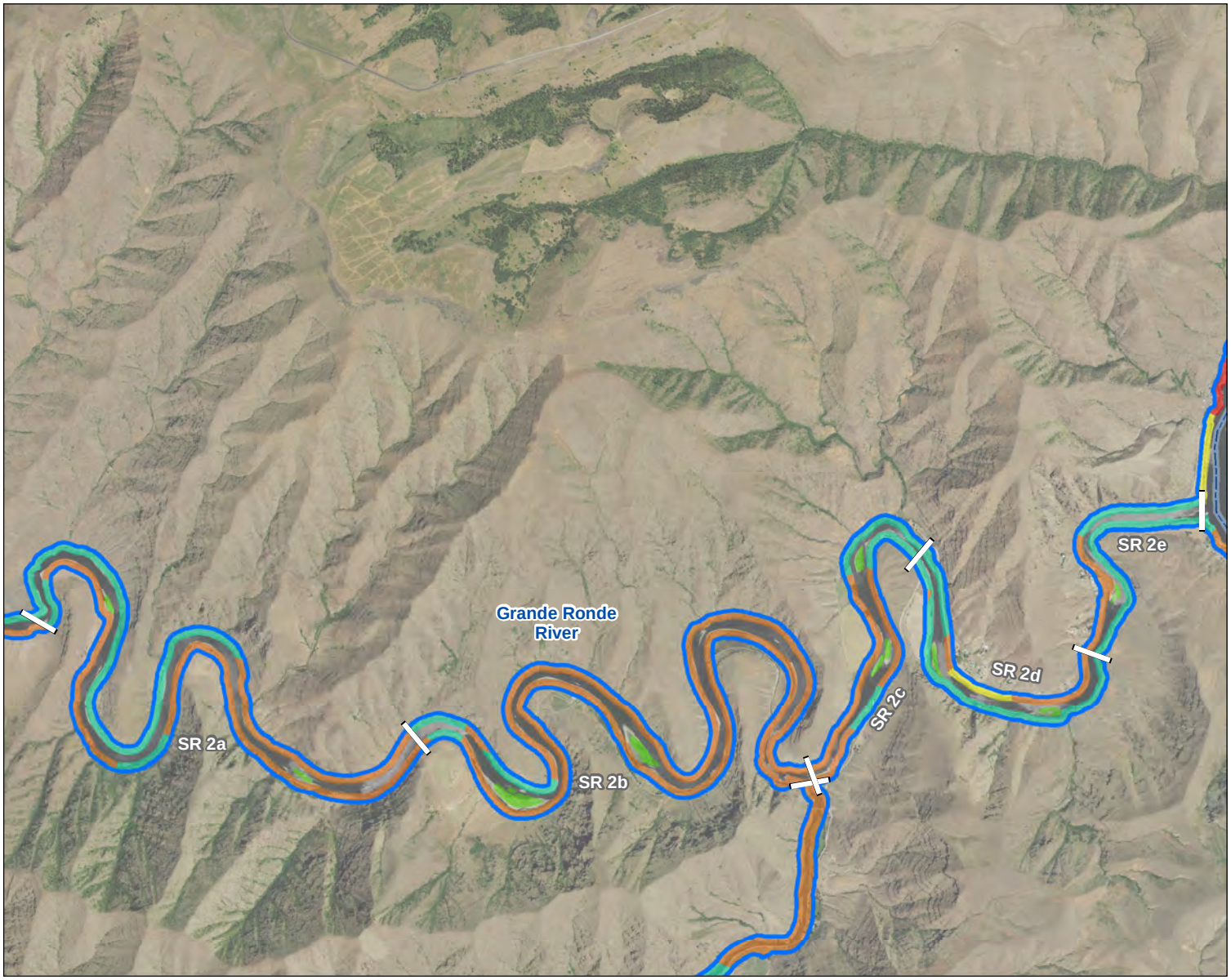
Map 7
Grande Ronde River SR 1d
SE WA Coalition Environment Designations



LEGEND

- County Reach and Subreach (SR) Breaks
- SE WA County Coalition County Boundary
- SMA Jurisdiction

Environment Designation

- Conservancy
- High Intensity
- Natural
- Recreation
- Rural

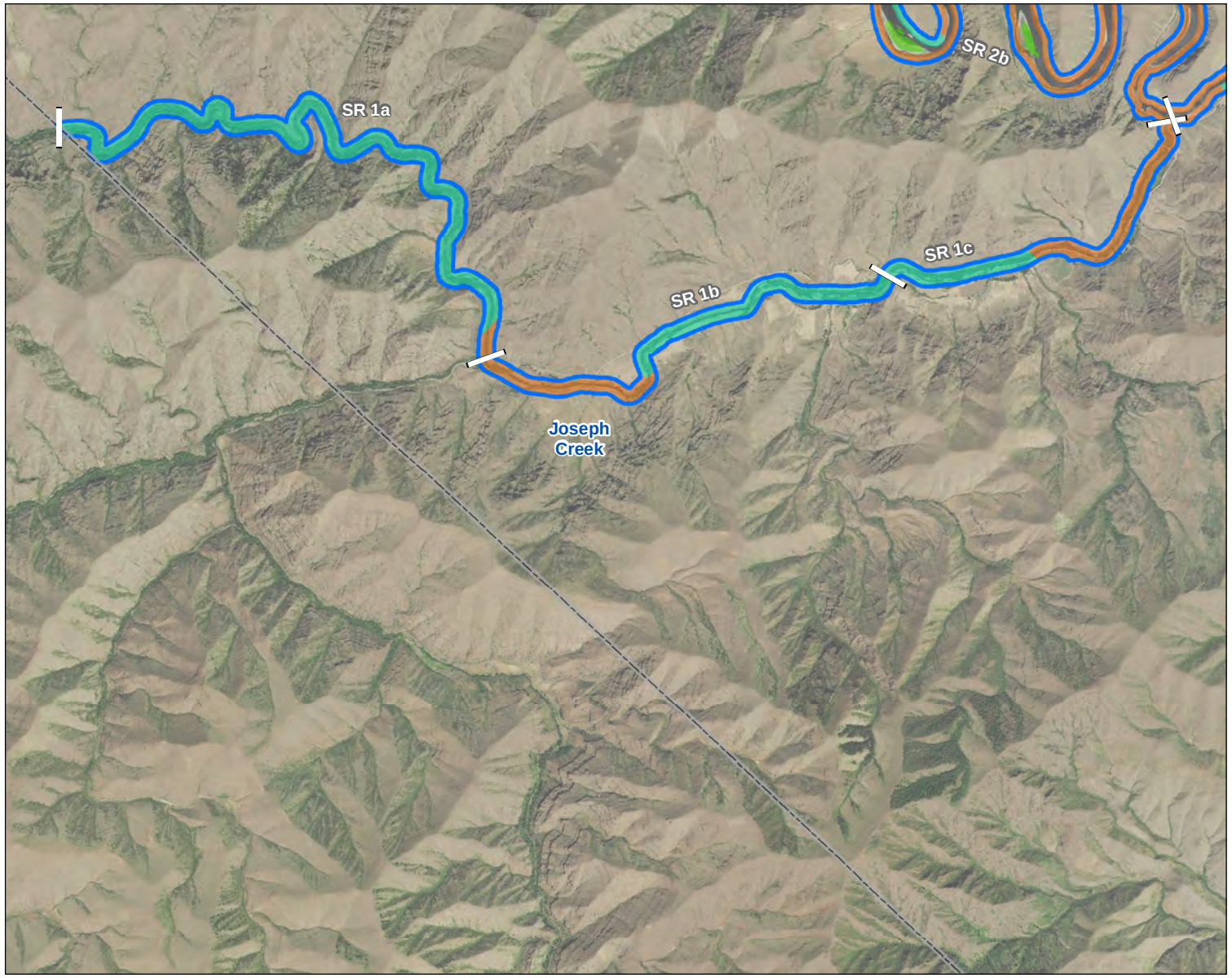
NOTES:

1. This information is to be used for planning purposes only. Data is displayed as is and without any guarantee of accuracy or completeness.
2. Aerial image courtesy of USDA NAIP (2015).
3. Ordinary high water data acquired from Washington Department of Ecology, SEA Program, Shorelines of the State.
4. All islands designated as Natural.

ANCHOR QEA

Miles
0 0.65 1.3

Map 8
Grande Ronde River SR 2a - 2e
SE WA Coalition Environment Designations



LEGEND

- County Reach and Subreach (SR) Breaks
- SE WA County Coalition County Boundary
- SMA Jurisdiction

Environment Designation

- Conservancy
- Natural
- Rural

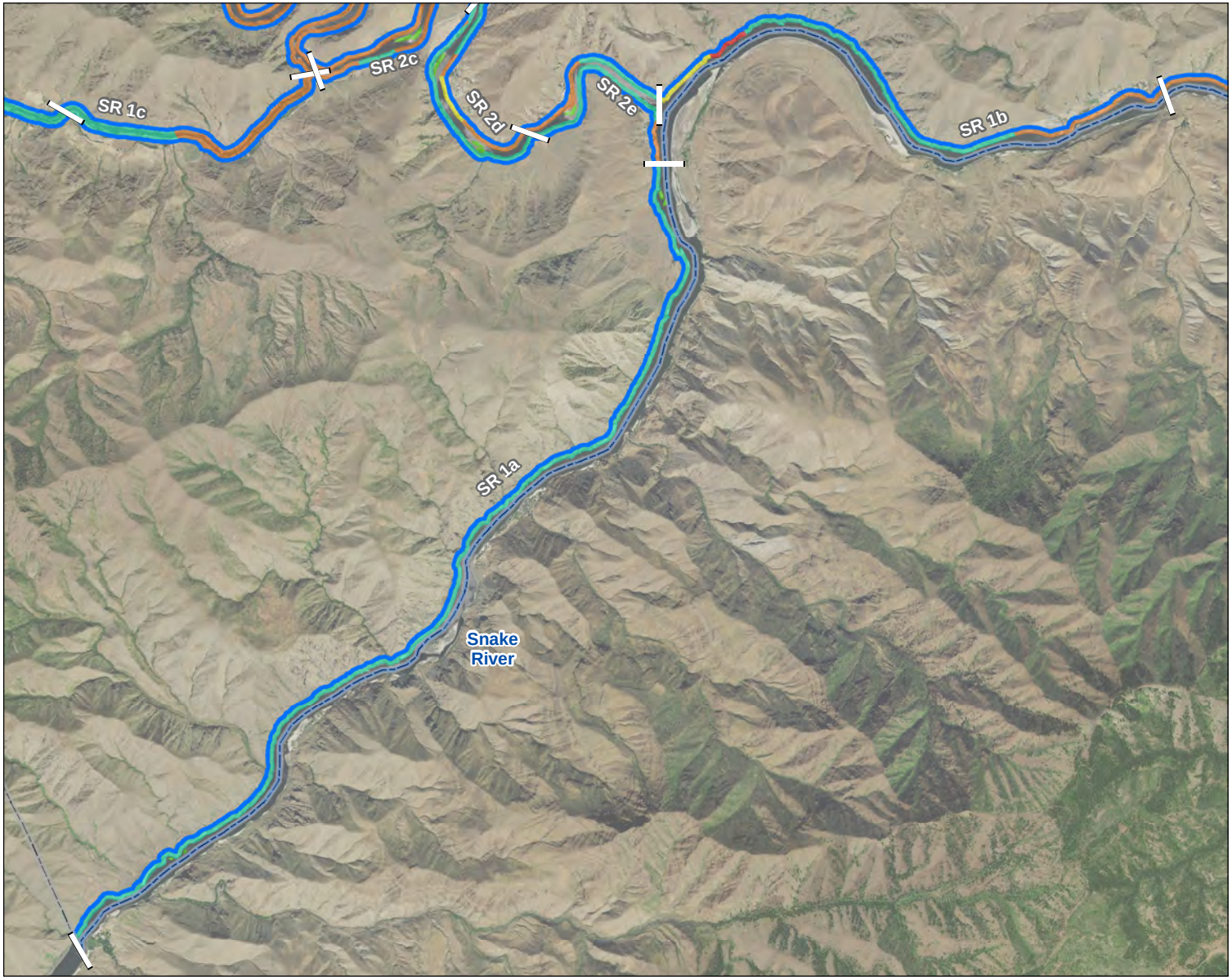
NOTES:

1. This information is to be used for planning purposes only. Data is displayed as is and without any guarantee of accuracy or completeness.
2. Aerial image courtesy of USDA NAIP (2015).
3. Ordinary high water data acquired from Washington Department of Ecology, SEA Program, Shorelines of the State.
4. All islands designated as Natural.

ANCHOR QEA

Miles
0 0.7 1.4

Map 9
Joseph Creek SR 1a - 1c
SE WA Coalition Environment Designations



LEGEND

- County Reach and Subreach (SR) Breaks
- SE WA County Coalition County Boundary
- SMA Jurisdiction

Environment Designation

- Conservancy
- High Intensity
- Natural
- Recreation
- Rural

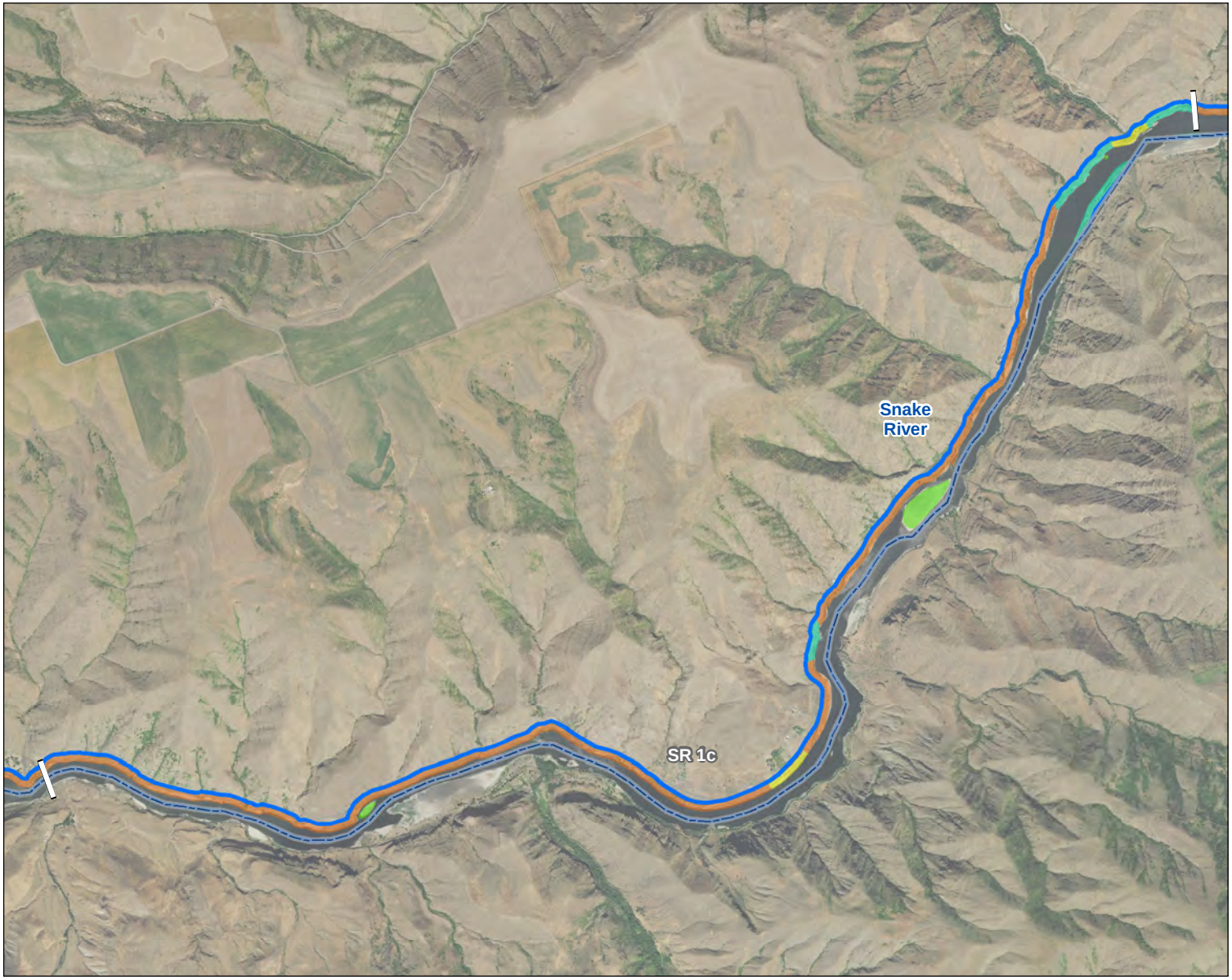
NOTES:

1. This information is to be used for planning purposes only. Data is displayed as is and without any guarantee of accuracy or completeness.
2. Aerial image courtesy of USDA NAIP (2015).
3. Ordinary high water data acquired from Washington Department of Ecology, SEA Program, Shorelines of the State.
4. All islands designated as Natural.

ANCHOR QEA

Miles
0 0.9 1.8

Map 10
Snake River SR 1a and 1b
SE WA Coalition Environment Designations



LEGEND

- County Reach and Subreach (SR) Breaks
- SE WA County Coalition County Boundary
- SMA Jurisdiction

Environment Designation

- Conservancy
- Natural
- Recreation
- Rural

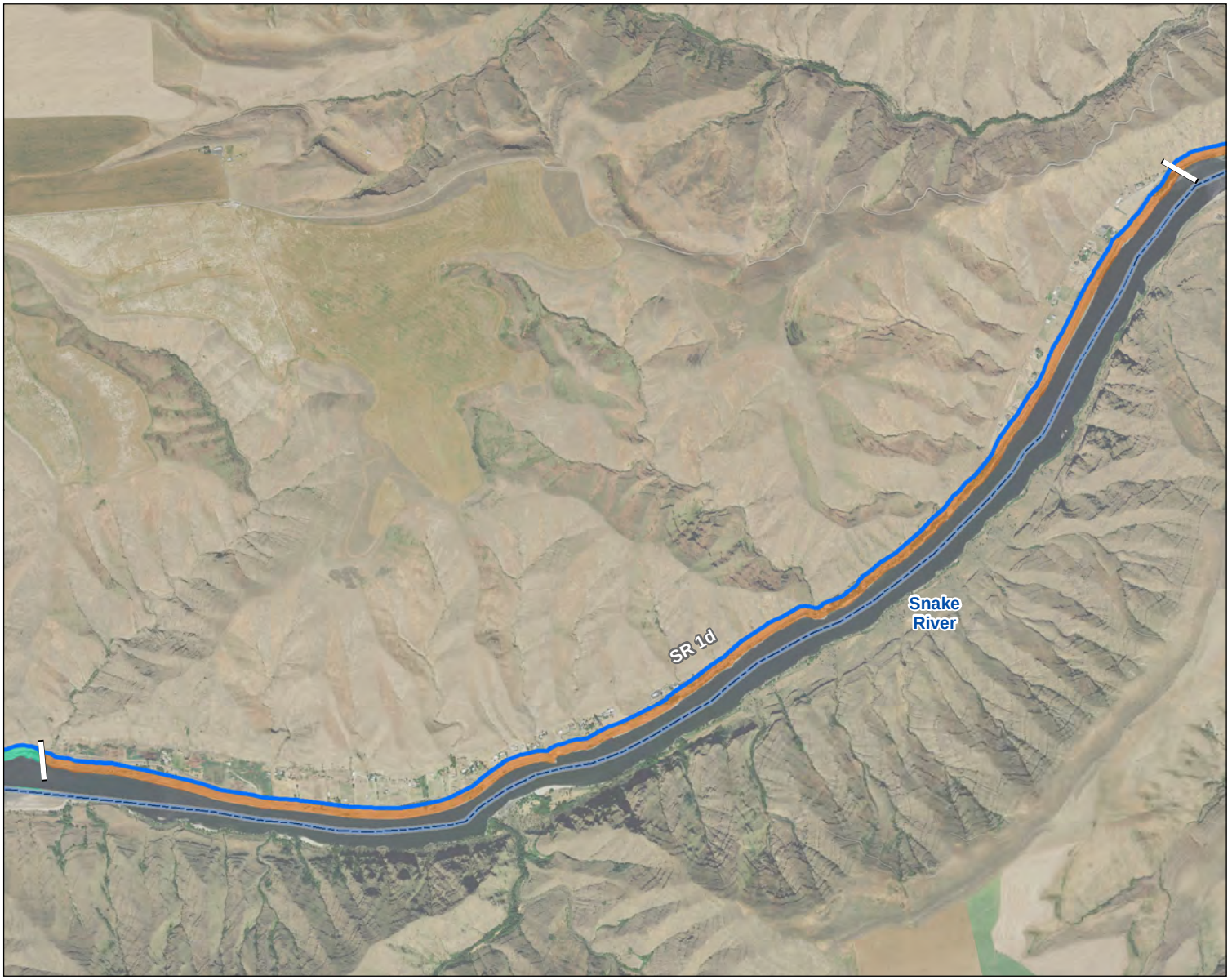
NOTES:

1. This information is to be used for planning purposes only. Data is displayed as is and without any guarantee of accuracy or completeness.
2. Aerial image courtesy of USDA NAIP (2015).
3. Ordinary high water data acquired from Washington Department of Ecology, SEA Program, Shorelines of the State.
4. All islands designated as Natural.

ANCHOR QEA

Miles
0 0.6 1.2

Map 11
Snake River SR 1c
SE WA Coalition Environment Designations



LEGEND

- County Reach and Subreach (SR) Breaks
- SE WA County Coalition County Boundary
- SMA Jurisdiction

Environment Designation

- Conservancy
- Rural

NOTES:

1. This information is to be used for planning purposes only. Data is displayed as is and without any guarantee of accuracy or completeness.
2. Aerial image courtesy of USDA NAIP (2015).
3. Ordinary high water data acquired from Washington Department of Ecology, SEA Program, Shorelines of the State.
4. All islands designated as Natural.

ANCHOR QEA

Miles
0 0.5 1

Map 12
Snake River SR 1d
SE WA Coalition Environment Designations

LEGEND

- County Reach and Subreach (SR) Breaks
- Major Road
- Incorporated City
- SE WA County Coalition County Boundary
- SMA Jurisdiction

Environment Designation

- Conservancy
- Rural

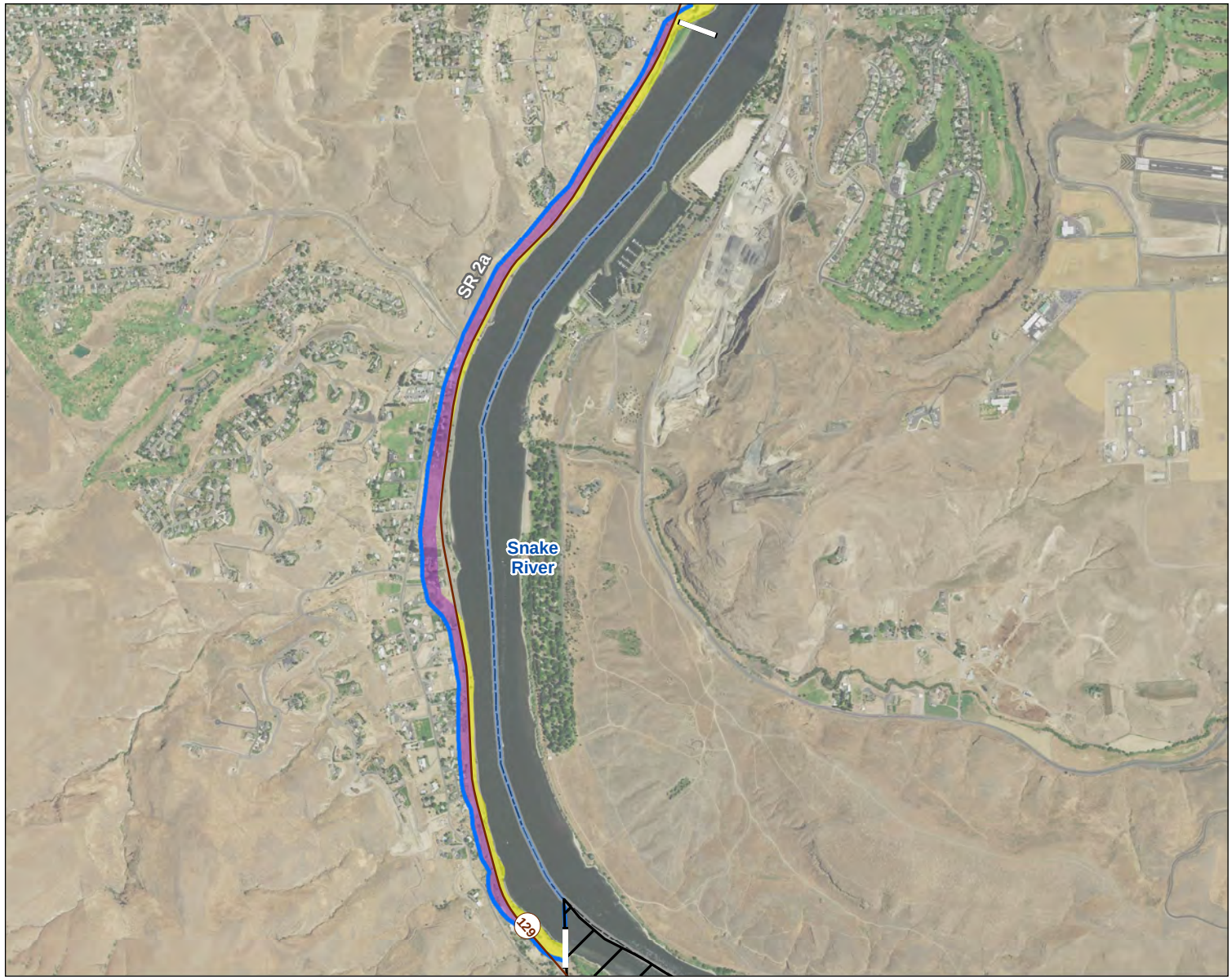
NOTES:

1. This information is to be used for planning purposes only. Data is displayed as is and without any guarantee of accuracy or completeness.
2. Aerial image courtesy of USDA NAIP (2015).
3. Ordinary high water data acquired from Washington Department of Ecology, SEA Program, Shorelines of the State.
4. All islands designated as Natural.

ANCHOR QEA

Miles
0 0.45 0.9

Map 13
Snake River SR 1e - 1g
SE WA Coalition Environment Designations



LEGEND

- County Reach and Subreach (SR) Breaks
- Major Road
- Incorporated City
- SE WA County Coalition County Boundary
- SMA Jurisdiction

Environment Designation

- Recreation
- Shoreline Residential

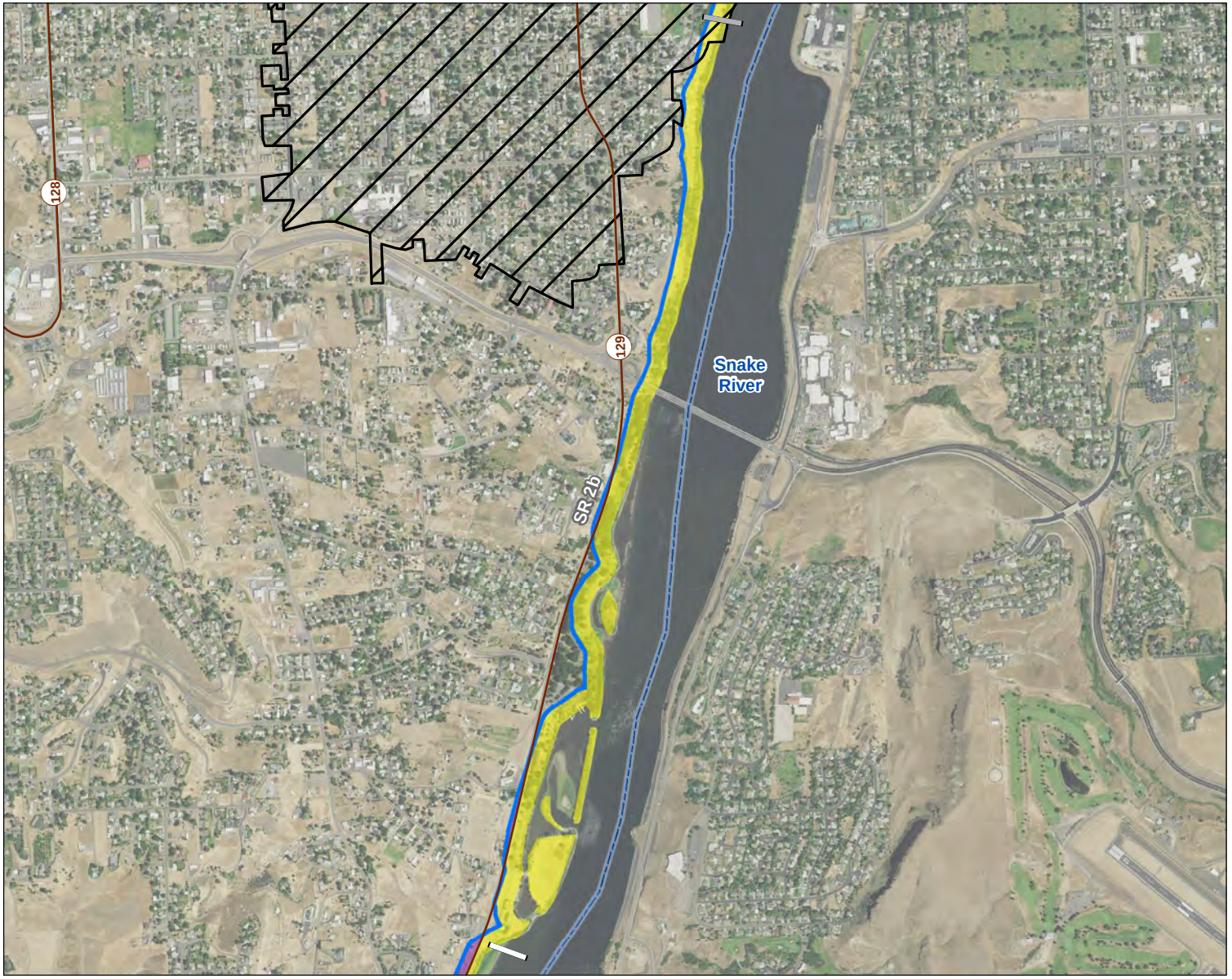
NOTES:

1. This information is to be used for planning purposes only. Data is displayed as is and without any guarantee of accuracy or completeness.
2. Aerial image courtesy of USDA NAIP (2015).
3. Ordinary high water data acquired from Washington Department of Ecology, SEA Program, Shorelines of the State.
4. All islands designated as Natural.

