



STAFF REPORT TO THE BENTON COUNTY PLANNING COMMISSION

FILE NO: **Workshop on the Shoreline Master Plan Periodic Update 2021**

MEMO DATE: November 2, 2020

WORKSHOP DATE: November 19, 2020

APPLICANT: Benton County Planning Department

OWNER: N/A

LOCATION: Unincorporated Benton County

PROPERTY SIZE: N/A

AREA TO BE USED: N/A

LAND USE: N/A

COMP. PLAN: N/A

ZONING: N/A

**SUGGESTED STAFF
RECOMMENDATION:** N/A

APPLICATION DESCRIPTION

The Shoreline Management Act (SMA), RCW 90.58, requires mandatory "periodic updates" to local shoreline master programs every eight (8) years. Every Washington city and county must periodically review and, if needed, revise its Shoreline Master Program (SMP) to ensure compliance with the SMA.

The last update of the Benton County SMP was completed and approved by the Washington State Department of Ecology in 2015. Per RCW, the Benton County SMP is required to be updated by June 2021.

In 2019, Benton County received a reimbursable grant from the Department of Ecology to complete the required update. Benton County, in turn, entered into a contract with the White Bluffs Consulting to assist the County with the review and update as necessary.

Components of the update include:

1. SMP Periodic Review Checklist;

2. SMP Text Changes;
3. Riparian Buffer Analysis Memo; and
4. CAO Text Change

A part of this overall SMP update process is to evaluate not only the streams and rivers within shoreline jurisdiction (SMP), but also take this opportunity to evaluate streams that not in shoreline jurisdiction and are subsequently regulated under the CAO. Regulations for the non-shoreline jurisdiction streams are in the County's Critical Area Ordinance- Fish and Wildlife Conservation Area chapter. White Bluffs Consulting has assisted the County with the development of an update to the Critical Area text.

Specifically, as it relates to the Riparian Analysis memo and the changes to the Critical Area Ordinance (CAO) text, all the standards in the CAO are to be based upon Best Available Science (BAS). The Riparian Buffer Analysis memo assesses the riparian conditions in the County and provides a scientific foundation for determining applicable stream buffers for each stream segment. Currently, the BAS for riparian buffer widths in the County is from the Washington State Department of Fish and Wildlife management recommendations. With the development of the Riparian Buffer Analysis, the County now has site specific analysis for each stream segment to use in development of stream buffer widths that are scientifically appropriate.

Ben Floyd of White Bluffs Consulting will be available, remotely, on November 19, 2020 at 6:00 p.m. to discuss the proposed updates to the Shoreline Master Program, along with the Riparian Buffer Analysis and subsequent update to the Critical Area Regulations.

Memorandum

September 30, 2020

To: Greg Wendt and Donna Hutchinson, Benton County Planning Department

From: Ben Floyd, White Bluffs Consulting; John Small, Anchor QEA, LLC

cc: Nikole Stout, Anchor QEA, LLC

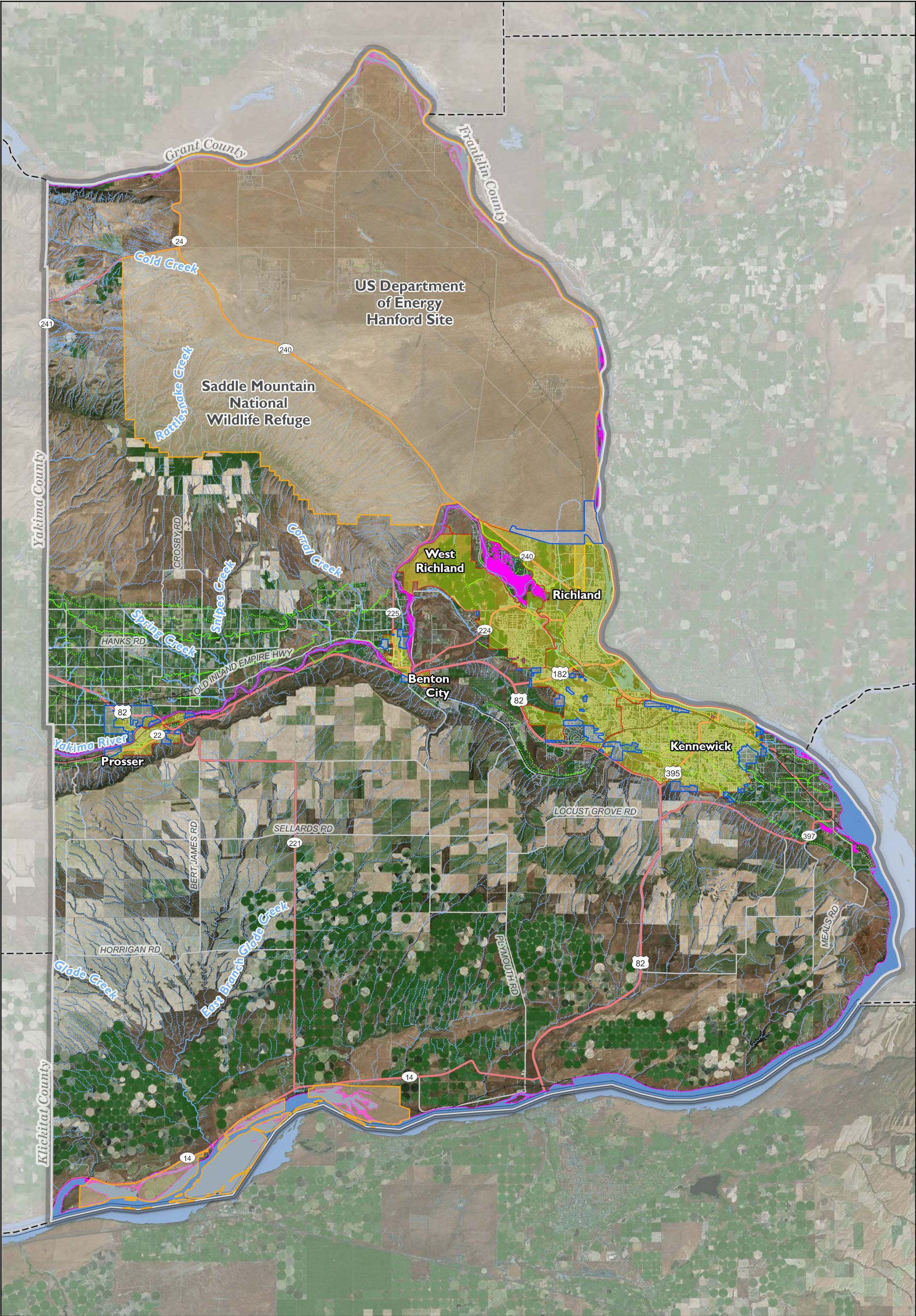
Re: Proposed Riparian Buffers within the Benton County Critical Areas Code Update

Introduction and Purpose

The purpose of this memorandum is to demonstrate how the best available science (BAS) was incorporated in the development of policies and regulations to protect Benton County critical areas outside of shoreline jurisdiction (per Revised Code of Washington 36.70A.172) but based on standards consistent with the County's Shoreline Master Program (SMP). Specifically, this memorandum summarizes how the BAS was used to support the riparian buffers proposed within Benton County's draft update to the Critical Areas Ordinance (CAO), Title 15 Benton County Code (BCC). This memorandum begins with a summary of recent, relevant, peer-reviewed literature on riparian ecological functions, along with associated recommendations for buffer widths or ranges for protecting ecological functions. This information is followed by proposed riparian buffers for the applicable stream types. Attachment 1 includes the *Riparian Buffer Analysis Summary Memorandum* (AC Geospatial, LLC 2020).

This memorandum was written to meet the requirements of Washington Administrative Code (WAC) 365-195-905 (criteria for determining which information is the "best available science") under the Growth Management Act. BAS is required to be included in CAO updates. To "include" BAS means to substantively consider BAS in developing regulations (Whidbey Environmental Action Network v. Island County 2004). In 2012, the Division II Court of Appeals held that "including" BAS does not impose a duty on local governments to describe each step of their deliberative process but rather the local government is required to address on the record the relevant sources of BAS included in their decision-making (Olympic Stewardship Foundation v. Western Washington Growth Management Hearings Board 2012).

As noted, this memorandum focuses on the BAS information for the streams and topographic lows and their associated riparian areas in the unincorporated areas in the County that are outside of shoreline jurisdiction, and that are largely privately owned (Figure 1). Ecological conditions and riparian buffers associated with shorelines of the state have been addressed as part of the Benton County SMP, which includes regulations based on a Shoreline Analysis Report for Shorelines in Benton County: Yakima and Columbia Rivers, developed in 2013.



Benton County Regional Conditions

Benton County is located in southeastern Washington and encompasses approximately 1,715 square miles. The Columbia River borders the north, east, and south sides of the County and the Yakima River intersects the middle of the County, flowing from Prosser to its confluence with the Columbia River at Richland. The County contains portions of three Water Resource Inventory Areas (WRIAs), including the eastern portion of the Lower Yakima Watershed (WRIA 37), the Rock-Glade Watershed (WRIA 31), and the Alkali-Squilchuck Watershed (WRIA 40).

Benton County is a cold desert climate, mean annual rainfall is generally 10 inches or less per year (Best Places 2020). Most of the drainage of the Columbia River falls as snow in the Rocky Mountains and in the Cascade Range. It is important to note that the 21 dams built on the Columbia and Snake Rivers since 1933 have substantially altered the Columbia River hydrograph. Annual peak discharges for local east slope drainages occur in the late spring (typically in June) and generally results from snowmelt in the interior subbasin. Peak flows are lower and winter flows higher than under natural conditions due to dam and reservoir operations. Mainstem Columbia River flows are primarily determined by fish runs and hydropower.

General Conditions

Benton County has an arid to semi-arid climate, and this is reflected in the dominant habitat cover. Shrub-steppe is the predominant upland native habitat type in Benton County. However, conversion of shrub-steppe habitats to cropland and grazing has left only about 5% of the historical habitat in relatively undisturbed condition. A larger proportion of the remaining native habitat is moderately disturbed by grazing, off-road vehicle use, and other land uses. These areas still provide cover, food, and nesting habitat for many species of wildlife, particularly during winter months when cultivated fields provide no vegetative cover.

Riparian areas exist along the rivers and streams in the County. These water bodies include large river systems, perennial streams with flow enhanced by surface water irrigation and shallow groundwater, and intermittent streams and topographic lows, also often enhanced by upland irrigation. With average rainfall in Benton County at less than 10 inches per year, irrigation water is the primary determinant in stream flow and associated riparian areas based on irrigation operations and upland irrigation areas and practices. The Columbia and Yakima rivers are the largest river systems in Benton County, and the riparian areas associated with their shorelines are regulated under the SMP. All 13 Endangered Species Act (ESA)-listed evolutionary significant units (ESUs) of salmon (*Oncorhynchus spp.*) and steelhead (*O. mykiss*) in the Columbia basin use the mainstem Columbia River for migration to and from freshwater natal areas to the Pacific Ocean (NMFS 2016). Most of the ESA-listed species spawn and incubate in tributaries, but some populations of fall Chinook and chum salmon spawn in the mainstem itself. Summer and fall Chinook salmon spawn in the mainstem Yakima River, and spring Chinook salmon use the mainstem for rearing (WDFW 2020). Generally,

Chinook salmon are the dominant salmonid during the spring period. Non-native fish species that compete with native fish are also present in the Yakima and Columbia Rivers. Generally, riparian buffer widths may influence critical habitat function for endangered salmon and steelhead.

In addition to the Columbia and Yakima rivers, unincorporated Benton County also has Glade, Spring, Snipes, Corral, and Dead Canyon creeks, along with several other unnamed perennial and intermittent streams or topographic lows with regular or occasional surface water flow. Spring, Snipes and Corral Creeks are tributaries to the Yakima and have documented usage by steelhead, fall Chinook salmon, and Coho salmon in the lower reaches of the streams. Additionally, Snipes also has spring Chinook salmon documented usage. Snipes Creek documented fish presence is in the lower 3.7 miles, Corral in the lower 1.7 miles and Spring in the lower 1.0 mile. Flows in each of these streams is annually regulated by irrigation system operations, including spill and/or return flows. Additionally, periodic high precipitation events can also temporarily influence flows.

Glade Creek and Dead Canyon, tributary to the Columbia River, have documented historical usage for Glade by Coho salmon (lower approximate 2.5 miles) and steelhead rearing for Dead Canyon (lower 1.4 miles) (WDFW 2020). Shallow groundwater from upland irrigation and pool elevations in the Columbia River John Day reservoir affect flows in these streams. Additionally, periodic high precipitation events can also temporarily influence flows.

Riparian Ecological Functions in the Semi-arid Environment

Riparian ecosystems in semi-arid regions appear as dense vegetative patches and corridors in a landscape otherwise dominated by shrub-steppe communities (Photo 1). "Riparian systems are therefore uncommon ecosystems in semi-arid regions, making up no more than 3% of the landscape, but are linked hydrologically to the rest of the landscape" (Naiman and Decamps 1997 as cited in Patten 1998).

Photo 1
Typical Shrub-Steppe Riparian Stream Buffer Conditions



The width of the riparian vegetation community can vary from a few feet to a few hundred feet (when associated wetlands also exist). Topography, specifically the depth to groundwater associated with the stream, strongly controls that distance. In areas without wetlands, where subsurface water or wet soils are limited, the riparian vegetation typically does not extend more than 20 feet from the ordinary high water mark of the associated waterbody. Exceptions occur where an upland irrigation source provides surface runoff or shallow ground water return to supplement the stream hydrology and when topography is extremely flat and hyporheic (e.g. subsurface) flows extend laterally from the stream maintaining the alluvial aquifer which the riparian vegetation depend on.

In Benton County, riparian buffer characteristics were summarized for 29 stream segments outside of SMP jurisdiction (F, Np, and Ns streams) (AC Geospatial, LLC 2020). **The average, minimum, and maximum values for each stream segment were calculated from the measurement points that fall along that segment. Overall, the measured streams had an average vegetated buffer width**

of 20 feet per side. The average stream channel width was 7 feet, and the average cumulative width of the stream and riparian vegetation was 47 feet (, average channel width 7 feet). The Riparian buffer data for each stream segment is summarized in Table 1 and described in greater detail in Table 3 of the Riparian Buffer Analysis Summary Memorandum (Attachment 1).

Table 1
Non-Shoreline Stream Riparian Widths

Stream Name	Max Width for Stream and Riparian Areas	Minimum Width for Stream and Riparian Areas	Max Average Riparian Width Per Side	Minimum Average Riparian Width Per Side
Corral Creek	126	26	41	33
East Branch Glade Creek	87	25	33	33
Glade Creek	132	30	32	21
Snipes Creek	102	27	25	16
Spring Creek	64	9	14	5
Unnamed Perennial Stream Segments	115	8	28	7
Dead Canyon	34	39	26	26
Bing Canyon	34	38	27	27
Switzler Canyon	34	39	31	31
Fourmile Canyon	34	16	21	15

Source: (AC Geospatial, LLC 2020)

Wood Recruitment and Organic Inputs

Instream wood provides habitat and hydrology function, especially for rearing fish and other aquatic fauna. Large woody material that creates pools and provides channel complexity is sparse in Benton County, where riparian areas are dominated by shrub and herb species. This vegetation still provides key organic inputs to the stream ecosystems.

Key Functions

Organic Inputs. Riparian vegetation communities are the primary source of organic inputs in most streams and lakes in semi-arid regions. The mesic nature and higher biomass of the riparian community combined with the proximity to the water bodies makes it a crucial source of organic matter.

Large woody debris. The potential size of large wood recruited into streams east of the Cascade Divide is generally less than the size of these features on the west side of the region. Instream wood provides habitat for fish and other aquatic wildlife. Small and large wood both impact channel

morphology through sediment capture, water retention, and create hydraulic complexity. Large wood provides pools and scour for fish-rearing habitat and organic matter storage, as well as shade and refuge for fish.

Key Findings

Sources. Bank erosion and tree mortality contribute the most to instream wood recruitment (Johnston et al. 2011; Murphy and Koski 1989). Litterfall including fallen woody debris can form debris dams that retain organic matter and sediment beneficial for habitat and/or as nutrients for aquatic species (Benke et al. 1985; Gregory et al. 1991; Prochazka et al. 1991; Speaker et al. 1984; Bisson et al. 1987 as cited in Tait et al. 1994). The limited water sources in semi-arid environments for tree and shrub vegetation in riparian habitats reduces the biomass of nutrients through organic input compared to riparian habitats in wetter climates.

Recruitment distances. Less wood is recruited as the distance from the channel increases. In Washington studies, 50% of wood recruited originated within 35 feet of the channel (McDade et al. 1990). Litterfall from shrubby vegetation is primarily input directly adjacent to the channel.

Recommendations

In semi-arid west environments, large woody vegetation can be rare and its presence decreases rapidly with increasing distance of the stream channel from flow patterns of the water table (Malanson 1993 as cited in Buffler 2005). Riparian buffer widths in Benton County on non-shoreline streams average 20 feet, with very limited tree cover as most of the habitat is shrub-steppe (Photo 2). Because most recruitment happens within the adjacent 49 feet of the stream, a buffer of 50 feet would be sufficient to provide wood recruitment in these conditions.

Photo 2
Benton County Non-Shoreline Stream Buffer Vegetation Example



Protection of existing functional riparian vegetation communities should be a priority and protective buffers should be developed based on the width of functional (undisturbed) riparian communities in the reach. In Benton County, the width of this area is typically less than 20 feet, so the recommended 50 feet is conservative.

Stream Temperature

Stream thermal conditions can vary with elevation, channel structure, landscape condition and land use, and the riparian ecosystem adjacent to the stream. The main source of heating in a stream is usual direct solar radiation, which is effectively reduced by the available shade given from vegetation.

Riparian vegetation has an important role in the food web system of streams (Cummins et al. 1989 as cited in Tait et al. 1994). Where it exists, overhanging vegetation can filter and absorb incident

radiation, this affects periphyton primary productivity and, improves water temperatures (Lyford and Gregory 1975, Towns 1981, Bott 1983 as cited in Tait et al. 1998).

Riparian areas with tree cover are most efficient in reducing solar heating of stream water by shading, especially in low order streams (Brown and Krygier 1970). Riparian vegetation also provides cooling through evapotranspiration (Beschta 1984, Theuer et al. 1984, Sinokrot and Stefan 1993 as cited in Tabacchi et al. 1998). Stream temperature can also be moderated by cool groundwater upwellings from deep phreatic sources and from hyporheic zones near stream margins (Stanford et al. 1994 as cited in Tabacchi et al. 1998).

Similar to habitat corridor functions, tree and shrub vegetation canopies adjacent to the shoreline and overhanging the stream banks are required for optimal temperature function. As tree and shrub density decreases near the shoreline the function also decreases. In semi-arid west environments, tree and shrub vegetation is often limited not only through land use activity but also because of natural conditions such as streams in steep sloped ravines and valley systems which typically have limited tree cover. Severe topography dominates many of the smaller order stream systems in Benton County. Many of the riparian habitats in the county also include shrub vegetation with little or no tree cover. Shrub communities in semi-arid riparian habitats typically do not provide the height, density, and overhanging vegetation characteristics that shrub species in wetter environments provide and therefore provide a lesser temperature regulation function than in wetter environments. Herbaceous riparian vegetation provides little or no temperature functional value, except in low-order, low-energy systems that support reed beds and/or forb dominated vegetation.

The findings from AC Geospatial 2020 show that the average width of riparian vegetation in Benton County is only 20 feet with a standard deviation of 9 feet. While this would be highly limiting in larger river systems in Benton County the average stream width was 7 feet, allowing for a large percentage of the stream to be shaded by relatively little vegetation. AC Geospatial (2020) also found that only about a third of reaches supported trees, which can provide shade to a stream even if growing away from the bank. Many riparian zones in Benton County are vegetated only with herbaceous species which provide shade only when very close to the streambank.

Stream water temperatures are also influenced by shallow groundwater inputs, primarily from upland irrigation practices. This groundwater is typically cooler than surface water, particularly in warmer months. Direct runoff from nearby impervious surfaces such as roads primarily occurs in the late fall and winter months when stream temperatures are lower. Thin stemmed vegetation like grasses and herbs tend to be more effective than trees or shrubs for collecting surface runoff to allow infiltration back into the groundwater prior to entering the streams (Hruby 2014).

Key Functions

Tree cover. Riparian areas with tree cover are most efficient in reducing solar heating of stream water by shading, especially in low order streams (Brown and Krygier 1970, as cited in Tabacchi et al. 1998). Riparian vegetation also provides cooling through evapotranspiration (Beschta et al. 1987, Theuer et al. 1984, Sinokrot and Stefan 1993, as cited in Tabacchi et al. 1998).

Groundwater. Stream temperature can also be moderated by cool groundwater upwellings from deep phreatic sources and from hyporheic zones near stream margins (Tabacchi et al. 1998).

Fish. Increasing stream temperatures are detrimental to fish, especially salmonids.

Key Findings

Shading. Shade from riparian cover maintains the cooler stream temperature, provided by groundwater inputs. Stream channel attributes like width, landscape position, flow, and groundwater table depth also influence stream temperatures. The type of riparian community (tree height and density) may have a larger impact on available shade than the width of riparian buffer (DeWalle 2010). Generally, cooler stream temperature is provided and maintained by irrigation spill and returns and the shallow groundwater table in the Yakima River tributaries.