ANCHOR QEA

Miles
0 0.35 0.7

Map 14
Snake River SR 2a
SE WA Coalition Environment Designations



LEGEND

- City/Town Reach and Subreach (SR) Breaks
- County Reach and Subreach (SR) Breaks
- Major Road
- Incorporated City
- SE WA County Coalition County Boundary
- SMA Jurisdiction

Environment Designation

- Recreation
- Shoreline Residential

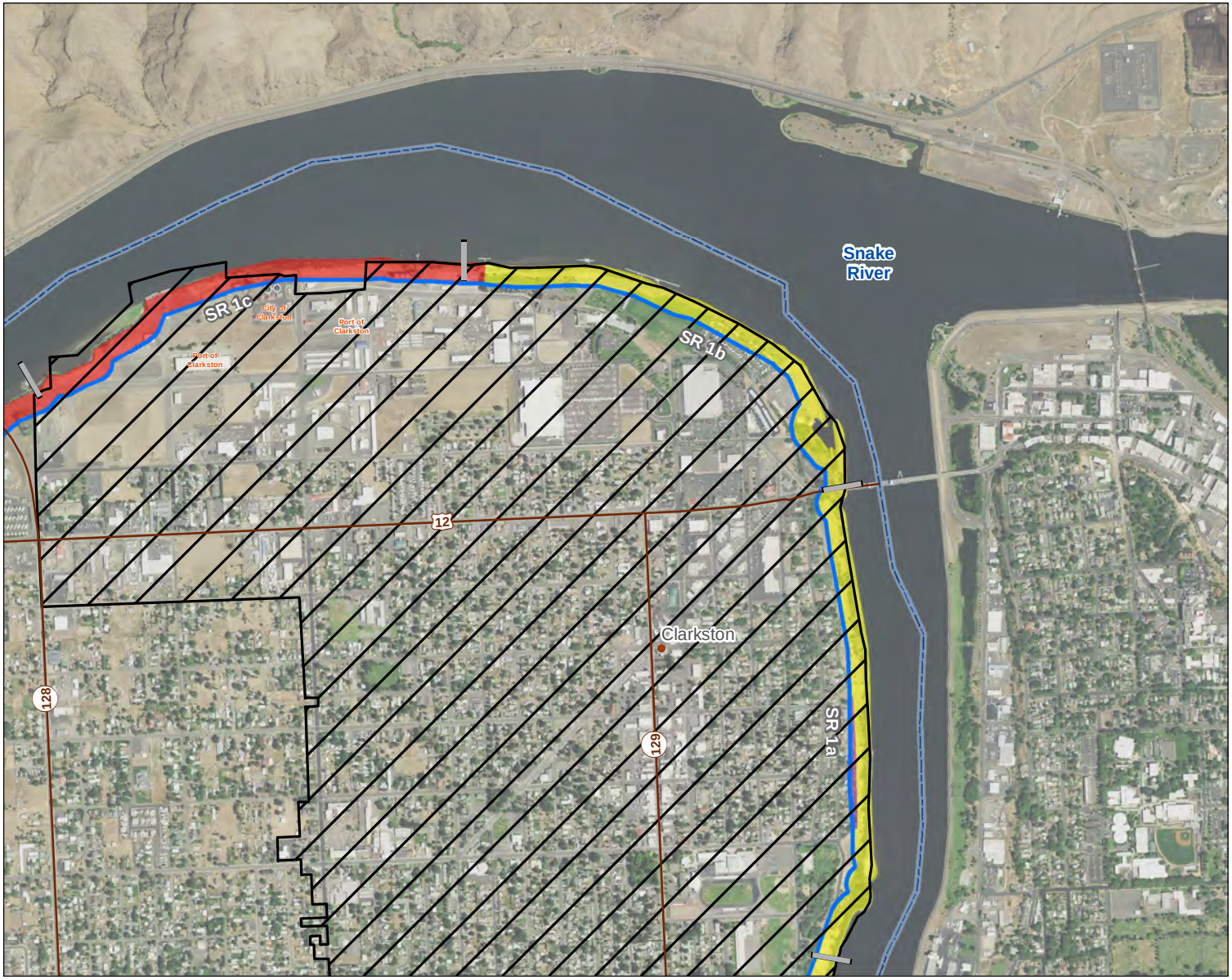
NOTES:

1. This information is to be used for planning purposes only. Data is displayed as is and without any guarantee of accuracy or completeness.
2. Aerial image courtesy of USDA NAIP (2015).
3. Ordinary high water data acquired from Washington Department of Ecology, SEA Program, Shorelines of the State.
4. All islands designated as Natural.

ANCHOR QEA

Miles
0 0.25 0.5

Map 15
Snake River SR 2b
SE WA Coalition Environment Designations



LEGEND

- City/Town Reach and Subreach (SR) Breaks
- Populated Place
- Major Road
- Incorporated City
- SE WA County Coalition County Boundary
- SMA Jurisdiction

Environment Designation

- High Intensity
- Recreation
- Shoreline Residential

NOTES:

1. This information is to be used for planning purposes only. Data is displayed as is and without any guarantee of accuracy or completeness.
2. Aerial image courtesy of USDA NAIP (2015).
3. Ordinary high water data acquired from Washington Department of Ecology, SEA Program, Shorelines of the State.
4. All islands designated as Natural.

ANCHOR QEA

Miles
0 0.25 0.5

Map 16
Snake River/Clarkston SR 1a - 1c
SE WA Coalition Environment Designations

LEGEND

- City/Town Reach and Subreach (SR) Breaks
- County Reach and Subreach (SR) Breaks
- Major Road
- Incorporated City
- SE WA County Coalition County Boundary
- SMA Jurisdiction

Environment Designation

- High Intensity
- Recreation

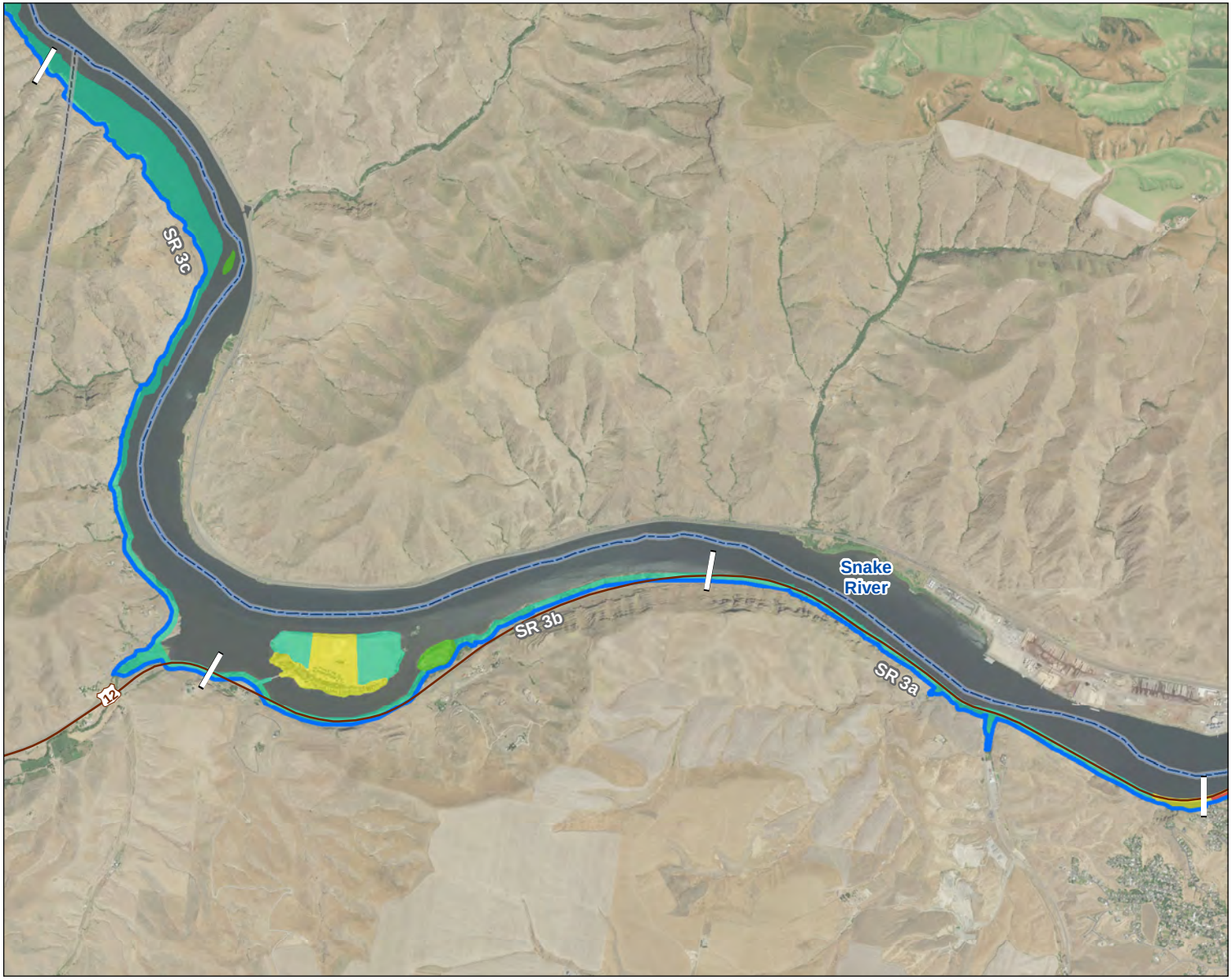
NOTES:

1. This information is to be used for planning purposes only. Data is displayed as is and without any guarantee of accuracy or completeness.
2. Aerial image courtesy of USDA NAIP (2015).
3. Ordinary high water data acquired from Washington Department of Ecology, SEA Program, Shorelines of the State.
4. All islands designated as Natural.

ANCHOR QEA

Miles
0 0.1 0.2

Map 17
Snake River SR 2c
SE WA Coalition Environment Designations



LEGEND

- County Reach and Subreach (SR) Breaks
- Major Road
- SE WA County Coalition County Boundary
- SMA Jurisdiction

Environment Designation

- Conservancy
- High Intensity
- Natural
- Recreation

NOTES:

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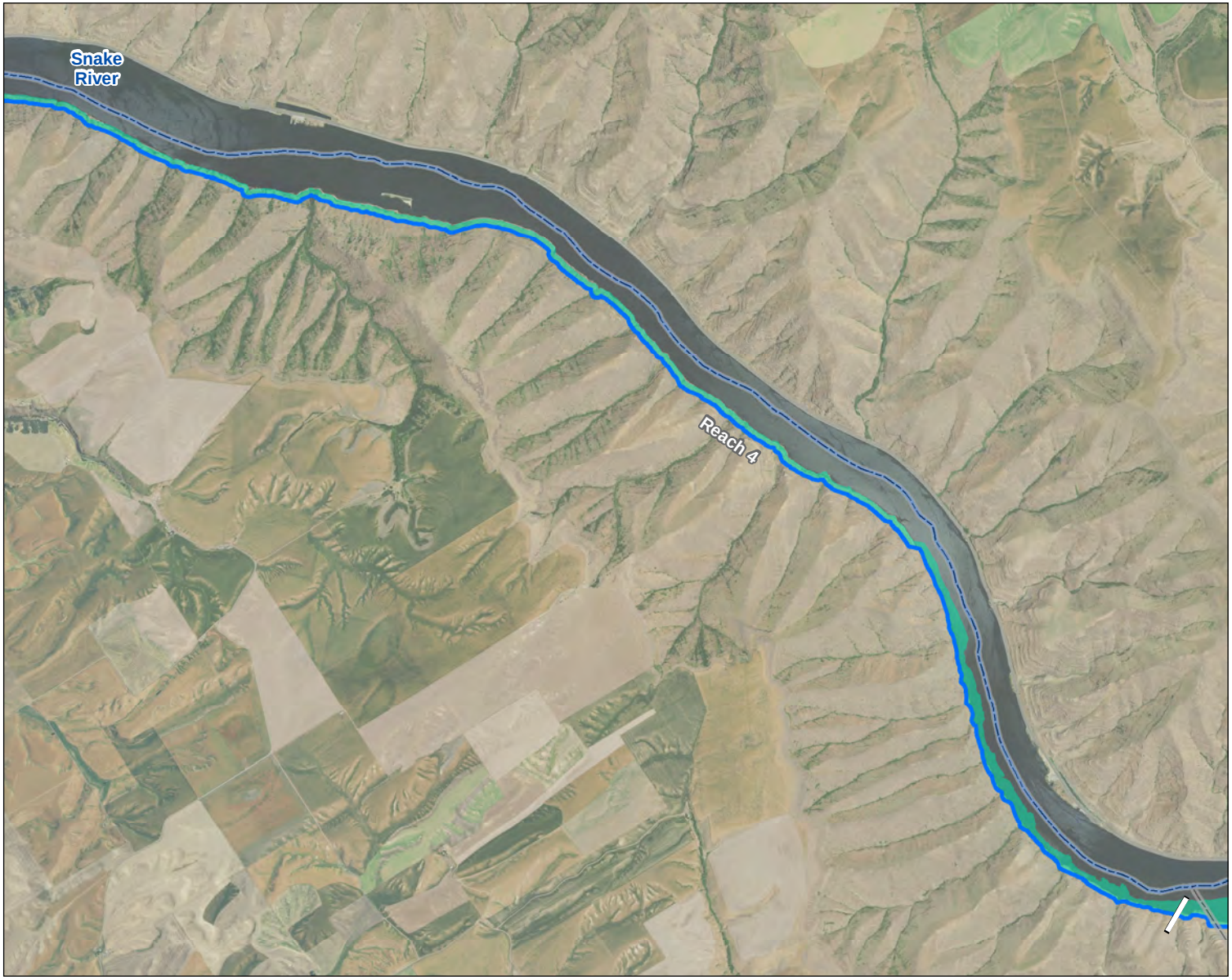
2. Aerial image courtesy of USDA NAIP (2015).
3. Ordinary high water data acquired from Washington Department of Ecology, SEA Program, Shorelines of the State.
4. All islands designated as Natural.

ANCHOR QEA

Miles
0 0.75 1.5

Map 18
Snake River SR 3a-3c
SE WA Coalition Environment Designations



LEGEND

- County Reach and Subreach (SR) Breaks
- SE WA County Coalition County Boundary
- SMA Jurisdiction

Environment Designation

- Conservancy

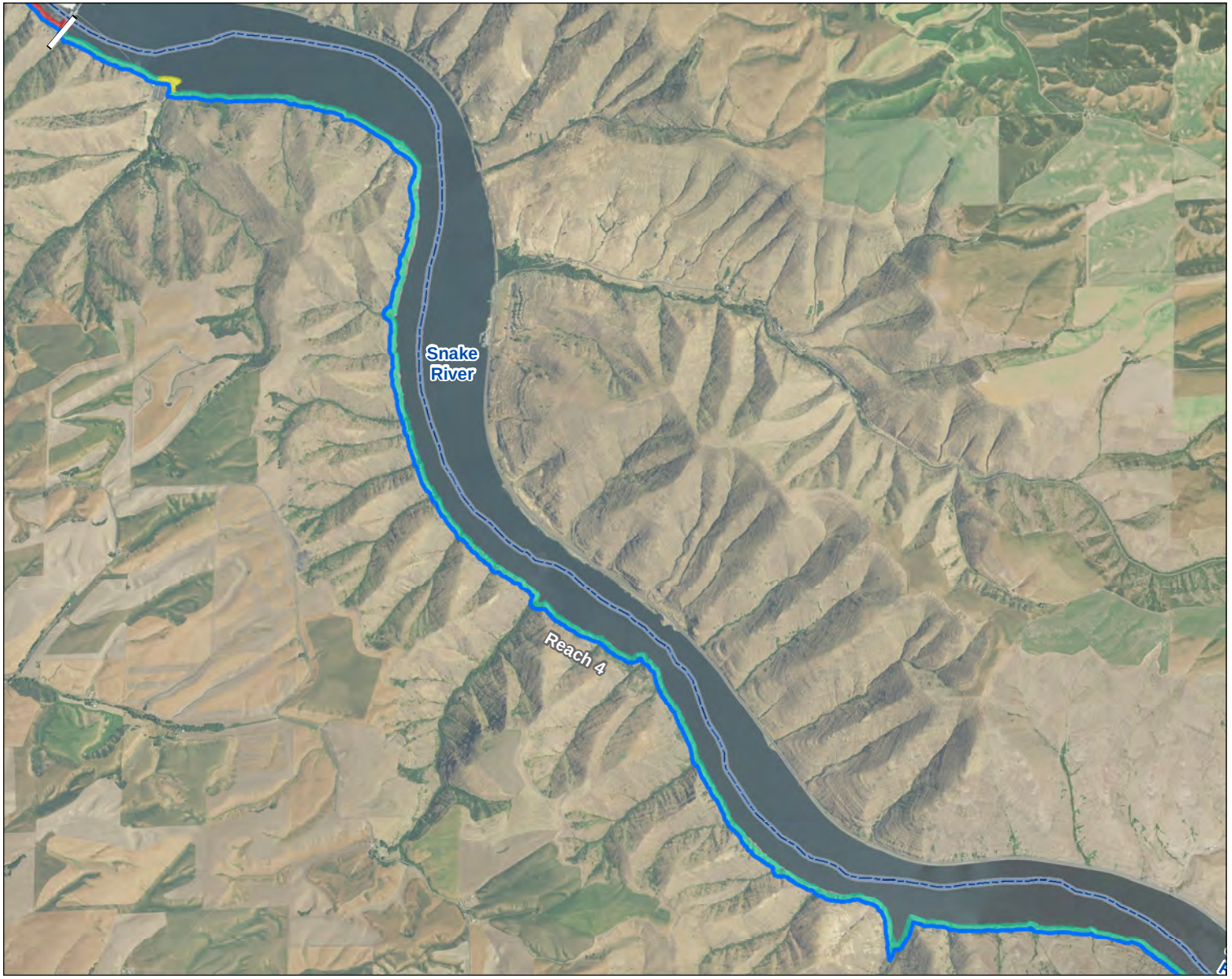
NOTES:

1. This information is to be used for planning purposes only. Data is displayed as is and without any guarantee of accuracy or completeness.
2. Aerial image courtesy of USDA NAIP (2015).
3. Ordinary high water data acquired from Washington Department of Ecology, SEA Program, Shorelines of the State.
4. All islands designated as Natural.

ANCHOR QEA

Miles
0 0.8 1.6

Map 19
Snake River Reach 4 - Start
SE WA Coalition Environment Designations



LEGEND

- County Reach and Subreach (SR) Breaks
- SE WA County Coalition County Boundary
- SMA Jurisdiction

Environment Designation

- Conservancy
- High Intensity
- Recreation

NOTES:

1. This information is to be used for planning purposes only. Data is displayed as is and without any guarantee of accuracy or completeness.
2. Aerial image courtesy of USDA NAIP (2015).
3. Ordinary high water data acquired from Washington Department of Ecology, SEA Program, Shorelines of the State.
4. All islands designated as Natural.

ANCHOR QEA

Miles
0 0.8 1.6

Map 20
Snake River Reach 4 - End
SE WA Coalition Environment Designations

LEGEND

- County Reach and Subreach (SR) Breaks
- SE WA County Coalition County Boundary
- SMA Jurisdiction

Environment Designation

- Conservancy
- High Intensity
- Natural
- Recreation
- Rural

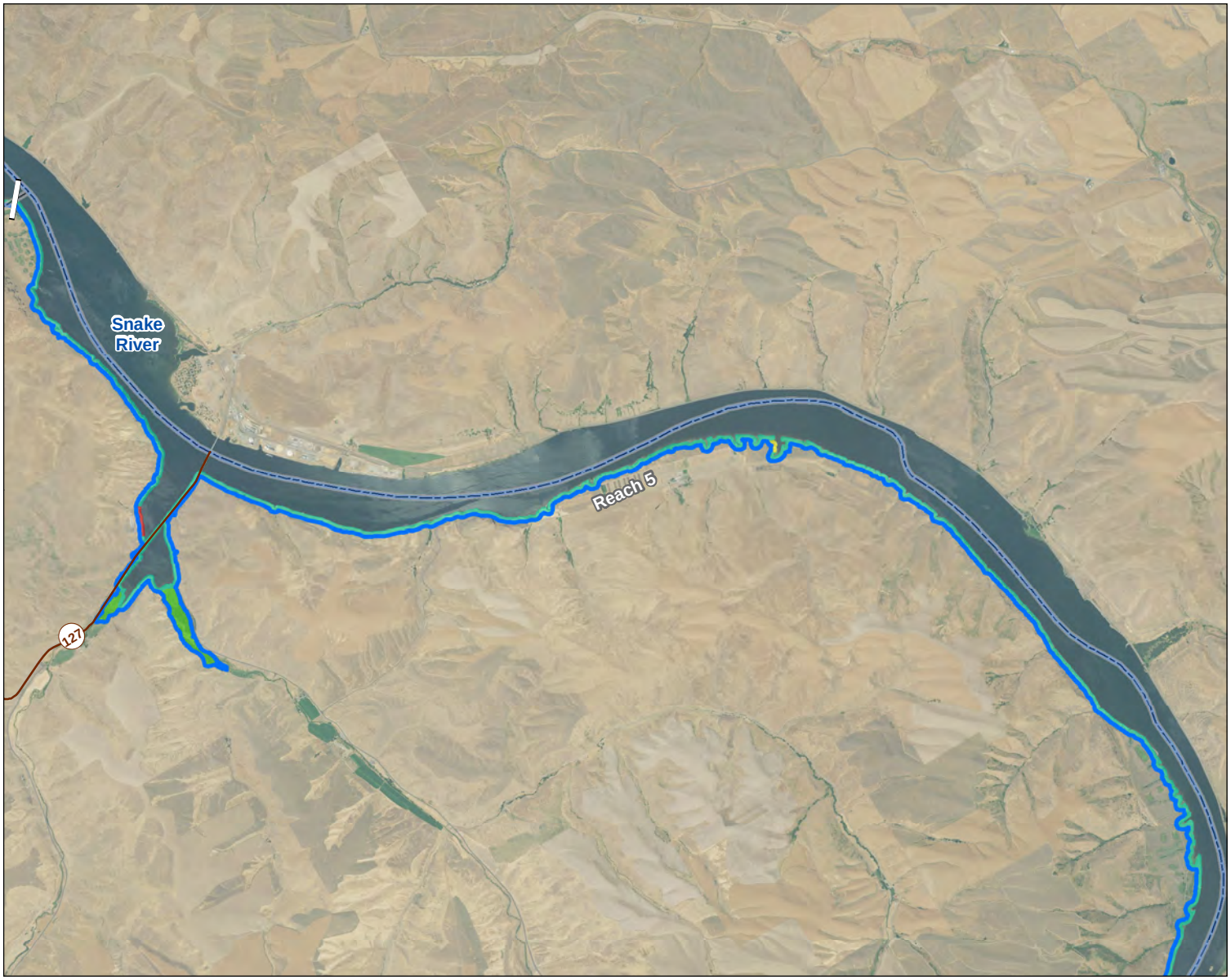
NOTES:

1. This information is to be used for planning purposes only. Data is displayed as is and without any guarantee of accuracy or completeness.
2. Aerial image courtesy of USDA NAIP (2015).
3. Ordinary high water data acquired from Washington Department of Ecology, SEA Program, Shorelines of the State.
4. All islands designated as Natural.

ANCHOR QEA

Miles
0 1 2

Map 21
Snake River Reach 5 - Start
SE WA Coalition Environment Designations



LEGEND

- County Reach and Subreach (SR) Breaks
- Major Road
- SE WA County Coalition County Boundary
- SMA Jurisdiction

Environment Designation

- Conservancy
- High Intensity
- Natural
- Recreation

NOTES:

1. This information is to be used for planning purposes only. Data is displayed as is and without any guarantee of accuracy or completeness.
2. Aerial image courtesy of USDA NAIP (2015).
3. Ordinary high water data acquired from Washington Department of Ecology, SEA Program, Shorelines of the State.
4. All islands designated as Natural.

ANCHOR QEA

Miles
0 1 2

Map 22
Snake River Reach 5 - End
SE WA Coalition Environment Designations

LEGEND

- County Reach and Subreach (SR) Breaks
- Major Road
- SE WA County Coalition County Boundary
- SMA Jurisdiction

Environment Designation

- Conservancy
- High Intensity
- Natural
- Recreation

NOTES:

1. This information is to be used for planning purposes only. Data is displayed as is and without any guarantee of accuracy or completeness.
2. Aerial image courtesy of USDA NAIP (2015).
3. Ordinary high water data acquired from Washington Department of Ecology, SEA Program, Shorelines of the State.
4. All islands designated as Natural.

ANCHOR QEA

Miles
0 1 2

Map 23
Snake River Reach 6
SE WA Coalition Environment Designations

LEGEND

- County Reach and Subreach (SR) Breaks
- Major Road
- SE WA County Coalition County Boundary
- SMA Jurisdiction

Environment Designation

- Conservancy
- High Intensity
- Natural
- Recreation
- Rural

NOTES:

1. This information is to be used for planning purposes only. Data is displayed as is and without any guarantee of accuracy or completeness.
2. Aerial image courtesy of USDA NAIP (2015).
3. Ordinary high water data acquired from Washington Department of Ecology, SEA Program, Shorelines of the State.
4. All islands designated as Natural.