Land use. Compaction can limit new vegetation growth and reduce shade from streambank riparian vegetation (Li et al. 1994), though riparian vegetation is able to recover after disturbance (Zoellick 2004).

In some studies, stream temperature was found to be more influenced by hyporheic exchange and width-to-depth ratio than by the riparian community type (forested or shrub-scrub) (Liquori and Jackson 2001; Maloney et al. 1999). Traditional stream temperature models are limited by the assumption that stream structure stays relatively stable because there is evidence of upslope land use and management affecting channel stability.

Recommendations

As stated in *Riparian Ecosystems, Volume 1* Section 7.4.2, "maximum recruitment distances for large wood will generally be either riparian zone width or site-potential tree height, whichever is smaller." This applies to shading function as well, as the more arid vegetation common in Benton County rarely exceeds a few feet in height. Cristea and Janisch (2007) found that shade on small streams 10 to 20 feet in channel width was 61% to 78% of undisturbed sites when only a 30-foot buffer was protected. Shorter shrub-steppe vegetation only a few feet in height will have the maximum function for shading closer to the stream.

Based on this, a buffer of 50 feet would be sufficient to support stream temperature function in undisturbed riparian areas. It should be noted that a buffer of 50 feet would likely be overprotective

for shade functions in rural or developed areas, as shade function is severely limited or gone in these impacted areas. However, shade is not the only factor that influences stream temperature. The shallow groundwater table and irrigation practices in the county primarily influence stream temperatures for tributaries and topographic lows, as discussed above.

Pollutant Removal

Pollutant removal functions of riparian areas are only applicable in developed or rural areas where there is the potential for human activities that generate polluted runoff. The streams behind evaluated are outside of the more densely urban areas; however, agricultural activities and the occasional runoff from storm events in the rural areas have the potential to introduce pollutants and sediment into the stream.

Key Functions

Runoff. Riparian vegetation intercepts polluted runoff from upland areas and provides some filtration of the contaminants before they enter streams. Soil and hydrology are also large factors in determining how functional the riparian zone is for pollutant removal (WDFW 2018).

Vegetation type. Grass buffers can be as effective as dense forested buffers for pollutant removal function (Correll 1997; Hawes and Smith 2004; Dosskey et al. 2010). These grass filter strips are especially valuable in rural areas where forested areas are not present, like in Benton County.

Key Findings

Sediment removal distances. Most sediment removal (up to 90%) happens in the first 10 to 40 feet of a riparian buffer (Leeds et al. 1994; Yuan et al. 2009). These findings are consistent with those of GEI Consultants, Inc. (2002), that reviewed riparian buffer efficiency in agricultural areas. In forested areas, 33 feet is enough of a buffer to reduce sediment transport to a stream (Clinton 2011); whereas in rural areas where quantity of overland flow could be greater, the buffer should be larger. Similarly, Sweeney and Newbold (2014) found that a 33-foot buffer is sufficient to remove approximately 65% of sediments. Zhang et al. (2010) analyzed pollutant removal and concluded that a 100-foot-wide riparian buffer with 10% slope could remove over 85% of pollutants.

This information indicates that to protect stream water quality from erosion a vegetative buffer of 40 to 50 feet should provide adequate protection. This achieves, for example, approximately 90% reduction in sediment for slopes up to 5%, and 80% reduction for slopes between 5 and 15%. This should be viewed as a conservative protection value, based upon the higher rainfall, intensity of rainfall and runoff potential in the geographic areas where most of the referenced studies were conducted. Semi-arid and arid areas experience significantly less precipitation (3 to 15 inches per year) than most of the study areas referenced (e.g., 20 inches [Nebraska] to 45 inches [Georgia]) per year. It is possible that at these lower precipitation levels and less frequent storm that less sediment

overall can be transported. Verification of this assumption with additional information, particularly as it relates to storm intensities, is recommended.

Organics. USDA-NRCS (2000) recommends that pollutants like pesticides and organic compounds could be diffused between 35 and 65 feet.

Recommendations

A buffer of 50 feet would be sufficient to support a majority pollutant removal function in most riparian areas. A minimum buffer of 40 feet would effectively intercept pollutants and minimize sediment input from upland sources. In specific cases where slopes into the stream are greater than 10% and adjacent to cultivated agricultural ground. A buffer up to 100 feet would be needed, but these conditions are too atypical in the county to warrant applying this buffer in all cases.

Nutrient Dynamics

Transport of primary macronutrients between uplands and streams examined in riparian ecology include carbon, nitrogen, and phosphorus.

Riparian vegetation buffers trap and remove sediment and dissolved phosphorus, nitrogen, and other nutrients. Both particulate and dissolved matter can be retained by growing riparian vegetation and decomposing organic detritus. These biological processes reduce the potential for eutrophication (Horowitz 2009).

Riparian vegetation allows for suspended sediment removal, along with dissolved nutrients from surface runoff of stormwater (Peterjohn and Correll 1986, Chescheir et al. 1991, Klarer and Millie 1989, Lowrance et al. 1986, Mitsch et al. 1979, Parsons et al. 1994; as cited in Tabacchi et al. 1998) and flood waters entering (Brunet et al. 1994, Hart et al. 1987, Hupp and Morris 1990, Hupp et al. 1993, Johnston 1993, Kleiss et al. 1989; as cited in Tabacchi et al. 1998). Riparian vegetation facilitates the removal or storage of particulates. Increased friction with the soil surfaces can reduce water flow velocity and increase sedimentation of particulates. Riparian vegetation and organic detrital layers on the soil surfaces and bottom sediments are also very effective in slowing the velocity of the surface waters. The roots of the plants, which are on or near the surface, and the microbial communities on surfaces of soil, organic litter, and above ground vegetation can also assimilate dissolved nutrients from surface waters (Peterjohn and Correll 1986 as cited in Tabacchi et al. 1998).

In agricultural areas, dissolved phosphorus can be attached and exported in suspended sediments. Several studies have demonstrated the effectiveness of the riparian zones in controlling phosphorus inputs from agricultural lands to the aquatic systems (Omernik et al. 1981, Peterjohn and Correll 1986, Cooper and Gilliam 1987, as cited in Tabacchi et al. 1998) and produced equivocal results. Therefore, depending on the soil texture and the form of phosphorus, riparian forest soils can be

considered “either as a source or a sink of phosphorus” (Fabre et al. 1996 as cited in Tabacchi et al. 1998).

Within the hyporheic zone riparian vegetation roots reduce subsurface pollution, particularly nitrogen (Peterjohn and Correll 1986). Nitrogen buffering in the riparian zone occurs through plant uptake and microbial denitrification. This buffering is most effective where the surface contact between riparian wetland and the adjacent agricultural land is maximized along low order streams (Haycock et al. 1993, Brinson 1990 as cited in Tabacchi et al. 1998). However, this function of regulating subsurface nitrogen is often limited by a riparian zone’s geomorphic character, which determine the groundwater flow path and thus influences transported nitrate availability. Thus the efficiency of the attenuation of nitrogen or other pollutants is dependent not only on the area of riparian vegetation but also on the area of length of hydrologic contact with vegetation in riparian areas. (Tabacchi et al. 1998).

In addition to their nutrient uptake properties, riparian areas also serve to reduce toxin inputs into aquatic environments. Since the character of vegetation corridors (width, density, type of vegetation) directly influence the amount of soil and sediment lost to the river this also influences the rate of immobilization of fertilizers, pesticides, and spilled contaminants found on the surface and subsurface of soils (Patten 1998).

Key Functions

Nutrient input. Riparian vegetation buffers trap and remove sediment and dissolved phosphorus, nitrogen, and other nutrients. Both particulate and dissolved matter can be retained by growing riparian vegetation and decomposing organic detritus. These biological processes reduce the potential for eutrophication (Horowitz 2009).

Riparian trees and other vegetation provide inputs of detrital particulate matter (e.g., leaves, pollen grains and terrestrial insects) to aquatic ecosystems. These organic materials comprise major sources of nutrients and energy source for food webs that sustain production of various consumers like fish and beaver (Tait et al. 1994).

Key Findings

Nitrogen removal. Nitrogen removal is most effective on wider bands of vegetation that allow for subsurface movement of water, from 80 to 150 feet wide (Sweeney et al. 2004; Mayer et al. 2007; Sweeney and Newbold 2014). Buffler et al. 2005 concluded that nitrogen “attenuation requires a buffer of as little as 30 feet to 60 feet in slopes up to 15%, and up to 100% removal of nitrogen with a buffer of 65 feet.”

Phosphorus retention. Phosphorus retention is influenced by hydrologic flow paths and soil structure more than by riparian area width (Hoffmann et al. 2009; Schechter et al. 2013).

Nutrient cycling. A riparian buffer width with a high function for nutrient cycling is 100 feet where there has been harvest or land use changes, and a 33-foot buffer would produce moderate function (Lecerf and Richardson 2010; Sweeney and Newbold 2014). Undisturbed areas would produce higher function with a smaller buffer width.

Recommendations

There are currently no Category 4 or 5 303(d) listing for nitrogen or phosphorus in the county (Ecology 2020). A buffer of 50 feet is sufficient to support nutrient dynamics function in riparian areas in Benton County.

Peak Flow Conveyance

Peak flow conveyance and channel migration is influenced by sediment supply, riparian vegetation, and transport capacity. Channel forms and varied substrates influence the quality of fish and wildlife habitat available in a stream system. Vegetation in the riparian zone strengthens the bank and contributes runoff to the stream. Inversely, channel morphology and hydrology affect the species composition and age structure of riparian vegetation.

Generally, streams in Benton County are controlled by irrigation practices, which also control peak flows. Because many of the streams are incised with severe topography, channel migration does not usually occur in the F, Ns and Np streams regulated under GMA.

Key Functions

Channel complexity. Channel forms are influenced by water flow, channel slope, sediment transport, and other factors that affect the stream shape and the quantity, quality, and type of habitat available to aquatic and terrestrial species using riparian areas (Leopold and Wolman 1957; Schumm 1977). These geomorphic processes contribute to the development of various stream habitats. Habitats useful to aquatic species, including shallow-water and off-channel refugia, gravel bars, pools, riffles, and the transport of organic material, including large woody debris.

Vegetation. Riparian vegetation slows flows during peak runoff events (greater than bankfull) and reduces peak discharge coming off of floods (Tabacchi et al. 2000). Vegetation along streambanks also traps and stores sediment from flow upslope (Naiman et al. 2010).

Key Findings

Sedimentation. For control of excessive sedimentation in rural or urban areas, Sweeney and Newbold (2014) concluded that a buffer of 100 feet is needed to remove approximately 85% of sediments from overland flow. A buffer of only 33 feet is needed to remove approximately 65% of excessive sediments. Buffler et al. 2005 found that a 3 to 10 meter-wide grass buffer was found to be sufficient to remove most particulates from overland flow.

Recommendations

Peak flow conveyance and channel migration processes are site specific, as each system has a unique set of geomorphic controls and natural disturbance regime. For Benton County non-shoreline streams, flood events are less common and peak flows are controlled (Photo 3). A buffer of 33 feet would be sufficient to support peak flow conveyance and channel migration function in most streams, as vegetation becomes less effective at stabilizing the bank as distance from the bank increases (Roering et al. 2003; Sweeney and Newbold 2014). In geomorphically unstable reaches, with a history of channel migration would require additional setback. Development should generally be kept out of the historic channel migration zone in locations where channel migration has not been arrested by levees or revetments.

Photo 3
Typical Controlled Stream in Benton County



Summary of Recommendations

In reviewing the reference documents, much of the available technical information is geographically broadly based and does not provide site-specific details for identifying specific widths of riparian protections to maintain the various types of semi-arid riparian ecological functions found in Benton County. Caution must be used in applying or relating these prescriptions for wetland, riparian, and floodplain protection from other geographic areas to these features in the County. This caution is tied to the variability in riparian functions and the area in which these functions occur in a semi-arid environment. In many cases, the intent of the prescriptions found in the literature is to protect vegetation types that are relatively rare or absent within the greater Columbia Basin Plateau region, and that may or may not be applicable to the streams in Benton County addressed in this memorandum.

Tree and shrub vegetation adjacent to the shoreline and overhanging stream banks is necessary for optimally functioning aquatic habitat. Functional quality provided by herbaceous riparian habitat with no tree or shrub canopy generally provides less function in terms of food web support, thermal regulation, and soil stabilization. Riparian habitat in the semi-arid west can have limited or no tree or shrub vegetation due to both land use activities, natural environmental conditions, or both.

Table 2 summarizes the recommended buffer distances based on the conclusions drawn from sources reviewed in the section above. The recommended buffers include an additional 10 feet to provide for facilities maintenance and for consistency with the County's draft SMP for similar functioning streams and associated habitat areas in the rural setting.

Table 2
Summary of Riparian Width to Provide Key Functions

Function	Minimum Distance Recommended by BAS (feet)	Type F Proposed Buffer in CAC	Type Np/Ns Proposed Buffer in CAC	Efficacy with Source from Above
Wood	20	50	50	Because most recruitment happens within the adjacent 49 feet of the stream, a buffer of 50 feet would be sufficient to provide wood recruitment in these conditions.
Stream Temperature	30	50	50	A buffer of 50 feet would be sufficient to support stream temperature function in undisturbed riparian areas. It should be noted that a buffer of 50 feet would be overprotective for shade functions in areas with moderate land use, as shade function is severely limited or gone in these impacted areas.
Pollutant Removal	40/100 (> 10% slope)	40/100 (> 10% slope)	50	A buffer of 40 feet would be sufficient to support pollutant removal function in riparian areas. 100 feet for areas with slope greater than 10% and significant ground disturbances directly upland.
Nutrient Dynamics	33	50	50	A buffer of 50 feet is sufficient to support nutrient dynamics function in riparian areas in Benton County.
Peak Flow Conveyance and Channel Migration	33	50	50	A buffer of 50 feet would be sufficient to support peak flow conveyance and channel migration function in most streams, as vegetation becomes less effective at stabilizing the bank as distance from the bank increases.

F: Fish

Np: Non-Fish

Ns: Non-Fish Seasonal

Table 3 provides the recommended riparian buffer widths for streams and topographic lows under the CAO. As a special consideration for anadromous species, the recommended buffer width for the documented anadromous fish-bearing streams is 75 feet.

Table 3
Recommended CAO Riparian Buffers

Stream Name, Type	Recommended Riparian Buffer
Corral Creek, F	75 feet
East Branch Glade Creek, Np	50 feet
Glade Creek, F	75 feet
Snipes Creek, F	75 feet
Spring Creek, F	75 feet
Unnamed Perennial Stream Segments, Np	50 feet
Dead Canyon, Ns	50 feet
Bing Canyon, Ns	50 feet
Switzler Canyon, Ns	50 feet
Fourmile Canyon, Ns	50 feet

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ORDINANCE NO. 609

AN ORDINANCE relating to critical areas and resources; adding a new title and chapters to the Benton County Code; repealing Ordinance 257, Sections 1 thru 9, Sections 11 thru 17, Sections 19 thru 20, Section 71 thru 72, Ordinance 311, Section 1 thru 7, Section 9 thru 15, Sections 17 thru 36, Ordinance 346 and Chapter 15.10 BCC entitled "General Provisions"; repealing Ordinance 257, Sections 20 thru 30, Ordinance 312 and Chapter 15.15 BCC entitled "Wetlands"; repealing Ordinance 257, Sections 31 thru 40, Ordinance 313 and Chapter 15.20 BCC entitled "Rivers and Creeks"; repealing Ordinance 257, Sections 41 thru 49, Ordinance 314 and Chapter 15.25 BCC entitled "Critical Aquifer Recharge/Interchange Areas"; repealing Ordinance 257, Sections 50 thru 56, Ordinance 315 and Chapter 15.30 BCC entitled "Frequently Flooded Areas"; repealing Ordinance 257, Sections 57 thru 63, Ordinance 316 and Chapter 15.35 BCC entitled "Geologically Hazardous Areas"; and repealing Ordinance 257, Section 64 thru 70, Ordinance 317 and Chapter 15.40 BCC entitled "Fish and Wildlife Conservation Areas".

BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF BENTON COUNTY, WASHINGTON:

SECTION 1. There is hereby added a new chapter to the Benton County Code, which together with Ordinance 610 will form a new title, entitled "Environment" and which shall include the sections which follow.

SECTION 2. PURPOSE.

The purpose of this ordinance is to designate and classify ecologically sensitive and hazardous areas and to protect these areas and their functions and values, while also allowing for reasonable use of private property. Critical areas provide a variety of valuable and beneficial biological and physical functions that benefit the County and its residents, and/or may pose a threat to human safety or to public and private property. The beneficial functions and values provided by critical areas include, but are not limited to, water quality protection and enhancement, food chain support, flood storage, conveyance and attenuation of flood waters, ground water recharge and discharge, erosion control, protection from hazards, historical, archaeological, and aesthetic value protection, recreation and fish and wildlife habitat.

SECTION 3. AUTHORITY.

(a) As provided herein, the Planning Administrator is given the authority to interpret and apply, and the responsibility to enforce this ordinance to accomplish the stated purpose.

(b) The County may withhold, condition, or deny development permits or activity approvals to ensure that the proposed action is consistent with this ordinance.

SECTION 4. RELATIONSHIP TO OTHER REGULATIONS.

(a) These critical areas regulations shall apply as an overlay and in addition to zoning and other regulations adopted by the County.

(b) Any individual critical area adjoined by another type of critical area shall have the buffer and meet the requirements that provide the most protection to the critical areas involved. When

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any provision of this ordinance or any existing regulation, easement, covenant, or deed restriction conflicts with this ordinance, that which provides more protection to the critical areas shall apply.

(c) These critical areas regulations shall apply concurrently with review conducted under the State Environmental Policy Act (SEPA), as locally adopted. Any potential impacts of a development and conditions required pursuant to this ordinance shall be considered in the SEPA review process.

(d) Compliance with the provisions of this ordinance does not constitute compliance with other federal, state, and local regulations and permit requirements that may be required (for example, Shoreline Substantial Development permits, Floodplain Development permits, Hydraulic Project Approval (HPA) permits, Section 106 of the National Historic Preservation Act, U.S. Army Corps of Engineers Section 404 permits, National Pollution Discharge Elimination System permits). The applicant is responsible for complying with these requirements, apart from the process established in this ordinance.

SECTION 5. APPLICANT RESPONSIBLE FOR REPORTS REQUIRED UNDER THIS ORDINANCE.

Unless otherwise indicated in this ordinance, the applicant shall be responsible for the initiation, preparation, submission, and expense of all required reports, assessment(s), studies, plans, reconnaissance(s), peer review(s) by qualified consultants, and other work prepared in support of or necessary to review the application.

SECTION 6. SEVERABILITY.

If any clause, sentence, paragraph, section, or part of this ordinance or the application thereof to any person or circumstances shall be judged by any court of competent jurisdiction to be invalid, such order or judgment shall be confined in its operation to the controversy in which it was rendered. The decision shall not affect or invalidate the remainder of any part thereof and to this end the provisions of each clause, sentence, paragraph, section, or part of this law are hereby declared to be severable.

SECTION 7. INTERPRETATION.

In the interpretation and application of this ordinance, the provisions of this ordinance shall be considered to be the minimum requirements necessary, shall be liberally construed to serve the purpose of this ordinance, and shall be deemed to neither limit nor repeal any other provisions under state statute.

SECTION 8. DEFINITIONS.

Words not defined in this ordinance shall be as defined in the Benton County Code, the Washington Administrative Code, or the Revised Code of Washington. Words not found in either Code shall be as defined in the Webster's Third New International Dictionary, latest edition.

(1) Adjacent -immediately adjoining or within a distance that is 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:

- (i) On a site immediately adjoining a critical area;
 - (ii) A distance equal to or less than the required critical area buffer width and building setback;
 - (iii) A distance equal to or less than three-hundred (300) feet upland from a stream, wetland, or water body; or
 - (iv) Bordering or within the floodplain.
- (2) Alluvial soil- fine-grained fertile soil deposited by water flowing over flood plains or in river beds.
- (3) Alteration-Any human induced change in an existing condition of a critical area or its buffer. Alterations include, but are not limited to, grading, filling, channelizing, dredging, clearing (vegetation), construction, compaction, excavation, or any other activity that changes the character of the critical area.
- (4) Anadromous fish -Fish whose life cycle includes time spent in both fresh and salt water.
- (5) Aquifer-A geological formation, group of formations, or part of a formation that is capable of yielding a significant amount of water to a well or spring.
- (6) Aquifer recharge areas-Areas that, due to the presence of certain soils, geology, or surface water, act to recharge groundwater by percolation.
- (7) Base flood-A flood event having a one-percent chance of being equaled or exceeded in any given year, also referred to as the 100-year flood. Designations of base flood areas on flood insurance map(s) always include the letters A or V.
- (8) Best available science-Current scientific information used in the process to designate, protect, or restore critical areas that is derived from a valid scientific process as defined by WAC 365-195-900 through 925, as they now exist or may be hereinafter amended. Sources of the best available science are included in Citations of Recommended Sources of Best Available Science for Designating and Protecting Critical Areas published by the Washington State Department of Community, Trade and Economic Development.
- (9) Best management practices (BMPs)-Conservation practices or systems of practices and management measures that:
- (i) Control soil loss and reduce water quality degradation caused by high concentrations of nutrients, animal waste, toxics, and sediment;
 - (ii) Minimize adverse impacts to surface water and groundwater flow and circulation patterns and to the chemical, physical, and biological characteristics of wetlands;
 - (iii) Protect trees and vegetation designated to be retained during and following site construction and use native plant species appropriate to the site for revegetation of disturbed areas; and
 - (iv) Provide standards for proper use of chemical herbicides within critical areas.

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(10) Buffer or buffer zone-An area that is contiguous to and protects a critical area which is required for the continued maintenance, functioning, and/or structural stability of a critical area.

(11) Compensation project-Actions necessary to replace project-induced critical area and buffer losses, including land acquisition, planning, construction plans, monitoring, and contingency actions.

(12) Compensatory mitigation-Replacing project-induced losses or impacts to a critical area, and includes, but is not limited to, the following:

(i) Restoration-Actions performed to re-establish wetland functional characteristics and processes that have been lost by alterations, activities, or catastrophic events within an area that no longer meets the definition of a wetland.

(ii) Creation-Actions performed to intentionally establish a wetland at a site where it did not formerly exist.

(iii) Enhancement-Actions performed to improve the condition of existing degraded wetlands so that the functions they provide are of a higher quality.

(iv) Preservation-Actions taken to ensure the permanent protection of existing, high-quality wetlands.

(13) Conservation easement-A legal agreement that the property owner enters into to restrict uses of the land. Such restrictions can include, but are not limited to, passive recreation uses such as trails or scientific uses and fences or other barriers to protect habitat. The easement is recorded on a property deed, runs with the land, and is legally binding on all present and future owners of the property, therefore, providing permanent or long-term protection.

(14) Critical aquifer recharge areas- Areas with a critical recharging effect on aquifers used for potable water, including areas where an aquifer that is a source of drinking water is vulnerable to contamination that would affect the potability of the water, or is susceptible to reduced recharge. [WAC 365-190-030]

(15) Critical areas-Critical areas include any of the following areas or ecosystems: aquifer recharge areas, fish and wildlife habitat conservation areas, frequently flooded areas, geologically hazardous areas, and wetlands, as defined in RCW 36.70A, as it now exists or may be hereinafter amended, and this ordinance.

(16) Critical species-All animal and plant species listed by the state or federal government as threatened or endangered.

(17) Cumulative impacts or effects-The combined, incremental effects of human activity on ecological or critical areas functions and values. Cumulative impacts result when the effects of an action are added to or interact with other effects in a particular place and within a particular time. It is the combination of these effects, and any resulting environmental degradation, that should be the focus of

cumulative impact analysis and changes to policies and permitting decisions.

(18) Development-Any activity upon the land consisting of the removal, excavation, stockpiling, or grading of soil; the dredging of soil, sand, gravel, minerals, organic matter, or material of any kind; the dumping, discharging, or filling with any material, liquid or solid; the draining or flooding which causes alteration of surface water level; the placing or construction, reconstruction, demolition, or expansion of any structure; activities that result in the destruction, or significant reduction of the biologic or hydrologic functions and values of riparian or wetland vegetation, including clearing, harvesting, intentional burning, or planting of non-native vegetation; activities that result in a significant change of water temperature, a significant change of physical or chemical characteristics of surface water resources, including quantity, or the introduction of pollutants; the platting or the subdivision of land; Development activity does not include the following activities:

(i) Interior building improvements.

(ii) Exterior structure maintenance activities, including painting and roofing.

(iii) Routine landscape maintenance of established, ornamental landscaping, such as lawn mowing, pruning, and weeding.

(iv) Maintenance of the following existing facilities that does not expand the affected area: septic tanks (routine cleaning); wells; individual utility service connections; and individual cemetery plots in established and approved cemeteries.

(19) Development permit-Any permit issued by the County, or other authorized agency, for construction, land use, or the alteration of land.

(20) Erosion-The process whereby wind, rain, water, and other natural agents mobilize and transport particles.

(21) Erosion hazard areas-At least those areas identified by the U.S. Department of Agriculture National Resources Conservation Service as having a "severe" rill and inter-rill erosion hazard.

(22) Exotic-Any species of plants or animals, which are foreign to the County.

(23) Fish and wildlife habitat conservation areas- Areas that serve a critical role in sustaining needed habitats and species for the functional integrity of the ecosystem, and which, if altered, may reduce the likelihood that the species will persist over the long term. These areas may include, but are not limited to, rare or vulnerable ecological systems, communities, and habitat or habitat elements including seasonal ranges, breeding habitat, winter range, and movement corridors; areas with high relative population density or species richness; and locally important habitats and species, if so designated by the County. Fish and wildlife habitat conservation areas does not include such artificial features or constructs as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches

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that lie within the boundaries of, and are maintained by, a port district or an irrigation district or company. [WAC 365-190-030]

(24) Fish habitat-Habitat that is used by fish at any life stage at any time of the year, including potential habitat likely to be used by fish that could be recovered by restoration or management and includes off-channel habitat.

(25) Flood or flooding-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 of surface waters from any source.

(26) Floodplain-The total land area adjoining a river, stream, watercourse, or lake subject to inundation by the base flood.

(27) Frequently flooded areas- Lands in the flood plain subject to at least a one percent or greater chance of flooding in any given year, or within areas subject to flooding due to high groundwater. These areas include, but are not limited to, streams, rivers, lakes, wetlands, and areas where high groundwater forms ponds on the ground surface. [WAC 365-190-030]

(28) Functions and values-The beneficial roles served by critical areas including, but are 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; wave attenuation; protection from hazards; historical, archaeological, and aesthetic value protection; educational opportunities; and recreation. These beneficial roles are not listed in order of priority. Critical area functions can be used to help set targets (species composition, structure, etc.) for managed areas, including mitigation sites.

(29) Geologically hazardous areas-Areas that may not be suited to development consistent with public health, safety, or environmental standards, because of their susceptibility to erosion, sliding, earthquake, or other geological events as designated by WAC 365-190-120, as it now exists or may be hereinafter amended. Types of geologically hazardous areas include: erosion, steep slopes, landslide, seismic, and volcanic hazards.

(30) Groundwater-Water in a saturated zone or stratum beneath the surface of land or a surface water body.

(31) Growth Management Act-RCW 36.70A and 36.70B, 36.70C, as they now exist or may be hereinafter amended.

(32) Habitat conservation areas-Areas designated as fish and wildlife habitat conservation areas.

(33) Habitats of local importance-designated as fish and wildlife habitat conservation areas and include those areas found to be locally important by the County (WAC 365-190-030, as currently existing and hereafter amended).

(34) Hazard areas-Areas designated as frequently flooded areas or geologically hazardous areas due to potential for erosion, landslide, seismic activity, mine collapse, or other geological condition.

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(35) Hearings examiner-An examiner appointed by the Board of County Commissioners authorized to hear and make decisions on variances, land use permits, and certain appeals.

(36) Historic condition-Condition of the land, including flora, fauna, soil, topography, and hydrology that existed before the area and vicinity were developed or altered by human activity.

(37) Hydraulic project approval (HPA)-A permit issued by the Washington Department of Fish and Wildlife for modifications to waters of the state in accordance with Chapter 75.20 RCW, as it now exists or may be hereinafter amended.

(38) Hydric soil-A soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part. The presence of hydric soil shall be determined following the methods described in the Washington State Wetland Identification and Delineation Manual.

(39) In-kind compensation-To replace critical areas with substitute areas whose characteristics and functions closely approximate those destroyed or degraded by a regulated activity.

(40) Infiltration-The downward entry of water into the immediate surface of soil.

(41) Joint aquatic resource permit application-A single application form that may be used to apply for hydraulic project approvals, shoreline management permits, approvals of exceedance of water quality standards, water quality certifications, coast guard bridge permits, Washington State Department of Natural Resources use authorization, and U.S. Army Corps of Engineers permits.

(42) Landslide hazard areas-Areas that are potentially subject to risk of mass movement due to a combination of geologic landslide resulting from a combination of geologic, topographic, and hydrologic factors. These areas are typically susceptible to landslides because of a combination of factors including: bedrock, soil, slope gradient, slope aspect, geologic structure, groundwater, or other factors.

(43) Mitigation-Avoiding, minimizing, or compensating for adverse critical areas impacts. Mitigation, in the following sequential order of preference, is:

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

(ii) Minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps, such as project redesign, relocation, or timing, to avoid or reduce impacts;

(iii) Rectifying the impact to wetlands, critical aquifer recharge areas, frequently flooded areas, and habitat conservation areas by repairing, rehabilitating, or restoring the affected environment to the historical conditions or the conditions existing at the time of the initiation of the project;

(iv) Minimizing or eliminating the hazard by restoring or stabilizing the hazard area through engineered or other methods;

(v) Reducing or eliminating the impact or hazard over time by preservation and maintenance operations during the life of the action;

(vi) Compensating for the impact to wetlands, critical aquifer recharge areas, frequently flooded areas, and habitat conservation areas by replacing, enhancing, or providing substitute resources or environments; and

(vii) Monitoring the hazard or other required mitigation and taking remedial action when necessary.

(44) Monitoring-Evaluating the impacts of development proposals on the biological, hydrological, and geological elements of such systems, and assessing the performance of required mitigation measures throughout the collection and analysis of data by various methods for the purpose of understanding and documenting changes in natural ecosystems and features, including gathering baseline data.

(45) Native vegetation-Plant species that are indigenous to the area in question.

(46) Nonindigenous-See "Exotic."

(47) Off-site compensation-To replace critical areas away from the site on which a critical area has been impacted.

(48) On-site compensation-To replace critical areas at or adjacent to the site on which a critical area has been impacted.

(49) Ordinary high water mark (OHWM)-That mark which is 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, that the soil has a character distinct from that of the abutting upland in respect to vegetation.

(50) Out-of-kind compensation-To replace critical areas with substitute critical areas whose characteristics do not closely approximate those destroyed or degraded.

(51) Planning Administrator-The Benton County Planning Department Manager, Director, or designated representative who shall be responsible for the administration of this ordinance.

(52) Potable water-Water that is safe and palatable for human use.

(53) Practical alternative-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 has less impacts to critical areas.

(54) Primary association area-The area used on a regular basis by, in close association with, or is necessary for the proper functioning of the habitat of a critical species. Regular basis means that the habitat area is normally, or

usually known to contain a critical species, or based on known habitat requirements of the species, the area is likely to contain the critical species. Regular basis is species and population dependent. Species that exist in low numbers may be present infrequently yet rely on certain habitat types.

(55) Priority habitat-Habitat type or elements with unique or significant value to one or more species as classified by the State Department of Fish and Wildlife. A priority habitat may consist of a unique vegetation type or dominant plant species, a described successional stage, or a specific structural element.

(56) Project area-All areas within fifty (50) feet of the area proposed to be disturbed, altered, or used by the proposed activity or the construction of any proposed structures. When the action binds the land, such as a subdivision, short subdivision, binding site plan, planned unit development, or rezone, the project area shall include the entire parcel, at a minimum.

(57) Qualified professional-A person with experience and training in the pertinent scientific discipline, and who is a qualified scientific expert with expertise appropriate for the relevant critical area subject in accordance with WAC 365-195-905(4), as it now exists or may be hereinafter amended. A qualified professional must have obtained a B.S. or B.A. or equivalent degree in biology, engineering, environmental studies, fisheries, geomorphology, or related field, and two years of related work experience.

(i) A qualified professional for fish and wildlife habitats must have a degree in biology and professional experience related to the subject species or habitat.

(ii) A qualified professional for a geological hazard must be a professional engineering geologist, geologist, or civil engineer licensed in the State of Washington.

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

(iv) A qualified professional for wetlands shall be a certified professional wetland scientist or have, at a minimum: (1) a Bachelor's degree in hydrology, soil science, botany, ecology, or related field; and (2) at least two years of full-time work experience as a wetlands professional, including delineating wetlands using the state or federal manuals, preparing wetland reports, conducting function assessments, and developing and implementing mitigation plans.

(58) Recharge-The process involved in the absorption and addition of water to groundwater.

(59) Repair or maintenance-An activity that restores the character, scope, size, and design of a serviceable area, structure, or land use to its previously authorized and undamaged condition. Activities that change the character, size, or scope of a project beyond the original design and drain, dredge, fill, flood, or otherwise alter critical areas are not included in this definition.

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(60) Restoration-Measures taken to restore an altered or damaged natural feature including:

(i) Active steps taken to restore damaged wetlands, streams, protected habitat, or their buffers to the functioning condition that existed prior to an unauthorized alteration; and

(ii) Actions performed to reestablish structural and functional characteristics of the critical area that have been lost by alteration, past management activities, or catastrophic events.

(61) Scientific process-A valid scientific process is one that produces reliable information useful in understanding the consequences of a decision. The characteristics of a valid scientific process are as follows:

(i) Peer Review. The information has been critically reviewed by other qualified scientific experts in that scientific discipline.

(ii) Methods. The methods that were used are standardized in the pertinent scientific discipline or the methods have been appropriately peer-reviewed to ensure their reliability and validity.

(iii) Logical Conclusions and Reasonable Inferences. The conclusions presented are based on reasonable assumptions supported by other studies and are logically and reasonably derived from the assumptions and supported by the data presented.

(iv) Quantitative Analysis. The data have been analyzed using appropriate statistical or quantitative methods.

(v) Context. The assumptions, analytical techniques, data, and conclusions are appropriately framed with respect to the prevailing body of pertinent scientific knowledge.

(vi) References. The assumptions, techniques, and conclusions are well referenced with citations to pertinent existing information.

(62) Seismic hazard areas-Areas that are subject to severe risk of damage as a result of earthquake-induced ground shaking, slope failure, settlement, or soil liquefaction.

(63) Serviceable-Presently usable.

(64) Shorelines-All of the water areas of the State as defined in RCW 90.58.030, as it now exists or may be hereinafter amended, including reservoirs and their associated shorelands, together with the lands underlying them except shorelines of statewide significance.

(65) Shorelines of the State-The total of all "shorelines," as defined in RCW 90.58.030(2)(e), and "shorelines of statewide significance" within the State, as defined in RCW 90.58.030(2)(f), as now existing or hereafter amended.

(66) Shorelines of statewide significance-Those areas defined in RCW 90.58.030(2)(f), as it now exists or may be hereinafter amended.

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(67) Significant portion of its range-That portion of a species range likely to be essential to the long-term survival of the population in Washington.

(68) Soil survey-The most recent soil survey for the County by the National Resources Conservation Service, U.S. Department of Agriculture.

(69) Species-Any group of animals classified as a species or subspecies as commonly accepted by the scientific community.

(70) Species, endangered-Any fish or wildlife species that is threatened with extinction throughout all or a significant portion of its range and is listed by the state or federal government as an endangered species.

(71) Species of local importance-Those species of local concern due to their population status or their sensitivity to habitat manipulation, or that are game species (WAC 365-190-030, as currently existing and hereafter amended).

(72) Species, priority-Any fish or wildlife species requiring protective measures and/or management guidelines to ensure their persistence as genetically viable population levels as classified by the Washington Department of Fish and Wildlife, including endangered, threatened, sensitive, candidate and monitor species, and those of recreational, commercial, or tribal importance.

(73) Species, threatened-Any fish or wildlife species that is likely to become an endangered species within the foreseeable future throughout a significant portion of its range without cooperative management or removal of threats, and is listed by the state or federal government as a threatened species.

(74) Stream-See "Watercourse."

(75) Unavoidable-Adverse impacts that remain after all appropriate and practicable avoidance and minimization have been achieved.

(76) Water typing system-Waters classified according to WAC 222-16-030, as now existing or hereafter amended.

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

(78) Well-A bored, drilled, or driven shaft, or a dug hole whose depth is greater than the largest surface dimension for the purpose of withdrawing or injecting water or other liquids.

(79) Wetlands-Those 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 adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from nonwetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from nonwetland areas to mitigate the conversion of wetlands. [RCW 36.70A.030 (23)]

(80) Wetland classes, classes of wetlands, or wetland types-The descriptive classes of the Washington State Wetland Rating System for Eastern Washington - Revised (Ecology Publication #14-06-030)

(81) Wetland edge-The boundary of a wetland as delineated based on the definitions contained in this ordinance.

SECTION 9. JURISDICTION-CRITICAL AREAS.

(a) The County shall regulate all uses, activities, and developments within, adjacent to, or likely to affect, one or more critical areas, consistent with the best available science and the provisions herein. Benton County's critical areas maps depict the approximate location and extent of known critical areas and are displayed on various inventory maps at the County Planning Department.

(b) Critical areas regulated by this ordinance include:

- (1) Wetlands;
- (2) Critical aquifer recharge areas;
- (3) Frequently flooded areas;
- (4) Geologically hazardous areas; and
- (5) Fish and wildlife habitat conservation areas.

(c) All areas within unincorporated Benton County 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 ordinance.

SECTION 10. ACTIVITIES LIKELY TO AFFECT CRITICAL AREAS SUBJECT TO REGULATION.

Activities likely to affect critical areas shall be considered to be within the jurisdiction of these requirements and regulations to support the intent of this ordinance and ensure protection of the functions and values of critical areas.

SECTION 11. PROTECTION OF CRITICAL AREAS.

Any action taken pursuant to this ordinance shall result in equivalent or greater functions and values of the critical areas associated with the proposed action, as determined by the best available science. All actions and developments shall be designed and constructed in accordance with mitigation sequencing (Ord.609 §23) 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 except under the reasonable use provisions of this ordinance.

SECTION 12. BEST AVAILABLE SCIENCE.

(a) Protect functions and values of critical areas with special consideration to anadromous fish. Critical area reports and decisions to alter critical areas shall rely on the best available science to protect the functions and values of critical areas and must give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fish, such as salmon and bull trout, and their habitat.

(b) Best Available Science to be Consistent with Criteria. The best available science is that scientific information applicable to the critical area prepared by local, state, or federal natural resource agencies, a qualified scientific professional, or team of qualified scientific professionals that is consistent with criteria established in WAC 365-195-900 through WAC 365-195-925, as now existing and hereafter amended.

(c) Characteristics of a Valid Scientific Process. In the context of critical areas protection, a valid scientific process is one that produces reliable information useful in understanding the consequences of a local government's regulatory decisions, and in developing critical areas policies and development regulations that will be effective in protecting the functions and values of critical areas. To determine whether information received during the permit review process is reliable scientific information, the Planning Administrator shall determine whether the source of the information displays the characteristics of a valid scientific process. Such characteristics are as follows:

(1) Peer Review. The information has been critically reviewed by other persons who are qualified scientific experts in that scientific discipline. The proponents of the information have addressed the criticism of the peer reviewers. Publication in a refereed scientific journal usually indicates that the information has been appropriately peer-reviewed;

(2) Methods. The methods used to obtain the information are clearly stated and reproducible. The methods are standardized in the pertinent scientific discipline or, if not, the methods have been appropriately peer-reviewed to ensure their reliability and validity;

(3) Logical Conclusions and Reasonable Inferences. The conclusions presented are based on reasonable assumptions supported by other studies and consistent with the general theory underlying the assumptions. The conclusions are logically and reasonably derived from the assumptions and supported by the data presented. Any gaps in information and inconsistencies with other pertinent scientific information are adequately explained;

(4) Quantitative Analysis. The data has been analyzed using appropriate statistical or quantitative methods;

(5) Context. The information is placed in proper context. The assumptions, analytical techniques, data, and conclusions

are appropriately framed with respect to the prevailing body of pertinent scientific knowledge; and

(6) References. The assumptions, analytical techniques, and conclusions are well referenced with citations to relevant, credible literature and other pertinent existing information.

(7) Absence of Valid Scientific Information. Where there is an absence of valid scientific information or incomplete scientific information relating to a critical area leading to uncertainty about the risk to critical area function of permitting an alteration of or impact to the critical area, the Planning Administrator shall take a "precautionary or a no-risk approach," that strictly limits development and land use activities until the uncertainty is sufficiently resolved.

SECTION 13. APPLICABILITY.

(a) The provisions of this ordinance shall apply to all lands, all land uses and development activity, and all structures and facilities in unincorporated Benton County, whether or not a permit or authorization is required, and shall apply to every person, firm, partnership, corporation, group, governmental agency, or other entity that owns, leases, or administers land within the unincorporated portion of the County. No person, company, agency, or applicant shall alter a critical area or buffer except as consistent with the purposes and requirements of this ordinance.

(1) Benton County has opted into the Voluntary Stewardship Program (VSP), an alternative to the regulatory protection of critical areas on agricultural lands. A working group comprised of agricultural groups, environmental groups, and tribes is developing a work plan that identifies goals and benchmarks to protect critical areas while maintaining the viability of agriculture through voluntary, incentive based measures (WAC 365-1919-010(1) as now existing and hereafter amended).

(i) If the work plan developed by the VSP working group is approved by the Washington State Conservation Commission, the provisions or standards of this ordinance will not apply to agricultural activities, as defined in RCW 36.70A.703(1) and RCW 90.58.065 as now existing and hereafter amended.

(ii) If the work plan is not approved by the Washington State Conservation Commission, or fails to meet goals and benchmarks, the provisions and policies of the ordinance will apply to agricultural activities (RCW 36.70A.735 as now existing and hereafter amended).