ANCHOR QEA

Miles
0 1 2

Map 24
Snake River Reach 7
SE WA Coalition Environment Designations

LEGEND

- County Reach and Subreach (SR) Breaks
- SE WA County Coalition County Boundary
- SMA Jurisdiction

Environment Designation

- Natural

NOTES:

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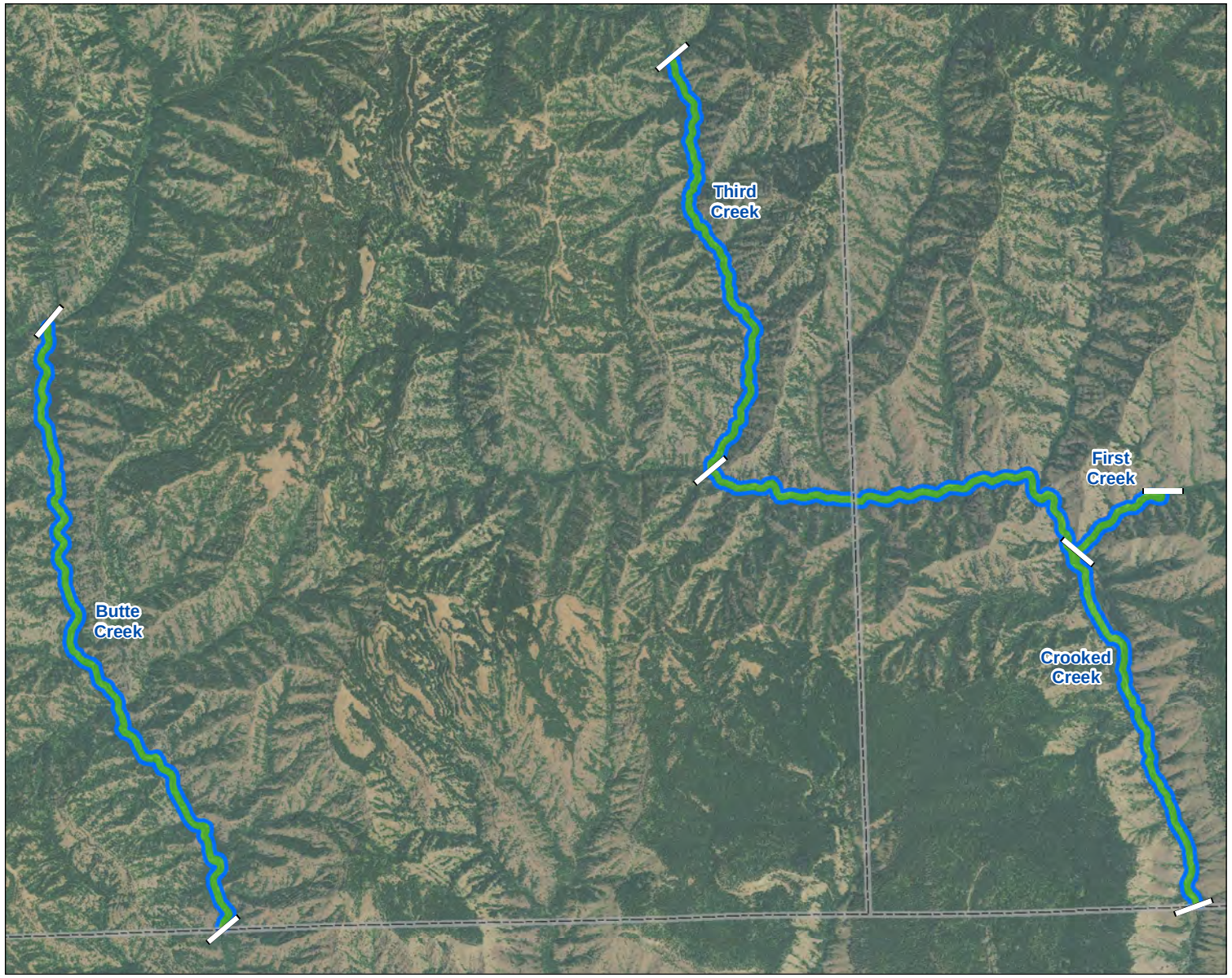
2. Aerial image courtesy of USDA NAIP (2015).
3. Ordinary high water data acquired from Washington Department of Ecology, SEA Program, Shorelines of the State.
4. All islands designated as Natural.

ANCHOR QEA

Miles
0 0.75 1.5

Map 25
Mill Creek and North Fork Wenaha River Reaches
SE WA Coalition Environment Designations



LEGEND

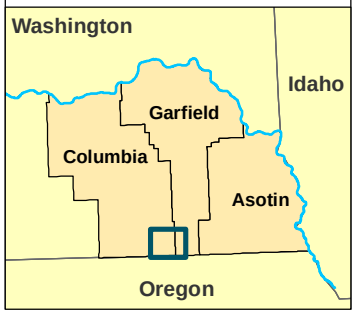
- County Reach and Subreach (SR) Breaks
- SE WA County Coalition County Boundary
- SMA Jurisdiction

Environment Designation

- Natural

NOTES:

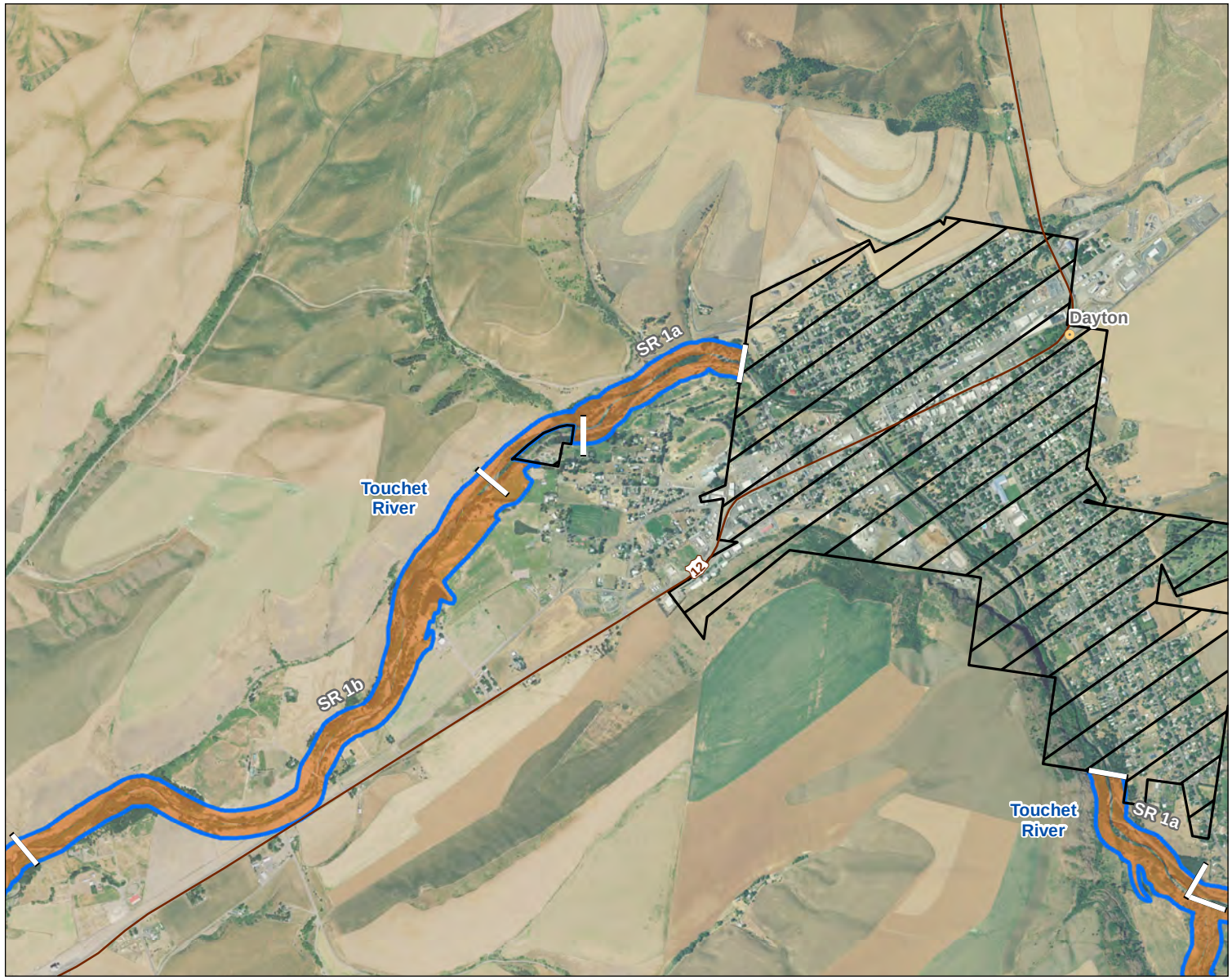
1. This information is to be used for planning purposes only. Data is displayed as is and without any guarantee of accuracy or completeness.
2. Aerial image courtesy of USDA NAIP (2015).
3. Ordinary high water data acquired from Washington Department of Ecology, SEA Program, Shorelines of the State.
4. All islands designated as Natural.



ANCHOR QEA

Miles
0 1 2

Map 26
Butte Creek, First Creek, Third Creek and Crooked Creek Reaches
SE WA Coalition Environment Designations



LEGEND

- County Reach and Subreach (SR) Breaks
- County Seat
- Major Road
- Incorporated City
- SE WA County Coalition County Boundary
- SMA Jurisdiction

Environment Designation

- Rural

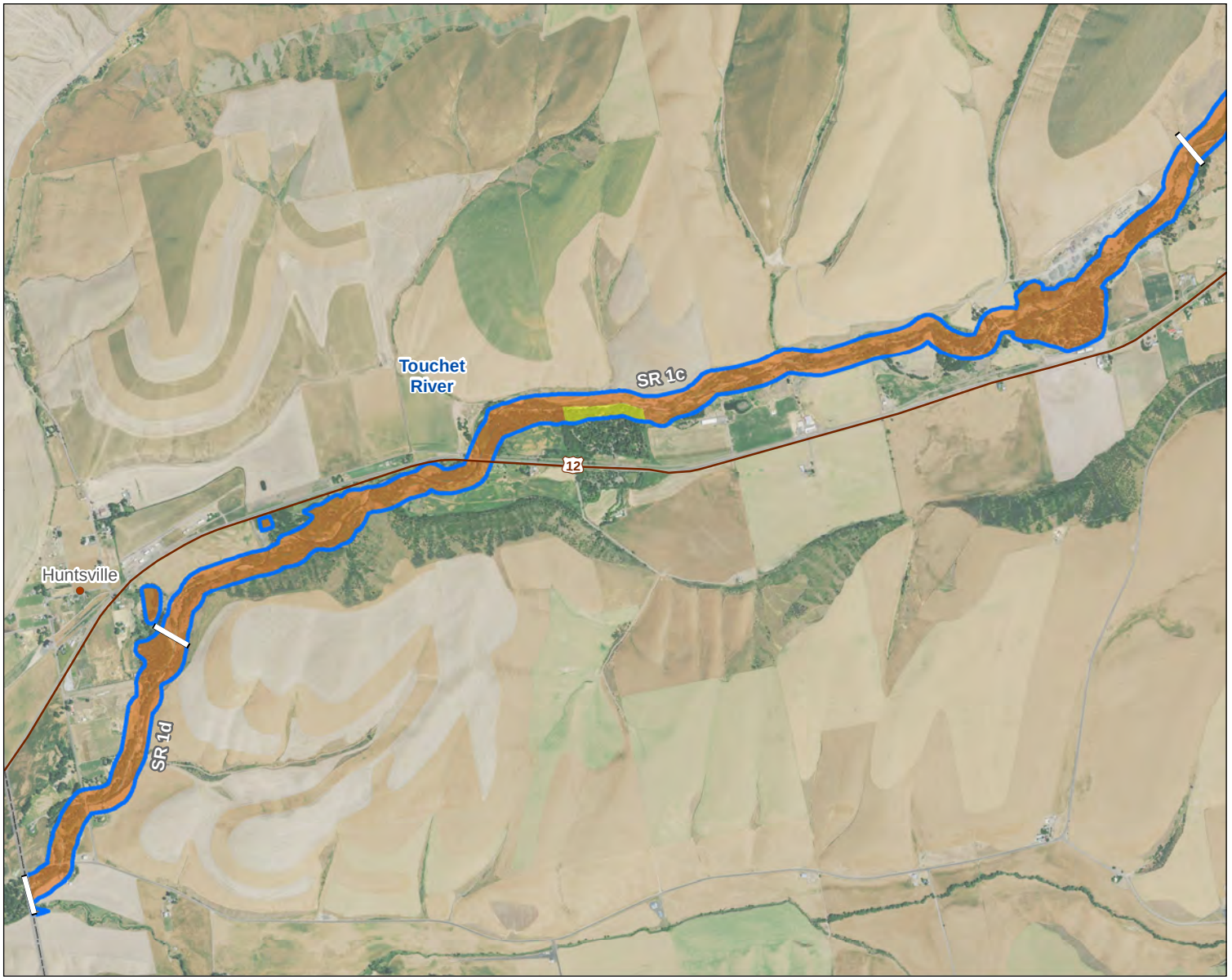
NOTES:

1. This information is to be used for planning purposes only. Data is displayed as is and without any guarantee of accuracy or completeness.
2. Aerial image courtesy of USDA NAIP (2015).
3. Ordinary high water data acquired from Washington Department of Ecology, SEA Program, Shorelines of the State.
4. All islands designated as Natural.

ANCHOR QEA

Miles
0 0.4 0.8

Map 27
Touchet River SR 1a and 1b
SE WA Coalition Environment Designations



LEGEND

- County Reach and Subreach (SR) Breaks
- Populated Place
- Major Road
- SE WA County Coalition County Boundary
- SMA Jurisdiction

Environment Designation

- Recreation
- Rural

NOTES:

1. This information is to be used for planning purposes only. Data is displayed as is and without any guarantee of accuracy or completeness.
2. Aerial image courtesy of USDA NAIP (2015).
3. Ordinary high water data acquired from Washington Department of Ecology, SEA Program, Shorelines of the State.
4. All islands designated as Natural.

ANCHOR QEA

Miles
0 0.4 0.8

Map 28
Touchet River SR 1c and 1d
SE WA Coalition Environment Designations

LEGEND

- County Reach and Subreach (SR) Breaks
- Incorporated City
- SE WA County Coalition County Boundary
- SMA Jurisdiction

Environment Designation

- Conservancy
- Natural
- Rural

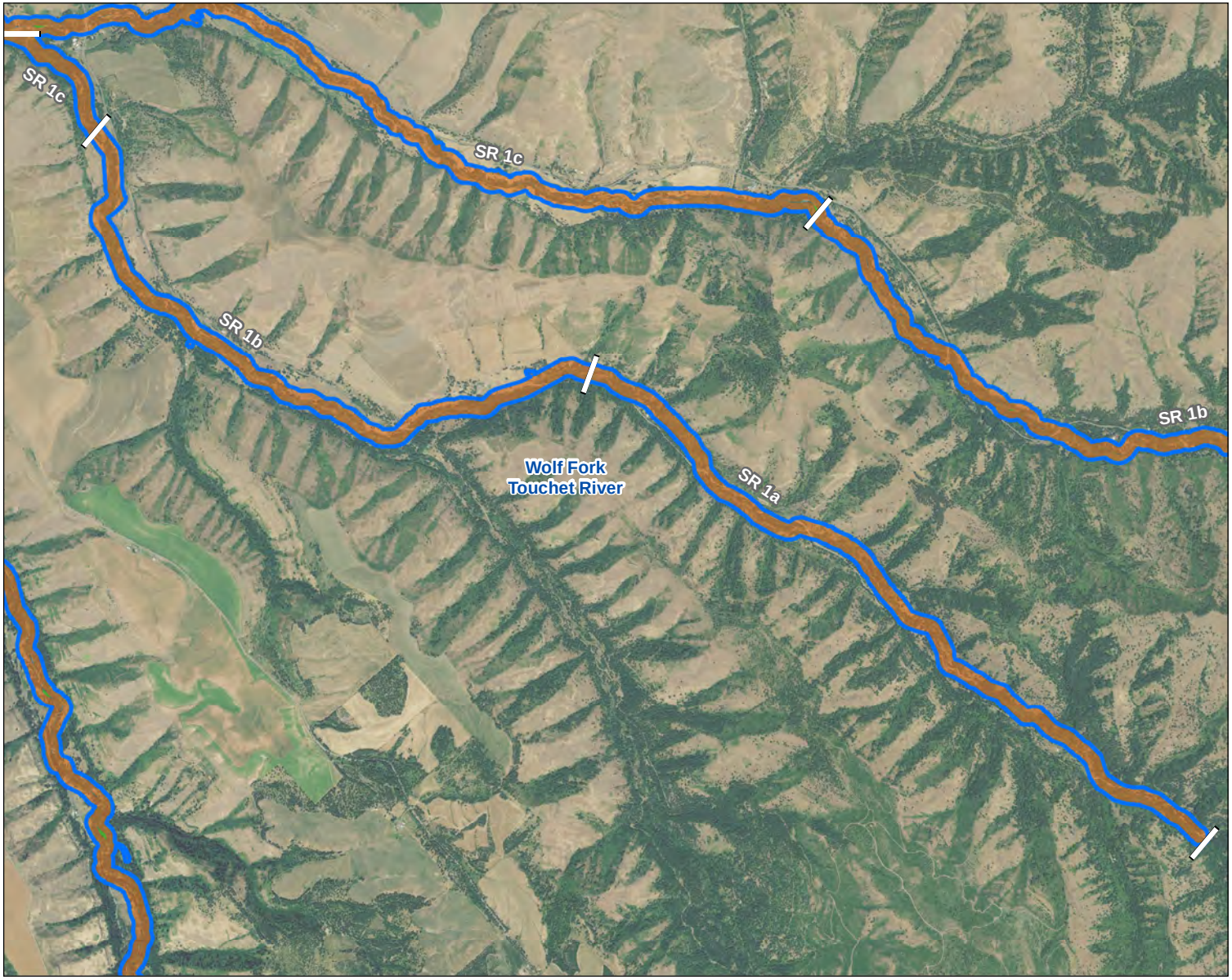
NOTES:

1. This information is to be used for planning purposes only. Data is displayed as is and without any guarantee of accuracy or completeness.
2. Aerial image courtesy of USDA NAIP (2015).
3. Ordinary high water data acquired from Washington Department of Ecology, SEA Program, Shorelines of the State.
4. All islands designated as Natural.

ANCHOR QEA

Miles
0 1 2

Map 29
South Fork Touchet River SR 1a - 1c
SE WA Coalition Environment Designations



LEGEND

- County Reach and Subreach (SR) Breaks
- SE WA County Coalition County Boundary
- SMA Jurisdiction

Environment Designation

- Natural
- Rural

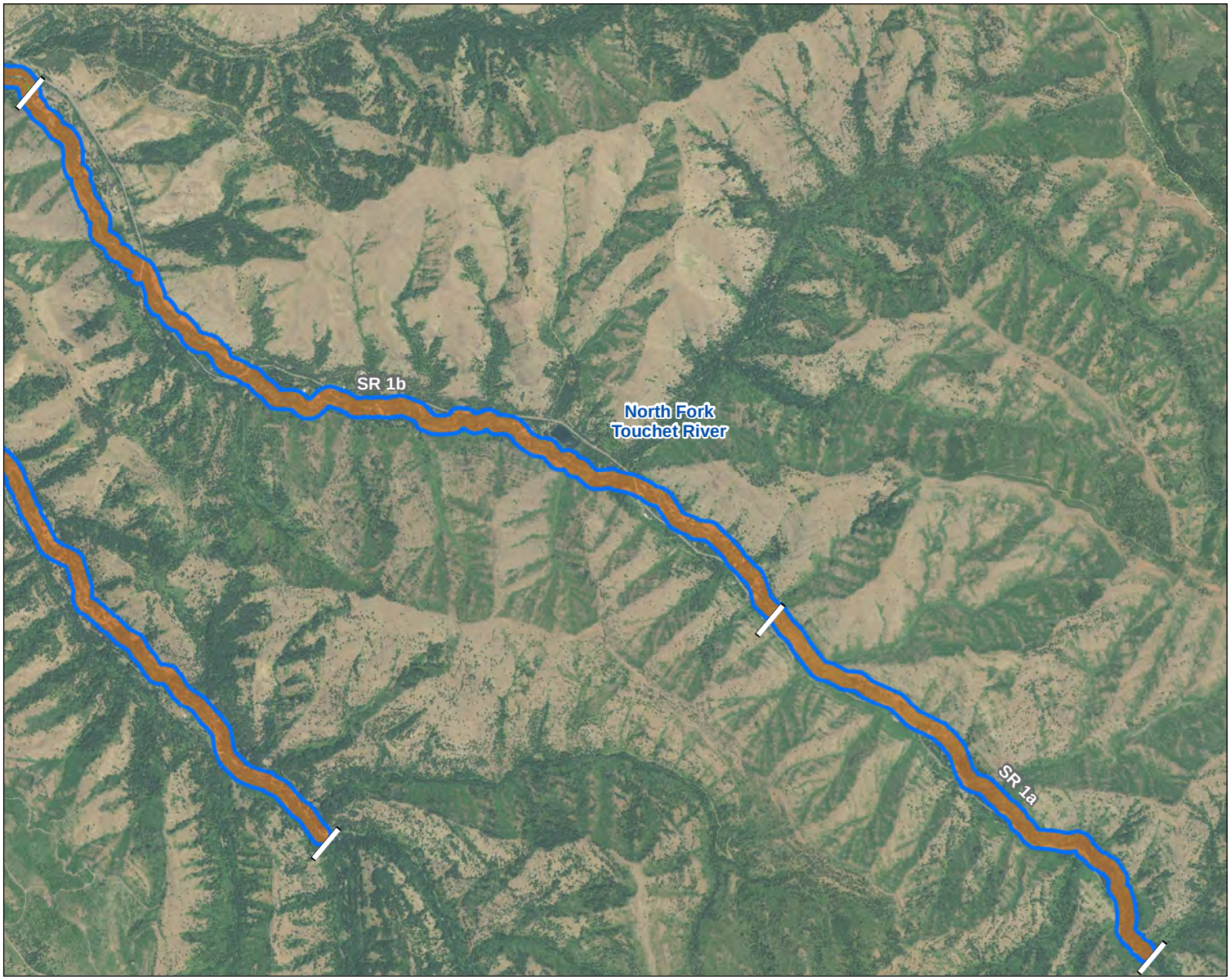
NOTES:

1. This information is to be used for planning purposes only. Data is displayed as is and without any guarantee of accuracy or completeness.
2. Aerial image courtesy of USDA NAIP (2015).
3. Ordinary high water data acquired from Washington Department of Ecology, SEA Program, Shorelines of the State.
4. All islands designated as Natural.

ANCHOR QEA

Miles
0 0.6 1.2

Map 30
Wolf Fork Touchet River SR 1a - 1c
SE WA Coalition Environment Designations



LEGEND

- County Reach and Subreach (SR) Breaks
- SE WA County Coalition County Boundary
- SMA Jurisdiction

Environment Designation

- Natural
- Rural

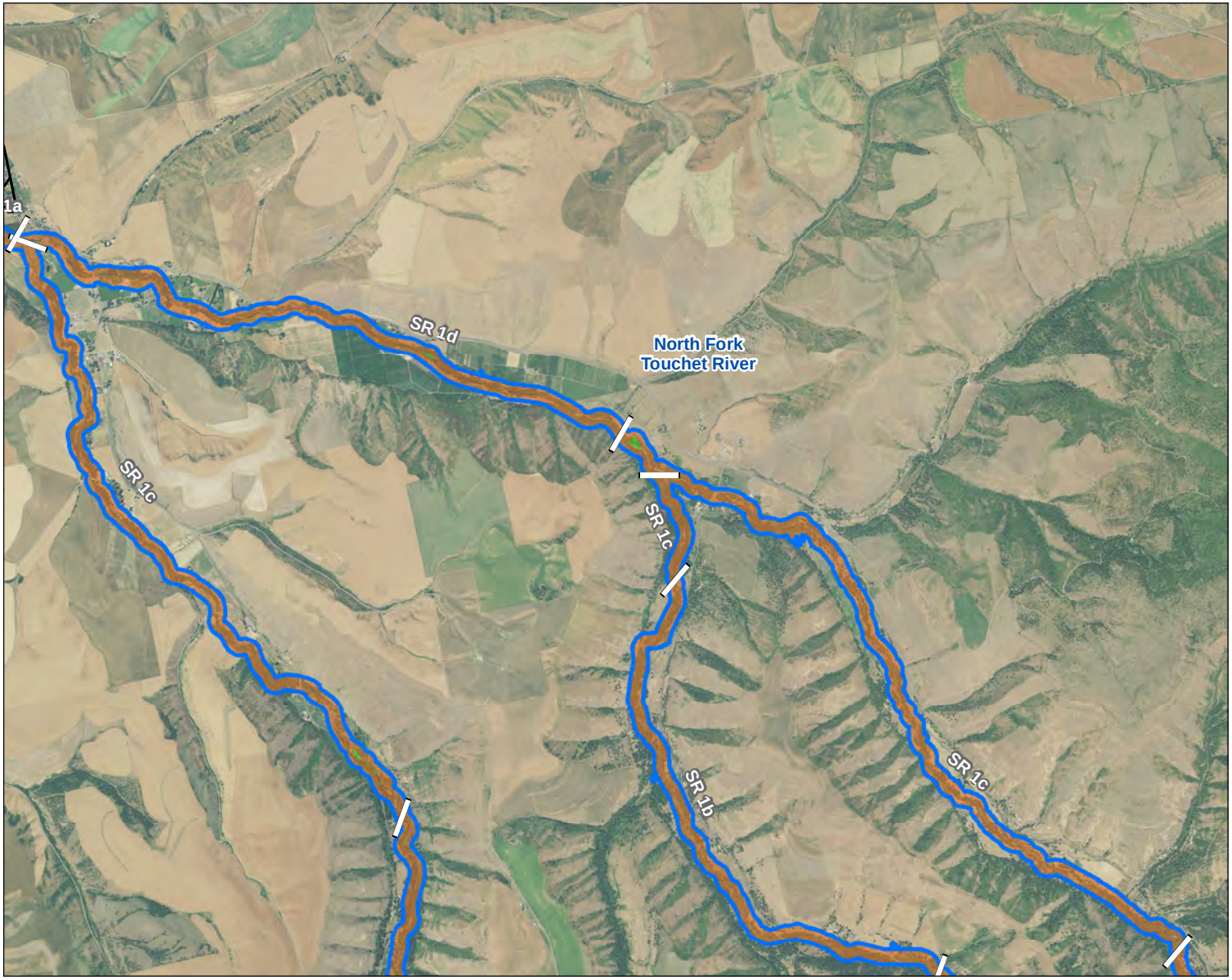
NOTES:

1. This information is to be used for planning purposes only. Data is displayed as is and without any guarantee of accuracy or completeness.
2. Aerial image courtesy of USDA NAIP (2015).
3. Ordinary high water data acquired from Washington Department of Ecology, SEA Program, Shorelines of the State.
4. All islands designated as Natural.

ANCHOR QEA

Miles
0 0.55 1.1

Map 31
North Fork Touchet River SR 1a and 1b
SE WA Coalition Environment Designations



LEGEND

- County Reach and Subreach (SR) Breaks
- Incorporated City
- SE WA County Coalition County Boundary
- SMA Jurisdiction

Environment Designation

- Natural
- Rural

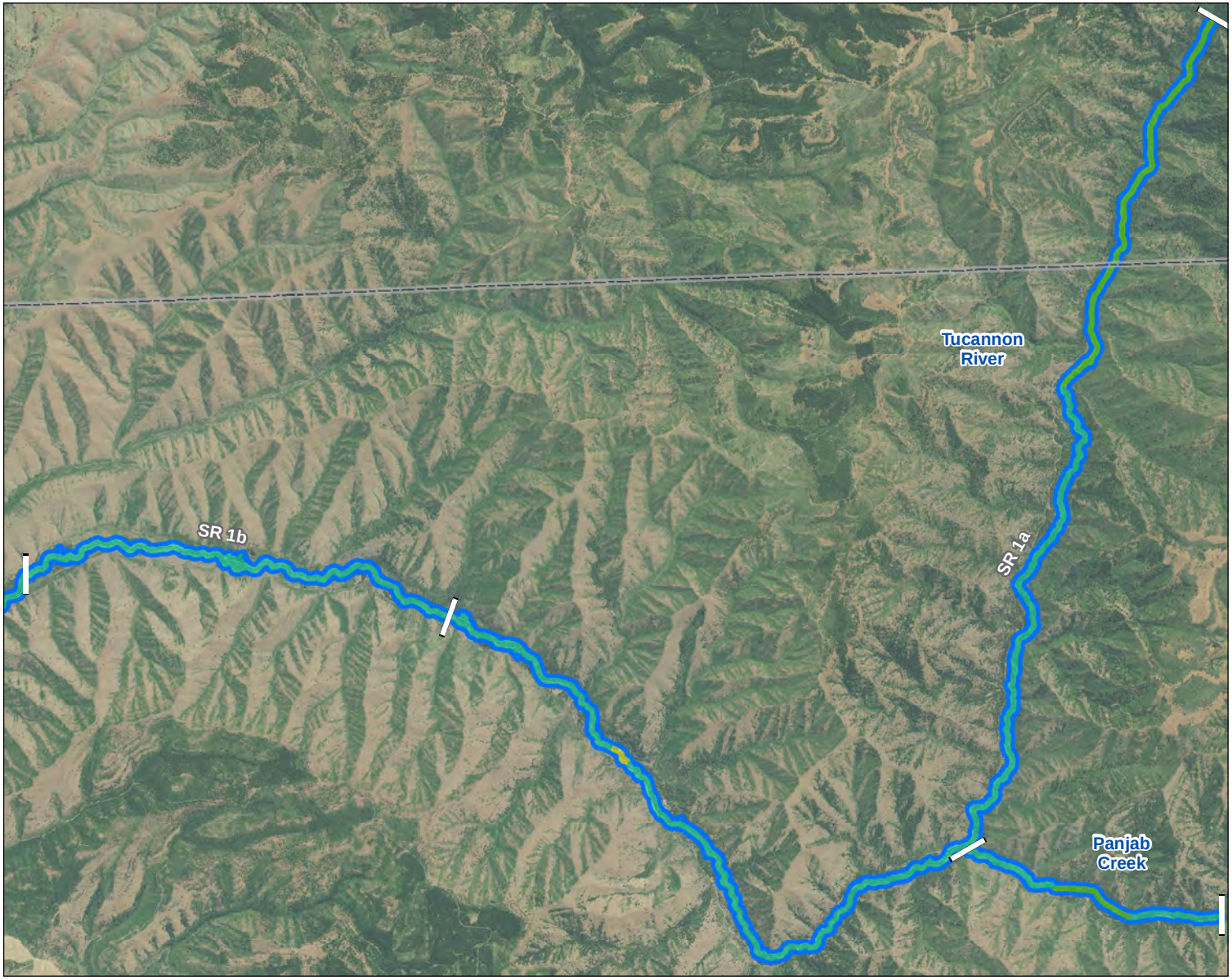
NOTES:

1. This information is to be used for planning purposes only. Data is displayed as is and without any guarantee of accuracy or completeness.
2. Aerial image courtesy of USDA NAIP (2015).
3. Ordinary high water data acquired from Washington Department of Ecology, SEA Program, Shorelines of the State.
4. All islands designated as Natural.