(2) The Benton County Shoreline Master Program, adopted pursuant to RCW 90.58 as now existing and hereafter amended, shall apply to all land use and development activities occurring within shoreline jurisdiction. Within shoreline jurisdiction, if critical areas are present where the activities are to take place, compliance with the SMP is required. No further evaluation under this ordinance is required.

Commented [BF1]: Describes relationship to SMP

(b) The County shall not approve any permit or otherwise issue any authorization not expressly exempted by this ordinance to alter the condition of any land, water, or vegetation, or to construct

or alter any structure or improvement in, over, or on a critical area or associated buffer, without first ensuring compliance with the requirements of this ordinance.

(c) Approval of a permit or development proposal pursuant to the provisions of this ordinance does not discharge the obligation of the applicant to comply with the provisions of this ordinance.

SECTION 14. EXEMPTIONS.

(a) Exemption Request and Review Process. The proponent of the activity may submit a written request for exemption to the Planning Administrator that describes the activity and states the exemption listed in this section that applies. The Planning Administrator shall review the exemption request to verify that it complies with this ordinance and approve or deny the exemption. If the exemption is denied, the proponent may continue in the review process and shall be subject to the requirements of this ordinance.

(b) Exempt Activities and Impacts to Critical Areas. All exempted activities shall avoid potential impacts to critical areas. To be exempt from this ordinance does not give permission to degrade a critical area, conduct an activity that results in a loss of the functions or values of 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. The following developments, activities, and associated uses shall be exempt from the provisions of this ordinance, provided they are otherwise consistent with other local, state, and federal laws and requirements:

(1) Emergencies. Those activities necessary to prevent an immediate threat to public health, safety, or welfare, or that pose an immediate risk of damage to private property and that require remedial or preventative action in a timeframe too short to allow for compliance with the requirements of this ordinance.

(i) Emergency actions that create an impact to a critical area or its buffer shall use reasonable methods to address the emergency; in addition, they must have the least possible impact to the critical area or its buffer. The person or agency undertaking such action shall notify the County within one working day following commencement of the emergency activity. Within thirty (30) days, the Planning Administrator shall determine if the action taken was within the scope of the emergency actions allowed in this Subsection. If the Planning Administrator determines that the action taken, or any part of the action taken, was beyond the scope of an allowed emergency action, then enforcement provisions in Ord. 609 §30 (Unauthorized Alterations and Enforcement) may apply.

(ii) After the emergency, the person or agency undertaking the action shall fully fund and conduct necessary restoration and/or mitigation for any impacts to the critical area and buffers resulting from the emergency action in accordance with an approved critical area report and mitigation plan. The person or agency undertaking the action shall apply for review, and the alteration, critical area report, and mitigation plan shall be reviewed by the County in accordance with the

review procedures contained herein. Restoration and/or mitigation activities must be initiated within one (1) year of the date of the emergency, and completed in a timely manner as approved by the Planning Administrator.

(2) Operation, Maintenance, or Repair. Operation, maintenance, or repair of existing structures, infrastructure improvements, utilities, public or private roads, dikes, levees, or drainage systems, provided the activity does not further alter or increase the impact to, or encroach further within, the critical area or buffer and there is no increased risk to life or property as a result of the proposed operation, maintenance, or repair.

(3) Passive Outdoor Activities. Recreation, education, and scientific research activities that do not degrade the critical area, including fishing, hiking, and bird watching.

(4) Existing and ongoing agricultural activities, provided they implement applicable Best Management Practices (BMPs) contained in the latest editions of the USDA Natural Resources Conservation Service (NRCS) Field Office Technical Guide (FOTG).

(i) 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 wetlands rating, to a new agricultural use should be subject to the same regulations that govern new development.

(ii) Fish and wildlife habitat conservation areas. Existing and ongoing agricultural activities do not include tree cutting, road building, new agriculture, clearing, earth moving, mining, filling, burning or construction of buildings or other facilities in fish and wildlife habitat conservation areas.

(5) Artificial structures intentionally constructed from upland areas for purposes of storm-water drainage or water quality control, or ornamental landscape ponds, which are not part of a mitigation plan as described and detailed in this ordinance.

(6) Operation, maintenance, repair, or reconstruction of irrigation district delivery systems, irrigation infrastructure, irrigation canals or drainage ditches that lie within the boundaries of and/or are maintained by an irrigation district, provided the activity does not further the impact to, or encroach further within, the critical area or buffer and there is no increased risk to life or property as a result of the proposed activity. Includes canal lining projects, pipeline and pump replacement, and the incidental reduction or alteration of regulated wetlands due to canal lining or piping projects.

SECTION 15. EXCEPTION-PUBLIC AGENCY AND UTILITY.

(a) If the application of this ordinance would prohibit a development proposal by a public agency or public utility, the

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agency or utility may apply for an exception pursuant to this section.

(b) Exception Request and Review Process. An application for a public agency and utility exception shall be made to the County and shall include; a critical area report, including mitigation plan, if necessary; and any other related project documents, such as permit applications to other agencies, special studies, and environmental documents prepared pursuant to the State Environmental Policy Act (Chapter 43.21C RCW, as it now exists or may be hereinafter amended). The Hearings Examiner shall issue a decision based on review of the submitted information, a site inspection, and the proposal's ability to comply with public agency and utility exception review criteria in subsection (d).

(c) Hearings Examiner Review. The Hearings Examiner shall review the application and Planning Administrator's recommendation, and conduct a public hearing pursuant to the provisions of the Benton County Code. The Hearings Examiner shall approve, approve with conditions, or deny the request based on the proposal's ability to comply with all of the reasonable use exception review criteria in subsection (d).

(d) Public Agency and Utility Review Criteria. The criteria for review and approval of public agency and utility exceptions are as follows:

(1) There is no other practical alternative to the proposed development with less impact on the critical areas;

(2) The application of this ordinance would unreasonably restrict the ability to provide utility services to the public;

(3) The proposal does not pose an unreasonable threat to the public health, safety, or welfare on or off the development proposal site;

(4) The proposal attempts to protect and mitigate impacts to the critical area functions and values consistent with the best available science; and

(5) The proposal is consistent with other applicable regulations and standards.

(e) Burden of Proof. The burden of proof shall be on the applicant to bring forth evidence in support of the application and to provide sufficient information on which any decision has to be made on the application.

SECTION 16. EXCEPTION-REASONABLE USE.

(a) If the application of this ordinance would deny all reasonable use of the subject property, the property owner may apply for an exception pursuant to this section.

(b) Exception Request and Review Process. An application for a reasonable use exception shall be made to the County and shall include a critical area report, including mitigation plan, if necessary; and any other related project documents, such as permit applications to other agencies, special studies, and environmental documents prepared pursuant to the State Environmental Policy Act (Chapter 43.21C RCW, as it now exists or may be hereinafter amended) (SEPA documents). The Hearings Examiner shall issue a decision based on review of the submitted information, a site

inspection, and the proposal's ability to comply with reasonable use exception criteria in subsection (d).

(c) Hearings Examiner Review. The Hearings Examiner shall review the application and Planning Administrator's recommendation, and conduct a public hearing pursuant to the provisions of the Benton County Code. The Hearings Examiner shall approve, approve with conditions, or deny the request based on the proposal's ability to comply with all of the reasonable use exception review criteria in subsection (d).

(d) Reasonable Use Review Criteria. Criteria for review and approval of reasonable use exceptions are as follows:

- (1) The application of this ordinance would deny all reasonable use of the property;
- (2) No other reasonable use of the property has less impact on the critical area;
- (3) The proposed impact to the critical area is the minimum necessary to allow for reasonable use of the property;
- (4) The inability of the applicant to derive reasonable use of the property is not the result of actions by the applicant after the effective date of this ordinance;
- (5) The proposal does not pose an unreasonable threat to the public health, safety, or welfare on or off the development proposal site;
- (6) The proposal will result in no net loss of critical area functions and values consistent with the best available science; and
- (7) The proposal is consistent with other applicable regulations and standards.

(e) Burden of Proof. The burden of proof shall be on the applicant to bring forth evidence in support of the application and to provide sufficient information on which any decision has to be made on the application.

SECTION 17. ALLOWED ACTIVITIES.

(a) Critical Area Report. Activities allowed under this ordinance shall have been reviewed and permitted or approved by the County or other agency with jurisdiction, but do not require submittal of a separate critical area report, unless such submittal was required previously for the underlying permit. The Planning Administrator may apply conditions to the underlying permit or approval to ensure that the allowed activity is consistent with the provisions of this ordinance to protect critical areas.

(b) Required Use of Best Management Practices. All allowed activities shall be conducted using the best management practices that result in the least amount of impact to the critical areas. Best management practices shall be used for vegetation protection, construction management, erosion and sedimentation control, water quality protection, and regulation of chemical applications. Any incidental damage to, or alteration of, a critical area shall be restored, rehabilitated, or replaced at the responsible party's expense.

(c) Allowed Activities. The following activities are allowed:

(1) Permit Requests Subsequent to Previous Critical Area Review. Development permits and approvals that involve both discretionary land use approvals (such as subdivisions, rezones, or conditional use permits), and construction approvals (such as building permits) if all of the following conditions have been met:

(i) The provisions of this ordinance have been previously addressed as part of another approval;

(ii) There have been no material changes in the potential impact to the critical area or buffer since the prior review;

(iii) There is no new information available that is applicable to any critical area review of the site or particular critical area;

(iv) The permit or approval has not expired or, if no expiration date, no more than five years has elapsed since the issuance of that permit or approval; and

(v) Compliance with any standards or conditions placed upon the prior permit or approval has been achieved or secured.

(d) Modification to Existing Structures. Structural modification of, addition to, or replacement of an existing legally constructed structure that does not further alter or increase the impact to the critical area or buffer and there is no increased risk to life or property as a result of the proposed modification or replacement, provided that restoration of structures substantially damaged by fire, flood, or act of nature must be initiated within one year of the date of such damage, as evidenced by the issuance of a valid building permit, and diligently pursued to completion.

(e) Activities within the Improved Right-of-Way. Replacement, modification, installation, or construction of utility facilities, lines, pipes, mains, equipment, or appurtenances, not including substations, when such facilities are located within the improved portion of the public right-of-way or a County authorized private roadway except those activities that alter a wetland or watercourse, such as culverts or bridges, or result in the transport of sediment or increased stormwater; subject to the following:

(1) Critical area and/or buffer widths shall be increased, where possible, equal to the width of the right-of-way improvement, including disturbed areas; and

(2) Retention and replanting of native vegetation shall occur wherever possible along the right-of-way improvement and resulting disturbance.

(f) Minor Utility Projects. Utility projects which have minor or short-duration impacts to critical areas, as determined by the Planning Administrator in accordance with the criteria below, and which do not significantly impact the function or values of a critical area(s), provided that such projects are constructed with best management practices and additional restoration measures are provided. Such allowed minor utility projects shall meet the following criteria:

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(1) There is no practical alternative to the proposed activity with less impact on critical areas;

(2) The activity involves the placement of a utility pole, street signs, anchor, or vault or other small component of a utility facility; and

(3) The activity involves disturbance of an area less than seventy-five (75) square feet.

(g) Public and Private Pedestrian Trails. Public and private pedestrian trails, except in wetlands, fish and wildlife habitat conservation areas, or their buffers, subject to the following:

(1) The trail surface shall meet all other requirements including water quality standards;

(2) Critical area and/or buffer widths shall be increased, where possible, equal to the width of the trail corridor, including disturbed areas; and

(3) Trails proposed to be located in landslide or erosion hazard areas shall be constructed in a manner that does not increase the risk of landslide or erosion and in accordance with an approved geotechnical report.

(h) Minor Site Investigative Work. Work necessary for land use submittals, such as surveys, soil logs, percolation tests, and other related activities, where such activities do not require construction of new roads or significant amounts of excavation. In every case, impacts to the critical area shall be minimized and disturbed areas shall be immediately restored.

(i) Navigational Aids and Boundary Markers. Construction or modification of navigational aids and boundary markers.

(j) Conservation and restoration activities aimed at protecting the soil, water, vegetation, or wildlife.

(k) Activities such as legal hunting, hiking, canoeing, nature study, photography, fishing, education or scientific research and wildlife viewing.

SECTION 18. GENERAL REQUIREMENTS—CRITICAL AREA PROJECT REVIEW PROCESS.

(a) As part of this review, the Planning Administrator shall:

(1) Verify the information submitted by the applicant;

(2) Evaluate the project area and vicinity for critical areas;

(3) Determine whether the proposed project is likely to impact the functions or values of critical areas; and

(4) Determine if the proposed project adequately addresses the impacts and avoids impacts to the critical area associated with the project.

(b) If the proposed project is within, or is likely to impact a critical area, the Planning Administrator shall:

(1) Require a critical area report from the applicant that has been prepared by a qualified professional;

(2) Review and evaluate the critical area report;

(3) Determine whether the development proposal conforms to the purposes and performance standards of this ordinance, including the criteria in review criteria (Ord.609 §25);

(4) Assess the potential impacts to the critical area and determine if they can be avoided or minimized; and

(5) Determine if any mitigation proposed by the applicant is sufficient to protect the functions and values of the critical area and public health, safety, and welfare concerns consistent with the goals, purposes, objectives, and requirements of this ordinance.

SECTION 19. CRITICAL AREA IDENTIFICATION PROCESS.

(a) Site Inspection. Prior to the County's consideration of any proposed activity not found to be exempt under exemptions (Ord.609 §14) or allowed pursuant to allowed activities (Ord.609 §17), the Planning Administrator shall conduct a site inspection to review critical area conditions on site. The Planning Administrator shall notify the property owner of the inspection prior to the site visit. Reasonable access to the site shall be provided by the property owner for the purpose of inspections during any proposal review, restoration, emergency action, or monitoring period.

(b) Following a site inspection, the Planning Administrator shall review any other information available pertaining to the site and the proposal and consult with agencies with expertise as to critical areas, as necessary. As part of the review the Planning Administrator shall review data on the location of critical areas, such as the priority species and habitat database, to determine if critical areas are present. After these reviews, the Planning Administrator shall make a determination as to whether any critical areas may be affected by the proposal or whether the proposal will be adversely impacted by a critical area and if a more detailed critical area report shall be submitted.

(c) Decision.

(1) No Critical Areas Present. If after a site visit the Planning Administrator's analysis indicates that the project area is not within or adjacent to a critical area or buffer and that the proposed activity is unlikely to degrade the functions or values of a critical area, then the Planning Administrator shall rule that the critical area review is complete and no further review is required. A summary of this information shall be included in any staff report or decision on the underlying permit.

(2) Critical Areas Present, But No Impact-Waiver. If the Planning Administrator determines that there are critical areas within or adjacent to the project area, but that the best available science shows that the proposed activity is unlikely to degrade the functions or values of the critical area, the Planning Administrator may waive the requirement for a critical area report. A waiver may be granted if there is substantial evidence that all of the following requirements will be met:

(i) There will be no alteration of the critical area or buffer;

(ii) The development proposal will not impact the critical area in a manner contrary to the purpose, intent, and requirements of this ordinance; and

(iii) The proposal is consistent with other applicable regulations and standards.

(iv) A summary of this analysis and the findings shall be included in any staff report or decision on the underlying permit.

(3) Critical Areas May Be Affected by Proposal. If the Planning Administrator determines that a critical area or areas may be affected by the proposal, or is unable to determine if critical areas may be affected by the proposal, then the Planning Administrator shall notify the applicant that a critical area report must be submitted prior to further review of the project, and indicate each of the critical area types that should be addressed in the report.

(4) Planning Administrator Determination Subject to Reconsideration.

(i) A determination regarding the apparent presence or absence of one or more critical areas by the Planning Administrator is not an expert certification and the determination is subject to possible reconsideration and reopening if new information is received.

(ii) If the applicant wants greater assurance of the accuracy of the critical area review determination, the applicant may choose to hire a qualified professional to provide such assurances.

SECTION 20. CRITICAL AREA REPORT-REQUIREMENTS.

(a) Preparation by Qualified Professional. If required by the Planning Administrator in accordance with General Requirements-Critical Area Project Review Process (Ord.609 §18), the applicant shall submit a critical area report prepared by a qualified professional as defined herein.

(b) Incorporating Best Available Science. The critical area report shall use scientifically valid methods and studies in the analysis of critical area data and field reconnaissance and reference the source of science used. The critical area report shall evaluate the proposal and all probable impacts to critical areas in accordance with the provisions of this ordinance.

(c) Minimum Report Contents. At a minimum, the report shall contain the following:

(1) The name and contact information of the applicant, a description of the proposal, and identification of the permit requested;

(2) A copy of the site plan for the development proposal including: A map to scale depicting critical areas, buffers, the development proposal, and any areas to be cleared;

(3) The dates, names, and qualifications of the persons preparing the report and documentation of any fieldwork performed on the site;

(4) Identification and characterization of all critical areas, wetlands, water bodies, and buffers adjacent to the proposed project area;

(5) A statement specifying the accuracy of the report, and all assumptions made and relied upon;

(6) An assessment of the probable cumulative impacts to critical areas resulting from development of the site and the proposed development;

(7) An analysis of site development alternatives;

(8) A description of reasonable efforts made to apply mitigation sequencing pursuant to mitigation sequencing (Ord.609 §23) to avoid, minimize, and mitigate impacts to critical areas;

(9) Plans for adequate mitigation, as needed, to offset any impacts, in accordance with mitigation plan requirements (Ord.609 §24), including but not limited to:

(i) The impacts of any proposed development within or adjacent to a critical area or buffer on the critical area; and

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

(10) A discussion of the performance standards applicable to the critical area and proposed activity;

(11) Financial guarantees to ensure compliance;

(12) Critical area reports for two or more types of critical areas must meet the report requirements for each relevant type of critical area;

(13) Unless otherwise provided, a critical area report may be supplemented by or composed, in whole or in part, of any reports or studies required by other laws and regulations or previously prepared for and applicable to the development proposal site, as approved by the Planning Administrator; and

(14) Any additional information required for the critical area as specified in this ordinance.

SECTION 21. CRITICAL AREA REPORT-MODIFICATIONS TO REQUIREMENTS.

(a) Limitations to Study Area. The Planning Administrator may limit the required geographic area of the critical area report as appropriate if:

(1) The applicant, with assistance from the County, cannot obtain permission to access properties adjacent to the project area; or

(2) The proposed activity will affect only a limited part of the subject site.

(b) Modifications to Required Contents. The applicant may consult with the Planning Administrator prior to or during preparation of the critical area report to obtain County approval of modifications to the required contents of the report where, in the judgment of

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a qualified professional, more or less information is required to adequately address the potential critical area impacts and required mitigation.

(c) Additional Information Requirements. The Planning Administrator may require additional information to be included in the critical area report when determined to be necessary to the review of the proposed activity in accordance with this ordinance. Additional information that may be required, includes, but is not limited to:

(1) Historical data, including original and subsequent mapping, aerial photographs, data compilations and summaries, and available reports and records relating to the site or past operations at the site;

(2) Grading and drainage plans; and

(3) Information specific to the type, location, and nature of the critical area.

SECTION 22. MITIGATION REQUIREMENTS.

(a) The applicant shall avoid all impacts that degrade the functions and values of a critical area or areas. Unless otherwise provided in this ordinance, if alteration to the critical area is unavoidable, all adverse impacts to or from critical areas and buffers resulting from a development proposal or alteration shall be mitigated using the best available science in accordance with an approved critical area report and SEPA documents, so as to result in no net loss of critical area functions and values.

(b) Mitigation shall be in-kind and on-site, when possible, and sufficient to maintain the functions and values of the critical area, and to prevent risk from a hazard posed by a critical area.

(c) Mitigation shall not be implemented until after County approval of a critical area report that includes a mitigation plan, and mitigation shall be in accordance with the provisions of the approved critical area report.

SECTION 23. MITIGATION SEQUENCING.

Applicants shall demonstrate that all reasonable efforts have been examined with the intent to avoid and minimize impacts to critical areas. When an alteration to a critical area is proposed, such alteration shall be avoided, minimized, or compensated for in the following sequential order of preference:

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

(b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps, such as project redesign, relocation, or timing, to avoid or reduce impacts;

(c) Rectifying the impact to wetlands, critical aquifer recharge areas, frequently flooded areas, and habitat conservation areas by repairing, rehabilitating, or restoring the affected environment to the historical conditions or the conditions existing at the time of the initiation of the project;

(d) Minimizing or eliminating the hazard by restoring or stabilizing the hazard area through engineered or other methods;

(e) Reducing or eliminating the impact or hazard over time by preservation and maintenance operations during the life of the action;

(f) Compensating for the impact to wetlands, critical aquifer recharge areas, frequently flooded areas, and habitat conservation areas by replacing, enhancing, or providing substitute resources or environments; and

(g) Monitoring the hazard or other required mitigation and taking remedial action when necessary.

Mitigation for individual actions may include a combination of the above measures.

SECTION 24. MITIGATION PLAN REQUIREMENTS.

When mitigation is required, the applicant shall submit for approval by the Planning Administrator a mitigation plan as part of the critical area report. The mitigation plan shall include:

(a) Environmental Goals and Objectives. The mitigation plan shall include a written report identifying environmental goals and objectives of the compensation proposed and including:

(1) A description of the anticipated impacts to the critical areas and the mitigating actions proposed and the purposes of the compensation measures, including the site selection criteria; identification of compensation goals; identification of resource functions; and dates for beginning and completion of site compensation construction activities. The goals and objectives shall be related to the functions and values of the impacted critical area;

(2) A review of the best available science supporting the proposed mitigation and a description of the report author's experience to date in restoring or creating the type of critical area proposed; and

(3) An analysis of the likelihood of success of the compensation project.