ANCHOR QEA

Miles
0 0.75 1.5

Map 32
North Fork Touchet River SR 1c and 1d
SE WA Coalition Environment Designations



LEGEND

- County Reach and Subreach (SR) Breaks
- SE WA County Coalition County Boundary
- SMA Jurisdiction

Environment Designation

- Conservancy
- Natural
- Recreation

NOTES:

1. This information is to be used for planning purposes only. Data is displayed as is and without any guarantee of accuracy or completeness.
2. Aerial image courtesy of USDA NAIP (2015).
3. Ordinary high water data acquired from Washington Department of Ecology, SEA Program, Shorelines of the State.
4. All islands designated as Natural.

ANCHOR QEA

Miles
0 1 2

Map 33
Tucannon River SR 1a and 1b and Panjab Creek
SE WA Coalition Environment Designations

LEGEND

- County Reach and Subreach (SR) Breaks
- Populated Place
- Major Road
- SE WA County Coalition County Boundary
- SMA Jurisdiction

Environment Designation

- Conservancy
- Rural

NOTES:

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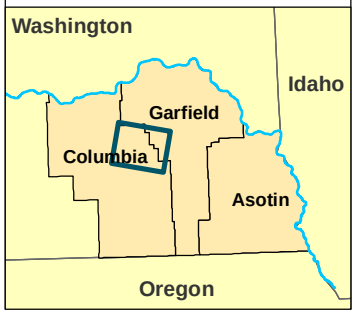
2. Aerial image courtesy of USDA NAIP (2015).
3. Ordinary high water data acquired from Washington Department of Ecology, SEA Program, Shorelines of the State.
4. All islands designated as Natural.



ANCHOR QEA

Miles
0 1.5 3

Map 34
Tucannon River SR 2a - 2c
SE WA Coalition Environment Designations

LEGEND

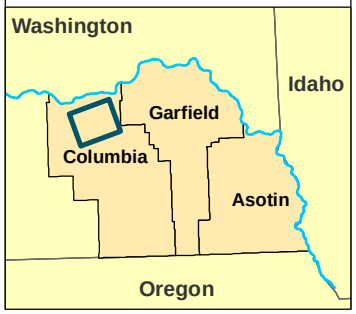
- City/Town Reach and Subreach (SR) Breaks
- County Reach and Subreach (SR) Breaks
- Major Road
- Incorporated City
- SE WA County Coalition County Boundary
- SMA Jurisdiction

Environment Designation

- Conservancy
- Rural
- Shoreline Residential

NOTES:

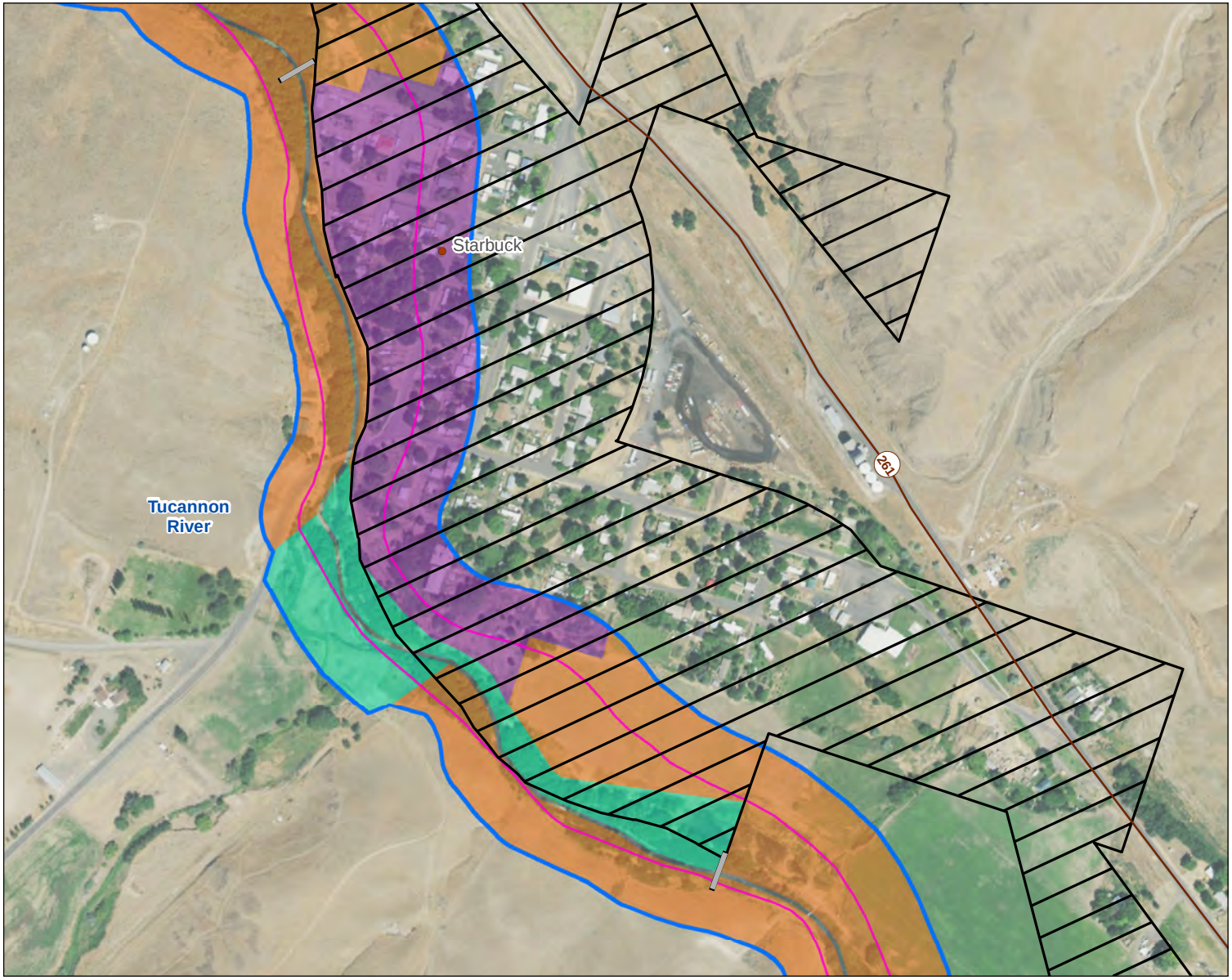
1. This information is to be used for planning purposes only. Data is displayed as is and without any guarantee of accuracy or completeness.
2. Aerial image courtesy of USDA NAIP (2015).
3. Ordinary high water data acquired from Washington Department of Ecology, SEA Program, Shorelines of the State.
4. All islands designated as Natural.



ANCHOR QEA

Miles
0 1 2

Map 35
Tucannon River SR 2d - 2f
SE WA Coalition Environment Designations



LEGEND

- City/Town Reach and Subreach (SR) Breaks
- Populated Place
- Major Road
- Incorporated City
- SE WA County Coalition County Boundary
- SMA Jurisdiction
- FEMA Floodway

Environment Designation

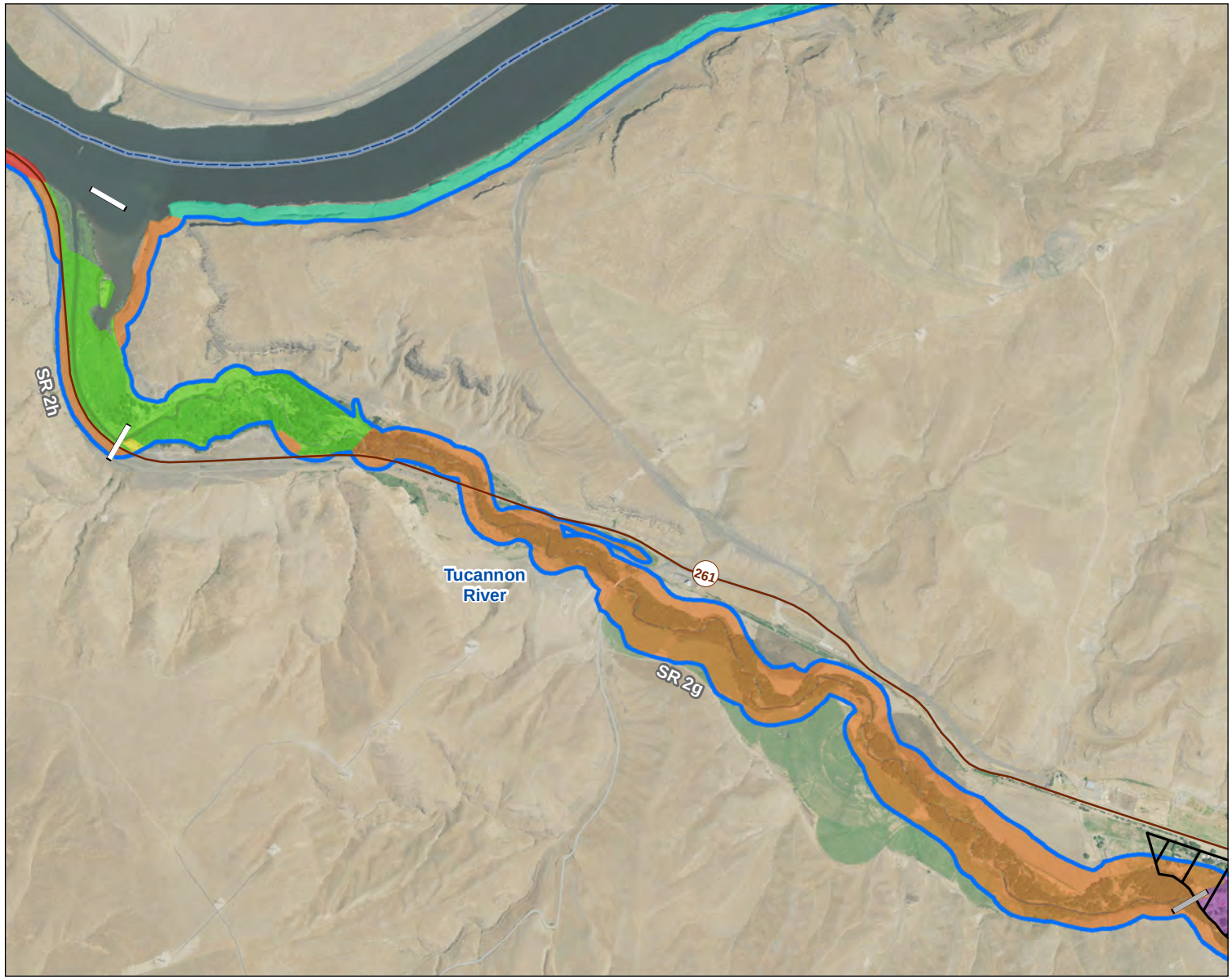
- Conservancy
- Rural
- Shoreline Residential

NOTES:
1. This information is to be used for planning purposes only. Data is displayed as is and without any guarantee of accuracy or completeness.
2. Aerial image courtesy of USDA NAIP (2015).
3. Ordinary high water data acquired from Washington Department of Ecology, SEA Program, Shorelines of the State.
4. All islands designated as Natural.

ANCHOR QEA

Miles
0 0.09 0.18

Map 36
Tucannon River/Starbuck Reach
SE WA Coalition Environment Designations



LEGEND

- City/Town Reach and Subreach (SR) Breaks
- County Reach and Subreach (SR) Breaks
- Major Road
- Incorporated City
- SE WA County Coalition County Boundary
- SMA Jurisdiction

Environment Designation

- Conservancy
- High Intensity
- Natural
- Recreation
- Rural
- Shoreline Residential

NOTES:

1. This information is to be used for planning purposes only. Data is displayed as is and without any guarantee of accuracy or completeness.
2. Aerial image courtesy of USDA NAIP (2015).
3. Ordinary high water data acquired from Washington Department of Ecology, SEA Program, Shorelines of the State.
4. All islands designated as Natural.

ANCHOR QEA

Miles
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Map 37
Tucannon River SR 2g and 2h
SE WA Coalition Environment Designations

Vascular Plant List
Asotin County

Asotin County Asotin County, WA. List covers plants found in Asotin County. Combination of plant lists of areas within Asotin County, with the addition of names of plants in the UW and WSU herbariums that were collected in Asotin County. 607 spp., 88 introduced. List prepared by Don Knoke, 2004.

* - Introduced

Scientific Name	*Common Name*	*Family Name*
Abies grandis	Grand fir	Pinaceae
Abies lasiocarpa	Sub-alpine fir	Pinaceae
Acer glabrum	Douglas maple	Aceraceae
Acer negundo*	Box elder	Aceraceae
Acer saccharinum*	Norway maple	Aceraceae
Aconitum columbianum	Monkshood	Ranunculaceae
Adenocaulon bicolor	Pathfinder	Asteraceae
Adiantum pedatum	Maidenhair fern	Polypodiaceae
Agastache urticifolia	Nettle-leaf horse-mint	Lamiaceae
Agoseris heterophylla	Annual agoseris	Asteraceae
Agropyron caninum	Bearded wheatgrass	Poaceae
Agropyron spicatum	Blue-bunch wheatgrass	Poaceae
Agrostis interrupta*	Interrupted apera	Poaceae
Allium acuminatum	Taper-tip onion	Liliaceae
Allium brandegei	Brandegee onion	Liliaceae
Allium douglasii	Douglas' onion	Liliaceae
Allium fibrillum	Fringed onion	Liliaceae
Allium tolmiei	Tolmie's onion	Liliaceae
Alnus rhombifolia	White alder	Betulaceae
Alnus sinuata	Sitka alder	Betulaceae
Alopecurus aequalis	Short-awned foxtail	Poaceae
Alyssum alyssoides*	Pale alyssum	Brassicaceae
Amelanchier alnifolia	Serviceberry	Rosaceae
Amsinckia intermedia	Fireweed fiddleneck	Boraginaceae
Amsinckia lycopsoides	Bugloss fiddleneck	Boraginaceae
Amsinckia retrorsa	Rigid fiddleneck	Boraginaceae
Amsinckia tessellata	Devil's lettuce	Boraginaceae
Anemone piperi	Piper's anemone	Ranunculaceae
Antennaria anaphaloides	Tall pussy-toes	Asteraceae
Antennaria dimorpha	Low pussy-toes	Asteraceae
Antennaria luzuloides	Woodrush pussy-toes	Asteraceae
Antennaria microphylla	Rosy pussy-toes	Asteraceae
Antennaria pulcherrima	Showy pussytoes	Asteraceae
Apocynum androsaemifolium	Spreading dogbane	Apocynaceae
Aquilegia formosa	Red columbine	Ranunculaceae
Arabis crucisetosa	Wet-soil rockcress	Brassicaceae
Arabis cusickii	Cusick's rockcress	Brassicaceae

Arabis glabra	Tower mustard	Brassicaceae
Arabis hirsuta	Hairy rockcress	Brassicaceae
Arabis holboellii	Holboell's rockcress	Brassicaceae
Arabis microphylla	Small-leaf rockcress	Brassicaceae
Arabis sparsiflora	Sicklepod rockcress	Brassicaceae
Arenaria congesta	Dense-flowered sandwort	Caryophyllaceae
Arenaria macrophylla	Big-leaf sandwort	Caryophyllaceae
Arenaria serpyllifolia*	Thyme-leaf sandwort	Caryophyllaceae
Aristida longiseta	Red three-awn	Poaceae
Arnica cordifolia	Heart-leaf arnica	Asteraceae
Arnica fulgens	Hillside arnica	Asteraceae
Arnica sororia	Twin arnica	Asteraceae
Artemisia ludoviciana	Western mugwort	Asteraceae
Artemisia rigida	Stiff sagebrush	Asteraceae
Artemisia tridentata	Big sagebrush	Asteraceae
Asclepias fascicularis	Mexican milkweed	Asclepiadaceae
Asclepias speciosa	Showy milkweed	Asclepiadaceae
Aster foliaceus	Leafy aster	Asteraceae
Aster lanceolatus	White-panicle aster	Asteraceae
Aster occidentalis	Western aster	Asteraceae
Aster pansus	Wreath aster	Asteraceae
Astragalus arthurii	Waha milkvetch	Fabaceae
Astragalus beckwithii	Beckwith's aster	Fabaceae
Astragalus canadensis	Canada milk-vetch	Fabaceae
Astragalus collinus	Hillside milk-vetch	Fabaceae
Astragalus cusickii	Cusick's milk-vetch	Fabaceae
Astragalus inflexus	Bent milk-vetch	Fabaceae
Astragalus lentiginosus	Specklepod milk-vetch	Fabaceae
Astragalus purshii	Pursh's milk-vetch	Fabaceae
Astragalus reventus	Blue Mtn. milk-vetch	Fabaceae
Balsamorhiza hirsuta	Hairy balsamroot	Asteraceae
Balsamorhiza incana	Hoary balsamroot	Asteraceae
Balsamorhiza sagittata	Arrow-leaf balsamroot	Asteraceae
Balsamorhiza serrata	Toothed balsamroot	Asteraceae
Barbarea orthoceras	American wintercress	Brassicaceae
Berberis repens	Creeping Oregongrape	Berberidaceae
Besseya rubra	Red besseya	Scrophulariaceae
Betula occidentalis	Water birch	Betulaceae
Betula papyrifera	Paper birch	Betulaceae
Bidens frondosa	Leafy beggar-ticks	Asteraceae
Bidens vulgata	Tall beggar-ticks	Asteraceae
Blepharipappus scaber	Blepharipappus	Asteraceae
Bolandra oregana	Bolandra	Saxifragaceae
Brickellia grandiflora	Large-flowered brickellia	Asteraceae
Brickellia microphylla	Small-leaved brickellia	Asteraceae
Brodiaea douglasii	Douglas' brodiaea	Liliaceae
Bromus brizaeformis*	Rattlesnake grass	Poaceae
Bromus carinatus	California brome	Poaceae
Bromus commutatus*	Common chess	Poaceae
Bromus japonicus*	Japanese brome	Poaceae

Bromus mollis*	Soft brome	Poaceae
Bromus rigidus*	Ripgut brome	Poaceae
Bromus secalinus*	Chess	Poaceae
Bromus sterilis*	Barren brome	Poaceae
Bromus tectorum*	Cheat grass	Poaceae
Calochortus elegans	Northwest mariposa	Liliaceae
Calochortus eurycarpus	Wide-fruit mariposa	Liliaceae
Calochortus macrocarpus	Sagebrush mariposa	Liliaceae
Calypso bulbosa	Fairy slipper	Orchidaceae
Camassia quamash	Common camas	Liliaceae
Camelina microcarpa*	Hairy false-flax	Brassicaceae
Capsella bursa-pastoris*	Shepherd's purse	Brassicaceae
Cardamine cordifolia	Large mountain bittercress	Brassicaceae
Carex athrostachya	Slender-beak sedge	Cyperaceae
Carex bolanderi	Bolander's sedge	Cyperaceae
Carex concinnoides	Northwest sedge	Cyperaceae
Carex deweyana	Dewey's sedge	Cyperaceae
Carex douglasii	Douglas' sedge	Cyperaceae
Carex hystricina	Porcupine sedge	Cyperaceae
Carex lenticularis	Lenticular sedge	Cyperaceae
Carex microptera	Small-winged sedge	Cyperaceae
Carex pachystachya	Pachystachy sedge	Cyperaceae
Carex petasata	Liddon's sedge	Cyperaceae
Carex stipata	Sawbeak sedge	Cyperaceae
Carex subfusca	Rusty sedge	Cyperaceae
Castilleja applegatei	Wavy-leaved paintbrush	Scrophulariaceae
Castilleja cusickii	Cusick's paintbrush	Scrophulariaceae
Castilleja hispida	Harsh paintbrush	Scrophulariaceae
Castilleja lutescens	Green paintbrush	Scrophulariaceae
Castilleja miniata	Scarlet paintbrush	Scrophulariaceae
Ceanothus velutinus	Snowbrush	Rhamnaceae
Celtis reticulata	Hackberry	Ulmaceae
Centaurea cyanus*	Batchelor button	Asteraceae
Centaurea solstitialis*	Yellow starthistle	Asteraceae
Cerastium arvense	Field chickweed	Caryophyllaceae
Cerastium viscosum*	Sticky chickweed	Caryophyllaceae
Cerastium vulgatum*	Mouse-ear chickweed	Caryophyllaceae
Cercocarpus ledifolius	Curl-leaf mountain-mohogany	Rosaceae
Chaenactis douglasii	Dusty maidens	Asteraceae
Cheilanthes feei	Fee's lip-fern	Polypodiaceae
Cheilanthes gracillima	Lace fern	Polypodiaceae
Chenopodium album*	Pigweed	Chenopodiaceae
Chenopodium botrys*	Jerusalem oak	Chenopodiaceae
Chenopodium hybridum	Sowbane	Chenopodiaceae
Chenopodium pumilio*	Clammy goosefoot	Chenopodiaceae
Chimaphila menziesii	Little pipsissewa	Ericaceae
Chimaphila umbellata	Pipsissewa	Ericaceae
Chorispora tenella*	Blue mustard	Brassicaceae
Chrysopsis villosa	Hairy golden-aster	Asteraceae
Circaea alpina	Enchanter's nightshade	Onagraceae

Cirsium brevifolium	Palouse thistle	Asteraceae
Cirsium undulatum	Wavy-leaved thistle	Asteraceae
Clarkia pulchella	Ragged Robin	Onagraceae
Claytonia lanceolata	Western spring beauty	Portulacaceae
Claytonia parviflora	Streambank spring beauty	Portulacaceae
Claytonia rubra	Red miner's lettuce	Portulacaceae
Clematis columbiana	Columbia virgin's bower	Ranunculaceae
Clematis ligusticifolia	Virgin's bower	Ranunculaceae
Cleome lutea	Yellow bee-plant	Capparidaceae
Clintonia uniflora	Queen's cup	Liliaceae
Collinsia parviflora	Small-flowered blue-eyed Mary	Scrophulariaceae
Collomia grandiflora	Large-flowered collomia	Polemoniaceae
Collomia linearis	Narrow-leaf collomia	Polemoniaceae
Conium maculatum*	Poison hemlock	Apiaceae
Convolvulus arvensis*	Field morning-glory	Convolvulaceae
Corallorhiza maculata	Spotted coral-root	Orchidaceae
Corallorhiza striata	Striped coral-root	Orchidaceae
Cordylanthus capitatus	Yakima birdbeak	Scrophulariaceae
Corispermum hyssopifolium*	Common bugseed	Chenopodiaceae
Cornus stolonifera	Red-osier dogwood	Cornaceae
Corydalis aurea	Golden corydalis	Fumariaceae
Crataegus columbiana	Columbia hawthorn	Rosaceae
Crepis acuminata	Tapertip hawksbeard	Asteraceae
Crepis atrabarba	Slender hawksbeard	Asteraceae
Crepis bakeri	Baker's hawksbeard	Asteraceae
Crepis intermedia	Gray hawksbeard	Asteraceae
Crepis occidentalis	Western hawksbeard	Asteraceae
Cryptantha celosioides	Northern cryptantha	Boraginaceae
Cryptantha intermedia	Common cryptantha	Boraginaceae
Cymopteris terebinthinus	Turpentine spring-parsley	Apiaceae
Cynoglossum officinale*	Common hound's-tongue	Boraginaceae
Cyperus aristatus	Awned flatsedge	Cyperaceae
Cyperus bipartitus	Shining flatsedge	Cyperaceae
Cyperus esculentus*	Yellow flatsedge	Cyperaceae
Cyperus strigosus	Straw-colored flatsedge	Cyperaceae
Cypripedium montanum	Mountain lady's-slipper	Orchidaceae
Cystopteris fragilis	Fragile fern	Polypodiaceae
Danthonia californica	California oatgrass	Poaceae
Danthonia intermedia	Timber oatgrass	Poaceae
Danthonia unispicata	Few-flowered wild oatgrass	Poaceae
Datura stramonium*	Jimson-weed	Solanaceae
Delphinium andersonii	Desert larkspur	Ranunculaceae
Delphinium bicolor	Montana larkspur	Ranunculaceae
Delphinium burkei	Meadow larkspur	Ranunculaceae
Delphinium depauperatum	Dwarf larkspur	Ranunculaceae
Delphinium distichum	two-spike larkspur	Ranunculaceae
Delphinium menziesii	Mountain larkspur	Ranunculaceae
Delphinium multiplex	Kittitas larkspur	Ranunculaceae
Delphinium nuttallianum	Upland larkspur	Ranunculaceae
Deschampsia danthonioides	Annual hairgrass	Poaceae

Deschampsia elongata	Slender hairgrass	Poaceae
Descurainia pinnata	Western tansymustard	Brassicaceae
Descurainia richardsonii	Mountain tansymustard	Brassicaceae
Dicentra cucullaria	Dutchman's breeches	Fumariaceae
Dicentra uniflora	Steer's head	Fumariaceae
Disporum trachycarpum	Sierra fairy-bell	Liliaceae
Dodecatheon conjugens	Desert shooting star	Primulaceae
Dodecatheon cusickii	Cusick's shooting star	Primulaceae
Dodecatheon pulchellum	Few-flowered shooting star	Primulaceae
Draba cuneifolia	Wedge-leaved draba	Brassicaceae
Draba reptans	Carolina draba	Brassicaceae
Draba verna	Spring whitlow-grass	Brassicaceae
Dracocephalum parviflorum	American dragonhead	Lamiaceae
Echinocystis lobata	Balsam apple	Cucurbitaceae
Eleocharis bella	Delicate spike-rush	Cyperaceae
Eleocharis palustris	Common spike-rush	Cyperaceae
Eleocharis pauciflora	Few-flowered spike-rush	Cyperaceae
Elymus glaucus	Western ryegrass	Poaceae
Epilobium alpinum	Alpine willow-herb	Onagraceae
Epilobium glandulosum	Common willow-herb	Onagraceae
Epilobium paniculatum	Tall annual willow-herb	Onagraceae
Epilobium watsonii	Watson's willow-herb	Onagraceae
Equisetum arvense	Common horsetail	Equisetaceae
Eragrostis cilianensis*	Stinkgrass	Poaceae
Eragrostis hypnoides	Creeping eragrostis	Poaceae
Eragrostis pectinacea	Purple lovegrass	Poaceae
Erigeron corymbosus	Long-leaf fleabane	Asteraceae
Erigeron disparipilus	Snake River daisy	Asteraceae
Erigeron divergens	Spreading daisy	Asteraceae
Erigeron eatonii	Eaton's daisy	Asteraceae
Erigeron linearis	Desert yellow daisy	Asteraceae
Erigeron philadelphicus	Philadelphia daisy	Asteraceae
Erigeron pumilus	Shaggy fleabane	Asteraceae
Eriogonum compositum	Northern buckwheat	Polygonaceae
Eriogonum flavum	Yellow buckwheat	Polygonaceae
Eriogonum heracleoides	Parsnip-flowered buckwheat	Polygonaceae
Eriogonum microthecum	Slender buckwheat	Polygonaceae
Eriogonum thymoides	Thyme-leaf buckwheat	Polygonaceae
Eriogonum umbellatum	Sulfur buckwheat	Polygonaceae
Eriophyllum lanatum	Oregon sunshine	Asteraceae
Erodium cicutarium*	Filaree	Geraniaceae
Erysimum asperum	Rough wallflower	Brassicaceae
Erysimum repandum*	Spreading wallflower	Brassicaceae
Erythronium grandiflorum	Glacier lily	Liliaceae
Euphorbia spathulata	Spatulate-leaf spurge	Euphorbiaceae
Euphorbia supina*	Milk spurge	Euphorbiaceae
Festuca idahoensis	Blue bunchgrass	Poaceae
Festuca myuros*	Rat-tail fescue	Poaceae
Festuca occidentalis	Western fescue	Poaceae
Festuca octoflora	Slender fescue	Poaceae

Festuca rubra	Red fescue	Poaceae
Floerkea proserpinacoides	False mermaid	Limnanthaceae
Fragaria vesca	Wild strawberry	Rosaceae
Fragaria virginiana	Woods strawberry	Rosaceae
Frasera albicaulis	Columbia frasera	Gentianaceae
Frasera fastigiata	Clustered frasera	Gentianaceae
Fritillaria pudica	Yellow bell	Liliaceae
Gaillardia aristata	Blanket-flower	Asteraceae
Galium aparine	Cleavers	Rubiaceae
Galium bifolium	Low mountain bedstraw	Rubiaceae
Galium boreale	Northern bedstraw	Rubiaceae
Galium multiflorum	Shrubby bedstraw	Rubiaceae
Galium serpenticum	Intermountain bedstraw	Rubiaceae
Galium triflorum	Fragrant bedstraw	Rubiaceae
Gaultheria shallon	Salal	Ericaceae
Geranium carolinianum	Wild geranium	Geraniaceae
Geranium pusillum*	Small flowered crane's-bill	Geraniaceae
Geranium viscosissimum	Sticky geranium	Geraniaceae
Geum macrophyllum	Large-leaved avens	Rosaceae
Geum triflorum	Prairie smoke	Rosaceae
Gilia aggregata	Skyrocket	Polemoniaceae
Glossopetalon nevadense	Spiny green-bush	Celastraceae
Glyceria striata	Fowl mannagrass	Poaceae
Glycyrrhiza lepidota	Licorice-root	Fabaceae
Gutierrezia sarothrae	Match weed	Asteraceae
Habenaria dilatata	White bog-orchid	Orchidaceae
Hackelia hispida	Rough stickseed	Boraginaceae
Hackelia micrantha	Blue stickseed	Boraginaceae
Haplopappus carthamoides	Large-flowered goldenweed	Asteraceae
Helianthella uniflora	Little-sunflower	Asteraceae
Helianthus tuberosus*	Jerusalum artichoke	Asteraceae
Hemicarpha micrantha	Small-flowered hemicrpha	Cyperaceae
Hesperochiron pumilis	Dwarf hesperochiron	Hydrophyllaceae
Heuchera cylindrica	Lava alumroot	Saxifragaceae
Hieracium cynoglossoides	Hounds-tongue hawkweed	Asteraceae
Holodiscus discolor	Ocean spray	Rosaceae
Holosteum umbellatum*	Jagged chickweed	Caryophyllaceae
Hordeum brachyantherum	Meadow barley	Poaceae
Hordeum geniculatum*	Seaside barley	Poaceae
Hordeum murinum*	Wall barley	Poaceae
Hutchinsia procumbens	Hutchinsia	Brassicaceae
Hydrophyllum capitatum	Woolly breeches	Hydrophyllaceae
Hypericum perforatum*	Klamath weed	Hypericaceae
Iliamna rivularis	Streambank globemallow	Malvaceae
Iris missouriensis	Western blue flag	Iridaceae
Iva axillaris	Poverty weed	Asteraceae
Iva xanthifolia	Tall marsh-elder	Asteraceae
Juncus balticus	Baltic rush	Juncaceae
Juncus bufonius*	Toad rush	Juncaceae
Juncus effusus	Soft rush	Juncaceae

Juncus ensifolius	Daggerleaf rush	Juncaceae
Juncus orthophyllus	Straight-leaf rush	Juncaceae
Juncus tenuis	Slender rush	Juncaceae
Juniperus occidentalis	Western juniper	Cupressaceae
Koeleria cristata	Prairie junegrass	Poaceae
Lactuca serriola*	Prickly lettuce	Asteraceae
Lagophylla ramosissima	Common hareleaf	Asteraceae
Lamium amplexicaule*	Henbit	Lamiaceae
Lappula redowskii	Western stickseed	Boraginaceae
Lathyrus nevadensis	Nuttall's peavine	Fabaceae
Lathyrus pauciflorus	Few-flowered peavine	Fabaceae
Lepidium densiflorum	Common pepperweed	Brassicaceae
Lepidium perfoliatum*	Clasping peppergrass	Brassicaceae
Lepidium virginicum*	Tall pepperweed	Brassicaceae
Lesquerella douglasii	Columbia bladderpod	Brassicaceae
Lewisia pygmaea	Dwarf lewisia	Portulacaceae
Lewisia triphylla	Three-leaf lewisia	Portulacaceae
Linanthus harknessii	Harkness' linanthus	Polemoniaceae
Linaria dalmatica*	Dalmatian toad-flax	Scrophulariaceae
Linum perenne	Wild blue-flax	Linaceae
Listera caurina	Northwestern twayblade	Orchidaceae
Lithophragma glabrum	Smooth woodland-star	Saxifragaceae
Lithophragma parviflorum	Small-flowered prairie-star	Saxifragaceae
Lithophragma tenellum	Slender fringecup	Saxifragaceae
Lithospermum arvense*	Corn gromwell	Boraginaceae
Lithospermum ruderale	Columbia puccoon	Boraginaceae
Lomatium ambiguum	Swale desert-parsley	Apiaceae
Lomatium bicolor	Slender-fruit lomatium	Apiaceae
Lomatium canbyi	Canby's desert-parsley	Apiaceae
Lomatium cous	Cous biscuit-root	Apiaceae
Lomatium dissectum	Fern-leaf biscuit-root	Apiaceae
Lomatium farinosum	Coeur d'Alene desert-parsley	Apiaceae
Lomatium gormanii	Gorman's desert-parsley	Apiaceae
Lomatium grayi	Gray's desert-parsley	Apiaceae
Lomatium macrocarpum	Large-fruited lomatium	Apiaceae
Lomatium rollinsii	Rollins' lomatium	Apiaceae
Lomatium serpentinum	Snake Canyon lomatium	Apiaceae
Lomatium triternatum	Nine-leaf lomatium	Apiaceae
Lonicera ciliosa	Orange honeysuckle	Caprifoliaceae
Lonicera utahensis	Utah honeysuckle	Caprifoliaceae
Lotus purshianus	Spanish clover	Fabaceae
Lupinus caudatus	Tailcup lupine	Fabaceae
Lupinus laxiflorus	Spurred lupine	Fabaceae
Lupinus lepidus	Prairie lupine	Fabaceae
Lupinus leucophyllus	Velvet lupine	Fabaceae
Lupinus microcarpus	Chick lupine	Fabaceae
Lupinus saxosus	Rock lupine	Fabaceae
Lupinus sericeus	Silky lupine	Fabaceae
Lupinus sulphureus	Sulphur lupine	Fabaceae
Lupinus wyethii	Wyeth's lupine	Fabaceae

Luzula campestris	Field woodrush	Juncaceae
Lycopus asper	Rough bugleweed	Lamiaceae
Machaeranthera canescens	Hoary aster	Asteraceae
Maclura pomifera*	Hedge apple	Moraceae
Madia citriodora	Lemon-scented tarweed	Asteraceae
Madia glomerata	Mountain tarweed	Asteraceae
Madia gracilis	Common tarweed	Asteraceae
Malva neglecta*	Dwarf mallow	Malvaceae
Marsilea vestita	Clover fern	Marsileaceae
Melica spectabilis	Showy oniongrass	Poaceae
Melica subulata	Alaska onion-grass	Poaceae
Mentha arvensis	Field mint	Lamiaceae
Mentzelia dispersa	Bushy mentzelia	Loasaceae
Mentzelia laevicaulis	Blazingstar	Loasaceae
Mertensia longiflora	Small bluebells	Boraginaceae
Mertensia paniculata	Tall bluebells	Boraginaceae
Microseris lindleyi	Lindley's microseris	Asteraceae
Microseris nutans	Nodding microseris	Asteraceae
Microseris troximoides	Wavyleaf microseris	Asteraceae
Microsteris gracilis	Pink microsteris	Polemoniaceae
Mimulus breviflorus	Short-flowered monkey-flower	Scrophulariaceae
Mimulus floribundus	Purple-stem monkey-flower	Scrophulariaceae
Mimulus guttatus	Common monkey-flower	Scrophulariaceae
Mimulus moschatus	Musk-flower	Scrophulariaceae
Mimulus nanus	Dwarf purple monkey-flower	Scrophulariaceae
Mimulus washingtonensis	Washington monkey-flower	Scrophulariaceae
Mitella pentandra	Alpine mitrewort	Saxifragaceae
Mitella stauropetala	Cross-shaped mitrewort	Saxifragaceae
Monardella odoratissima	Mountain monardella	Lamiaceae
Montia arenicola	Sand montia	Portulacaceae
Montia chamissoi	Water montia	Portulacaceae
Montia linearis	Narrow-leaf montia	Portulacaceae
Montia perfoliata	Miner's lettuce	Portulacaceae
Montia sibirica	Candyflower	Portulacaceae
Morus alba*	White mulberry	Moraceae
Myosotis discolor*	Yellow & blue forget-me-not	Boraginaceae
Myosotis laxa	Small-flowered forget-me-not	Boraginaceae
Myosotis micrantha*	Blue forget-me-not	Boraginaceae
Navarretia divaricata	Mountain navarretia	Polemoniaceae
Nemophila breviflora	Great Basin nemophila	Hydrophyllaceae
Nemophila kirtleyi	Kirtley's nemophila	Hydrophyllaceae
Nemophila parviflora	Small-flowered nemophila	Hydrophyllaceae
Nepeta cataria*	Catnip	Lamiaceae
Oenothera caespitosa	Desert rockrose	Onagraceae
Oenothera pallida	White-stemmed e-p	Onagraceae
Oenothera subacaulis	Long-leaf evening-primrose	Onagraceae
Onopordum acanthium*	Scotch thistle	Asteraceae
Opuntia polyacantha	Prickly pear	Cactaceae
Orobanche fasciculata	Clustered broomrape	Orobanchaceae
Orobanche ludoviciana	Flat-topped broomrape	Orobanchaceae

Orobanche uniflora	Naked broom-rape	Orobanchaceae
Orogenia linearifolia	Great Basin orogenia	Apiaceae
Orthocarpus hispidus	Hairy owl-clover	Scrophulariaceae
Orthocarpus tenuifolius	Thin-leaved owl-clover	Scrophulariaceae
Osmorhiza chilensis	Mountain sweet-cicely	Apiaceae
Osmorhiza occidentalis	Western sweet-cicely	Apiaceae
Oxalis stricta	Upright yellow wood-sorrel	Oxalidaceae
Pachistima myrsinites	Mountain box	Celastraceae
Paeonia brownii	Wild peony	Paeoniaceae
Panicum scribnerianum	Scribner witchgrass	Poaceae
Papsulum distichum	Knotgrass	Poaceae
Parietaria pensylvanica	Pellitory	Urticaceae
Paspalum distichum	Knotgrass	Poaceae
Pedicularis bracteosa	Bracted lousewort	Scrophulariaceae
Pedicularis contorta	Coiled lousewort	Scrophulariaceae
Penstemon attenuatus	Sulfur penstemon	Scrophulariaceae
Penstemon confertus	Yellow penstemon	Scrophulariaceae
Penstemon deustus	Hot-rock penstemon	Scrophulariaceae
Penstemon diphyllus	Two-leaf penstemon	Scrophulariaceae
Penstemon eriantherus	Fuzzy beardtongue	Scrophulariaceae
Penstemon fruticosus	Shrubby penstemon	Scrophulariaceae
Penstemon glandulosus	Glandular penstemon	Scrophulariaceae
Penstemon pennellianus	Blue Mountain penstemon	Scrophulariaceae
Penstemon rydbergii	Rydberg's penstemon	Scrophulariaceae
Penstemon venustus	Blue mountain penstemon	Scrophulariaceae
Perideridia gairdneri	Yampah	Apiaceae
Petalostemon ornatum	Western prairie-clover	Fabaceae
Petrophytum caespitosum	Rocky Mtn. rockmat	Rosaceae
Phacelia hastata	White-leaf phacelia	Hydrophyllaceae
Phacelia heterophylla	Varileaf phacelia	Hydrophyllaceae
Phacelia linearis	Thread-leaf phacelia	Hydrophyllaceae
Philadelphus lewisii	Mock-orange	Hydrangeaceae
Phlox caespitosa	Tufted phlox	Polemoniaceae
Phlox colubrina	Snake River phlox	Polemoniaceae
Phlox longifolia	Long-leaf phlox	Polemoniaceae
Phlox speciosa	Showy phlox	Polemoniaceae
Phlox viscida	Sticky phlox	Polemoniaceae
Phoenicaulis cheiranthoides	Daggerpod	Brassicaceae
Physalis longifolia	Long-leaved ground-cherry	Solanaceae
Physaria oregana	Oregon twinpod	Brassicaceae
Physocarpus malvaceus	Mallow ninebark	Rosaceae
Picea engalmannii	Engelmann spruce	Pinaceae
Plagiobothrys hispidus	Bristly popcorn-flower	Boraginaceae
Plagiobothrys scouleri	Scouler's popcorn-flower	Boraginaceae
Plagiobothrys tenellus	Slender popcorn-flower	Boraginaceae
Plantago patagonica	Candleweed	Plantaginaceae
Plectritis macrocera	White plectritus	Valerianaceae
Poa bulbosa*	Bulbous bluegrass	Poaceae
Poa cusickii	Cusick's bluegrass	Poaceae
Poa fendleriana	Longtongue muttongrass	Poaceae

Poa leibergii	Leiberg's bluegrass	Poaceae
Poa nervosa	Wheeler's bluegrass	Poaceae
Poa pratensis*	Kentucky bluegrass	Poaceae
Poa sandbergii	Sandberg's bluegrass	Poaceae
Poa secunda	Merrill's bluegrass	Poaceae
Polemonium californicum	California Jacob's-ladder	Polemoniaceae
Polemonium micranthum	Littlebells polemonium	Polemoniaceae
Polemonium pulcherrimum	Showy Jacob's ladder	Polemoniaceae
Polygonum bistortoides	Mountain bistort	Polygonaceae
Polygonum coccineum	Swamp persicaria	Polygonaceae
Polygonum convolvulus*	Black bindweed	Polygonaceae
Polygonum douglasii	Douglas' knotweed	Polygonaceae
Polygonum majus	Wiry knotweed	Polygonaceae
Polygonum minimum	Leafy dwarf knotweed	Polygonaceae
Polygonum polygaloides	White-margined knotweed	Polygonaceae
Polypogon monspeilensis*	Rabbitsfoot grass	Poaceae
Potentilla arguta	Tall cinquefoil	Rosaceae
Potentilla biennis	Biennial cinquefoil	Rosaceae
Potentilla glandulosa	Sticky cinquefoil	Rosaceae
Potentilla gracilis	Graceful cinquefoil	Rosaceae
Potentilla recta*	Erect cinquefoil	Rosaceae
Prunus cerasifera*	Cherry plum	Rosaceae
Prunus emarginata	Bitter cherry	Rosaceae
Prunus virginiana	Chokecherry	Rosaceae
Psoralea lanceolata	Dune scurf-pea	Fabaceae
Pteridium aquilinum	Bracken	Polypodiaceae
Puccinellia pauciflora	Weak alkaligrass	Poaceae
Pyrola secunda	One-sided wintergreen	Ericaceae
Ranunculus acris*	Meadow buttercup	Ranunculaceae
Ranunculus aquatilis	Water buttercup	Ranunculaceae
Ranunculus cymbalaria	Shore buttercup	Ranunculaceae
Ranunculus glaberrimus	Sagebrush buttercup	Ranunculaceae
Ranunculus orthorhynchus	Straight-beak buttercup	Ranunculaceae
Ranunculus uncinatus	Little buttercup	Ranunculaceae
Rhus glabra	Sumac	Anacardiaceae
Rhus radicans	Poison ivy	Anacardiaceae
Ribes aureum	Golden currant	Grossulariaceae
Ribes cereum	Wax currant	Grossulariaceae
Ribes irriguum	Idaho gooseberry	Grossulariaceae
Ribes lacustre	Prickly currant	Grossulariaceae
Ribes niveum	Snow gooseberry	Grossulariaceae
Ribes oxyacanthoides	Northern gooseberry	Grossulariaceae
Ribes triste	Wild red currant	Grossulariaceae
Ribes velutinum	Gooding's gooseberry	Grossulariaceae
Ribes viscosissimum	Sticky currant	Grossulariaceae
Ribes wolfii	Wolf's current	Grossulariaceae
Rorippa curvisiliqua	Western yellowcress	Brassicaceae
Rorippa nasturtium-aquaticum*	Water cress	Brassicaceae
Rosa gymnocarpa	Baldhip rose	Rosaceae
Rosa nutkana	Nootka rose	Rosaceae

Rosa woodsii	Wood's rose	Rosaceae
Rubus leucodermis	Blackcap	Rosaceae
Rubus parviflorus	Thimbleberry	Rosaceae
Rumex acetosella*	Sheep sorrel	Polygonaceae
Rumex crispus*	Sour dock	Polygonaceae
Rumex patientia*	Patience dock	Polygonaceae
Rumex venosus	Winged dock	Polygonaceae
Sagina saginoides	Alpine pearlwort	Caryophyllaceae
Salix amygdaloides	Peachleaf willow	Salicaceae
Salix exigua	Coyote willow	Salicaceae
Salix rigida	Mackenzie willow	Salicaceae
Salix scouleriana	Scouler willow	Salicaceae
Sambucus cerulea	Blue elderberry	Caprifoliaceae
Sanguisorba minor*	Small burnet	Rosaceae
Sanguisorba occidentalis	Annual burnet	Rosaceae
Saponaria officinalis*	Bouncing Bett	Caryophyllaceae
Saxifraga arguta	Brook saxifrage	Saxifragaceae
Saxifraga integrifolia	Grassland saxifrage	Saxifragaceae
Saxifraga mertensiana	Merten's saxifrage	Saxifragaceae
Saxifraga nidifica	Nesting saxifrage	Saxifragaceae
Saxifraga occidentalis	Western saxifrage	Saxifragaceae
Scirpus americanus	Three-square bulrush	Cyperaceae
Scirpus microcarpus	Small-flowered bulrush	Cyperaceae
Scirpus pallidus	Pale bulrush	Cyperaceae
Scirpus validus	Soft-stem bulrush	Cyperaceae
Scleranthus annuus*	Annual knawel	Caryophyllaceae
Sclerochloa dura*	Hardgrass	Poaceae
Scutellaria angustifolia	Narrow-leaved skullcap	Lamiaceae
Scutellaria antirrhinoides	Snapdragon skullcap	Lamiaceae
Secaule cereale*	Rye	Poaceae
Sedum leibergii	Leiberg's stonecrop	Crassulaceae
Sedum stenopetalum	Worm-leaf stonecrop	Crassulaceae
Selaginella wallacei	Wallace's selaginella	Selaginellaceae
Senecio canus	Woolly groundsel	Asteraceae
Senecio crassulus	Thick-leaf groundsel	Asteraceae
Senecio foetidus	Sweet-marsh butterweed	Asteraceae
Senecio integerrimus	Western groundsel	Asteraceae
Setaria viridis*	Green foxtail	Poaceae
Sidalcea oregana	Oregon checkermallow	Malvaceae
Silene antirrhina*	Sleepy catchfly	Caryophyllaceae
Silene conoidea	Conoid catchfly	Caryophyllaceae
Silene oregana	Oregon silene	Caryophyllaceae
Sisymbrium altissimum*	Jim Hill mustard	Brassicaceae
Sisyrinchium inflatum	Purple-eyed grass	Iridaceae
Sitanion jubatum	Big squirreltail	Poaceae
Smilacina racemosa	False Solomon's seal	Liliaceae
Smilacina stellata	Star-flowered Solomon's seal	Liliaceae
Solanum americanum*	American black nightshade	Solanaceae
Solanum sarrachoides	Hairy nightshade	Solanaceae
Solidago gigantea	Late goldenrod	Asteraceae

Solidago occidentalis	Western goldenrod	Asteraceae
Sonchus asper*	Prickly sowthistle	Asteraceae
Sorbus scopulina	Cascade mountain-ash	Rosaceae
Spergularia rubra*	Red sandspurry	Caryophyllaceae
Sphaeralcea munroana	White-leaved globe mallow	Malvaceae
Spiraea betulifolia	Birch-leafed spirea	Rosaceae
Stachys palustris	Swamp hedge-nettle	Lamiaceae
Stellaria media*	Common chickweed	Caryophyllaceae
Stephanomeria tenuifolia	Bush wirelettuce	Asteraceae
Stipa comata	Rip-gut	Poaceae
Stipa lemmonii	Lemmon's needlegrass	Poaceae
Streptopus amplexifolius	Clasping-leaved twisted-stalk	Liliaceae
Symphoricarpos albus	Common snowberry	Caprifoliaceae
Symphoricarpos oreophilus	Mountain snowberry	Caprifoliaceae
Synthyris missurica	Mountain kittytails	Scrophulariaceae
Taraxacum officinale*	Dandelion	Asteraceae
Thalictrum occidentale	Western meadowrue	Ranunculaceae
Thelypodium laciniatum	Thick-leaved thelepody	Brassicaceae
Thermopsis montana	Mountain golden-pea	Fabaceae
Thlaspi arvense*	Fanweed	Brassicaceae
Thlaspi fendleri	Fendler's pennycress	Brassicaceae
Thysanocarpus curvipes	Fringepod	Brassicaceae
Tiarella trifoliata	Foamflower	Saxifragaceae
Tonella floribunda	Large-flowered tonella	Scrophulariaceae
Tragopogon dubius*	Oysterplant	Asteraceae
Trautvetteria caroliniensis	False bugbane	Ranunculaceae
Tribulus terrestris*	Puncture vine	Zygophyllaceae
Trifolium eriocephalum	Wooly-head clover	Fabaceae
Trifolium latifolium	Twinclover	Fabaceae
Trifolium macrocephalum	Big-headed clover	Fabaceae
Trifolium repens*	White clover	Fabaceae
Trifolium variegatum	White-tip clover	Fabaceae
Trillium ovatum	White trillium	Liliaceae
Trillium petiolatum	Purple trillium	Liliaceae
Triodanis perfoliata	Venus' looking-glass	Campanulaceae
Urtica dioica	Stinging nettle	Urticaceae
Vaccinium globulare	Globe huckleberry	Ericaceae
Vaccinium membranaceum	Mountain huckleberry	Ericaceae
Valeriana occidentlis	Western valerian	Valerianaceae
Valeriana sitchensis	Sitka valerian	Valerianaceae
Valerianella locusta*	European corn salad	Valerianaceae
Veratrum californicum	California false hellebore	Liliaceae
Verbascum blattaria*	Moth mullein	Scrophulariaceae
Verbena bracteata	Bracted vervain	Verbenaceae
Veronica americana	American brooklime	Scrophulariaceae
Veronica peregrina	Purslane speedwell	Scrophulariaceae
Veronica serpyllifolia	Thyme-leaf speedwell	Scrophulariaceae
Veronica verna*	Spring speedwell	Scrophulariaceae
Vicia americana	American vetch	Fabaceae
Vicia villosa*	Hairy vetch	Fabaceae

Viola adunca	Early blue violet	Violaceae
Viola arvensis*	Pansy	Violaceae
Viola canadensis	Canadian violet	Violaceae
Viola glabella	Stream violet	Violaceae
Viola nuttallii	Yellow prairie violet	Violaceae
Viola odorata*	English violet	Violaceae
Viola orbiculata	Round-leaved violet	Violaceae
Vitis vinifera*	Wine grape	Vitaceae
Woodsia oregana	Oregon woodsia	Polypodiaceae
Wyethia amplexicaulis	Northern mule's ears	Asteraceae
Xanthium spinosum*	Spiny cocklebur	Asteraceae
Zigadenus paniculatus	Panicled death-camas	Liliaceae
Zigadenus venenosus	Meadow death camas	Liliaceae

Vascular Plant List
Columbia County

Columbia County Columbia County, WA. List covers plants found in Columbia County. Combination of plant lists of areas within Columbia County, with the addition of names of plants in the UW and WSU herbariums that were collected in Columbia County. 621 spp., 96 introduced. List prepared by Don Knoke, 2004.

* - Introduced

Scientific Name	*Common Name*	*Family Name*
Abies lasiocarpa	Sub-alpine fir	Pinaceae
Acer glabrum	Douglas maple	Aceraceae
Achillea millefolium	Yarrow	Asteraceae
Aconitum columbianum	Monkshood	Ranunculaceae
Actaea rubra	Baneberry	Ranunculaceae
Adenocaulon bicolor	Pathfinder	Asteraceae
Adiantum pedatum	Maidenhair fern	Polypodiaceae
Agastache urticifolia	Nettle-leaf horse-mint	Lamiaceae
Ageratina occidentalis*	Agaratina	Asteraceae
Agoseris grandiflora	Large-flowered agoseris	Asteraceae
Agoseris heterophylla	Annual agoseris	Asteraceae
Agropyron repens*	Quack grass	Poaceae
Agropyron spicatum	Blue-bunch wheatgrass	Poaceae
Agrostis exarata*	Spike bentgrass	Poaceae
Agrostis scabra	Tickle-grass	Poaceae
Agrostis stolonifera	Colonian bentgrass	Poaceae
Agrostis tenuis*	Colonial bentgrass	Poaceae
Allium dictuon	Blue Mountain onion	Liliaceae
Allium douglasii	Douglas' onion	Liliaceae
Allium fibrillum	Fringed onion	Liliaceae
Allium macrum	Rock onion	Liliaceae
Allium tolmiei	Tolmie's onion	Liliaceae
Alnus sinuata	Sitka alder	Betulaceae
Alopecurus aequalis	Short-awned foxtail	Poaceae
Alyssum alyssoides*	Pale alyssum	Brassicaceae
Amaranthus blitoides	Prostrate pigweed	Amaranthaceae
Amaranthus californicus	California pigweed	Amaranthaceae
Amaranthus retroflexus*	Red-root pigweed	Amaranthaceae
Amelanchier alnifolia	Serviceberry	Rosaceae
Amsinckia tessellata	Devil's lettuce	Boraginaceae
Anaphalis margaritacea	Pearly everlasting	Asteraceae
Anemone oregana	Oregon anemone	Ranunculaceae
Anemone piperi	Piper's anemone	Ranunculaceae
Angelica arguta	Sharp-tooth angelica	Apiaceae
Antennaria dimorpha	Low pussy-toes	Asteraceae
Antennaria luzuloides	Woodrush pussy-toes	Asteraceae
Antennaria microphylla	Rosy pussy-toes	Asteraceae
Antennaria racemosa	Raceme pussy-toes	Asteraceae

Anthemis cotula*	Dog fennel	Asteraceae
Apocynum androsaemifolium	Spreading dogbane	Apocynaceae
Aquilegia formosa	Red columbine	Ranunculaceae
Arabis divaricarpa	Spreadingpod rockcress	Brassicaceae
Arabis glabra	Tower mustard	Brassicaceae
Arabis hirsuta	Hairy rockcress	Brassicaceae
Arabis holboellii	Holboell's rockcress	Brassicaceae
Arabis microphylla	Small-leaf rockcress	Brassicaceae
Arabis sparsiflora	Sicklepod rockcress	Brassicaceae
Arabis suffrutescens	Crater Lake rockcress	Brassicaceae
Arceuthobium douglasii	Douglas dwarf mistletoe	Loranthaceae
Arctostaphylos uva-ursi	Bearberry	Ericaceae
Arenaria capillaris	Thread-leaved sandwort	Caryophyllaceae
Arenaria congesta	Dense-flowered sandwort	Caryophyllaceae
Arenaria lateriflora	Bluntleaf sandwort	Caryophyllaceae
Arenaria macrophylla	Big-leaf sandwort	Caryophyllaceae
Arnica cordifolia	Heart-leaf arnica	Asteraceae
Arnica diversifolia	Sticky arnica	Asteraceae
Arnica fulgens	Hillside arnica	Asteraceae
Arnica latifolia	Mountain arnica	Asteraceae
Artemisia ludoviciana	Western mugwort	Asteraceae
Asclepias speciosa	Showy milkweed	Asclepiadaceae
Asperugo procumbens*	Madwort	Boraginaceae
Aspidotus densa	Indian's dream fern	Polypodiaceae
Aster foliaceus	Leafy aster	Asteraceae
Aster integrifolius	Thick-stemmed Aster	Asteraceae
Aster jessicae	Smooth-leaf aster	Asteraceae
Aster subspicatus	Douglas' aster	Asteraceae
Astragalus canadensis	Canada milk-vetch	Fabaceae
Astragalus collinus	Hillside milk-vetch	Fabaceae
Astragalus purshii	Pursh's milk-vetch	Fabaceae
Astragalus reventus	Blue Mtn. milk-vetch	Fabaceae
Astragalus riparius	Woody-root milk-vetch	Fabaceae
Astragalus spaldingii	Spalding's milk vetch	Fabaceae
Astragalus whitneyi	Balloon milk-vetch	Fabaceae
Athyrium filix-femina	Lady fern	Polypodiaceae
Athysanus pusillus	Sandweed	Brassicaceae
Avena fatua*	Wild oats	Poaceae
Balsamorhiza incana	Hoary balsamroot	Asteraceae
Balsamorhiza sagittata	Arrow-leaf balsamroot	Asteraceae
Balsamorhiza serrata	Toothed balsamroot	Asteraceae
Berberis repens	Creeping Oregongrape	Berberidaceae
Besseya rubra	Red besseya	Scrophulariaceae
Betula papyrifera	Paper birch	Betulaceae
Blepharipappus scaber	Blepharipappus	Asteraceae
Boisduvalia densiflora	Dense spike-primrose	Onagraceae
Boisduvalia stricta	Brook spike-primrose	Onagraceae
Brassica campestris*	Common mustard	Brassicaceae
Bromus brizaeformis*	Rattlesnake grass	Poaceae
Bromus carinatus	California brome	Poaceae