(b) Performance Standards. The mitigation plan shall include measurable specific criteria for evaluating whether or not the goals and objectives of the mitigation project have been successfully attained and whether or not the requirements of this ordinance have been met.

(c) Detailed Construction Plans. The mitigation plan shall include written specifications and descriptions of the mitigation proposed, such as:

(1) The proposed construction sequence, timing, and duration;

(2) Grading and excavation details;

(3) Erosion and sediment control features;

(4) A planting plan specifying plant species, quantities, locations, size, spacing, and density; and

(5) Measures to protect and maintain plants until established.

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(d) These written specifications shall be accompanied by detailed site diagrams, scaled cross-sectional drawings, topographic maps showing slope percentage and final grade elevations, and any other drawings appropriate to show construction techniques or anticipated final outcome.

(e) Monitoring Program. The mitigation plan shall include a program for monitoring the mitigation measures and for assessing a completed project. A protocol shall be included outlining the schedule for site monitoring (for example, monitoring shall occur in years one, three, five, and seven after site construction), and how the monitoring data will be evaluated to determine if the performance standards are being met. A monitoring report shall be submitted as needed to document milestones, successes, problems, and contingency actions of the project. The project shall be monitored for a period necessary to establish that performance standards have been met, but not for a period less than five years.

(f) Contingency Plan. The mitigation plan shall include identification of potential courses of action, and any corrective measures to be taken if monitoring or evaluation indicates project performance standards are not being met.

(g) Financial Guarantees. The mitigation plan shall include financial guarantees, if necessary, to ensure that the mitigation plan is fully implemented. Financial guarantees ensuring fulfillment of the compensation project, monitoring program, and any contingency measures shall be posted in accordance with bonds to ensure mitigation, maintenance, and monitoring (Ord.609 §28).

SECTION 25. REVIEW CRITERIA.

The Planning Administrator shall make a determination as to whether the proposed activity and mitigation, if any, is consistent with the provisions of this ordinance, based on the following criteria:

(a) Any alteration to a critical area, unless otherwise provided for in this ordinance, shall be reviewed and approved, approved with conditions, or denied based on the proposal's ability to comply with all of the following criteria:

(1) The proposal minimizes the impact on critical areas in accordance with mitigation sequencing (Ord.609 §23);

(2) The proposal does not pose an unreasonable threat to the public health, safety, or welfare on or off the development proposal site;

(3) The proposal is consistent with the general purposes of this ordinance and the public interest;

(4) Any alterations permitted to the critical area are mitigated in accordance with mitigation requirements (Ord.609 §22);

(5) The proposal protects the critical area functions and values consistent with the best available science and results in no net loss of critical area functions and values; and

(6) The proposal is consistent with other applicable regulations and standards.

(b) The Planning Administrator may condition the proposed activity as necessary to mitigate impacts to critical areas and to conform to the standards required by this ordinance.

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(c) Except as provided for by this ordinance, any project that cannot adequately mitigate its impacts to critical areas in the sequencing order of preferences in mitigation sequencing (Ord.609 §22) shall be denied.

SECTION 26. COMPLETION OF THE CRITICAL AREA REVIEW.

The County's determination regarding critical areas pursuant to this ordinance shall be final concurrent with the final decision to approve, condition, or deny the development proposal or other activity involved.

SECTION 27. APPEALS.

Any decision to approve, condition, or deny a development proposal or other activity based on the requirements of this ordinance may be appealed by any person aggrieved to the Benton County Hearings Examiner and the following procedure shall apply:

(a) Appeals shall be filed within fourteen (14) days of the date of the decision being appealed. All appeals shall be in writing, in duplicate, shall be accompanied by a non-refundable fee as established by resolution of the Board of Benton County Commissioners, and shall be filed with the Hearings Examiner.

(b) Upon the filing of an appeal, the Hearings Examiner shall set the time and place at which the matter will be considered. At least a ten (10) day notice of such time and place together with one copy of the written appeal, shall be given to the official whose decision is being appealed and to the adverse parties of record, if any. The official whose decision is appealed shall transmit to the Hearings Examiner all of the records pertaining to the decision, together with such additional written report as he/she deems pertinent.

(c) Notice shall be given not less than twelve (12) days before the hearing date, in the following manner:

(1) By United States Postal Service addressed to the applicant, parties of record, and to the owners of all property within a distance of three-hundred (300) feet in any direction from the subject property. (Notices addressed to the last known address of the person making the most recent tax payment shall be deemed proper notice to the owner of such property.)

(2) By publication of a legal notice in a paper of general circulation.

(d) Upon hearing the appeal, the Hearings Examiner may reverse or affirm, wholly or in part, or may modify the decision appealed, and may make such decision as should be made and, to that end, shall have all the powers of the officials whose decision is appealed, as to the particular issue.

(e) The Hearings Examiner shall keep in a written record of the case, the findings of fact, upon which the action is based.

SECTION 28. BONDS TO ENSURE MITIGATION, MAINTENANCE, AND MONITORING.

(a) When mitigation required pursuant to a development proposal is not completed prior to the County final permit approval, such

as final plat approval or final building inspection, the County shall require the applicant to post a performance bond or other security in a form and amount deemed acceptable by the County. If the development proposal is subject to mitigation, the applicant shall post a mitigation bond or other security in a form and amount deemed acceptable by the County to ensure mitigation is fully functional.

(b) The bond shall be in the amount of one hundred twenty-five (125) percent of the estimated cost of the uncompleted actions or the estimated cost of restoring the functions and values of the critical area that are at risk, whichever is greater.

(c) The bond shall be in the form of a surety bond, performance bond, assignment of savings account, or an irrevocable letter of credit guaranteed by an acceptable financial institution with terms and conditions acceptable to the County Prosecuting Attorney's Office.

(d) Bonds or other security authorized by this section shall remain in effect until the County determines, in writing, that the standards bonded for have been met. Bonds or other security shall be held by the County for a minimum of five (5) years to ensure that the required mitigation has been fully implemented and demonstrated to function, and may be held for longer periods when necessary.

(e) Depletion, failure, or collection of bond funds shall not discharge the obligation of an applicant or violator to complete required mitigation, maintenance, monitoring, or restoration.

(f) Public development proposals shall be relieved from having to comply with the bonding requirements of this section if public funds have previously been committed for mitigation, maintenance, monitoring, or restoration.

(g) Any failure to satisfy critical area requirements established by law or condition including, but not limited to, the failure to provide a monitoring report within thirty (30) days after it is due or comply with other provisions of an approved mitigation plan shall constitute a default, and the County may demand payment of any financial guarantees or require other action authorized by the County code or any other law.

(h) Any funds recovered pursuant to this section shall be used to complete the required mitigation.

SECTION 29. GENERAL PROTECTIVE MEASURES.

(a) Temporary or Permanent Field Identification. Prior to a regulated activity taking place within or adjacent to a critical area, the County shall require temporary or permanent field markers delineating the critical area boundary and associated buffer. The type of field markers to be used will be agreed to by the applicant and the Planning Administrator depending on site conditions and inspection requirements. Field markers shall be spaced at a minimum of every fifty (50) feet, unless alternative placement or spacing is authorized by the Administrator. If required, the location of field markers must be shown on all site plans and final plats associated with the proposed development. Field markers shall remain in place until any required final inspections are completed and approved. Field markers may be waived by the Administrator if an alternative to field marking achieves the same objective, or if the development and construction activity(ies) is located at a

sufficient distance so that impacts to the critical area and its buffer are unlikely to occur. The Administrator may require permanent fencing and/or signage if necessary to protect a critical area and its buffer from adjacent land uses.

(b) Building Setback. Buildings and other structures shall be set back a minimum distance of ten (10) feet from the edges of all critical area buffers or from the edges of all critical areas, if no buffers are required. A setback that is less than 10 feet in width may be allowed if it can be demonstrated in the critical area report that building construction and long-term critical area maintenance can be achieved without encroaching upon the critical area or buffer.

(1) The following may be allowed in the building setback area:

(i) Landscaping;

(ii) Uncovered decks;

(iii) Building overhangs, if such overhangs do not extend more than eighteen (18) inches into the setback area; and

(iv) Impervious ground surfaces, such as driveways and patios.

(c) Notice on Title. 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 Benton County Auditor (Recording) according to the direction of the County. The notice should state the presence of the critical area or buffer on the property and the fact that limitations on actions in or affecting the critical area or buffer may exist.

SECTION 30. INSPECTION, UNAUTHORIZED CRITICAL AREA ALTERATIONS AND ENFORCEMENT.

(a) Reasonable access to the site shall be provided to the County, State, and federal agency review staff for the purpose of inspections during any proposal review, restoration, emergency action, or monitoring period.

(b) When a critical area or its buffer has been altered in violation of this ordinance, all ongoing development work shall stop and the critical area shall be restored. The County shall have the authority to issue a stop work order to cease all ongoing development work, and order restoration, rehabilitation, or replacement measures at the owner's or other responsible party's expense to compensate for violation of provisions of this ordinance.

(c) Requirement for Restoration Plan. All development work shall remain stopped until a restoration plan is prepared and approved by the Planning Administrator. Such a plan shall be prepared by a qualified professional using the best available science and shall describe how the actions proposed meet the minimum requirements described in Subsection (d). The Planning Administrator shall, at the violator's expense, seek expert advice in determining the adequacy of the plan. Inadequate plans shall be returned to the applicant or violator for revision and resubmittal.

(d) Minimum Performance Standards for Restoration.

(1) For alterations to critical aquifer recharge areas, frequently flooded areas, wetlands, and habitat conservation areas, the following minimum performance standards shall be met for the restoration of a critical area, provided that if the violator can demonstrate that greater functional and habitat values can be obtained, these standards may be modified:

(i) The historic structural and functional values shall be restored, including water quality and habitat functions;

(ii) The historic soil types and configuration shall be replicated;

(iii) The critical area and buffers shall be replanted with native vegetation that replicates the vegetation historically found on the site in species types, sizes, and densities. The historic functions and values should be replicated at the location of the alteration; and

(iv) Information demonstrating compliance with the requirements in mitigation plan requirements (Ord. 609 §24) shall be submitted to the Planning Administrator.

(2) For alterations to frequently flooded and geologically hazardous areas, the following minimum performance standards shall be met for the restoration of a critical area, provided that, if the violator can demonstrate that greater safety can be obtained, these standards may be modified:

(i) The hazard shall be reduced to a level equal to, or less than, the predevelopment hazard;

(ii) Any risk of personal injury resulting from the alteration shall be eliminated or minimized; and

(iii) Upon the determination of the Planning Administrator, the hazard area and buffers shall be replanted with native vegetation sufficient to minimize the hazard.

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

(f) Enforcement and Penalties. Any violation of this ordinance (Benton County Critical Area Regulations) shall be enforced under the provisions BCC Title 11 (Benton County Zoning Regulations), Chapter 11.54 Administration and Disposition of Infractions, as currently existing or hereafter amended. Additionally, penalties for violating the provisions of this ordinance are specified in BCC Title 11, Chapter 11.54 Administration and Disposition of Infractions, as currently existing or hereafter amended.

SECTION 31. DESIGNATION, RATING, AND MAPPING OF WETLANDS.

(a) Designating Wetlands. Wetlands are those areas, designated in accordance with WAC 173-22-035 and the Federal Wetlands Delineation Manual (1987, as now existing and hereafter amended) 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 adapted for

life in saturated soil conditions. All areas meeting the wetland designation criteria in the Federal Wetlands Delineation Manual and applicable regional supplements, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this ordinance.

(b) Wetlands Rating Categories: Wetlands shall be rated according to Ecology's Washington State Wetland Rating System for Eastern Washington - Revised (Ecology Publication #14-06-030), or as revised by the Washington State Department of Ecology. Wetland rating categories shall be applied as the wetland exists at the time of the adoption of this ordinance or as it exists at the time of an associated permit application. Wetland rating categories shall not change due to illegal modifications. Wetlands shall be rated according to the following categories:

- (1) Category I Wetlands. Those wetlands scoring a "Category I" rating under the Ecology Wetlands Rating System.
- (2) Category II Wetlands: Those wetlands scoring a "Category II" rating under the Ecology Wetlands Rating System;
- (3) Category III Wetlands: Those wetlands scoring a "Category III" rating under the Ecology Wetlands Rating System; and
- (4) Category IV Wetlands: Those wetlands scoring a "Category IV" rating under the Ecology Wetlands Rating System.

(c) Mapping: The approximate location and extent of critical areas are displayed on various inventory maps available at the Planning Department. These maps will be updated as inventories are completed in compliance with the requirements of the Growth Management Act, and additional maps may be added as appropriate. Benton County's critical areas maps depict the approximate location and extent of known or suspected wetlands, and are hereby adopted.

(1) These maps are to be used as a guide for the County, project applicants, and/or property owners, and may be continuously updated as new critical areas are identified. They are a reference and do not provide a final critical area designation.

(2) The exact location of a wetland's boundary shall be determined through the performance of a field investigation by a qualified professional wetland scientist applying the approved Federal Wetlands Delineation Manual (1987, as now existing and hereafter amended) and applicable regional supplements.

SECTION 32. ACTIVITIES ALLOWED IN WETLANDS.

The activities listed below are allowed in wetlands, in addition to those activities listed in, and consistent with, the provisions established in allowed activities (Ord.609 §17), and do not require submission of a critical area report, except where such activities result in a loss to the functions and values of a wetland or wetland buffer. These activities include:

(a) Conservation or preservation of soil, water, vegetation, fish, shellfish, and other wildlife that does not entail changing the structure or functions of the existing wetland.

(b) Enhancement of a wetland through the removal of non-native invasive species. Weeding shall be restricted to hand removal and weed material shall be removed from the site. Bare areas that remain after weed removal shall be revegetated with native shrubs and trees at natural densities. Some hand seeding may also be done over the bare areas with native herbs.

SECTION 33. CRITICAL AREA REPORT-ADDITIONAL REQUIREMENTS FOR WETLANDS.

In addition to the general critical area report requirements of Ord.609 §20, critical area reports for wetlands must meet the requirements of this section.

(a) Preparation by a Qualified Professional. A critical area report for wetlands shall be prepared by a qualified professional who has training and experience in preparing wetland reports. A qualified professional shall meet the standard specified in Ord.609 §8(57).

(b) Area Addressed in Critical Area Report. The following areas shall be addressed in a critical area report for wetlands:

(1) The project area of the proposed activity;

(2) All wetlands, shoreline areas, water features, floodplains, and other critical areas, and related buffers within two-hundred fifty (250) feet of the project area.

(c) Wetland analysis. In addition to the minimum required contents of critical area reports-requirements (Ord.609 §20), a critical area report for wetlands may, upon the determination of the Planning Administrator, contain an analysis of the wetlands including the following site and proposal related information:

(1) A written assessment and accompanying maps of the wetlands and buffers within two hundred fifty (250) feet of the project area, including the following information at a minimum:

(i) Wetland delineation and required buffers;

(ii) Estimated wetland acreage;

(iii) Wetland category;

(iv) Vegetative, faunal, and hydrologic characteristics;

(v) Soil and substrate conditions; and

(vi) Topographic elevations.

(2) A discussion of the water sources supplying the wetland and documentation of hydrologic regime (locations of inlet and outlet features, water depths throughout the wetland, evidence of recharge or discharge, evidence of water depths throughout the year).

(3) A description of the functions provided by the wetland and discussion of the relative degree to which the wetland is capable of providing the identified functions.

(4) A scale map of the development proposal site and adjacent area.

(5) As appropriate, a discussion of measures, including avoidance, minimization, and mitigation, proposed to preserve existing wetlands, habitat and native vegetation and restore any wetlands that were degraded prior to the current proposed land use activity.

(6) Proposed mitigation, if needed, including a written assessment and accompanying maps of the mitigation area, including the following information at a minimum:

(i) Existing and proposed wetland acreage;

(ii) Vegetative and faunal conditions;

(iii) Surface and subsurface hydrologic conditions including an analysis of existing and future hydrologic regime and proposed hydrologic regime for enhanced, created, or restored mitigation areas;

(iv) Relationship within watershed and to existing waterbodies;

(v) Soil and substrate conditions, topographic elevations;

(vi) Existing and proposed adjacent site conditions;

(vii) Required wetland buffers (including any buffer reduction and mitigation proposed to increase the plant densities, remove weedy vegetation, and replant the buffers);

(viii) A description of the nature and timing of any previous alterations to the wetland and buffer;

(ix) Property ownership; and

(x) Other wetlands and critical areas that may be functionally related to or associated with the subject wetland.

(7) A discussion of any ongoing management practices that will protect wetlands after the project site has been developed, including proposed monitoring and maintenance programs.

(8) A bond estimate for any installation (including site preparation, plant materials and installation, fertilizers, mulch, stakes) and the proposed monitoring and maintenance work for the required number of years.

d) When appropriate, the Planning Administrator may also require the critical area report to include an evaluation by the Washington State Department of Ecology or an independent qualified expert regarding the applicant's analysis and the effectiveness of any proposed mitigating measures or programs, and to include any recommendations as appropriate.

(e) The Planning Administrator shall determine if the mitigation and monitoring plans and bonding measures proposed by the applicant are sufficient to protect the public health, safety, and welfare, consistent with the goals, purposes, objectives and requirements of this ordinance.

SECTION 34. PERFORMANCE STANDARDS--GENERAL REQUIREMENTS.

(a) Activities may only be permitted in a wetland or wetland buffer if the applicant can show that the proposed activity will not degrade the functions and functional performance of the wetland and other critical areas.

(b) Wetland Buffers. The following buffer widths have been established in accordance with the best available science. They are based on the category of wetland and the habitat score as determined by a qualified wetland professional using the Washington State Wetland Rating System for Eastern Washington (Ecology Publication #14-06-030, or as revised and approved by Ecology). The standard buffer widths are provided in Table Section 34-1 below.

(1) The use of the standard buffer widths requires the implementation of the measures in Table Section 34-2, where applicable, to minimize the impacts of the adjacent land uses.

(2) If an applicant chooses not to apply the minimization measures in Table Section 34-2, then a 33% increase in the width of all buffers is required. For example, a 75-foot standard buffer would become a 100-foot buffer if the minimization measures are not implemented.

(3) The standard buffer widths assume that the buffer is vegetated with a native plant community appropriate for the ecoregion. If the buffer is unvegetated, sparsely vegetated, or vegetated with invasive species that do not perform needed functions, the buffer should either be planted to create the appropriate plant community in accordance with subsection (i) below, or the buffer should be widened to ensure that adequate functions of the buffer are provided.

(i) In lieu of increasing the buffer width where existing buffer vegetation is inadequate to protect the wetland functions and values, implementation of a buffer planting plan may substitute. Existing buffer vegetation is considered "inadequate" and will need to be enhanced through additional native plantings and (if appropriate) removal of non-native plants when: (1) non-native or invasive plant species provide the dominant cover, (2) vegetation is lacking due to disturbance and wetland resources could be adversely affected, or (3) enhancement plantings in the buffer could significantly improve buffer functions

(4) Measurement of Wetland Buffers. All buffers shall be measured from the wetland boundary as surveyed in the field.

(5) Increased Wetland Buffer Widths. The Planning Administrator may require increased buffer widths in accordance with the recommendations of an experienced, qualified professional wetland scientist, and the best available science on a case-by-case basis when a larger buffer is necessary to protect wetland functions and values based on site-specific characteristics.

Table Section 34-1. Wetland Buffers

Wetland Category	Standard Buffer Width 3-4 habitat points*	Additional buffer width if wetland scores 5 habitat points*	Additional buffer width if wetland scores 6-7 habitat points*	Additional buffer width if wetland scores 8-9 habitat points*
Category I: Based on total score	75 ft	Add 15 ft	Add 45 ft	Add 75 ft
Category I: Forested	75 ft	Add 15 ft	Add 45 ft	Add 75 ft
Category I: Bogs	190 ft	NA	NA	NA
Category I: Alkali	150 ft	N/A	NA	NA
Category I: Natural Heritage Wetlands	190 ft	N/A	NA	NA
Category II: Based on total score	75 ft	Add 15 ft	Add 45 ft	Add 75 ft
Category II: Vernal pool	150	NA	NA	NA
Category II: Forested	75 ft	Add 15 ft	Add 45 ft	Add 75 ft
Category III (all)	60 ft	Add 30 ft	Add 60 ft	Add 90 ft
Category IV (all)	40 ft	NA	NA	NA

*If the Department of Ecology updates its Wetland Rating Forms, these point ranges should be modified using Ecology’s conversion table once updated.

[**NOTE:** This ordinance is continued on the following page.]

Table Section 34-2. Required measures to minimize impacts to wetlands

(Measures are required, where applicable to a specific proposal)

Disturbance	Required Measures to Minimize Impacts
Lights	Direct lights away from wetland
Noise	▪ Locate activity that generates noise away from wetland ▪ If warranted, enhance existing buffer with native vegetation plantings adjacent to noise source ▪ For activities that generate relatively continuous, potentially disruptive noise, such as certain heavy industry or mining, establish an additional 10' heavily vegetated buffer strip immediately adjacent to the outer wetland buffer
Toxic runoff	▪ Route all new, untreated runoff away from wetland while ensuring wetland is not dewatered ▪ Establish covenants limiting use of pesticides within 150 ft of wetland ▪ Apply integrated pest management
Stormwater runoff	▪ Retrofit stormwater detention and treatment for roads and existing adjacent development ▪ Prevent channelized flow from lawns that directly enters the buffer ▪ Use Low Intensity Development techniques (per PSAT publication on LID techniques)
Change in water regime	Infiltrate or treat, detain, and disperse into buffer new runoff from impervious surfaces and new lawns
Pets and human disturbance	▪ Use privacy fencing OR plant dense vegetation to delineate buffer edge and to discourage disturbance using vegetation appropriate for the ecoregion. ▪ Place wetland and its buffer in a separate tract or protect with a conservation easement
Dust	Use best management practices to control dust
Disruption of corridors or connections	▪ Maintain connections to offsite areas that are undisturbed ▪ Restore corridors or connections to offsite habitats by replanting

(c) Wetland Buffer Width Averaging. The Planning Administrator may allow modification of the standard wetland buffer width in accordance with an approved critical area report and the best available science on a case-by-case basis by averaging buffer widths. Averaging of buffer widths may only be allowed where a qualified professional wetland scientist demonstrates that:

- (1) It will not reduce wetland functions or functional performance;
- (2) The wetland contains variations in sensitivity due to existing physical characteristics or the character of the buffer varies in slope, soils, or vegetation, and the wetland would benefit from a wider buffer in places and would not be adversely impacted by a narrower buffer in other places;
- (3) The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer; and

(4) The buffer width is not reduced to less than seventy-five (75) percent of the standard width or thirty-five (35) feet whichever is less.

(d) Buffer Uses. The following uses may be permitted within a wetland buffer in accordance with the review procedures of this ordinance, provided they are not prohibited by any other applicable law and they are conducted in a manner so as to minimize impacts to the buffer and adjacent wetland:

(1) Conservation and Restoration Activities. Conservation or restoration activities aimed at protecting the soil, water, vegetation, or wildlife.

(2) Passive Recreation. In the outer twenty-five (25) percent of wetland buffers, passive recreation facilities designed and in accordance with an approved critical area report, including pedestrian-only walkways, trails and wildlife viewing structures constructed with a surface that does not interfere with the permeability.

(3) Stormwater Management Facilities. Stormwater management facilities, limited to stormwater dispersion outfalls and bioswales, may be allowed within the outer twenty-five (25) percent of the buffer of Category III or IV wetlands, provided that:

(i) No other location is feasible; and

(ii) The location of such facilities will not degrade the functions or values of the wetland.

SECTION 35. PERFORMANCE STANDARDS-COMPENSATORY MITIGATION REQUIREMENTS.

Compensatory mitigation for alterations to wetlands shall achieve equivalent or greater biologic functions. Compensatory mitigation plans shall be consistent with the following: Washington State Department of Ecology's Guidance on Wetland Mitigation in Washington State, Part 1: Agency Policies and Guidance and Part 2: Developing Mitigation Plans (Version 1, Ecology Publication #06-06-011a, March 2006), as now existing and hereafter amended.

(a) Mitigation for Lost or Affected Functions. Compensatory mitigation actions shall address functions affected by the alteration to achieve functional equivalency or improvement and shall provide similar wetland functions as those lost, except when out-of-kind replacement will best meet formally identified watershed goals, such as replacement of historically diminished wetland types.

(b) Preference of Mitigation Actions. Mitigation actions that require compensation by replacing, enhancing, or substitution shall occur in the following order of preference:

(1) Restoring wetlands on upland sites that were formerly wetlands.

(2) Creating wetlands on disturbed upland sites such as those with vegetative cover consisting primarily of non-native introduced species. This should only be attempted when there is a consistent source of hydrology and it can be shown that the surface and subsurface hydrologic regime is conducive for the wetland community that is being designed.

(3) Enhancing significantly degraded wetlands in combination with restoration or creation. Such enhancement should be part of a mitigation package that includes replacing the impacted area meeting appropriate ratio requirements.

(c) Type and Location of Mitigation. Unless it is demonstrated that a higher level of ecological functioning would result from an alternate approach, compensatory mitigation for ecological functions shall be either in-kind and on-site, or in-kind and within the same sub-basin. Mitigation actions shall be conducted within the same subdrainage basin and on the site as the alteration except when all of the following apply:

(1) There are no reasonable on-site or in-subdrainage basin opportunities or on-site and in-subdrainage basin opportunities do not have a high likelihood of success, after a determination of the natural capacity of the site to mitigate for the impacts. Consideration should include: anticipated wetland mitigation replacement ratios, buffer conditions and proposed widths, hydrogeomorphic classes of on-site wetlands when restored, proposed flood storage capacity, potential to mitigate riparian fish and wildlife impacts (such as connectivity);

(2) Off-site mitigation has a greater likelihood of providing equal or improved wetland functions than the impacted wetland; and

(3) Off-site locations shall be in the same subdrainage basin.

(d) Mitigation Timing. Mitigation projects shall be completed with an approved monitoring plan prior to activities that will disturb wetlands. In all other cases, mitigation shall be completed immediately following disturbance and prior to use or occupancy of the activity or development. Construction of mitigation projects shall be timed to reduce impacts to existing fisheries, wildlife, and flora.

(e) Mitigation Ratios. Ratios for compensatory mitigation shall be as specified in Table Section 35-3. The ratios shall apply to creation, restoration, rehabilitation, or enhancement that is in-kind, is on-site, is the same category, is timed prior to or concurrent with alteration, and has a high probability of success. Greater ratios may apply in those cases of remedial actions resulting from unauthorized alterations. The first number specifies the acreage of replacement wetlands and the second specifies the acreage of wetlands altered.

[**NOTE:** This ordinance is continued on the following page.]

Table Section 35-3. Wetland Mitigation Ratios			
Category and Type of Wetland	Creation or Re-establishment	Rehabilitation	Enhancement
Category I: Bog, Natural Heritage site	Not considered possible	Case by case	Case by case
Category I: Mature Forested	6:1	12:1	24:1
Category I: Based on functions	4:1	8:1	16:1
Category II	3:1	6:1	12:1
Category III	2:1	4:1	8:1
Category IV	1.5:1	3:1	6:1

SECTION 36. PERFORMANCE STANDARDS-SUBDIVISIONS.

The subdivision and short subdivision of land in wetlands and associated buffers is subject to the following:

- (a) Land that is located wholly within a wetland or its buffer may not be subdivided.
- (b) Land that is located partially within a wetland or its buffer may be subdivided provided that an accessible and contiguous portion of each new lot is:
 - (1) Located outside of the wetland and its buffer; and
 - (2) Meets the minimum lot size requirements of the applicable zoning designation.

(c) Access roads and utilities serving the proposed subdivision may be permitted within the wetland and associated buffers only if the County determines that no other feasible alternative exists and when consistent with this ordinance.

SECTION 37. CRITICAL AQUIFER RECHARGE AREAS-CLASSIFICATION AND DESIGNATION.

Critical aquifer recharge areas (CARAs) are those areas with a critical recharging effect on aquifers used for potable water as defined by WAC 365-190-030(2), as it now exists or may be hereinafter amended.

- (a) Classification: Lands shall be classified as having either a high, moderate, or low susceptibility as determined by local conditions and the criteria provided in WAC 365-190-100, as it now exists or may hereafter amended.
- (b) Designation: All lands classified as having moderate to high susceptibility are hereby designated as critical aquifer recharge areas. Critical aquifer recharge areas in Benton County include:

- (1) Areas with high susceptibility:
 - (i) All floodplains and floodways for all rivers, creeks and wetlands mapped by local, state, and federal agencies; or
 - (ii) Areas of high groundwater identified by the Benton Franklin Health District where there exists inadequate depth to groundwater for the placement of a waste drainfield.
- (2) Areas with moderate susceptibility:
 - (i) Any areas with both of the following characteristics: Hydrologic A soils as identified in the Natural Resource Conservation Service Benton County Soil Survey and irrigated lands;
 - (ii) Designated wellhead protection areas. Includes Group A public water supply wells and those Group B wells with a wellhead protection plan filed with the Benton Franklin Health District;
 - (iii) Areas within one hundred (100) feet of all irrigation district main canals (one hundred (100) feet from edge of canal); or
 - (iv) Areas with alluvial soils.

SECTION 38. MAPPING OF CRITICAL AQUIFER RECHARGE AREAS.

(a) The approximate location and extent of critical areas are displayed on various inventory maps available at the Planning Department. These maps will be updated as inventories are completed in compliance with the requirements of the Growth Management Act, and additional maps may be added as appropriate. Benton County's critical areas maps depict the approximate location and extent of known critical aquifer recharge areas, and are hereby adopted.

(1) These maps are to be used as a guide for the County, 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.

SECTION 39. ACTIVITIES REQUIRING A CRITICAL AREA REPORT.

(a) Critical area reports are required for the following activities and similar activities as determined by the Planning Administrator when these activities are proposed to be located in a critical aquifer recharge area:

- (1) Biosolids land application;
- (2) Critical material handling, generating, or use;
- (3) Dairy operation;
- (4) Feedlot or livestock/animal operation;
- (5) Landfill;
- (6) Mining and/or gravel pits;
- (7) Sanitary waste discharge;
- (8) Wood treatment facilities;

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- (9) Storage, processing, or disposal of radioactive substances;
- (10) Above ground storage tanks, subject to WAC 173-303-640 as it now exists or may be hereinafter amended;
- (11) Below ground storage tanks, subject to WAC 173-360 as it now exists or may be hereinafter amended;
- (12) Hazardous waste generator (such as Boat or Motor Vehicle Repair Shops);
- (13) Junk yards and salvage yards;
- (14) Waste water application to land surface;
- (15) Commercial fertilizer storage;
- (16) Injection wells;
- (17) Sawmill;
- (18) Solid waste handling and recycling facility;
- (19) Cement and/or concrete plants;
- (20) Machine shops;
- (21) Chemical treatment and disposal facility; or
- (22) Any activities, particularly municipal, industrial, and commercial that involve the collection and storage of substances that, in sufficient quantity during an accidental or intentional release, would result in the impairment of the aquifer water to be used as potable drinking water liquids shall be regulated by this ordinance.

SECTION 40. CRITICAL AREA REPORT-ADDITIONAL REQUIREMENTS FOR CRITICAL AQUIFER RECHARGE AREAS.

In addition to the general critical area report requirements of Ord.609 §20, critical area reports for critical aquifer recharge areas must meet the requirements of this section.

(a) Preparation by a Qualified Professional. A critical area report for critical aquifer recharge areas shall be prepared by a qualified professional who has training and experience in preparing hydrogeological reports. A qualified professional shall meet the standard specified in Ord.609 §8(57).

(b) Area Addressed in Critical Area Report. The following areas shall be addressed in a critical area report for critical aquifer recharge areas:

- (1) A detailed narrative describing the project, including, but not limited to, associated grading and filling, structures, utilities, and those activities, practices, materials, or chemicals that have a potential to adversely affect the quantity or quality of underlying aquifers;
- (2) Site plan indicating the location of all proposed improvements and aquifer recharge areas;
- (3) A hydrogeological evaluation that includes at a minimum, a description and/or evaluation of the following:

- (i) Site location, topography, drainage and surface water bodies;
- (ii) Soils and geologic units underlying the site;
- (iii) Groundwater characteristics of the area, including flow direction, gradient, and existing groundwater quality;
- (iv) Location and characteristics of wells and springs within 300 feet of the perimeter of the property;
- (v) Evaluation of existing on-site groundwater recharge;
- (vi) Evaluation of the potential impact of the proposed development on groundwater quality, both short and long term, based on an assessment of the cumulative impacts of the proposal in combination with existing and potential future land use activities; and
- (vii) A proposed mitigation plan.

SECTION 41. PERFORMANCE STANDARDS-GENERAL REQUIREMENTS.

- (a) Activities may only be permitted in a critical aquifer recharge area if the applicant can show that the proposed activity will not cause contaminants to enter the aquifer and that the proposed activity will not adversely affect the recharging of the aquifer.
- (b) Proposed groundwater uses must provide evidence that the proposed water source is physically and legally available and meets drinking water standards.
- (c) Groundwater uses, withdrawals, and recharge must be consistent with RCW 90.44.050 and with applicable rules adopted pursuant to RCW 90.22 and 90.54 when making decisions under RCW 19.27.097 and RCW 58.17.110.

SECTION 42. FREQUENTLY FLOODED AREAS-DESIGNATION.

Frequently flooded areas shall be those floodways and associated floodplains designated by the Federal Emergency Management Agency (FEMA) flood hazard classifications as delineated on the most current available Flood Insurance Rate Maps (FIRM) for Benton County, or as subsequently revised by FEMA, as being within the 100-year flood plain.

SECTION 43. MAPPING OF FREQUENTLY FLOODED AREAS.

(a) The approximate location and extent of critical areas are displayed on various inventory maps available at the Planning Department. These maps will be updated as inventories are completed in compliance with the requirements of the Growth Management Act, and additional maps may be added as appropriate. Benton County's critical areas maps depict the approximate location and extent of known frequently flooded areas, and are hereby adopted.

- (1) Benton County's critical areas maps and the Federal Emergency Management Agency (FEMA) flood hazard classifications as delineated on the most current available Flood Insurance Rate Maps (FIRM) for Benton County depict the approximate location and extent of frequently flooded areas, and are hereby adopted.

SECTION 44. FREQUENTLY FLOODED AREAS-REGULATION.

Frequently flooded areas are those same areas regulated by the Flood Damage Prevention Ordinance, Chapter 3.26 of the Benton County Code, as it now exists or may be hereinafter amended, and are protected through regulations provided in that Chapter.

SECTION 45. GEOLOGICALLY HAZARDOUS AREAS.

Geologically hazardous areas include areas susceptible to erosion, land sliding, bluff failures, or other geological events. Such areas pose a threat to the health and safety of citizens when incompatible development is sited in areas of significant hazard. Such incompatible development may not only place itself at risk, but also may increase the hazard to surrounding development and use.

SECTION 46. DESIGNATION OF SPECIFIC HAZARD AREAS.

Geologically hazardous areas are designated as those areas that are susceptible to one or more of the following types of hazards:

(a) Erosion Hazard Areas.

- (1) Slopes between 15 percent and 39 percent;
- (2) Slopes 40 percent or greater; or
- (3) Slopes 15 percent or greater that contain soils or soils complexes identified by the U.S. Department of Agriculture's Natural Resource Conservation Service or the Soil Survey for Benton County as having, "severe" or "very severe" erosion hazard potential.

(b) Landslide Hazard Areas.

- (1) Slopes 15 percent or greater that have a relatively permeable geologic unit overlying a relatively impermeable unit and have springs or ground water seeps;
- (2) Slopes 40 percent or greater with a vertical relief of 10 or more feet except areas composed of competent rock and properly engineered slopes designed and approved by a geotechnical engineer licensed in the state of Washington and experienced with the site;
- (3) Potentially unstable slopes resulting from rapid river or stream incision, river or stream bank erosion, or undercutting by wave action. These include slopes exceeding 10 feet in height adjacent to rivers, streams, lakes and shorelines with more than a 35 percent gradient;
- (4) Areas that have shown evidence of historic failure or instability, including, but not limited to, back-rotated benches on slopes; areas with structures that exhibit structural damage such as settling and racking of building foundations; and areas that have toppling, leaning, or bowed trees caused by ground surface movement;
- (5) Slopes having gradients steeper than 80 percent subject to rock fall during seismic shaking;
- (6) Areas that are at risk of mass wasting due to seismic forces;
- (7) Areas of historical landslide movement; or

(8) Areas mapped by the State of Washington Department of Natural Resources as landslides or landslide deposits.

(9) Areas identified as landslide runout areas or areas at the top and sides of landslide hazards likely to slide.

(c) Seismic hazard areas shall include areas subject to a severe risk of earthquake damage as a result of seismically induced ground shaking, differential settlement, slope failure, settlement, lateral spreading, mass wasting, surface faulting or soil liquefaction. They include areas identified by the State of Washington Department of Natural Resources as having liquefaction susceptibility of moderate, moderate to high, and/or high.

(d) Other Hazard Areas. Geologically hazard areas shall include those areas subject to severe risk of damage as a result of other geological events including mass wasting, debris flows, rock falls and differential settlement.

SECTION 47. MAPPING OF GEOLOGICALLY HAZARDOUS AREAS.

(a) The approximate location and extent of critical areas are displayed on various inventory maps available at the Planning Department. These maps will be updated as inventories are completed in compliance with the requirements of the Growth Management Act, and additional maps may be added as appropriate. Benton County's critical areas maps depict the approximate location and extent of known or suspected geologically hazardous areas, and are hereby adopted.

(1) These maps are to be used as a guide for the County, 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.

SECTION 48. CRITICAL AREA REPORT-ADDITIONAL REQUIREMENTS FOR GEOLOGICALLY HAZARDOUS AREAS-GEOTECHNICAL ENGINEERING REPORT.

In addition to the general critical area report requirements of Ord.609 §20, critical area reports for geologically hazardous areas shall meet the requirements of this section. This section shall apply to those hazards identified in Ord.609 §46(a)(2), (b), (c), and (d).

(a) Preparation by a Qualified Professional. A critical area report for geologically hazardous areas shall be prepared by a qualified professional who has training and experience in preparing reports for the relevant type of hazard. A qualified professional shall meet the standard specified in Ord.609 §8(57).

(b) Geotechnical Engineering Report. The technical information for a project which has the potential to be damaged by a geologically hazardous area shall include a geotechnical engineering report, prepared by a qualified professional as described in subsection (a). The qualified professional shall present and include the following information:

(1) Site Plan. The report shall include a copy of the site plan for the proposal showing:

(i) The height of slope, slope gradient, and cross section of the project area;

(ii) The location and description of surface water runoff;

(iii) The location of springs, seeps, or other surface expressions of ground water on or within two hundred feet of the project area or that have potential to be affected by the proposal;

(iv) Proposed development, including the location of existing and proposed structures, fill, storage of materials, and drainage facilities, with dimensions indicating distances to the floodplain, if available;

(v) Clearing limits; and

(vi) The topography, in five-foot contours, or as deemed appropriate by the Planning Administrator, of the project area and all hazard areas addressed in the report.

(2) Geotechnical Analysis. The geotechnical analysis shall specifically include:

(i) A description of the extent and type of vegetative cover;

(ii) A description of subsurface conditions based on data from site-specific explorations;

(iii) An estimate of load capacity including surface and ground water conditions, public and private sewage disposal systems, fills and excavations and all structural development;

(iv) An estimate of slope stability and the effect construction and placement of structures will have on the slope over the estimated life of the structure;

(v) An estimate of the bluff retreat rate that recognizes and reflects potential catastrophic events such as seismic activity or a one hundred year storm event;

(vi) Consideration of the run-out hazard of landslide debris and/or the impacts of landslide run-out on down slope properties;

(vii) A study of slope stability including an analysis of proposed angles of cut and fill and site grading;

(viii) Recommendations for building limitations, structural foundations, and an estimate of foundation settlement; and

(ix) An analysis of proposed surface and subsurface drainage, and the vulnerability of the site to erosion.

(3) Geotechnical Engineering Report. The qualified professional shall provide engineering recommendations for the following:

(i) Parameters for design of site improvements including appropriate foundations and retaining structures. These should include allowable load and resistance capacities for bearing and lateral loads, installation considerations, and estimates of settlement performance;

(ii) Recommendations for drainage and subdrainage improvements;

(iii) Earthwork recommendations including clearing and site preparation criteria, fill placement and compaction criteria, temporary and permanent slope inclinations and protection, and temporary excavation support, if necessary;

(iv) Mitigation of adverse site conditions including slope stabilization measures and seismically unstable soils, if appropriate; and

(v) The report shall make a recommendation for the minimum building setback from any geologic hazard based upon the geotechnical analysis.

(4) Seismic Hazard Areas. A critical area report for a seismic hazard area shall also meet the following requirements:

(i) The site map shall show all known and mapped faults within two hundred feet of the project area or that have potential to be affected by the proposal;

(ii) The analysis shall include a complete discussion of the potential impacts of seismic activity on the site (for example, forces generated, fault displacement and liquefaction potential); and

(iii) Where liquefaction risks of high, moderate to high or moderate exist, the report shall address soil and structural mitigation measures.

SECTION 49. CRITICAL AREA REPORT-ADDITIONAL REQUIREMENTS FOR GEOLOGICALLY HAZARDOUS AREAS-GEOTECHNICAL ENGINEERING RISK ASSESSMENT.

In addition to the general critical area report requirements of Ord.609 §20, critical area reports for those hazards in Ord.609 §46(a)(1), must meet the requirements of this section.

(a) Preparation by a Qualified Professional. A critical area report for geologically hazardous areas shall be prepared by a qualified professional who has training and experience in preparing reports for the relevant type of hazard. A qualified professional shall meet the standard specified in Ord. 609 §8(57).

(b) Geotechnical Engineering Risk Assessment: The technical information for a project shall include a geotechnical engineering risk assessment, prepared by a qualified professional as described in Subsection (a). The qualified professional shall present and include the following information:

(1) Site Plan. The assessment shall include a copy of the site plan for the proposal showing:

(i) The height of slope and slope gradient of the project area;

(ii) The location of springs, seeps, or other surface expressions of ground water on or within two hundred feet of the project area or that have potential to be affected by the proposal;

(iii) The location and description of surface water runoff;

(iv) The top and toe of all unstable slopes and locations of erosion hazard areas;

(vi) Proposed development, including the location of existing and proposed structures, fill, storage of materials, and drainage facilities, with dimensions indicating distances to the floodplain, if available; and

(vii) Clearing limits.