Bromus inermis*	Smooth brome	Poaceae
Bromus mollis*	Soft brome	Poaceae
Bromus rigidus*	Ripgut brome	Poaceae
Bromus tectorum*	Cheat grass	Poaceae
Bromus vulgaris	Narrow-leaf brome	Poaceae
Calamagrostis rubescens	Pinegrass	Poaceae
Calochortus elegans	Northwest mariposa	Liliaceae
Calochortus subalpinus	Subalpine mariposa	Liliaceae
Calypso bulbosa	Fairy slipper	Orchidaceae
Camelina microcarpa*	Hairy false-flax	Brassicaceae
Capsella bursa-pastoris*	Shepherd's purse	Brassicaceae
Cardamine breweri	Brewer's bittercress	Brassicaceae
Cardamine cordifolia	Large mountain bittercress	Brassicaceae
Cardamine oligosperma	Little Western bittercress	Brassicaceae
Cardamine pensylvanica	Pennsylvania bittercress	Brassicaceae
Carex amplifolia	Big-leaf sedge	Cyperaceae
Carex deweyana	Dewey's sedge	Cyperaceae
Carex geyeri	Geyer's sedge	Cyperaceae
Carex hystricina	Porcupine sedge	Cyperaceae
Carex laeviculmis	Smooth-stemmed sedge	Cyperaceae
Carex microptera	Small-winged sedge	Cyperaceae
Carex multicostata	Many-ribbed sedge	Cyperaceae
Carex pachystachya	Pachystachy sedge	Cyperaceae
Carex retrorsa	Knot-leaf sedge	Cyperaceae
Carex rossii	Ross' sedge	Cyperaceae
Carex stipata	Sawbeak sedge	Cyperaceae
Carex subfusca	Rusty sedge	Cyperaceae
Castilleja hispida	Harsh paintbrush	Scrophulariaceae
Castilleja miniata	Scarlet paintbrush	Scrophulariaceae
Castilleja tenuis	Hairy Indian paintbrush	Scrophulariaceae
Catabrosa aquatica	Brookgrass	Poaceae
Ceanothus sanguineus	Redstem ceanothus	Rhamnaceae
Ceanothus velutinus	Snowbrush	Rhamnaceae
Centaurea cyanus*	Batchelor button	Asteraceae
Centaurea maculosa*	Spotted knapweed	Asteraceae
Centaurea solstitialis*	Yellow starthistle	Asteraceae
Cerastium arvense	Field chickweed	Caryophyllaceae
Cerastium nutans	Nodding chickweed	Caryophyllaceae
Cerastium viscosum*	Sticky chickweed	Caryophyllaceae
Cerastium vulgatum*	Mouse-ear chickweed	Caryophyllaceae
Cercocarpus ledifolius	Curl-leaf mountain-mohogany	Rosaceae
Chaenactis douglasii	Dusty maidens	Asteraceae
Cheilanthes gracillima	Lace fern	Polypodiaceae
Chenopodium album*	Pigweed	Chenopodiaceae
Chenopodium botrys*	Jerusalem oak	Chenopodiaceae
Chenopodium leptophyllum	Slim-leaf goosefoot	Chenopodiaceae
Chimaphila menziesii	Little pipsissewa	Ericaceae
Chimaphila umbellata	Pipsissewa	Ericaceae
Chrysothamnus nauseosus	Gray rabbit-brush	Asteraceae
Chrysothamnus viscidiflorus	Green rabbit-brush	Asteraceae

Cichorium intybus*	Chicory	Asteraceae
Circaea alpina	Enchanter's nightshade	Onagraceae
Cirsium brevistylum	Indian thistle	Asteraceae
Cirsium undulatum	Wavy-leaved thistle	Asteraceae
Cirsium utahense	Utah thistle	Asteraceae
Cirsium vulgare*	Bull thistle	Asteraceae
Clarkia pulchella	Ragged Robin	Onagraceae
Clarkia purpurea	Purple godetia	Onagraceae
Clarkia rhomboidea	Common clarkia	Onagraceae
Claytonia lanceolata	Western spring beauty	Portulacaceae
Claytonia parviflora	Streambank spring beauty	Portulacaceae
Claytonia rubra	Red miner's lettuce	Portulacaceae
Clematis columbiana	Columbia virgin's bower	Ranunculaceae
Clematis ligusticifolia	Virgin's bower	Ranunculaceae
Clintonia uniflora	Queen's cup	Liliaceae
Collinsia parviflora	Small-flowered blue-eyed Mary	Scrophulariaceae
Collomia grandiflora	Large-flowered collomia	Polemoniaceae
Collomia heterophylla	Varied-leaf collomia	Polemoniaceae
Collomia linearis	Narrow-leaf collomia	Polemoniaceae
Conyza canadensis*	Horseweed	Asteraceae
Corallorhiza maculata	Spotted coral-root	Orchidaceae
Corallorhiza striata	Striped coral-root	Orchidaceae
Corallorhiza trifida	Yellow coral-root	Orchidaceae
Cornus canadensis	Bunchberry	Cornaceae
Cornus stolonifera	Red-osier dogwood	Cornaceae
Crataegus douglasii	Black hawthorn	Rosaceae
Crataegus sukdorfii	Suksdorf's hawthorn	Rosaceae
Crepis acuminata	Tapertip hawksbeard	Asteraceae
Crepis atrabarba	Slender hawksbeard	Asteraceae
Crepis intermedia	Gray hawksbeard	Asteraceae
Crepis occidentalis	Western hawksbeard	Asteraceae
Cryptantha affinis	Slender cryptantha	Boraginaceae
Cryptantha simulans	Pine woods cryptantha	Boraginaceae
Cryptantha torreyana	Torrey's cryptantha	Boraginaceae
Cymopteris terebinthinus	Turpentine spring-parsley	Apiaceae
Cyperus aristatus	Awned flatsedge	Cyperaceae
Cyperus erythrorhizos	Red-root flatsedge	Cyperaceae
Cypripedium montanum	Mountain lady's-slipper	Orchidaceae
Dactylis glomerata*	Orchard grass	Poaceae
Daucus carota*	Queen Anne's lace	Apiaceae
Delphinium burkei	Meadow larkspur	Ranunculaceae
Delphinium depauperatum	Dwarf larkspur	Ranunculaceae
Delphinium nuttallianum	Upland larkspur	Ranunculaceae
Deschampsia danthonioides	Annual hairgrass	Poaceae
Deschampsia elongata	Slender hairgrass	Poaceae
Descurainia pinnata	Western tansymustard	Brassicaceae
Descurainia richardsonii	Mountain tansymustard	Brassicaceae
Dianthus armeria*	Grass pink	Caryophyllaceae
Dicentra cucullaria	Dutchman's breeches	Fumariaceae
Dicentra uniflora	Steer's head	Fumariaceae

Dipsacus sylvestris*	Teasel	Dipsacaceae
Disporum hookeri	Hooker fairy-bell	Liliaceae
Disporum trachycarpum	Sierra fairy-bell	Liliaceae
Dodecatheon conjugens	Desert shooting star	Primulaceae
Dodecatheon cusickii	Cusick's shooting star	Primulaceae
Draba densifolia	Nuttall's draba	Brassicaceae
Draba stenoloba	Slender draba	Brassicaceae
Draba verna	Spring whitlow-grass	Brassicaceae
Dryopteris filix-mas	Male fern	Polypodiaceae
Eburophyton austiniae	Phantom orchid	Orchidaceae
Echinochloa crus-galli*	Barnyard-grass	Poaceae
Echinops ruthenicus*	Globe-thistle	Asteraceae
Eleocharis ovata	Ovoid spike-rush	Cyperaceae
Elodea canadensis	Canadian waterweed	Hydrocharitaceae
Elymus cinereus	Giant rye grass	Poaceae
Elymus glaucus	Western ryegrass	Poaceae
Epilobium alpinum	Alpine willow-herb	Onagraceae
Epilobium angustifolium	Fireweed	Onagraceae
Epilobium glaberrimum	Smooth willow-herb	Onagraceae
Epilobium glandulosum	Common willow-herb	Onagraceae
Epilobium minutum	Small-flowered willow-herb	Onagraceae
Epilobium paniculatum	Tall annual willow-herb	Onagraceae
Epilobium watsonii	Watson's willow-herb	Onagraceae
Equisetum arvense	Common horsetail	Equisetaceae
Equisetum fluviatale	Swamp horsetail	Equisetaceae
Equisetum hyemale	Scouring rush	Equisetaceae
Equisetum laevigatum	Smooth scouring-rush	Equisetaceae
Erigeron bloomeri	Scabland fleabane	Asteraceae
Erigeron chrysopsidis	Austin's daisy	Asteraceae
Erigeron disparipilus	Snake River daisy	Asteraceae
Erigeron eatonii	Eaton's daisy	Asteraceae
Erigeron peregrinus	Subalpine daisy	Asteraceae
Erigeron pumilus	Shaggy fleabane	Asteraceae
Eriogonum compositum	Northern buckwheat	Polygonaceae
Eriogonum douglasii	Douglas' buckwheat	Polygonaceae
Eriogonum flavum	Yellow buckwheat	Polygonaceae
Eriogonum heracleoides	Parsnip-flowered buckwheat	Polygonaceae
Eriogonum niveum	Snow buckwheat	Polygonaceae
Eriogonum sphaerocephalum	Rock buckwheat	Polygonaceae
Eriogonum strictum	Strict buckwheat	Polygonaceae
Eriogonum umbellatum	Sulfur buckwheat	Polygonaceae
Eriogonum vimineum	Broom buckwheat	Polygonaceae
Eriophyllum lanatum	Oregon sunshine	Asteraceae
Erodium cicutarium*	Filaree	Geraniaceae
Erysimum asperum	Rough wallflower	Brassicaceae
Erythronium grandiflorum	Glacier lily	Liliaceae
Euphorbia serpyllifolia*	Thyme-leaf spurge	Euphorbiaceae
Festuca idahoensis	Blue bunchgrass	Poaceae
Festuca myuros*	Rat-tail fescue	Poaceae
Festuca occidentalis	Western fescue	Poaceae

Festuca pratensis*	Meadow fescue	Poaceae
Festuca rubra	Red fescue	Poaceae
Festuca viridula	Green fescue	Poaceae
Floerkea proserpinacoides	False mermaid	Limnanthaceae
Fragaria vesca	Wild strawberry	Rosaceae
Frasera fastigiata	Clustered frasera	Gentianaceae
Fritillaria pudica	Yellow bell	Liliaceae
Gaillardia aristata	Blanket-flower	Asteraceae
Galium aparine	Cleavers	Rubiaceae
Galium bifolium	Low mountain bedstraw	Rubiaceae
Galium boreale	Northern bedstraw	Rubiaceae
Galium serpenticum	Intermountain bedstraw	Rubiaceae
Galium trifidum	Small bedstraw	Rubiaceae
Galium triflorum	Fragrant bedstraw	Rubiaceae
Gayophytum diffusum	Spreading groundsmoke	Onagraceae
Gentiana calycosa	Mountain bog gentian	Gentianaceae
Geranium bicknellii	Bicknell's geranium	Geraniaceae
Geranium carolinianum	Wild geranium	Geraniaceae
Geranium pusillum*	Small flowered crane's-bill	Geraniaceae
Geranium viscosissimum	Sticky geranium	Geraniaceae
Geum aleppicum	Yellow avens	Rosaceae
Geum macrophyllum	Large-leaved avens	Rosaceae
Geum triflorum	Prairie smoke	Rosaceae
Gilia aggregata	Skyrocket	Polemoniaceae
Glecoma hederacea*	Creeping Charlie	Lamiaceae
Glyceria striata	Fowl mannagrass	Poaceae
Gnaphalium microcephalum	Slender cudweed	Asteraceae
Gnaphalium palustre	Lowland cudweed	Asteraceae
Goodyera oblongifolia	Rattlesnake-plantain	Orchidaceae
Grindelia nana	Low gumweed	Asteraceae
Grindelia squarrosa	Resinweed	Asteraceae
Gymnocarpium dryopteris	Oak fern	Polypodiaceae
Gypsophila paniculata*	Baby's breath	Caryophyllaceae
Habenaria dilatata	White bog-orchid	Orchidaceae
Habenaria saccata	Slender bog-orchid	Orchidaceae
Habenaria unalascensis	Alaska rein-orchid	Orchidaceae
Hackelia micrantha	Blue stickseed	Boraginaceae
Haplopappus carthamoides	Large-flowered goldenweed	Asteraceae
Helianthus annuus*	Common sunflower	Asteraceae
Heracleum lanatum	Cow parsnip	Apiaceae
Hesperochiron pumilis	Dwarf hesperochiron	Hydrophyllaceae
Heuchera cylindrica	Lava alumroot	Saxifragaceae
Heuchera micrantha	Small-flowered alumroot	Saxifragaceae
Hieracium albiflorum	White-flowered hawkweed	Asteraceae
Hieracium cynoglossoides	Hounds-tongue hawkweed	Asteraceae
Hieracium gracile	Slender hawkweed	Asteraceae
Hieracium scouleri	Scouler's hawkweed	Asteraceae
Holcus lanatus*	Common velvet grass	Poaceae
Holodiscus discolor	Ocean spray	Rosaceae
Holosteum umbellatum*	Jagged chickweed	Caryophyllaceae

Hordeum geniculatum*	Seaside barley	Poaceae
Hydrophyllum capitatum	Woolly breeches	Hydrophyllaceae
Hydrophyllum fendleri	Fendler's waterleaf	Hydrophyllaceae
Hydrophyllum tenuipes	Pacific waterleaf	Hydrophyllaceae
Hypericum perforatum*	Klamath weed	Hypericaceae
Hypericum scouleri	Scouler's St. John's-wort	Hypericaceae
Iliamna rivularis	Streambank globemallow	Malvaceae
Impatiens aurella	Orange balsam	Balsaminaceae
Iva xanthifolia	Tall marsh-elder	Asteraceae
Juglans nigra*	Black walnut	Juglandaceae
Juncus bufonius*	Toad rush	Juncaceae
Juncus confusus	Colorado rush	Juncaceae
Juncus effusus	Soft rush	Juncaceae
Juncus ensifolius	Daggerleaf rush	Juncaceae
Juncus longistylus	Long-beaked rush	Juncaceae
Juncus mertensianus	Merten's rush	Juncaceae
Juncus parryi	Parry's rush	Juncaceae
Juncus regelii	Regel's rush	Juncaceae
Juncus tenuis	Slender rush	Juncaceae
Juniperus occidentalis	Western juniper	Cupressaceae
Kelloggia galioides	Kelloggia	Rubiaceae
Koeleria cristata	Prairie junegrass	Poaceae
Lactuca canadensis*	Canada wild lettuce	Asteraceae
Lactuca serriola*	Prickly lettuce	Asteraceae
Lagophylla ramosissima	Common hareleaf	Asteraceae
Lamium amplexicaule*	Henbit	Lamiaceae
Larix occidentalis	Western larch	Pinaceae
Lathyrus lanszwertii	Thick-leaved peavine	Fabaceae
Lathyrus latifolius*	Everlasting peavine	Fabaceae
Lathyrus nevadensis	Nuttall's peavine	Fabaceae
Lathyrus pauciflorus	Few-flowered peavine	Fabaceae
Lewisia pygmaea	Dwarf lewisia	Portulacaceae
Lewisia triphylla	Three-leaf lewisia	Portulacaceae
Ligusticum canbyi	Canby's lovage	Apiaceae
Linanthastrum nuttallii	Linanthastrum	Polemoniaceae
Linanthus septentrionalis	Northern linanthus	Polemoniaceae
Linaria vulgaris*	Butter and eggs	Scrophulariaceae
Linnaea borealis	Twinflower	Caprifoliaceae
Linum perenne	Wild blue-flax	Linaceae
Listera caurina	Northwestern twayblade	Orchidaceae
Listera convallarioides	Broad-lipped twayblade	Orchidaceae
Lithophragma glabrum	Smooth woodland-star	Saxifragaceae
Lithophragma parviflorum	Small-flowered prairie-star	Saxifragaceae
Lithospermum ruderale	Columbia puccoon	Boraginaceae
Lomatium ambiguum	Swale desert-parsley	Apiaceae
Lomatium bicolor	Slender-fruit lomatium	Apiaceae
Lomatium cous	Cous biscuit-root	Apiaceae
Lomatium dissectum	Fern-leaf biscuit-root	Apiaceae
Lomatium gormanii	Gorman's desert-parsley	Apiaceae
Lomatium grayi	Gray's desert-parsley	Apiaceae

Lomatium macrocarpum	Large-fruited lomatium	Apiaceae
Lomatium triternatum	Nine-leaf lomatium	Apiaceae
Lonicera ciliosa	Orange honeysuckle	Caprifoliaceae
Lonicera involucrata	Black twinberry	Caprifoliaceae
Lonicera utahensis	Utah honeysuckle	Caprifoliaceae
Lotus purshianus	Spanish clover	Fabaceae
Lupinus caudatus	Tailcup lupine	Fabaceae
Lupinus laxiflorus	Spurred lupine	Fabaceae
Lupinus lepidus	Prairie lupine	Fabaceae
Lupinus leucophyllus	Velvet lupine	Fabaceae
Lupinus lyallii	Alpine lupine	Fabaceae
Lupinus minimus	Kettle Falls lupine	Fabaceae
Lupinus polyphyllus	Big-leaf lupine	Fabaceae
Lupinus sericeus	Silky lupine	Fabaceae
Lupinus sulphureus	Sulphur lupine	Fabaceae
Lupinus wyethii	Wyeth's lupine	Fabaceae
Luzula campestris	Field woodrush	Juncaceae
Machaeranthera canescens	Hoary aster	Asteraceae
Madia exigua	Little tarweed	Asteraceae
Madia glomerata	Mountain tarweed	Asteraceae
Madia gracilis	Common tarweed	Asteraceae
Malva neglecta*	Dwarf mallow	Malvaceae
Marrubium vulgare*	Horehound	Lamiaceae
Matricaria matricarioides*	Pineapple weed	Asteraceae
Medicago lupulina*	Black medic	Fabaceae
Medicago sativa*	Alfalfa	Fabaceae
Melica bulbosa	Onion-grass	Poaceae
Melica fugax	Little onion-grass	Poaceae
Melica subulata	Alaska onion-grass	Poaceae
Melilotus officinalis*	Yellow sweet-clover	Fabaceae
Mentha arvensis	Field mint	Lamiaceae
Mentha spicata*	Spearmint	Lamiaceae
Mentzelia dispersa	Bushy mentzelia	Loasaceae
Mertensia longiflora	Small bluebells	Boraginaceae
Mertensia paniculata	Tall bluebells	Boraginaceae
Microseris nutans	Nodding microseris	Asteraceae
Microsteris gracilis	Pink microsteris	Polemoniaceae
Mimulus breweri	Brewer's monkey-flower	Scrophulariaceae
Mimulus floribundus	Purple-stem monkey-flower	Scrophulariaceae
Mimulus guttatus	Common monkey-flower	Scrophulariaceae
Mimulus lewisii	Lewis's monkey-flower	Scrophulariaceae
Mimulus moschatus	Musk-flower	Scrophulariaceae
Mimulus nanus	Dwarf purple monkey-flower	Scrophulariaceae
Mitella caulescens	Leafy mitrewort	Saxifragaceae
Mitella pentandra	Alpine mitrewort	Saxifragaceae
Mitella stauropetala	Cross-shaped mitrewort	Saxifragaceae
Monardella odoratissima	Mountain monardella	Lamiaceae
Moneses uniflora	Woodnymph	Ericaceae
Monolepis nuttalliana	Patata	Chenopodiaceae
Montia arenicola	Sand montia	Portulacaceae

Montia cordifolia	Broad-leafed montia	Portulacaceae
Montia linearis	Narrow-leaf montia	Portulacaceae
Montia parvifolia	Streambank spring beauty	Portulacaceae
Montia perfoliata	Miner's lettuce	Portulacaceae
Montia sibirica	Candyflower	Portulacaceae
Montia spathulata	Pale montia	Portulacaceae
Myosotis laxa	Small-flowered forget-me-not	Boraginaceae
Myosotis scorpioides*	Common forget-me-not	Boraginaceae
Myosotis verna	Spring forget-me-knot	Boraginaceae
Myriophyllum sibericum	Siberian water-milfoil	Haloragaceae
Navarretia divaricata	Mountain navarretia	Polemoniaceae
Navarretia intertexta	Needle-leaf navarretia	Polemoniaceae
Nemophila breviflora	Great Basin nemophila	Hydrophyllaceae
Nepeta cataria*	Catnip	Lamiaceae
Oenothera subacaulis	Long-leaf evening-primrose	Onagraceae
Oplopanax horridum	Devil's club	Araliaceae
Orobanche uniflora	Naked broom-rape	Orobanchaceae
Orogenia linearifolia	Great Basin orogenia	Apiaceae
Orthocarpus hispidus	Hairy owl-clover	Scrophulariaceae
Osmorhiza depauperata	Blunt-fruited sweet-cicely	Apiaceae
Osmorhiza occidentalis	Western sweet-cicely	Apiaceae
Pachistima myrsinites	Mountain box	Celastraceae
Paeonia brownii	Wild peony	Paeoniaceae
Panicum capillare*	Old witchgrass	Poaceae
Pedicularis bracteosa	Bracted lousewort	Scrophulariaceae
Pedicularis contorta	Coiled lousewort	Scrophulariaceae
Pedicularis racemosa	Sickletop lousewort	Scrophulariaceae
Penstemon acuminatus	Sand-dune penstemon	Scrophulariaceae
Penstemon attenuatus	Sulfur penstemon	Scrophulariaceae
Penstemon deustus	Hot-rock penstemon	Scrophulariaceae
Penstemon fruticosus	Shrubby penstemon	Scrophulariaceae
Penstemon lyallii	Lyall's penstemon	Scrophulariaceae
Penstemon pennellianus	Blue Mountain penstemon	Scrophulariaceae
Penstemon rydbergii	Rydberg's penstemon	Scrophulariaceae
Penstemon speciosus	Showy penstemon	Scrophulariaceae
Penstemon venustus	Blue mountain penstemon	Scrophulariaceae
Petasites frigidus	Sweet coltsfoot	Asteraceae
Phacelia hastata	White-leaf phacelia	Hydrophyllaceae
Phacelia heterophylla	Varileaf phacelia	Hydrophyllaceae
Phacelia linearis	Thread-leaf phacelia	Hydrophyllaceae
Philadelphus lewisii	Mock-orange	Hydrangeaceae
Phlox caespitosa	Tufted phlox	Polemoniaceae
Phlox longifolia	Long-leaf phlox	Polemoniaceae
Phlox multiflora	Many-flowered phlox	Polemoniaceae
Phlox viscida	Sticky phlox	Polemoniaceae
Phoenicaulis cheiranthoides	Daggerpod	Brassicaceae
Phyllodoce empetriformis	Red mountain heather	Ericaceae
Physocarpus malvaceus	Mallow ninebark	Rosaceae
Picea engalmannii	Engelmann spruce	Pinaceae
Pinus contorta	Lodgepole pine	Pinaceae

Pinus ponderosa	Ponderosa pine	Pinaceae
Plagiobothrys scouleri	Scouler's popcorn-flower	Boraginaceae
Plantago lanceolata*	English plantain	Plantaginaceae
Plantago major*	Common plantain	Plantaginaceae
Plectritis macrocera	White plectritus	Valerianaceae
Poa annua	Annual bluegrass	Poaceae
Poa bolanderi	Bolander's bluegrass	Poaceae
Poa bulbosa*	Bulbous bluegrass	Poaceae
Poa compressa	Canadian bluegrass	Poaceae
Poa nervosa	Wheeler's bluegrass	Poaceae
Poa palustris*	Fowl meadow-grass	Poaceae
Poa secunda	Merrill's bluegrass	Poaceae
Polemonium californicum	California Jacob's-ladder	Polemoniaceae
Polemonium pulcherrimum	Showy Jacob's ladder	Polemoniaceae
Polygonum aviculare*	Doorweed	Polygonaceae
Polygonum bistortoides	Mountain bistort	Polygonaceae
Polygonum convolvulus*	Black bindweed	Polygonaceae
Polygonum douglasii	Douglas' knotweed	Polygonaceae
Polygonum kelloggii	Kellogg's knotweed	Polygonaceae
Polygonum majus	Wiry knotweed	Polygonaceae
Polygonum minimum	Leafy dwarf knotweed	Polygonaceae
Polypogon monspeilensis*	Rabbitsfoot grass	Poaceae
Polystichum lonchitis	Holly fern	Polypodiaceae
Polystichum munitum	Sword fern	Polypodiaceae
Populus tremuloides	Quaking aspen	Salicaceae
Populus trichocarpa	Black cottonwood	Salicaceae
Potentilla glandulosa	Sticky cinquefoil	Rosaceae
Potentilla gracilis	Graceful cinquefoil	Rosaceae
Potentilla recta*	Erect cinquefoil	Rosaceae
Prunella vulgaris	Self-heal	Lamiaceae
Prunus emarginata	Bitter cherry	Rosaceae
Prunus virginiana	Chokecherry	Rosaceae
Pseudotsuga menziesii	Douglas fir	Pinaceae
Pteridium aquilinum	Bracken	Polypodiaceae
Puccinellia pauciflora	Weak alkaligrass	Poaceae
Pyrola minor	Snowline pyrola	Ericaceae
Ranunculus aquatilis	Water buttercup	Ranunculaceae
Ranunculus cymbalaria	Shore buttercup	Ranunculaceae
Ranunculus glaberrimus	Sagebrush buttercup	Ranunculaceae
Ranunculus macounii	Macoun's buttercup	Ranunculaceae
Ranunculus populago	Mountain buttercup	Ranunculaceae
Ranunculus repens*	Creeping buttercup	Ranunculaceae
Ranunculus sceleratus	Celery-leaved buttercup	Ranunculaceae
Ranunculus uncinatus	Little buttercup	Ranunculaceae
Rhamnus purshiana	Cascara	Rhamnaceae
Rhus glabra	Sumac	Anacardiaceae
Ribes cereum	Wax currant	Grossulariaceae
Ribes cognatum	Umatilla gooseberry	Grossulariaceae
Ribes hudsonianum	Northern black currant	Grossulariaceae
Ribes lacustre	Prickly currant	Grossulariaceae

Ribes oxyacanthoides	Northern gooseberry	Grossulariaceae
Ribes viscosissimum	Sticky currant	Grossulariaceae
Rorippa curvisiliqua	Western yellowcress	Brassicaceae
Rorippa islandica	Marsh yellowcress	Brassicaceae
Rorippa nasturtium-aquaticum*	Water cress	Brassicaceae
Rosa gymnocarpa	Baldhip rose	Rosaceae
Rosa nutkana	Nootka rose	Rosaceae
Rosa woodsii	Wood's rose	Rosaceae
Rubus discolor*	Himalayan blackberry	Rosaceae
Rubus idaeus	Red raspberry	Rosaceae
Rubus leucodermis	Blackcap	Rosaceae
Rubus parviflorus	Thimbleberry	Rosaceae
Rudbeckia occidentalis	Black head	Asteraceae
Rumex acetosella*	Sheep sorrel	Polygonaceae
Rumex crispus*	Sour dock	Polygonaceae
Rumex salicifolius	Willow dock	Polygonaceae
Sagina saginoides	Alpine pearlwort	Caryophyllaceae
Salix amygdaloides	Peachleaf willow	Salicaceae
Salix exigua	Coyote willow	Salicaceae
Salix lasiandra	Pacific willow	Salicaceae
Salix lasiolepis	Arroyo willow	Salicaceae
Salix rigida	Mackenzie willow	Salicaceae
Salix scouleriana	Scouler willow	Salicaceae
Salix sitchensis	Sitka willow	Salicaceae
Salvia aethiops*	Mediterranean sage	Lamiaceae
Sambucus cerulea	Blue elderberry	Caprifoliaceae
Sambucus racemosa	Red elderberry	Caprifoliaceae
Sanguisorba occidentalis	Annual burnet	Rosaceae
Sanguisorba sitchensis	Sitka burnet	Rosaceae
Sanicula graveolens	Sierra sanicle	Apiaceae
Satureja douglasii	Yerba buena	Lamiaceae
Saxifraga arguta	Brook saxifrage	Saxifragaceae
Saxifraga integrifolia	Grassland saxifrage	Saxifragaceae
Saxifraga mertensiana	Merten's saxifrage	Saxifragaceae
Saxifraga occidentalis	Western saxifrage	Saxifragaceae
Scirpus microcarpus	Small-flowered bulrush	Cyperaceae
Scleranthus annuus*	Annual knawel	Caryophyllaceae
Scrophularia lanceolata	Lance-leaf figwort	Scrophulariaceae
Scutellaria angustifolia	Narrow-leaved skullcap	Lamiaceae
Sedum lanceolatum	Lance-leaved stonecrop	Crassulaceae
Sedum stenopetalum	Worm-leaf stonecrop	Crassulaceae
Senecio canus	Woolly groundsel	Asteraceae
Senecio foetidus	Sweet-marsh butterweed	Asteraceae
Senecio integerrimus	Western groundsel	Asteraceae
Senecio serra	Tall butterweed	Asteraceae
Senecio streptanthifolius	Cleft-leaf groundsel	Asteraceae
Senecio triangularis	Arrowleaf groundsel	Asteraceae
Setaria viridis*	Green foxtail	Poaceae
Sibbaldia procumbens	Creeping sibbaldia	Rosaceae
Sidalcea neomexicana	Salt spring checkerbloom	Malvaceae