(2) A description of the geology of the site and the proposed development;

(3) An assessment of the potential impact the project may have on the hazard area;

(4) An assessment of what potential impact the hazard area may have on the project;

(5) Appropriate mitigation measures, if any;

(6) A determination by the qualified professional as to whether further analysis is necessary. If further analysis is necessary, a geotechnical engineering report, pursuant to Ord.609 §48 is required; and

(7) The assessment must be signed by and bear the seal of the engineer or geologist that prepared it.

(c) If additional hazards are identified at the activity site, a geotechnical engineering report, pursuant to Ord. 609 §48 is required.

SECTION 50. PERFORMANCE STANDARDS-GENERAL REQUIREMENTS.

(a) If it is determined by the geotechnical engineering report that either the proposed development or adjacent properties will be at risk of damage from the geologic hazard, or that the project will increase the risk of occurrence of the hazard, and there are no adequate mitigation measures to alleviate the risks, the proposed development cannot be approved by the Planning Administrator.

(b) Development and grading plans shall comply with Benton County Building Department and Benton-Franklin Health District requirements. Additional permits may apply.

(c) Development activities within seismic hazard areas shall comply with the following:

(1) All new development shall conform to the applicable provisions of the International Building Code (Benton County Building Code, BCC 3.04), as existing and hereafter amended by Benton County, which contains structural standards and safeguards to reduce risks from seismic activity.

(2) Construction of commercial, industrial, public assembly, or any publicly owned building shall comply with the requirements of Ord.609 §48 which includes the submittal of a geotechnical report. The results or conclusions of the evaluation shall be considered a condition of development approval.

SECTION 51. DESIGNATION OF FISH AND WILDLIFE HABITAT
CONSERVATION AREAS.

(a) Fish and wildlife habitat conservation areas include:

(1) Areas where federal or state designated endangered, threatened, and sensitive species have a primary association.

(i) Federal designated endangered and threatened species are those fish, wildlife, and plant species identified by the U.S. Fish and Wildlife Service and the National Marine Fisheries Service that are in danger of extinction or threatened to become endangered. The U.S. Fish and Wildlife Service and the National Marine Fisheries Service should be consulted as necessary for current federal listing status.

(ii) State designated endangered, threatened, and sensitive species are those fish, wildlife and plant species identified by the Washington State Department of Fish and Wildlife and/or State of Washington Natural Heritage Program. The State of Washington's Department of Fish and Wildlife and/or Natural Heritage Program maintains the most current listing and should be consulted as necessary for current state listing status.

(2) State priority habitats and areas associated with state priority species.

(i) State of Washington Priority Habitats and Species are considered priorities for conservation and management. The State of Washington's Department of Fish and Wildlife should be consulted for current listing of priority habitats and species.

(3) Habitats and species of local importance. Benton County designates the following as a habitat and species of local importance:

(i) Shrub-steppe habitat. Critical to supporting priority species in Benton County, shrub-steppe habitat as identified by the Washington State Department of Fish and Wildlife and included in the State Priority Habitats and Species List.

(4) Waters of the state, as defined in RCW 90.48.020, as it now exists or may be hereinafter amended, and include lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and water courses in Washington State.

(i) For the purposes of this ordinance, Benton County hereby adopts the water typing system specified in WAC 222-16-030 as existing and hereafter amended.

(5) Naturally occurring ponds under twenty 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 three years duration) and landscape amenities. However, 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;

(6) Lakes, ponds, streams and rivers planted with native fish populations, including fish planted under the auspices of federal, state, local or tribal programs or which supports priority fish species as identified by the Washington State Department of Fish and Wildlife;

(7) Washington State Wildlife Areas are defined, established, and managed by the Washington State Department of Fish and Wildlife;

(8) Washington State Natural Area Preserves and Natural Resource Conservation Areas are defined, established, and managed by the Washington State Department of Natural Resources; and

(b) All areas meeting one or more of these criteria, regardless of any formal identification, are hereby designated fish and wildlife habitat conservation areas and are subject to the provisions of this ordinance and shall be managed consistent with the best available science.

(c) Fish and wildlife habitat conservation areas does not include such artificial features or constructs as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches that lie within the boundaries of, and are maintained by, a port district or an irrigation district or company.

SECTION 52. MAPPING OF FISH AND WILDLIFE HABITAT CONSERVATION AREAS.

(a) Mapping. The approximate location and extent of critical areas are displayed on various inventory maps available at the Planning Department. These maps will be updated as inventories are completed in compliance with the requirements of the Growth Management Act, and additional maps may be added as appropriate. Benton County's critical areas maps depict the approximate location and extent of known or suspected fish and wildlife habitat conservation areas, and are hereby adopted.

(1) These maps are to be used as a guide for the County, 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.

SECTION 53. CRITICAL AREA REPORT-ADDITIONAL REQUIREMENTS FOR HABITAT CONSERVATION AREAS.

In addition to the general critical area report requirements of Ord.609 §20, critical area reports for fish and wildlife habitat conservation areas must meet the requirements of this section. Critical area reports for two or more types of critical areas must meet the report requirements for each relevant type of critical area.

(a) Preparation by a Qualified Professional. A critical areas report for a fish and wildlife habitat conservation area shall be prepared by a qualified professional with experience preparing reports for the relevant type of habitat. A qualified professional shall meet the standard specified in Ord.609 §8(57).

(b) Areas Addressed in Critical Area Report. The following areas shall be addressed in a critical area report for habitat conservation areas:

- (1) The project area of the proposed activity;
- (2) All habitat conservation areas and recommended buffers within three-hundred (300) feet; and
- (3) All shoreline areas, floodplains, other critical areas, and related buffers within three-hundred (300) feet.

(c) Habitat Assessment. A habitat assessment is an investigation of the project area to evaluate the potential presence or absence of designated critical fish or wildlife species or habitat. A critical area report for a habitat conservation area shall contain an assessment of habitats including the following site and proposal related information at a minimum:

- (1) Detailed description of vegetation on and adjacent to the project area and its associated buffer;
- (2) Identification of any species of local importance, priority species, or endangered, threatened, sensitive, or candidate species that have a primary association with habitat on or adjacent to the project area, and assessment of potential project impacts to the use of the site by the species;
- (3) A discussion of any federal, state, or local special management recommendations, including Washington Department of Fish and Wildlife habitat management recommendations, that have been developed for species or habitats located on or adjacent to the project area;
- (4) A detailed discussion of the direct and indirect potential impacts on habitat by the project, including potential impacts to water quality;
- (5) A discussion of measures, including avoidance, minimization, and mitigation, proposed to preserve existing habitats and restore any habitat that was degraded prior to the current proposed land use activity and to be conducted in accordance with mitigation sequencing Ord.609 §23;
- (6) A discussion of ongoing management practices that will protect habitat after the project site has been developed, including proposed monitoring and maintenance programs; and
- (7) Agency Consultation May Be Required. When appropriate due to the type of habitat or species present or the project area conditions, the Planning Administrator may also require the critical area report/habitat assessment to include a request for consultation with the Washington State Department of Fish and Wildlife or the local Confederated Indian Tribe or other appropriate agency.

SECTION 54. PERFORMANCE STANDARDS—GENERAL REQUIREMENTS.

(a) Alterations shall not degrade the functions and values of habitat. A habitat conservation area may be altered only if the proposed alteration of the habitat or the mitigation proposed does not degrade the quantitative and qualitative functions and values of the habitat. All new structures and land alterations shall be prohibited from habitat conservation areas, except in accordance with this ordinance.

(b) Nonindigenous Species. No plant, wildlife, or fish species not indigenous to the region shall be introduced into a habitat

conservation area unless authorized by a state or federal permit or approval.

(c) Mitigation and Contiguous Corridors. Mitigation sites shall be located to preserve or achieve contiguous wildlife habitat corridors in accordance with a mitigation plan that is part of an approved critical area report to minimize the isolating effects of development on habitat areas, so long as mitigation of aquatic habitat is located within the same aquatic ecosystem as the area disturbed.

(d) Approvals of Activities. The Planning Administrator shall condition approvals of activities allowed within or adjacent to a habitat conservation area or its buffers, as necessary to minimize or mitigate any potential adverse impacts. Conditions shall be based on the best available science and may include, but are not limited to, the following:

- (1) Establishment of buffer zones;
- (2) Preservation of critically important vegetation and/or habitat features such as snags and downed wood;
- (3) Limitation of access to the habitat area, including fencing to deter unauthorized access;
- (4) Seasonal restriction of construction activities;
- (5) Establishment of a duration and timetable for periodic review of mitigation activities; and
- (6) Requirement of a performance bond, when necessary, to ensure completion and success of proposed mitigation.

(e) Mitigation and Equivalent or Greater Biological Functions. Mitigation of alterations to habitat conservation areas shall achieve equivalent or greater biologic and hydrologic functions and shall include mitigation for adverse impacts upstream or downstream of the development proposal site. Mitigation shall address each function affected by the alteration to achieve functional equivalency or improvement on a per-function basis.

(f) Approvals and the Best Available Science. Any approval of alterations or impacts to a habitat conservation area shall be supported by the best available science.

(g) Buffers.

(1) Establishment of Buffers. The Planning Administrator shall require the establishment of buffer areas for activities adjacent to habitat conservation areas when needed to protect habitat conservation areas. Buffers shall consist of an undisturbed area of native vegetation or areas identified for restoration established to protect the integrity, functions, and values of the affected habitat. Required buffer widths shall reflect the sensitivity of the habitat and the type and intensity of human activity proposed to be conducted nearby and shall be consistent with the management recommendations issued by the Washington State Department of Fish and Wildlife.

(2) Rivers, Lakes, Ponds, and Streams. Waterbodies classified by the water typing system specified in WAC 222-16-030 have the following riparian buffer requirements

consistent with State Department of Fish and Wildlife recommendations:

(i) Type S (Shorelines of the State) Standard Buffer Width: Type S waters are protected by the Benton County Shoreline Master Program, as existing and hereafter amended, rather than this ordinance.

Commented [BF2]: Covered by the SMP

(ii) Type F (Fish) Standard Buffer Width: ~~200-75~~ ft.

Commented [BF3]: Snipes, Spring, Corral, Upper Glade (not SMP)

(iii) Type Np (Non-Fish Perennial) and Type Ns (Non-Fish Seasonal) Standard Buffer Width: ~~±50~~ ft.

Commented [BF4]: Buffers updated based on Anchor QEA Sep 2020 memo

~~(iv) Type Ns (Non-Fish Seasonal) Standard Buffer Width: ~~±50~~ ft.~~

(3) Buffer Width Averaging. The Planning Administrator may allow modification of the riparian buffer width in accordance with an approved critical area report and the best available science on a case-by-case basis by averaging buffer widths. Averaging of buffer widths may only be allowed where a qualified professional demonstrates that:

(1) It will not reduce riparian functions or functional performance;

(2) The riparian area contains variations in sensitivity due to existing physical characteristics or the character of the buffer varies in slope, soils, or vegetation, and the riparian area would benefit from a wider buffer in places and would not be adversely impacted by a narrower buffer in other places;

(3) The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer; and

(4) The buffer width is not reduced to less than seventy-five (75) percent of the standard width or fifteen (15) feet whichever is less.

Commented [BF5]: New section added for flexibility while maintaining functions and values, based on similar language in Wetlands section

~~Buffer modification. To manage for site specific conditions, buffer widths established in section (2) (ii-iv) above may be modified, provided:~~

~~(i) The buffer width modification is no greater than 33%;~~

~~(ii) The critical area study shall demonstrate that the proposed buffer width will continue to protect the integrity, functions, and values of the riparian area and habitat;~~

~~(iii) The critical area study shall include a field verification that evaluates actual river, lake, pond, and stream conditions. This shall be completed by a qualified professional and comply with WAC 365-190-130 (4) (f) (ii), as existing or hereafter amended; and~~

~~(iv) Applicant shall complete a request for consultation with the State Department of Fish and Wildlife consistent with Ord. 609 §53(c) (7).~~

Commented [BF6]: This section is unnecessary with the buffer width averaging provision added above

(4) Measurement.

(i) Buffers for ~~rivers, lakes, ponds, and streams~~ applicable water bodies shall be measured in all directions from the ordinary high-water mark (OHWM) as identified in the field; and

Commented [BF7]: Makes this more general and accurate. No rivers are regulated by CA as these are covered in the SMP

(ii) Buffers for other habitat types shall be measured in all directions from the habitat boundary, as mapped by the Washington State Department of Fish and Wildlife or a qualified professional pursuant to Ord. 609 §53(a).

(5) Seasonal Restrictions. When a species is more susceptible to adverse impacts during specific periods of the year, seasonal restrictions may apply. Larger buffers may be required and activities may be further restricted during the specified season.

SECTION 55. PERFORMANCE STANDARDS-SPECIFIC HABITATS.

(a) Endangered, threatened, and sensitive species.

(1) No development shall be allowed within a habitat conservation area or buffer with which state or federal endangered, threatened, or sensitive species have a primary association, unless provided for through a federal or state permit, or other approval.

(2) Whenever activities are proposed adjacent to a habitat conservation area with which state or federally endangered, threatened, or sensitive species have a primary association, such area shall be protected through the application of protection measures in accordance with a critical area report prepared by a qualified professional and submitted to the county. Approval for alteration of land adjacent to the habitat conservation area or its buffer shall not occur prior to consultation with the Washington State Department of Fish and Wildlife and the appropriate federal agency.

SECTION 56. The following section will be known as "APPENDIX A-BEST AVAILABLE SCIENCE" and will be part of the new Benton County Code Title known as "Environment" but will not be codified.

Best Available Science Sources for Benton County Critical Area Regulations.

This document serves as the Best Available Science produced for the Benton County Critical Area Regulations.

Benton County is mandated by the Growth Management Act of Washington (GMA) to review and update its comprehensive plan and development regulations according to a schedule established in RCW 36.70A.130(5). This review and update includes the critical area regulations per RCW 36.70A.130(1)(c). The review of critical area regulations under RCW 36.70A.172(1) requires the inclusion of best available science (BAS) and consideration given to anadromous fisheries.

The following documents represent a partial list of data and best available science. This list is not meant to be exhaustive, and may be added to in the future. This document is intended to provide an index of the science and data that may be reviewed by Benton County in the development of the County's Critical Area Ordinance.

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WAC 365-190 Critical Areas.

WAC 365-195 Best Available Science.

WAC 222-16-030 Water Typing System

WAC 173-22 Designation of Shorelands and Wetlands

Commented [BF8]: Updated sources with Anchor QEA memo and references incorporated into it

Commented [BF9R8]: Completed

- RCW 90.58 Shoreline Management Act
- RCW 43.21C State Environmental Policy
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SECTION 57. CHAPTER REPEAL. Ordinance 257, Sections 1 thru 9, Sections 11 thru 17, Sections 19 thru 20, Section 71 thru 72, Ordinance 311, Section 1 thru 7, Section 9 thru 15, Sections 17 thru 36, Ordinance 346 and Chapter 15.10 BCC entitled "General Provisions" are each hereby repealed in their entirety.

SECTION 58. CHAPTER REPEAL. Ordinance 257, Sections 20 thru 30, Ordinance 312 and Chapter 15.15 BCC entitled "Wetlands" are each hereby repealed in their entirety.

SECTION 59. CHAPTER REPEAL. Ordinance 257, Sections 31 thru 40, Ordinance 313 and Chapter 15.20 BCC entitled "Rivers and Creeks" are each hereby repealed in their entirety.

SECTION 60. CHAPTER REPEAL. Ordinance 257, Sections 41 thru 49, Ordinance 314 and Chapter 15.25 BCC entitled "Critical Aquifer Recharge/Interchange Areas" are each hereby repealed in their entirety.

SECTION 61. CHAPTER REPEAL. Ordinance 257, Sections 50 thru 56, Ordinance 315 and Chapter 15.30 BCC entitled "Frequently Flooded Areas" are each hereby repealed in their entirety.

SECTION 62. CHAPTER REPEAL. Ordinance 257, Sections 57 thru 63, Ordinance 316 and Chapter 15.35 BCC entitled "Geologically Hazardous Areas" are each hereby repealed in their entirety.

SECTION 63. CHAPTER REPEAL. Ordinance 257, Section 64 thru 70, Ordinance 317 and Chapter 15.40 BCC entitled "Fish and Wildlife Conservation Areas" are each hereby repealed in their entirety.

SECTION 64. Severability. If any provision of this Ordinance is declared unconstitutional, or the applicability thereof to any person or circumstance is held invalid, the constitutionality of the remainder of the Ordinance and the applicability thereof to other persons and circumstances shall not be affected thereby.

SECTION 65. Effective Date. This Ordinance shall take effect and be in full force upon its passage and adoption.

ADOPTED AND PASSED this 21st day of August, 2018.

Chairman of the Board.

Chairman Pro-Tem.

Member.

Approved as to Form:

Constituting the Board of
County Commissioners of
Benton County, Washington

Deputy Prosecuting Attorney

Attest: _____
Clerk of the Board

Benton County SMP Periodic Review Checklist

Row	Summary of change	Review	Action
2017			
a.	OFM adjusted the cost threshold for substantial development to \$7,047.	2015 SMP includes reference to previous \$6,416 cost threshold.	Section 15.02, amend definition of Substantial Development cost threshold to new inflation-adjusted amount of \$7,047.
b.	Ecology amended rules to clarify that the definition of “development” does not include dismantling or removing structures.	2015 SMP does not clarify that removing structures does not constitute “development.” This issue has come up at the counter frequently enough that staff recommend adding this optional clarification to the SMP.	Section 15.02, amend definition of development to include Ecology example code.
c.	Ecology adopted rules that clarify exceptions to local review under the SMA.	Ecology’s revised rule addressing exceptions incorporated a 2015 Legislative statutory exceptions for WSDOT projects that went into effect after the 2015 SMP was approved.	Add new Section 15.04.120, include new language based on Ecology example code.
d.	Ecology amended rules that clarify permit filing procedures consistent with a 2011 statute.	2015 SMP describes filing procedures for permit by stating “permits shall be filed with Department of Ecology pursuant to WAC 173-27-130.” Ecology amendments apply to the County, but no local amendments are needed.	N/A
e.	Ecology amended forestry use regulations to clarify that forest practices that only involves timber cutting are not SMA “developments” and do not require SDPs.	N/A. No commercial forestry in County.	N/A
f.	Ecology clarified the SMA does not apply to lands under exclusive federal jurisdiction	Benton County has jurisdiction over SDPs on Hanford Nuclear Reservation, as applicable	N/A

Row	Summary of change	Review	Action
g.	Ecology clarified “default” provisions for nonconforming uses and development .	2015 SMP includes tailored nonconforming use and development provisions.	No amendments needed. County will retain existing nonconforming use and development provisions.
h.	Ecology adopted rule amendments to clarify the scope and process for conducting periodic reviews .	2015 SMP already referenced statutory obligation to conduct reviews under RCW 90.58.080. County may follow Ecology procedures for conducting reviews without amending the SMP.	No amendments needed.
i.	Ecology adopted a new rule creating an optional SMP amendment process that allows for a shared local/state public comment period.	2015 SMP does identify amendment process but doesn’t specify this optional amendment process for shared comment period	No amendment to SMP needed. SMP provides flexibility to follow optional process.
j.	Submittal to Ecology of proposed SMP amendments.	2015 SMP does include description of the SMP submittal process, and also relies on state rule.	No amendments to SMP needed. County will meet state requirements.
2016			
a.	The Legislature created a new shoreline permit exemption for retrofitting existing structures to comply with the Americans with Disabilities Act .	2015 SMP does not include new permit exemption for retrofits to comply with ADA	Section 15.09.040, new permit exemption will be added consistent with Ecology example code.
b.	Ecology updated wetlands critical areas guidance including implementation guidance for the 2014 wetlands rating system.	Standards in SMP and County CAO based on 2014 wetlands rating system	Review Section 15.06.020, and update standards in SMP and CAO to include 2016 guidance and standards, as applicable
2015			
a.	The Legislature adopted a 90-day target for local review of Washington State Department of Transportation (WSDOT) projects.	2015 SMP was adopted prior to effective date of 2015 legislation.	Section 15.07.150, adopt Ecology example code incorporating direction to conduct review consistent with legislative targets.
2014			
a.	The Legislature raised the cost threshold for requiring a Substantial Development Permit (SDP) for replacement docks on lakes and rivers to \$20,000 (from \$10,000).	Not incorporated into 2015 SMP.	Section 15.07.030, include updated threshold value of \$20,000
b.	The Legislature created a new definition and policy for floating	The County includes no floating on-water residences.	N/A

Row	Summary of change	Review	Action
	on-water residences legally established before 7/1/2014.		
2012			
a.	The Legislature amended the SMA to clarify SMP appeal procedures .	County will rely on existing SMP language, and state laws and rules.	N/A
2011			
a.	Ecology adopted a rule requiring that wetlands be delineated in accordance with the approved federal wetland delineation manual .	Incorporated into 2015 SMP.	N/A
b.	Ecology adopted rules for new commercial geoduck aquaculture .	N/A	N/A
c.	The Legislature created a new definition and policy for floating homes permitted or legally established prior to January 1, 2011.	The County includes no floating on-water residences.	N/A
d.	The Legislature authorized a new option to classify existing structures as conforming .	Incorporated into 2015 SMP.	N/A
2010			
a.	The Legislature adopted Growth Management Act – Shoreline Management Act clarifications .	Incorporated into 2015 SMP.	N/A
2009			
a.	The Legislature created new “relief” procedures for instances in which a shoreline restoration project within a UGA creates a shift in Ordinary High Water Mark.	Incorporated into 2015 SMP.	N/A
b.	Ecology adopted a rule for certifying wetland mitigation banks .	Incorporated into 2015 SMP.	N/A
c.	The Legislature added moratoria authority and procedures to the SMA.	Incorporated into 2015 SMP.	N/A
2007			
a.	The Legislature clarified options for defining "floodway" as either the area that has been	Incorporated into 2015 SMP.	N/A

<i>Row</i>	<i>Summary of change</i>	<i>Review</i>	<i>Action</i>
	established in FEMA maps, or the floodway criteria set in the SMA.		
b.	Ecology amended rules to clarify that comprehensively updated SMPs shall include a list and map of streams and lakes that are in shoreline jurisdiction.	Incorporated into 2015 SMP.	N/A
c.	Ecology's rule listing statutory exemptions from the requirement for an SDP was amended to include fish habitat enhancement projects that conform to the provisions of RCW 77.55.181.	Incorporated into 2015 SMP.	N/A

Section 15.01 Authority and Purpose

01.010 Authority

This SMP is enacted and administered according to the following state law and rules:

- (e) The Shoreline Management Act (SMA) of 1971, Chapter 90.58 RCW;
- (f) State master program approval/amendment procedures and master program guidelines, WAC 173-26; and
- (g) Shoreline management permit and enforcement procedures, Chapter 173-27 WAC.