Sidalcea oregana	Oregon checkermallow	Malvaceae
Silene antirrhina*	Sleepy catchfly	Caryophyllaceae
Silene douglasii	Douglas' silene	Caryophyllaceae
Silene menziesii	Menzies' silene	Caryophyllaceae
Silene noctiflora*	Night-flowering catchfly	Caryophyllaceae
Silene oregana	Oregon silene	Caryophyllaceae
Sisymbrium altissimum*	Jim Hill mustard	Brassicaceae
Sisymbrium loeselii*	Loesel tumblemustard	Brassicaceae
Sisymbrium officinale*	Hedge mustard	Brassicaceae
Sisyrinchium inflatum	Purple-eyed grass	Iridaceae
Sitanion hystrix	Squirreltail	Poaceae
Sitanion jubatum	Big squirreltail	Poaceae
Smilacina racemosa	False Solomon's seal	Liliaceae
Smilacina stellata	Star-flowered Solomon's seal	Liliaceae
Solanum dulcamara*	Bittersweet nightshade	Solanaceae
Solanum sarrachoides	Hairy nightshade	Solanaceae
Solidago gigantea	Late goldenrod	Asteraceae
Sonchus asper*	Prickly sowthistle	Asteraceae
Sorbus scopulina	Cascade mountain-ash	Rosaceae
Spergularia rubra*	Red sandspurry	Caryophyllaceae
Spiraea betulifolia	Birch-leafed spirea	Rosaceae
Spiraea densiflora	Rosy spirea	Rosaceae
Spiranthes romanzoffiana	Hooded ladies-tresses	Orchidaceae
Stellaria borealis	Northern starwort	Caryophyllaceae
Stellaria crispa	Crisped starwort	Caryophyllaceae
Stellaria longipes	Long-stalked starwort	Caryophyllaceae
Stellaria media*	Common chickweed	Caryophyllaceae
Stellaria umbellata	Umbellate chickweed	Caryophyllaceae
Stipa lemmonii	Lemmon's needlegrass	Poaceae
Stipa occidentalis	Western needlegrass	Poaceae
Streptopus amplexifolius	Clasping-leaved twisted-stalk	Liliaceae
Symphoricarpos albus	Common snowberry	Caprifoliaceae
Symphoricarpos mollis	Creeping snowberry	Caprifoliaceae
Symphoricarpos oreophilus	Mountain snowberry	Caprifoliaceae
Synthyris missurica	Mountain kittytails	Scrophulariaceae
Tanacetum vulgare*	Common tansy	Asteraceae
Taraxacum laevigatum*	Red-seeded dandelion	Asteraceae
Taraxacum officinale*	Dandelion	Asteraceae
Taxus brevifolia	Western yew	Taxaceae
Thalictrum occidentale	Western meadowrue	Ranunculaceae
Thermopsis montana	Mountain golden-pea	Fabaceae
Thlaspi arvense*	Fanweed	Brassicaceae
Thlaspi fendleri	Fendler's pennycress	Brassicaceae
Thysanocarpus curvipes	Fringepod	Brassicaceae
Tiarella trifoliata	Foamflower	Saxifragaceae
Tragopogon dubius*	Oysterplant	Asteraceae
Trautvetteria caroliniensis	False bugbane	Ranunculaceae
Trifolium eriocephalum	Wooly-head clover	Fabaceae
Trifolium hybridum*	Alsike clover	Fabaceae
Trifolium latifolium	Twinclover	Fabaceae

Trifolium longipes	Long-stalked clover	Fabaceae
Trifolium macrocephalum	Big-headed clover	Fabaceae
Trifolium pratense*	Red clover	Fabaceae
Trillium petiolatum	Purple trillium	Liliaceae
Trisetum canescens	Tall trisetum	Poaceae
Trisetum cernuum	Nodding trisetum	Poaceae
Trisetum spicatum	Downy oat-grass	Poaceae
Typha latifolia	Common cattail	Typhaceae
Urtica dioica	Stinging nettle	Urticaceae
Vaccaria segetalis*	Cowcockle	Caryophyllaceae
Vaccinium globulare	Globe huckleberry	Ericaceae
Vaccinium membranaceum	Mountain huckleberry	Ericaceae
Vaccinium scoparium	Grouseberry	Ericaceae
Valeriana sitchensis	Sitka valerian	Valerianaceae
Valerianella locusta*	European corn salad	Valerianaceae
Veratrum californicum	California false hellebore	Liliaceae
Veratrum viride	Green false hellebore	Liliaceae
Verbascum blattaria*	Moth mullein	Scrophulariaceae
Verbascum thapsus*	Common mullein	Scrophulariaceae
Verbena bracteata	Bracted vervain	Verbenaceae
Veronica americana	American brooklime	Scrophulariaceae
Veronica arvensis*	Field veronica	Scrophulariaceae
Veronica serpyllifolia	Thyme-leaf speedwell	Scrophulariaceae
Vicia americana	American vetch	Fabaceae
Vicia villosa*	Hairy vetch	Fabaceae
Viola adunca	Early blue violet	Violaceae
Viola glabella	Stream violet	Violaceae
Viola orbiculata	Round-leaved violet	Violaceae
Viola purpurea	Goosefoot violet	Violaceae
Wyethia amplexicaulis	Northern mule's ears	Asteraceae
Zigadenus venenosus	Meadow death camas	Liliaceae

Vascular Plant List
Garfield County

Garfield County Garfield County, WA. List covers plants found in Garfield County. Combination of lists of areas in Garfield County, with the addition of names of plants found in the UW and WSU herbariums. 788 spp., 101 introduced. List prepared by Don Knoke, 2004.

* - Introduced

Scientific Name	*Common Name*	*Family Name*
Abies grandis	Grand fir	Pinaceae
Abies lasiocarpa	Sub-alpine fir	Pinaceae
Acer glabrum	Douglas maple	Aceraceae
Acer negundo*	Box elder	Aceraceae
Achillea millefolium	Yarrow	Asteraceae
Aconitum columbianum	Monkshood	Ranunculaceae
Actaea rubra	Baneberry	Ranunculaceae
Adenocaulon bicolor	Pathfinder	Asteraceae
Adiantum pedatum	Maidenhair fern	Polypodiaceae
Agastache urticifolia	Nettle-leaf horse-mint	Lamiaceae
Agoseris aurantiaca	Orange agoseris	Asteraceae
Agoseris glauca	Mountain agoseris	Asteraceae
Agoseris grandiflora	Large-flowered agoseris	Asteraceae
Agoseris heterophylla	Annual agoseris	Asteraceae
Agropyron dasytachyum	Thickspike wheatgrass	Poaceae
Agropyron intermedium*	Intermediate ryegrass	Poaceae
Agropyron spicatum	Blue-bunch wheatgrass	Poaceae
Agrostis scabra	Tickle-grass	Poaceae
Agrostis spica-venti*	Silky apera	Poaceae
Ailanthus altissima*	Tree-of-Heaven	Simaroubaceae
Alisma plantago-aquatica	American waterplantain	Alismataceae
Allium acuminatum	Taper-tip onion	Liliaceae
Allium douglasii	Douglas' onion	Liliaceae
Allium fibrillum	Fringed onion	Liliaceae
Allium madidum	Swamp onion	Liliaceae
Allium tolmiei	Tolmie's onion	Liliaceae
Alnus incana	Mountain alder	Betulaceae
Alnus rhombifolia	White alder	Betulaceae
Alnus sinuata	Sitka alder	Betulaceae
Alopecurus aequalis	Short-awned foxtail	Poaceae
Alopecurus pratensis*	Meadow foxtail	Poaceae
Alyssum alyssoides*	Pale alyssum	Brassicaceae
Amaranthus blitoides	Prostrate pigweed	Amaranthaceae
Ambrosia acanthicarpa	Bur ragweed	Asteraceae
Amelanchier alnifolia	Serviceberry	Rosaceae
Amorpha fruticosa	False indigo	Fabaceae
Amsinckia lycopsoides	Bugloss fiddleneck	Boraginaceae
Amsinckia retrorsa	Rigid fiddleneck	Boraginaceae
Amsinckia tessellata	Devil's lettuce	Boraginaceae

Anaphalis margaritacea	Pearly everlasting	Asteraceae
Anemone piperi	Piper's anemone	Ranunculaceae
Angelica arguta	Sharp-tooth angelica	Apiaceae
Antennaria anaphaloides	Tall pussy-toes	Asteraceae
Antennaria dimorpha	Low pussy-toes	Asteraceae
Antennaria luzuloides	Woodrush pussy-toes	Asteraceae
Antennaria microphylla	Rosy pussy-toes	Asteraceae
Antennaria racemosa	Raceme pussy-toes	Asteraceae
Antennaria stenophylla	Narrow-leaf pussy-toes	Asteraceae
Antennaria umbrinella	Umber pussy-toes	Asteraceae
Anthriscus scandicina*	Bur chervil	Apiaceae
Apocynum androsaemifolium	Spreading dogbane	Apocynaceae
Aquilegia formosa	Red columbine	Ranunculaceae
Arabis divaricarpa	Spreadingpod rockcress	Brassicaceae
Arabis glabra	Tower mustard	Brassicaceae
Arabis holboellii	Holboell's rockcress	Brassicaceae
Arabis lignifera	Woody-branch rockcress	Brassicaceae
Arabis lyallii	Lyall's rockcress	Brassicaceae
Arabis sparsiflora	Sicklepod rockcress	Brassicaceae
Arabis suffrutescens	Crater Lake rockcress	Brassicaceae
Arceuthobium americanum	American mistletoe	Loranthaceae
Arceuthobium campylopodum	Western dwarf mistletoe	Loranthaceae
Arceuthobium douglasii	Douglas dwarf mistletoe	Loranthaceae
Arctium minus*	Common burdock	Asteraceae
Arctostaphylos uva-ursi	Bearberry	Ericaceae
Arenaria capillaris	Thread-leaved sandwort	Caryophyllaceae
Arenaria congesta	Dense-flowered sandwort	Caryophyllaceae
Arenaria macrophylla	Big-leaf sandwort	Caryophyllaceae
Arenaria rubella	Reddish sandwort	Caryophyllaceae
Arenaria serpyllifolia*	Thyme-leaf sandwort	Caryophyllaceae
Arnica cordifolia	Heart-leaf arnica	Asteraceae
Arnica fulgens	Hillside arnica	Asteraceae
Arnica latifolia	Mountain arnica	Asteraceae
Arnica longifolia	Seep-spring arnica	Asteraceae
Arnica mollis	Hairy arnica	Asteraceae
Arnica sororia	Twin arnica	Asteraceae
Arrhenatheram elatius*	Oat-grass	Poaceae
Artemisia absinthium*	Absinthe	Asteraceae
Artemisia arbuscula	Low sagebrush	Asteraceae
Artemisia ludoviciana	Western mugwort	Asteraceae
Artemisia michauxiana	Michaux mugwort	Asteraceae
Artemisia rigida	Stiff sagebrush	Asteraceae
Artemisia tridentata	Big sagebrush	Asteraceae
Artemisia vulgaris*	Mugwort	Asteraceae
Asarum caudatum	Wild ginger	Aristolochiaceae
Aspidotus densa	Indian's dream fern	Polypodiaceae
Aster chilensis	Long-leaf aster	Asteraceae
Aster conspicuus	Showy aster	Asteraceae
Aster foliaceus	Leafy aster	Asteraceae
Aster integrifolius	Thick-stemmed Aster	Asteraceae

Aster occidentalis	Western aster	Asteraceae
Astragalus arrectus	Palouse milkvetch	Fabaceae
Astragalus canadensis	Canada milk-vetch	Fabaceae
Astragalus collinus	Hillside milk-vetch	Fabaceae
Astragalus reventiformis	Yakima milk-vetch	Fabaceae
Astragalus reventus	Blue Mtn. milk-vetch	Fabaceae
Astragalus riparius	Woody-root milk-vetch	Fabaceae
Astragalus spaldingii	Spalding's milk vetch	Fabaceae
Astragalus whitneyi	Balloon milk-vetch	Fabaceae
Athyrium distentifolium	Alpine lady fern	Polypodiaceae
Athyrium filix-femina	Lady fern	Polypodiaceae
Balsamorhiza careyana	Carey's balsamroot	Asteraceae
Balsamorhiza sagittata	Arrow-leaf balsamroot	Asteraceae
Balsamorhiza serrata	Toothed balsamroot	Asteraceae
Barbarea orthoceras	American wintercress	Brassicaceae
Barbarea vulgaris*	Bitter wintercress	Brassicaceae
Berberis nervosa	Cascade Oregongrape	Berberidaceae
Berberis repens	Creeping Oregongrape	Berberidaceae
Besseya rubra	Red besseya	Scrophulariaceae
Betula occidentalis	Water birch	Betulaceae
Betula papyrifera	Paper birch	Betulaceae
Bidens cernua	Nodding beggar-ticks	Asteraceae
Blepharipappus scaber	Blepharipappus	Asteraceae
Boisduvalia stricta	Brook spike-primrose	Onagraceae
Brodiaea douglasii	Douglas' brodiaea	Liliaceae
Bromus brizaeformis*	Rattlesnake grass	Poaceae
Bromus carinatus	California brome	Poaceae
Bromus ciliatus	Fringed brome	Poaceae
Bromus inermis*	Smooth brome	Poaceae
Bromus japonicus*	Japanese brome	Poaceae
Bromus mollis*	Soft brome	Poaceae
Bromus pacificus	Pacific brome	Poaceae
Bromus tectorum*	Cheat grass	Poaceae
Bromus vulgaris	Narrow-leaf brome	Poaceae
Calamagrostis inexpansa	Northern reedgrass	Poaceae
Calamagrostis purpurescens	Purple pinegrass	Poaceae
Calamagrostis rubescens	Pinegrass	Poaceae
Calochortus elegans	Northwest mariposa	Liliaceae
Calochortus eurycarpus	Wide-fruit mariposa	Liliaceae
Calochortus macrocarpus	Sagebrush mariposa	Liliaceae
Calypso bulbosa	Fairy slipper	Orchidaceae
Camassia quamash	Common camas	Liliaceae
Capsella bursa-pastoris*	Shepherd's purse	Brassicaceae
Cardamine cordifolia	Large mountain bittercress	Brassicaceae
Cardamine integrifolia	Milk maids	Brassicaceae
Cardamine oligosperma	Little Western bittercress	Brassicaceae
Cardaria pubescens*	Globepodded hoary cress	Brassicaceae
Carex amplifolia	Big-leaf sedge	Cyperaceae
Carex aquatilis	Water sedge	Cyperaceae
Carex concinnoides	Northwest sedge	Cyperaceae

Carex deweyana	Dewey's sedge	Cyperaceae
Carex filifolia	Thread-leaf sedge	Cyperaceae
Carex geyeri	Geyer's sedge	Cyperaceae
Carex haydeniana	Hayden's sedge	Cyperaceae
Carex hoodii	Hood's sedge	Cyperaceae
Carex illota	Sheep sedge	Cyperaceae
Carex microptera	Small-winged sedge	Cyperaceae
Carex multicostata	Many-ribbed sedge	Cyperaceae
Carex pachystachya	Pachystachy sedge	Cyperaceae
Carex preslii	Presl's sedge	Cyperaceae
Carex rossii	Ross' sedge	Cyperaceae
Carex rostrata	Beaked sedge	Cyperaceae
Carex stipata	Sawbeak sedge	Cyperaceae
Castilleja chromosa	Desert paintbrush	Scrophulariaceae
Castilleja cusickii	Cusick's paintbrush	Scrophulariaceae
Castilleja hispida	Harsh paintbrush	Scrophulariaceae
Castilleja lutescens	Green paintbrush	Scrophulariaceae
Castilleja miniata	Scarlet paintbrush	Scrophulariaceae
Ceanothus integerrimus	Deerbrush	Rhamnaceae
Ceanothus sanguineus	Redstem ceanothus	Rhamnaceae
Ceanothus velutinus	Snowbrush	Rhamnaceae
Centaurea cyanus*	Batchelor button	Asteraceae
Centaurea maculosa*	Spotted knapweed	Asteraceae
Centaurea nigra*	Black knapweed	Asteraceae
Cerastium arvense	Field chickweed	Caryophyllaceae
Cerastium nutans	Nodding chickweed	Caryophyllaceae
Cercocarpus ledifolius	Curl-leaf mountain-mohogany	Rosaceae
Chaenactis douglasii	Dusty maidens	Asteraceae
Cheilanthes gracillima	Lace fern	Polypodiaceae
Chenopodium rubrum*	Red goosefoot	Chenopodiaceae
Chimaphila menziesii	Little pipsissewa	Ericaceae
Chimaphila umbellata	Pipsissewa	Ericaceae
Chorispora tenella*	Blue mustard	Brassicaceae
Chrysanthemum leucanthemum*	Ox-eye daisy	Asteraceae
Chrysopsis villosa	Hairy golden-aster	Asteraceae
Chrysothamnus nauseosus	Gray rabbit-brush	Asteraceae
Chrysothamnus viscidiflorus	Green rabbit-brush	Asteraceae
Cichorium intybus*	Chicory	Asteraceae
Cicuta douglasii	Water-hemlock	Apiaceae
Cinna latifolia	Reedgrass	Poaceae
Circaea alpina	Enchanter's nightshade	Onagraceae
Cirsium arvense*	Canada thistle	Asteraceae
Cirsium foliosum	Elk thistle	Asteraceae
Cirsium utahense	Utah thistle	Asteraceae
Cirsium vulgare*	Bull thistle	Asteraceae
Clarkia pulchella	Ragged Robin	Onagraceae
Clarkia rhomboidea	Common clarkia	Onagraceae
Claytonia lanceolata	Western spring beauty	Portulacaceae
Claytonia parviflora	Streambank spring beauty	Portulacaceae
Clematis columbiana	Columbia virgin's bower	Ranunculaceae

Clematis ligusticifolia	Virgin's bower	Ranunculaceae
Cleome lutea	Yellow bee-plant	Capparidaceae
Clintonia uniflora	Queen's cup	Liliaceae
Collinsia parviflora	Small-flowered blue-eyed Mary	Scrophulariaceae
Collomia grandiflora	Large-flowered collomia	Polemoniaceae
Collomia linearis	Narrow-leaf collomia	Polemoniaceae
Collomia tenella	Diffuse collomia	Polemoniaceae
Collomia tinctoria	Yellow-staining collomia	Polemoniaceae
Comandra umbellata	Bastard toad-flax	Santalaceae
Convolvulus arvensis*	Field morning-glory	Convolvulaceae
Conyza canadensis*	Horseweed	Asteraceae
Corallorhiza maculata	Spotted coral-root	Orchidaceae
Corallorhiza mertensiana	Western coral-root	Orchidaceae
Corallorhiza striata	Striped coral-root	Orchidaceae
Corallorhiza trifida	Yellow coral-root	Orchidaceae
Cordylanthus ramosus	Much-branched birdbeak	Scrophulariaceae
Corispermum hyssopifolium*	Common bugseed	Chenopodiaceae
Cornus canadensis	Bunchberry	Cornaceae
Cornus stolonifera	Red-osier dogwood	Cornaceae
Cotoneaster acutifolius*	Siberian cotoneaster	Rosaceae
Crataegus douglasii	Black hawthorn	Rosaceae
Crepis acuminata	Tapertip hawksbeard	Asteraceae
Crepis atrabarba	Slender hawksbeard	Asteraceae
Crepis barbigera	Bearded hawksbeard	Asteraceae
Crepis intermedia	Gray hawksbeard	Asteraceae
Crepis occidentalis	Western hawksbeard	Asteraceae
Cryptantha intermedia	Common cryptantha	Boraginaceae
Cryptantha pterocarya	Wing-nut cryptantha	Boraginaceae
Cryptantha torreyana	Torrey's cryptantha	Boraginaceae
Cryptogramma crispa	Parsley fern	Polypodiaceae
Cuscuta indecora	Bigseed alfalfa dodder	Cuscutaceae
Cymopteris terebinthinus	Turpentine spring-parsley	Apiaceae
Cynoglossum officinale*	Common hound's-tongue	Boraginaceae
Cynosurus echinatus*	Hedgehog dogtail	Poaceae
Cyperus aristatus	Awned flatsedge	Cyperaceae
Cyperus erythrorhizos	Red-root flatsedge	Cyperaceae
Cypripedium fasciculatum	Clustered lady's-slipper	Orchidaceae
Cypripedium montanum	Mountain lady's-slipper	Orchidaceae
Cystopteris fragilis	Fragile fern	Polypodiaceae
Dactylis glomerata*	Orchard grass	Poaceae
Danthonia californica	California oatgrass	Poaceae
Danthonia spicata	Poverty danthonia	Poaceae
Danthonia unispicata	Few-flowered wild oatgrass	Poaceae
Delphinium burkei	Meadow larkspur	Ranunculaceae
Delphinium depauperatum	Dwarf larkspur	Ranunculaceae
Delphinium nuttallianum	Upland larkspur	Ranunculaceae
Delphinium occidentale	Western larkspur	Ranunculaceae
Deschampsia caespitosa	Tufted hairgrass	Poaceae
Deschampsia danthonioides	Annual hairgrass	Poaceae
Deschampsia elongata	Slender hairgrass	Poaceae

Descurainia pinnata	Western tansymustard	Brassicaceae
Descurainia richardsonii	Mountain tansymustard	Brassicaceae
Descurainia sophia*	Flixweed	Brassicaceae
Dianthus armeria*	Grass pink	Caryophyllaceae
Dicentra cucullaria	Dutchman's breeches	Fumariaceae
Dicentra uniflora	Steer's head	Fumariaceae
Dipsacus sylvestris*	Teasel	Dipsacaceae
Disporum hookeri	Hooker fairy-bell	Liliaceae
Disporum trachycarpum	Sierra fairy-bell	Liliaceae
Dodecatheon conjugens	Desert shooting star	Primulaceae
Dodecatheon cusickii	Cusick's shooting star	Primulaceae
Dodecatheon jeffreyi	Jeffrey's shooting star	Primulaceae
Dodecatheon pulchellum	Few-flowered shooting star	Primulaceae
Draba lonchocarpa	Lancefruited draba	Brassicaceae
Draba verna	Spring whitlow-grass	Brassicaceae
Dryopteris filix-mas	Male fern	Polypodiaceae
Eburophyton austiniae	Phantom orchid	Orchidaceae
Eleocharis acicularis	Needle spike-rush	Cyperaceae
Eleocharis tenuis	Slender spike-rush	Cyperaceae
Elymus caput-medusa*	Medusa-head	Poaceae
Elymus flavescens	Sand wildrye	Poaceae
Elymus glaucus	Western ryegrass	Poaceae
Epilobium alpinum	Alpine willow-herb	Onagraceae
Epilobium angustifolium	Fireweed	Onagraceae
Epilobium glaberrimum	Smooth willow-herb	Onagraceae
Epilobium glandulosum	Common willow-herb	Onagraceae
Epilobium minutum	Small-flowered willow-herb	Onagraceae
Epilobium palustre	Swamp willow-herb	Onagraceae
Epilobium paniculatum	Tall annual willow-herb	Onagraceae
Epilobium watsonii	Watson's willow-herb	Onagraceae
Equisetum arvense	Common horsetail	Equisetaceae
Equisetum hyemale	Scouring rush	Equisetaceae
Equisetum laevigatum	Smooth scouring-rush	Equisetaceae
Equisetum palustre	Marsh horsetail	Equisetaceae
Eragrostis pectinacea	Purple lovegrass	Poaceae
Erigeron bloomeri	Scabland fleabane	Asteraceae
Erigeron chrysopsidis	Austin's daisy	Asteraceae
Erigeron compositus	Cut-leaved daisy	Asteraceae
Erigeron corymbosus	Long-leaf fleabane	Asteraceae
Erigeron disparipilus	Snake River daisy	Asteraceae
Erigeron eatonii	Eaton's daisy	Asteraceae
Erigeron elegantulus	Volcanic daisy	Asteraceae
Erigeron filifolius	Thread-leaf fleabane	Asteraceae
Erigeron linearis	Desert yellow daisy	Asteraceae
Erigeron peregrinus	Subalpine daisy	Asteraceae
Erigeron poliospermus	Cushion fleabane	Asteraceae
Erigeron pumilus	Shaggy fleabane	Asteraceae
Erigeron speciosus	Showy fleabane	Asteraceae
Eriogonum compositum	Northern buckwheat	Polygonaceae
Eriogonum douglasii	Douglas' buckwheat	Polygonaceae

Eriogonum flavum	Yellow buckwheat	Polygonaceae
Eriogonum heracleoides	Parsnip-flowered buckwheat	Polygonaceae
Eriogonum niveum	Snow buckwheat	Polygonaceae
Eriogonum pyrolifolium	Alpine buckwheat	Polygonaceae
Eriogonum strictum	Strict buckwheat	Polygonaceae
Eriogonum umbellatum	Sulfur buckwheat	Polygonaceae
Eriogonum vimineum	Broom buckwheat	Polygonaceae
Eriophyllum lanatum	Oregon sunshine	Asteraceae
Erodium cicutarium*	Filaree	Geraniaceae
Erysimum arenicola	Mountain wallflower	Brassicaceae
Erysimum asperum	Rough wallflower	Brassicaceae
Erysimum occidentale	Pale wallflower	Brassicaceae
Erythronium grandiflorum	Glacier lily	Liliaceae
Eschscholtzia californica*	California poppy	Papaveraceae
Euphorbia glyptosperma	Ribseed sandmat	Euphorbiaceae
Euphorbia serpyllifolia*	Thyme-leaf spurge	Euphorbiaceae
Festuca idahoensis	Blue bunchgrass	Poaceae
Festuca myuros*	Rat-tail fescue	Poaceae
Festuca occidentalis	Western fescue	Poaceae
Festuca octoflora	Slender fescue	Poaceae
Festuca ovina	Sheep fescue	Poaceae
Festuca rubra	Red fescue	Poaceae
Festuca scabrella	Rough fescue	Poaceae
Festuca subulata	Bearded fescue	Poaceae
Floerkea proserpinacoides	False mermaid	Limnanthaceae
Fragaria vesca	Wild strawberry	Rosaceae
Fragaria virginiana	Woods strawberry	Rosaceae
Frasera fastigiata	Clustered frasera	Gentianaceae
Fritillaria pudica	Yellow bell	Liliaceae
Gaillardia aristata	Blanket-flower	Asteraceae
Galium aparine	Cleavers	Rubiaceae
Galium asperrimum	Rough bedstraw	Rubiaceae
Galium bifolium	Low mountain bedstraw	Rubiaceae
Galium boreale	Northern bedstraw	Rubiaceae
Galium multiflorum	Shrubby bedstraw	Rubiaceae
Galium serpenticum	Intermountain bedstraw	Rubiaceae
Galium triflorum	Fragrant bedstraw	Rubiaceae
Gaultheria humifusa	Alpine wintergreen	Ericaceae
Gaultheria ovatifolia	Slender wintergreen	Ericaceae
Gayophytum diffusum	Spreading groundsmoke	Onagraceae
Gayophytum ramosissimum	Hairstem groundsmoke	Onagraceae
Gentiana amarella	Norhern gentian	Gentianaceae
Geranium molle*	Dovefoot geranium	Geraniaceae
Geranium viscosissimum	Sticky geranium	Geraniaceae
Geum macrophyllum	Large-leaved avens	Rosaceae
Geum triflorum	Prairie smoke	Rosaceae
Gilia aggregata	Skyrocket	Polemoniaceae
Gilia capillaris	Smooth-leaved gilia	Polemoniaceae
Glyceria grandis	Reed mannagrss	Poaceae
Glyceria striata	Fowl mannagrass	Poaceae

Glycyrrhiza lepidota	Licorice-root	Fabaceae
Gnaphalium palustre	Lowland cudweed	Asteraceae
Goodyera oblongifolia	Rattlesnake-plantain	Orchidaceae
Grindelia nana	Low gumweed	Asteraceae
Grindelia squarrosa	Resinweed	Asteraceae
Gymnocarpium dryopteris	Oak fern	Polypodiaceae
Habenaria dilatata	White bog-orchid	Orchidaceae
Habenaria elegans	Elegant rein-orchid	Orchidaceae
Habenaria saccata	Slender bog-orchid	Orchidaceae
Habenaria unalascensis	Alaska rein-orchid	Orchidaceae
Hackelia micrantha	Blue stickseed	Boraginaceae
Haplopappus acaulis	Stemless goldenweed	Asteraceae
Haplopappus carthamoides	Large-flowered goldenweed	Asteraceae
Haplopappus hirtus	Hairy goldenweed	Asteraceae
Haplopappus lanuginosus	Woolly goldenweed	Asteraceae
Haplopappus stenophyllus	Narrow-leaf goldenweed	Asteraceae
Helenium autumnale	Sneezeweed	Asteraceae
Helianthella uniflora	Little-sunflower	Asteraceae
Heracleum lanatum	Cow parsnip	Apiaceae
Hesperochiron pumilis	Dwarf hesperochiron	Hydrophyllaceae
Heterocodon rariflorum	Heterocodon	Campanulaceae
Heuchera cylindrica	Lava alumroot	Saxifragaceae
Hieracium albiflorum	White-flowered hawkweed	Asteraceae
Hieracium cynoglossoides	Hounds-tongue hawkweed	Asteraceae
Hieracium scouleri	Scouler's hawkweed	Asteraceae
Holodiscus discolor	Ocean spray	Rosaceae
Holosteum umbellatum*	Jagged chickweed	Caryophyllaceae
Hordeum jubatum	Foxtail barley	Poaceae
Hydrophyllum capitatum	Woolly breeches	Hydrophyllaceae
Hydrophyllum fendleri	Fendler's waterleaf	Hydrophyllaceae
Hypericum formosum	Western St.John's-wort	Hypericaceae
Hypericum perforatum*	Klamath weed	Hypericaceae
Hypopites monotropa	Many-flowered indian pipe	Ericaceae
Iliamna rivularis	Streambank globemallow	Malvaceae
Impatiens aurella	Orange balsam	Balsaminaceae
Iris missouriensis	Western blue flag	Iridaceae
Iva axillaris	Poverty weed	Asteraceae
Juncus balticus	Baltic rush	Juncaceae
Juncus bufonius*	Toad rush	Juncaceae
Juncus ensifolius	Daggerleaf rush	Juncaceae
Juncus filiformis	Thread rush	Juncaceae
Juncus longistylus	Long-beaked rush	Juncaceae
Juncus mertensianus	Merten's rush	Juncaceae
Juncus tenuis	Slender rush	Juncaceae
Juniperus occidentalis	Western juniper	Cupressaceae
Juniperus scopulorum	Rocky Mountain juniper	Cupressaceae
Koeleria cristata	Prairie junegrass	Poaceae
Lactuca serriola*	Prickly lettuce	Asteraceae
Lagophylla ramosissima	Common hareleaf	Asteraceae
Larix occidentalis	Western larch	Pinaceae

Lathyrus lanszwertii	Thick-leaved peavine	Fabaceae
Lathyrus pauciflorus	Few-flowered peavine	Fabaceae
Lemna minor	Common duckweed	Lemnaceae
Leontodon nudicaulis*	Hairy hawkbit	Asteraceae
Lepidium perfoliatum*	Clasping peppergrass	Brassicaceae
Lepidium virginicum*	Tall pepperweed	Brassicaceae
Leptodactylon pungens	Prickly phlox	Polemoniaceae
Lewisia pygmaea	Dwarf lewisia	Portulacaceae
Lewisia triphylla	Three-leaf lewisia	Portulacaceae
Ligusticum canbyi	Canby's lovage	Apiaceae
Ligusticum grayi	Gray's lovage	Apiaceae
Linanthastrum nuttallii	Linanthastrum	Polemoniaceae
Linanthus harknessii	Harkness' linanthus	Polemoniaceae
Linanthus septentrionalis	Northern linanthus	Polemoniaceae
Linaria dalmatica*	Dalmatian toad-flax	Scrophulariaceae
Linnaea borealis	Twinflower	Caprifoliaceae
Linum perenne	Wild blue-flax	Linaceae
Listera caurina	Northwestern twayblade	Orchidaceae
Listera convallarioides	Broad-lipped twayblade	Orchidaceae
Listera cordata	Heart-leaved twayblade	Orchidaceae
Lithophragma glabrum	Smooth woodland-star	Saxifragaceae
Lithophragma parviflorum	Small-flowered prairie-star	Saxifragaceae
Lithospermum arvense*	Corn gromwell	Boraginaceae
Lithospermum ruderale	Columbia puccoon	Boraginaceae
Lolium multiflorum*	Italian ryegrass	Poaceae
Lolium perenne*	English ryegrass	Poaceae
Lomatium ambiguum	Swale desert-parsley	Apiaceae
Lomatium bicolor	Slender-fruit lomatium	Apiaceae
Lomatium cous	Cous biscuit-root	Apiaceae
Lomatium dissectum	Fern-leaf biscuit-root	Apiaceae
Lomatium grayi	Gray's desert-parsley	Apiaceae
Lomatium leptocarpum	Bi-color biscuit-root	Apiaceae
Lomatium macrocarpum	Large-fruited lomatium	Apiaceae
Lomatium salmoniflorum	Salmon River lomatium	Apiaceae
Lomatium triternatum	Nine-leaf lomatium	Apiaceae
Lonicera ciliosa	Orange honeysuckle	Caprifoliaceae
Lonicera involucrata	Black twinberry	Caprifoliaceae
Lonicera utahensis	Utah honeysuckle	Caprifoliaceae
Lotus purshianus	Spanish clover	Fabaceae
Lupinus argenteus	Silvery lupine	Fabaceae
Lupinus caudatus	Tailcup lupine	Fabaceae
Lupinus holosericeus	Little-flowered lupine	Fabaceae
Lupinus laxiflorus	Spurred lupine	Fabaceae
Lupinus lepidus	Prairie lupine	Fabaceae
Lupinus leucophyllus	Velvet lupine	Fabaceae
Lupinus minimus	Kettle Falls lupine	Fabaceae
Lupinus polyphyllus	Big-leaf lupine	Fabaceae
Lupinus pusillus	Annual lupine	Fabaceae
Lupinus sericeus	Silky lupine	Fabaceae
Lupinus sulphureus	Sulphur lupine	Fabaceae

Lupinus wyethii	Wyeth's lupine	Fabaceae
Luzula campestris	Field woodrush	Juncaceae
Luzula spicata	Spiked woodrush	Juncaceae
Lychnis alba*	White campion	Caryophyllaceae
Lythrum salicaria*	Purple loosestrife	Lythraceae
Machaeranthera canescens	Hoary aster	Asteraceae
Machaeranthera shastensis	Shasta aster	Asteraceae
Madia glomerata	Mountain tarweed	Asteraceae
Madia gracilis	Common tarweed	Asteraceae
Madia minima	Small-head tarweed	Asteraceae
Marsilea vestita	Clover fern	Marsileaceae
Matricaria matricarioides*	Pineapple weed	Asteraceae
Medicago falcata*	Sickle medic	Fabaceae
Medicago lupulina*	Black medic	Fabaceae
Medicago sativa*	Alfalfa	Fabaceae
Melica bulbosa	Onion-grass	Poaceae
Melica fugax	Little onion-grass	Poaceae
Melica spectabilis	Showy oniongrass	Poaceae
Melica subulata	Alaska onion-grass	Poaceae
Melilotus alba*	White sweet-clover	Fabaceae
Melilotus officinalis*	Yellow sweet-clover	Fabaceae
Mentha arvensis	Field mint	Lamiaceae
Mentha citrata*	Bergamot mint	Lamiaceae
Mentzelia albicaulis	White-stemmed mentzelia	Loasaceae
Mentzelia dispersa	Bushy mentzelia	Loasaceae
Mentzelia laevicaulis	Blazingstar	Loasaceae
Menziesia ferruginea	Fool's huckleberry	Ericaceae
Mertensia ciliata	Broad-leaf bluebells	Boraginaceae
Mertensia longiflora	Small bluebells	Boraginaceae
Mertensia oblongifolia	Leafy bluebells	Boraginaceae
Mertensia paniculata	Tall bluebells	Boraginaceae
Mertensia viridis	Green bluebells	Boraginaceae
Microseris nutans	Nodding microseris	Asteraceae
Microseris troximoides	Wavyleaf microseris	Asteraceae
Microsteris gracilis	Pink microsteris	Polemoniaceae
Mimulus breviflorus	Short-flowered monkey-flower	Scrophulariaceae
Mimulus breweri	Brewer's monkey-flower	Scrophulariaceae
Mimulus guttatus	Common monkey-flower	Scrophulariaceae
Mimulus lewisii	Lewis's monkey-flower	Scrophulariaceae
Mimulus moschatus	Musk-flower	Scrophulariaceae
Mimulus nanus	Dwarf purple monkey-flower	Scrophulariaceae
Mimulus primuloides	Primrose monkey-flower	Scrophulariaceae
Mimulus tilingii	Mountain monkey-flower	Scrophulariaceae
Mitella breweri	Brewer's mitrewort	Saxifragaceae
Mitella caulescens	Leafy mitrewort	Saxifragaceae
Mitella pentandra	Alpine mitrewort	Saxifragaceae
Mitella stauropetala	Cross-shaped mitrewort	Saxifragaceae
Monardella odoratissima	Mountain monardella	Lamiaceae
Moneses uniflora	Woodnymph	Ericaceae
Monotropa uniflora	Single-flowered indian pipe	Ericaceae

Montia arenicola	Sand montia	Portulacaceae
Montia cordifolia	Broad-leafed montia	Portulacaceae
Montia linearis	Narrow-leaf montia	Portulacaceae
Montia perfoliata	Miner's lettuce	Portulacaceae
Montia sibirica	Candyflower	Portulacaceae
Muhlenbergia mexicana	Leafy muhly	Poaceae
Myosotis laxa	Small-flowered forget-me-not	Boraginaceae
Myosotis micrantha*	Blue forget-me-not	Boraginaceae
Myosotis scorpioides*	Common forget-me-not	Boraginaceae
Myosurus minimus	Common mousetail	Ranunculaceae
Navarretia divaricata	Mountain navarretia	Polemoniaceae
Navarretia intertexta	Needle-leaf navarretia	Polemoniaceae
Nemophila breviflora	Great Basin nemophila	Hydrophyllaceae
Nemophila kirtleyi	Kirtley's nemophila	Hydrophyllaceae
Nemophila parviflora	Small-flowered nemophila	Hydrophyllaceae
Nemophila pedunculata	Meadow nemophila	Hydrophyllaceae
Oenothera hookeri	Hooker's evening-primrose	Onagraceae
Oenothera pallida	White-stemmed e-p	Onagraceae
Oenothera strigosa	Common evening-primrose	Onagraceae
Oplopanax horridum	Devil's club	Araliaceae
Orobanche fasciculata	Clustered broomrape	Orobanchaceae
Orobanche pinorum	Pine broomrape	Orobanchaceae
Orobanche uniflora	Naked broom-rape	Orobanchaceae
Orogenia linearifolia	Great Basin orogenia	Apiaceae
Orthocarpus hispidus	Hairy owl-clover	Scrophulariaceae
Orthocarpus tenuifolius	Thin-leaved owl-clover	Scrophulariaceae
Osmorhiza chilensis	Mountain sweet-cicely	Apiaceae
Osmorhiza depauperata	Blunt-fruited sweet-cicely	Apiaceae
Osmorhiza occidentalis	Western sweet-cicely	Apiaceae
Pachistima myrsinites	Mountain box	Celastraceae
Paeonia brownii	Wild peony	Paeoniaceae
Panicum capillare*	Old witchgrass	Poaceae
Papaver argemone*	Long prickly-headed poppy	Papaveraceae
Pedicularis bracteosa	Bracted lousewort	Scrophulariaceae
Pedicularis contorta	Coiled lousewort	Scrophulariaceae
Pedicularis racemosa	Sickletop lousewort	Scrophulariaceae
Penstemon attenuatus	Sulfur penstemon	Scrophulariaceae
Penstemon davidsonii	Davidson's penstemon	Scrophulariaceae
Penstemon deustus	Hot-rock penstemon	Scrophulariaceae
Penstemon diphyllus	Two-leaf penstemon	Scrophulariaceae
Penstemon fruticosus	Shrubby penstemon	Scrophulariaceae
Penstemon glandulosus	Glandular penstemon	Scrophulariaceae
Penstemon pennellianus	Blue Mountain penstemon	Scrophulariaceae
Penstemon rydbergii	Rydberg's penstemon	Scrophulariaceae
Penstemon speciosus	Showy penstemon	Scrophulariaceae
Penstemon venustus	Blue mountain penstemon	Scrophulariaceae
Perideridia bolanderi	Bolander's yampah	Apiaceae
Perideridia gairdneri	Yampah	Apiaceae
Petasites frigidus	Sweet coltsfoot	Asteraceae
Phacelia hastata	White-leaf phacelia	Hydrophyllaceae

Phacelia heterophylla	Varileaf phacelia	Hydrophyllaceae
Phacelia linearis	Thread-leaf phacelia	Hydrophyllaceae
Philadelphus lewisii	Mock-orange	Hydrangeaceae
Phleum alpinum	Alpine timothy	Poaceae
Phleum pratense*	Timothy	Poaceae
Phlox caespitosa	Tufted phlox	Polemoniaceae
Phlox diffusa	Spreading phlox	Polemoniaceae
Phlox longifolia	Long-leaf phlox	Polemoniaceae
Phlox pulvinata	Cushion phlox	Polemoniaceae
Phlox viscida	Sticky phlox	Polemoniaceae
Phoenicaulis cheiranthoides	Daggerpod	Brassicaceae
Phyllodoce empetriformis	Red mountain heather	Ericaceae
Physaria oregana	Oregon twinpod	Brassicaceae
Physocarpus capitatus	Pacific ninebark	Rosaceae
Physocarpus malvaceus	Mallow ninebark	Rosaceae
Picea engalmannii	Engelmann spruce	Pinaceae
Pinus contorta	Lodgepole pine	Pinaceae
Pinus ponderosa	Ponderosa pine	Pinaceae
Plagiobothrys scouleri	Scouler's popcorn-flower	Boraginaceae
Plantago lanceolata*	English plantain	Plantaginaceae
Plantago major*	Common plantain	Plantaginaceae
Plectritis macrocera	White plectritus	Valerianaceae
Poa annua	Annual bluegrass	Poaceae
Poa bulbosa*	Bulbous bluegrass	Poaceae
Poa compressa	Canadian bluegrass	Poaceae
Poa nemoralis	Wood bluegrass	Poaceae
Poa nervosa	Wheeler's bluegrass	Poaceae
Poa palustris*	Fowl meadow-grass	Poaceae
Poa pratensis*	Kentucky bluegrass	Poaceae
Poa sandbergii	Sandberg's bluegrass	Poaceae
Poa scabrella	Pine bluegrass	Poaceae
Poa secunda	Merrill's bluegrass	Poaceae
Polemonium californicum	California Jacob's-ladder	Polemoniaceae
Polemonium occidentale	Western polemonium	Polemoniaceae
Polemonium pectinatum	Washington polemonium	Polemoniaceae
Polemonium pulcherrimum	Showy Jacob's ladder	Polemoniaceae
Polygonum aviculare*	Doorweed	Polygonaceae
Polygonum bistortoides	Mountain bistort	Polygonaceae
Polygonum douglasii	Douglas' knotweed	Polygonaceae
Polygonum exsertum	Long-fruit knotweed	Polygonaceae
Polygonum kelloggii	Kellogg's knotweed	Polygonaceae
Polygonum majus	Wiry knotweed	Polygonaceae
Polygonum minimum	Leafy dwarf knotweed	Polygonaceae
Polygonum polygaloides	White-margined knotweed	Polygonaceae
Polypodium hesperium	Western polypody	Polypodiaceae
Polypogon monspeilensis*	Rabbitsfoot grass	Poaceae
Polystichum munitum	Sword fern	Polypodiaceae
Polystichum scopulinum	Rock sword-fern	Polypodiaceae
Populus tremuloides	Quaking aspen	Salicaceae
Populus trichocarpa	Black cottonwood	Salicaceae

Portulaca oleracea*	Purslane	Portulacaceae
Potentilla biennis	Biennial cinquefoil	Rosaceae
Potentilla glandulosa	Sticky cinquefoil	Rosaceae
Potentilla gracilis	Graceful cinquefoil	Rosaceae
Potentilla recta*	Erect cinquefoil	Rosaceae
Prunella vulgaris	Self-heal	Lamiaceae
Prunus cerasus*	Sour cherry	Rosaceae
Prunus domestica*	Plum	Rosaceae
Prunus emarginata	Bitter cherry	Rosaceae
Prunus virginiana	Chokecherry	Rosaceae
Pseudotsuga menziesii	Douglas fir	Pinaceae
Psoralea lanceolata	Dune scurf-pea	Fabaceae
Pteridium aquilinum	Bracken	Polypodiaceae
Pterospora andromedea	Pinedrops	Ericaceae
Purshia tridentata	Bitterbrush	Rosaceae
Pyrola asarifolia	Pink wintergreen	Ericaceae
Pyrola chlorantha	Green wintergreen	Ericaceae
Pyrola picta	White-veined wintergreen	Ericaceae
Pyrola secunda	One-sided wintergreen	Ericaceae
Pyrus communis*	Pear	Rosaceae
Pyrus malus*	Apple	Rosaceae
Ranunculus glaberrimus	Sagebrush buttercup	Ranunculaceae
Ranunculus orthorhynchus	Straight-beak buttercup	Ranunculaceae
Ranunculus populago	Mountain buttercup	Ranunculaceae
Ranunculus sceleratus	Celery-leaved buttercup	Ranunculaceae
Ranunculus uncinatus	Little buttercup	Ranunculaceae
Rhamnus alnifolia	Alder buckthorn	Rhamnaceae
Rhamnus purshiana	Cascara	Rhamnaceae
Ribes aureum	Golden currant	Grossulariaceae
Ribes cereum	Wax currant	Grossulariaceae
Ribes cognatum	Umatilla gooseberry	Grossulariaceae
Ribes hudsonianum	Northern black currant	Grossulariaceae
Ribes inerme	White-stem gooseberry	Grossulariaceae
Ribes irriguum	Idaho gooseberry	Grossulariaceae
Ribes lacustre	Prickly currant	Grossulariaceae
Ribes niveum	Snow gooseberry	Grossulariaceae
Ribes oxyacanthoides	Northern gooseberry	Grossulariaceae
Ribes viscosissimum	Sticky currant	Grossulariaceae
Ribes wolfii	Wolf's current	Grossulariaceae
Robinia pseudoacacia*	Black locust	Fabaceae
Rorippa curvisiliqua	Western yellowcress	Brassicaceae
Rorippa nasturtium-aquaticum*	Water cress	Brassicaceae
Rosa gymnocarpa	Baldhip rose	Rosaceae
Rosa nutkana	Nootka rose	Rosaceae
Rosa woodsii	Wood's rose	Rosaceae
Rubus idaeus	Red raspberry	Rosaceae
Rubus laciniatus*	Evergreen blackberry	Rosaceae
Rubus leucodermis	Blackcap	Rosaceae
Rubus parviflorus	Thimbleberry	Rosaceae
Rubus ursinus	Wild blackberry	Rosaceae

Rudbeckia occidentalis	Black head	Asteraceae
Rumex acetosella*	Sheep sorrel	Polygonaceae
Rumex crispus*	Sour dock	Polygonaceae
Rumex patientia*	Patience dock	Polygonaceae
Rumex paucifolius	Mountain sorrel	Polygonaceae
Rumex salicifolius	Willow dock	Polygonaceae
Rumex venosus	Winged dock	Polygonaceae
Sagittaria cuneata	Wapato	Alismataceae
Salix amygdaloides	Peachleaf willow	Salicaceae
Salix commutata	Variable willow	Salicaceae
Salix exigua	Coyote willow	Salicaceae
Salix lasiandra	Pacific willow	Salicaceae
Salix rigida	Mackenzie willow	Salicaceae
Salix scouleriana	Scouler willow	Salicaceae
Salsola kali*	Russian thistle	Chenopodiaceae
Sambucus cerulea	Blue elderberry	Caprifoliaceae
Sambucus racemosa	Red elderberry	Caprifoliaceae
Sanguisorba occidentalis	Annual burnet	Rosaceae
Sanguisorba sitchensis	Sitka burnet	Rosaceae
Sanicula graveolens	Sierra sanicle	Apiaceae
Saussurea americana	American sawwort	Asteraceae
Saxifraga arguta	Brook saxifrage	Saxifragaceae
Saxifraga integrifolia	Grassland saxifrage	Saxifragaceae
Saxifraga mertensiana	Merten's saxifrage	Saxifragaceae
Saxifraga nidifica	Nesting saxifrage	Saxifragaceae
Saxifraga occidentalis	Western saxifrage	Saxifragaceae
Scirpus acutus	Hard-stem bulrush	Cyperaceae
Scirpus americanus	Three-square bulrush	Cyperaceae
Scirpus maritimus	Seacoast bulrush	Cyperaceae
Scirpus microcarpus	Small-flowered bulrush	Cyperaceae
Scirpus nevadensis	Nevada bulrush	Cyperaceae
Scirpus olneyi	Olney's bulrush	Cyperaceae
Scrophularia lanceolata	Lance-leaf figwort	Scrophulariaceae
Scutellaria angustifolia	Narrow-leaved skullcap	Lamiaceae
Scutellaria antirrhinoides	Snapdragon skullcap	Lamiaceae
Sedum lanceolatum	Lance-leaved stonecrop	Crassulaceae
Sedum leibergii	Leiberg's stonecrop	Crassulaceae
Sedum stenopetalum	Worm-leaf stonecrop	Crassulaceae
Selaginella densa	Compact selaginella	Selaginellaceae
Selaginella wallacei	Wallace's selaginella	Selaginellaceae
Senecio canus	Woolly groundsel	Asteraceae
Senecio crassulus	Thick-leaf groundsel	Asteraceae
Senecio foetidus	Sweet-marsh butterweed	Asteraceae
Senecio integerrimus	Western groundsel	Asteraceae
Senecio serra	Tall butterweed	Asteraceae
Senecio streptanthifolius	Cleft-leaf groundsel	Asteraceae
Senecio triangularis	Arrowleaf groundsel	Asteraceae
Senecio vulgaris*	Common groundsel	Asteraceae
Setaria lutescens*	Yellow foxtail	Poaceae
Sidalcea oregana	Oregon checkermallow	Malvaceae

Silene douglasii	Douglas' silene	Caryophyllaceae
Silene menziesii	Menzies' silene	Caryophyllaceae
Silene oregana	Oregon silene	Caryophyllaceae
Sisymbrium altissimum*	Jim Hill mustard	Brassicaceae
Sisyrinchium douglasii	Grass-widow	Iridaceae
Sisyrinchium inflatum	Purple-eyed grass	Iridaceae
Sitanion hystrix	Squirreltail	Poaceae
Sitanion jubatum	Big squirreltail	Poaceae
Smilacina racemosa	False Solomon's seal	Liliaceae
Smilacina stellata	Star-flowered Solomon's seal	Liliaceae
Solidago gigantea	Late goldenrod	Asteraceae
Solidago missouriensis	Missouri goldenrod	Asteraceae
Solidago occidentalis	Western goldenrod	Asteraceae
Sorbus scopulina	Cascade mountain-ash	Rosaceae
Spergularia rubra*	Red sandspurry	Caryophyllaceae
Sphaeralcea munroana	White-leaved globe mallow	Malvaceae
Sphenopholis obtusata	Wedgegrass	Poaceae
Sphenosciadium capitellatum	Swamp white-heads	Apiaceae
Spiraea betulifolia	Birch-leafed spirea	Rosaceae
Stellaria crispa	Crisped starwort	Caryophyllaceae
Stellaria graminea*	Lesser starwort	Caryophyllaceae
Stellaria longifolia	Long-leaved starwort	Caryophyllaceae
Stellaria longipes	Long-stalked starwort	Caryophyllaceae
Stellaria media*	Common chickweed	Caryophyllaceae
Stipa comata	Rip-gut	Poaceae
Stipa lemmonii	Lemmon's needlegrass	Poaceae
Stipa lettermanii	Letterman's needlegrass	Poaceae
Stipa occidentalis	Western needlegrass	Poaceae
Streptopus amplexifolius	Clasping-leaved twisted-stalk	Liliaceae
Symphoricarpos albus	Common snowberry	Caprifoliaceae
Symphoricarpos oreophilus	Mountain snowberry	Caprifoliaceae
Synthyris missurica	Mountain kittytails	Scrophulariaceae
Syringa vulgaris*	Lilac	Oleaceae
Tanacetum vulgare*	Common tansy	Asteraceae
Taraxacum ceratophorum	Horned dandelion	Asteraceae
Taraxacum officinale*	Dandelion	Asteraceae
Taxus brevifolia	Western yew	Taxaceae
Thalictrum fendleri	Fendler's meadowrue	Ranunculaceae
Thalictrum occidentale	Western meadowrue	Ranunculaceae
Thelypodium laciniatum	Thick-leaved thelepody	Brassicaceae
Thermopsis montana	Mountain golden-pea	Fabaceae
Thlaspi arvense*	Fanweed	Brassicaceae
Thlaspi californicum*	Kneeland Prairie pennycress	Brassicaceae
Thlaspi fendleri	Fendler's pennycress	Brassicaceae
Thysanocarpus curvipes	Fringepod	Brassicaceae
Tiarella trifoliata	Foamflower	Saxifragaceae
Tonella floribunda	Large-flowered tonella	Scrophulariaceae
Tragopogon dubius*	Oysterplant	Asteraceae
Tragopogon pratensis*	Meadow salsify	Asteraceae
Trautvetteria caroliniensis	False bugbane	Ranunculaceae

Tribulus terrestris*	Puncture vine	Zygophyllaceae
Trifolium agrarium*	Yellow clover	Fabaceae
Trifolium cyathiferum	Cup clover	Fabaceae
Trifolium dubium*	Least hop clover	Fabaceae
Trifolium eriocephalum	Wooly-head clover	Fabaceae
Trifolium longipes	Long-stalked clover	Fabaceae
Trifolium macrocephalum	Big-headed clover	Fabaceae
Trifolium microcephalum	Woolly clover	Fabaceae
Trifolium pratense*	Red clover	Fabaceae
Trifolium repens*	White clover	Fabaceae
Trillium ovatum	White trillium	Liliaceae
Trillium petiolatum	Purple trillium	Liliaceae
Trisetum cernuum	Nodding trisetum	Poaceae
Typha latifolia	Common cattail	Typhaceae
Ulmus americanus	American elm	Ulmaceae
Urtica dioica	Stinging nettle	Urticaceae
Vaccinium globulare	Globe huckleberry	Ericaceae
Vaccinium membranaceum	Mountain huckleberry	Ericaceae
Vaccinium scoparium	Grouseberry	Ericaceae
Valeriana scouleri	Scouler's valerian	Valerianaceae
Valeriana sitchensis	Sitka valerian	Valerianaceae
Valerianella locusta*	European corn salad	Valerianaceae
Ventenata dubia*	Ventenata	Poaceae
Veratrum californicum	California false hellebore	Liliaceae
Veratrum viride	Green false hellebore	Liliaceae
Verbascum thapsus*	Common mullein	Scrophulariaceae
Veronica americana	American brooklime	Scrophulariaceae
Veronica anagallis-aquatica*	Water pimpernel	Scrophulariaceae
Veronica cusickii	Cusick's speedwell	Scrophulariaceae
Veronica serpyllifolia	Thyme-leaf speedwell	Scrophulariaceae
Vicia americana	American vetch	Fabaceae
Vicia villosa*	Hairy vetch	Fabaceae
Viola adunca	Early blue violet	Violaceae
Viola glabella	Stream violet	Violaceae
Viola macloskeyi	Small white violet	Violaceae
Viola nuttallii	Yellow prairie violet	Violaceae
Viola orbiculata	Round-leaved violet	Violaceae
Viola palustris	Marsh violet	Violaceae
Viola purpurea	Goosefoot violet	Violaceae
Woodsia oregana	Oregon woodsia	Polypodiaceae
Wyethia amplexicaulis	Northern mule's ears	Asteraceae
Zigadenus paniculatus	Panicled death-camas	Liliaceae
Zigadenus venenosus	Meadow death camas	Liliaceae