01.020 Purpose

The purposes of this SMP are:

- (a) To promote the public health, safety, and general welfare of the County by providing comprehensive policies and effective, reasonable regulations for development, use and protection of jurisdictional shorelines; and
- (b) To further assume and carry out the local government responsibilities established by RCW 90.58.050 including planning and administering the regulatory program; and
- (c) To assure no net loss of ecological functions associated with the shoreline; and
- (d) To carry out the policies and use preferences in RCW 90.58.020, described in Section 15.03.

01.030 Applicability

- (a) Except as described in Subsection (b) and (c), all proposed uses and development occurring within shoreline jurisdiction must conform to the intent and requirements of the laws and rules cited in Section 15.01.010 and this SMP.
- (b) The following are examples of activities that are not considered development and are therefore not subject to this SMP:
 - (1) Interior building improvements that do not change the use or occupancy;
 - (2) Exterior structure maintenance activities, including painting and roofing, as long as it does not expand the existing footprint of the structure; and,
 - (3) Routine landscape maintenance of established, ornamental landscaping, such as lawn mowing, pruning and weeding.
- (c) Consistent with Section 15.02 (Definitions), WAC 173-26-020 (Definitions), and WAC 173-26-241(3)(a), as amended, this SMP shall not require modifications of or limit agricultural activities on agricultural lands.
- (d) Activities that are exempt from the permit system in Section 15.09.040 shall comply with this SMP whether or not a permit or other form of authorization is required.
- (e) The shoreline permit procedures, policies and regulations established in this SMP shall apply countywide to all nonfederal uses, activities, and development.
- (f) This SMP applies to lands subject to nonfederal ownership, lease or easement, even though such lands may fall within the external boundaries of a federal ownership.

01.040 Findings

This SMP was developed based on community participation, local shoreline conditions, and the Shoreline Management Act provisions per Resolution 2014-440 dated June 3, 2014. Key findings are highlighted below:

- (a) The Benton County SMP Public Participation Plan, adopted by the County Commissioners in June 2012, was followed, and encouraged public involvement and interaction, and provided public forums, open houses and meetings in several venues in the County.
- (b) A Shoreline Advisory Committee made up of fourteen volunteers with diverse backgrounds, including, shoreline property owners, residents, agri-business, economic and environmental interests, state and federal agencies and the Yakama Nation, and sanctioned by the Board of County Commissioners, reviewed, interacted and provided input for the SMP and all required documents.
- (c) The Benton County Shoreline Analysis Report, Inventory and Channel Migration Maps, Cumulative Impacts Analysis, and voluntary Restoration Plan were utilized for the development of the Benton County SMP update which was prepared in conformance with RCW 90.58 (Shoreline Management Act) and WAC 173-26.
- (d) The SMP is appropriately tailored to accommodate Benton County's unique environmental conditions and community needs.
- (e) The policies, programs and regulations of the SMP address cumulative impacts of the reasonably foreseeable future development and use of the County's shoreline and further demonstrate through its Cumulative Impacts Analysis that the SMP as prepared will not result in degradation of shoreline ecological functions over the next 20-year planning horizon.
- (f) The SMP will help protect water quality for the County's rivers and streams, increase protection of lives and property from flood, protect fish and wildlife habitat, allow preferred uses along the shoreline meeting the needs of the Benton County community, and promote recreational opportunities for County residents consistent with RCW 90.58/WAC 173-26.
- (g) The SMP is in the best interest of the public and is consistent with the Benton County Comprehensive Plan and furthers the intent of the Shoreline Management Act (RCW 90.58/WAC 173-26).

01.050 Relationship to Other Codes, Ordinances and Plans

- (a) All applicable federal, state, and local laws shall apply to properties in the shoreline jurisdiction.
- (b) Consistent with RCW 36.70A.480, the goals and policies of this SMP approved under chapter 90.58 RCW shall be considered a sub area plan of Benton County's Comprehensive Plan. All regulatory elements of this SMP, including, but not limited to, definitions and use regulations, shall be considered a part of Benton County's development regulations.
- (c) All local development regulations including, but not limited to, zoning and subdivision rules shall apply in addition to this SMP. This SMP includes critical areas regulations applicable only in shoreline jurisdiction, and shall control within shoreline jurisdiction over other County critical area regulations adopted pursuant to the Growth Management Act.
- (d) In the event provisions of this SMP conflict with provisions of federal, state, county or city regulations, the provision that is most protective of shoreline resources shall prevail, when consistent with policies set out in the SMA.

01.060 Liberal Construction

As provided for in RCW 90.58.900, the SMA is exempted from the rule of strict construction; the SMA and this SMP shall therefore be liberally construed to give full effect to the purposes, goals, objectives, and policies for which they were enacted.

01.070 Effective Date

The SMP is hereby adopted on the 3rd of June, 2014. This SMP and all amendments thereto shall become effective 14 days from the date of the Washington Department of Ecology's written notice of final approval.

Section 15.02 Definitions

Whenever the words and terms set forth in this Section appear in this title, they shall be given the meaning attributed to them by this Section. Definitions established by RCW 90.58.030 and WAC 173 have been incorporated herein and should these definitions in the RCW or WAC be amended, the most current RCW or WAC definition shall apply. Except where specifically defined in this Section, the RCW, the WAC, or the Benton County Code, all words used in this SMP shall carry their customary meanings.

"Abutting" means bordering upon, to touch upon, or in physical contact with. Sites are considered abutting even though the area of contact may be only a point.

"Accessory" means any use or development incidental to and subordinate to a primary use of a shoreline use or development. See also Appurtenance, Residential.

"Adjacent" means to be nearby and not necessarily abutting.

"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. See Section 15.05.010 regarding interpretation of agricultural activities.

"Agricultural equipment" and "agricultural facilities" includes, but is not limited to:

- A. The following used in agricultural operations: Equipment; machinery; constructed shelters, buildings, and ponds; fences; upland finfish rearing facilities; water diversion, withdrawal, conveyance, and use equipment and facilities including but not limited to pumps, pipes, tapes, canals, ditches, and drains;
- B. corridors and facilities for transporting personnel, livestock, and equipment to, from, and within agricultural lands;
- C. farm residences and associated equipment, lands, and facilities; and
- D. roadside stands and on-farm markets for marketing fruit or vegetables.

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

"Agricultural lands of long-term commercial significance" means those lands that are not already characterized by urban growth and that have long-term significance for the commercial production of food or other agricultural products.

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

"Agricultural Related Industry" means specifically:

- A. Packaging Plants - may include but are not limited to the following activities: washing, sorting, crating, and other functional operations such as drying, field crushing, or other preparation in which the chemical and physical composition of the agriculture product remains essentially unaltered. Does not include processing activities, or slaughter houses, animal reduction yards, and tallow works.
- B. Processing Plants - may include but are not limited to those activities which involve the fermentation or other substantial chemical and physical alteration of the agricultural product. Does not include slaughter houses or rendering plants.
- C. Storage Facilities - may include those activities which involve the warehousing of processed and/or packaged agricultural products.

"Agricultural tourism" or "Agri-tourism" refers to the act of visiting a working farm or any agricultural, horticultural or agribusiness operation for the purpose of enjoyment, education or active involvement in the activities of the farm or operation.

"Amendment" means a revision, update, addition, deletion, and/or reenactment to an existing shoreline master program. "Applicant" means a person, party, firm, corporation, or other legal entity that proposes a development, construction or use on a site.

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

"Appurtenance, residential" is necessarily connected to the use and enjoyment of a single family residence and is located landward of the ordinary high water mark and the perimeter of a wetland. Normal appurtenance includes a garage; deck; driveway; utilities; fences; installation of a septic tank and drainfield and grading which does not exceed two hundred fifty cubic yards and which does not involve placement of fill in any wetland or waterward of the ordinary high water mark.

"Aquaculture" means the culture and/or farming of fish, shellfish, or other aquatic plants and animals. Aquaculture is dependent on the use of the water area and, when consistent with control of pollution and prevention of damage to the environment, is a preferred use of the water area. Commercial aquaculture is conducted to produce products for market with the objective of earning a profit. Non-commercial aquaculture is conducted for the benefit of native fish recovery, education and interpretation, or other public benefit or use.

"Aquifer" means a body of rock or soil that contains sufficient saturated permeable material to conduct groundwater and to yield economically significant quantities of groundwater to wells and springs.

"Aquifer confined" means groundwater overlain by a confining bed, such as an impermeable layer of clay or rock.

"Aquifer Recharge/Interchange Area" means those natural and man-made land features that hold or convey surface waters having connectivity to groundwater.

"Aquifer unconfined" means groundwater lying between the soil profile and the shallowest impermeable layer (i.e., clay, basalt).

"Archaeologist, professional" means a person who meets qualification standards promulgated by DAHP and the National Park Service and published in 36 CFR Part 61, and which define minimum education and experience required to perform identification, evaluation, registration and treatment activities for archaeological sites. In

some cases, additional areas or levels of expertise may be needed, depending on the complexity of the task and the nature of the properties involved.

"Area of Special Flood Hazard", which designation on the Flood Insurance Rate Maps always includes the letter A or V, means the land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year.

"Base Flood" or "100-year Flood" means the designation on the Federal Emergency Management Act (FEMA) Flood Insurance Maps that denote areas subject to floods having a one (1) percent chance of being equaled or exceeded in any given year. The base flood is determined for existing conditions, unless a basin plan including project flows under future developed conditions has been completed and adopted by Benton County; in these cases, future flow projections shall be used. In areas where the Flood Insurance Study includes detailed base flood calculations, those calculations may be used until projections of future flows are completed and approved by Benton County.

"Best Management Practices" or "BMPs" means physical, structural and/or managerial practices, that, when used singly or in a combination protect the functions and values of critical resources. BMPs are current and evolving conservation practices, systems of practices, management and operational measures, design and construction techniques, or normal and accepted industry standards that are applied to land uses and land use activity in a manner which:

- A. controls soil loss and reduces water surface and ground-water quality degradation caused by nutrients, animal wastes, toxins, and sediment; and,
- B. mitigates adverse impacts to the natural chemical, physical and biological environment of the County; and,
- C. facilitates the utilization of the County's natural resources on a long term, sustainable yield basis.

"Board of Adjustment" means the County board which hears applications for variances, conditional use permits and other quasi-judicial matters assigned to it by the legislative body. Appeals may be taken to the Board by any person aggrieved, or by any officer, department, board or bureau of the county affected by appealable decisions of the director.

"Boating Facilities" means developments and uses that support access to shoreline waters for purposes of boating, including marinas, community docks serving more than four single-family residences or multi-family units, public piers, and community or public boat launch facilities.

"Breakwater" means a fixed or floating off-shore structure that protects the shore from wave action or currents.

"Buffer" means a designated area used to separate incompatible uses or protect resources or development. Buffers are generally undeveloped areas. There are different types of buffers for different purposes:

- A. buffers which protect sensitive natural resources (critical areas) from the adverse impacts of development are generally undeveloped open space which are ecologically part of the protected resource;
- B. buffers which protect the integrity of development from certain natural hazards such as slope instability, floods or fire prone areas, and which ensure that buildings and development avoid the hazardous condition;
- C. buffers to separate incompatible uses, such as residential from industrial, airports, or certain activities common to commercial agriculture, are generally open or sparsely populated.

"Building Setback" means a line which establishes a definite point beyond which the foundation of a building shall not extend; this line is measured from the upland edge of the shoreline buffer.

"Bulkhead" means a vertical or nearly vertical erosion protection structure placed parallel to the shore consisting of concrete, timber, steel, rock, or other permanent material not readily subject to erosion.

"Candidate" means any species officially designated as "Candidate" by the appropriate agency of the federal government or by the Washington State Department of Fish and Wildlife.

"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.

"Clearing" means the cutting or removal of vegetation or other organic plant material by physical, mechanical, chemical, or any other means.

"Commercial" means those activities engaged in commerce and trade and involving the exchange of money, including but not limited to, retail, services, wholesale, or business trade activities. Examples include, but are not limited to, hotels, motels, or other commercial accommodations, grocery stores, restaurants, concessions, shops, commercial recreation facilities such as marinas, boat repair, boat, canoe, or kayak rentals, and offices.

"Comprehensive master program update" means a master program that fully achieves the procedural and substantive requirements of the Department of Ecology's SMP Guidelines effective January 17, 2004, as now or hereafter amended.

"Comprehensive Plan" means the Benton County Comprehensive Land Use Plan and any amendments, addenda, or supplemental plans that are duly adopted under Chapter 36.70 RCW (as amended), for Benton County or any portion thereof.

"Conditional use" means a use, development, or substantial development which is classified as a conditional use or is not classified within the applicable master program.

"Creeks" mean those areas of Benton County where surface waters form or have formed a defined channel or bed and for which the State Department Fish and Wildlife has Hydraulic Permit Authority. The channel or bed need not contain water year-round. This definition is not meant to include irrigation ditches, channels, storm or surface water runoff devices or other entirely artificial watercourses unless they are, or have been, used by salmonids or used to convey streams naturally occurring prior to construction in such water course.

"Critical Aquifer Recharge/Interchange Areas" means those aquifer recharge/interchange areas that have an effect on, or are associated with, aquifers used for potable water in community water systems.

"Critical Areas" means those specific resources which are subject to protection by regulation under Section 15.07 (e.g., wetlands, geologically hazardous areas, fish and wildlife conservation areas, frequently flooded areas, critical aquifer recharge/interchange areas).

"Critical Areas Overlay Maps" were developed from and are augmented by resource and technical studies, aerial photographs, and other resource maps, such as the:

- A. Federal Emergency Management Agency's (FEMA), 100-year flood maps,
- B. County and other agency Geologic Hazards Map(s),
- C. U.S.D.A. Natural Resources Conservation Service (NRCS) Soils Capabilities Map(s),
- D. Slope Stability Map(s),
- E. U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory Map(s),
- F. Washington State Department of Fish and Wildlife (WDFW), Priority Habitats and Species Maps (PHS),

G. County Shoreline Management Map(s), and

H. other maps as are appropriate.

"Cumulative impact" means the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

"Department" means the Benton County Planning Department.

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

Development does not include the following activities:

- A. Interior building improvements that do not change the use or occupancy;
- B. Exterior structure maintenance activities, including painting and roofing as long as it does not expand the existing footprint of the structure;
- C. Routine landscape maintenance of established, ornamental landscaping, such as lawn mowing, pruning and weeding; and

D. Maintenance of the following existing facilities that does not expand the affected area: septic tanks (routine cleaning); wells; and individual utility service connections.

~~D-E.~~ Dismantling or removing structures if there is no other associated development or re-development.

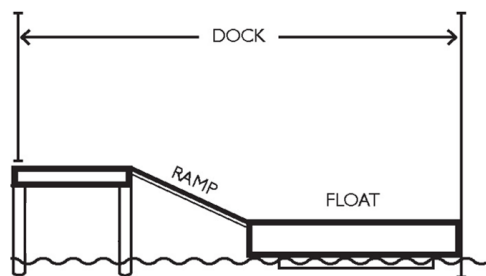
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"Development regulations" means the controls placed on development or land uses by a county or city, including, but not limited to, zoning ordinances, critical areas ordinances, all portions of a SMP other than goals and policies approved or adopted under chapter 90.58 RCW, planned unit development ordinances, subdivision ordinances, and binding site plan ordinances together with any amendments thereto.

"Development Site" means the legal boundaries of the parcel or parcels of land for which an applicant has applied for authority from Benton County to carry out a development proposal.

"Diversity (ecological)" refers to the variety of species of plants and animals that compose a biotic community or ecosystem, often expressed as total number of different species.

"Dock" means a structure built over or floating upon the water and used as a landing place for boats and other marine transport, fishing, swimming, and other recreational uses. A dock typically consists of the combination of one or more of the following elements: pier, ramp, and/or float.



"Dredging" means removal of earth from the bed of a stream, lake, or pond for the purpose of flood control; navigation; utility installation (excluding on-site utility features serving a primary use, which are "accessory utilities" and shall be considered a part of the primary use); the construction or modification of essential public

facilities and regional transportation facilities; restoration (of which the primary restoration element is sediment/soil removal rather than being incidental to the primary restoration purpose); and/or obtaining minerals, construction aggregate, or landfill materials. This definition does not include excavation for mining within a pond created by a mining operation approved under this title or under a local zoning ordinance, or a mining operation in existence before Zoning, Shorelines, or Critical Areas permits were required for such operations. Dredging, as regulated in this SMP under Section 15.07.60, is not intended to cover other excavations waterward of the ordinary high water mark that are incidental to construction of an otherwise authorized use or modification (e.g., bulkhead replacements, large woody debris installations, boat launch ramp installation, pile placement).

"Ecological functions" or "shoreline functions" means the work performed or role played by the physical, chemical, and biological processes that contribute to the maintenance of the aquatic and terrestrial environments that constitute the shoreline's natural ecosystem. Shoreline ecological functions include, but are not limited to hydrologic (transport of water and sediment across the natural range of flow variability; attenuating flow energy; developing pools, riffles, gravel bars, nutrient flux, recruitment and transport of large woody debris and other organic material), shoreline vegetation (maintaining temperature; removing excessive nutrients and toxic compound, sediment removal and stabilization; attenuation of high stream flow energy; and provision of woody debris and other organic matter), hyporheic functions (removing excessive nutrients and toxic compounds, water storage, support of vegetation, and sediment storage and maintenance of base flows), and habitat for native aquatic and shoreline-dependent birds, invertebrates, mammals; amphibians; and anadromous and resident native fish (e.g., space or conditions for reproduction; resting, hiding and migration; and food production and delivery).

"Ecologically intact" means shoreline areas that retain the majority of their natural shoreline functions, as evidenced by the shoreline configuration and the presence of native vegetation. Generally, but not necessarily, ecologically intact shorelines are free of structural shoreline modifications, structures, and intensive human uses. In forested areas, they generally include native vegetation with diverse plant communities, multiple canopy layers, and the presence of large woody debris available for recruitment to adjacent waterbodies. Recognizing that there is a continuum of ecological conditions ranging from near natural conditions to totally degraded and contaminated sites, this term is intended to delineate those shoreline areas that provide valuable functions for the larger aquatic and terrestrial environments which could be lost or significantly reduced by human development. Whether or not a shoreline is ecologically intact is determined on a case-by-case basis.

"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.

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

"Exempt" developments are those set forth in WAC 173-27-040 and RCW 90.58.030(3)(e), 90.58.140(9), 90.58.147, 90.58.355, and 90.58.515, as hereafter amended, which are not required to obtain a Shoreline Substantial Development Permit, but which must otherwise comply with applicable provisions of the SMA and this Master Program.

"Fair market value" of a development is the open market bid price for conducting the work, using the equipment and facilities, and purchase of the goods, services and materials necessary to accomplish the development. This would normally equate to the cost of hiring a contractor to undertake the development from start to finish, including the cost of labor, materials, equipment and facility usage, transportation and contractor overhead and

profit. The fair market value of the development shall include the fair market value of any donated, contributed or found labor, equipment or materials.

"Feasible" means 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 County may weigh the action's relative public costs and public benefits, considered in the short- and long-term time frames.

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

"Fish and Wildlife" mean any member of the animal kingdom, including without limitation, any vertebrate, mollusk, crustacean, arthropod, or other invertebrate, and includes any part, product, egg, or offspring thereof, or the dead body parts thereof.

"Fish and Wildlife Conservation Areas" refer to the following:

- A. Those areas shown on the Fish and Wildlife Conservation Areas Map in the Benton County Comprehensive Plan;
- B. Areas identified on the Washington State Department of Fish and Wildlife (WDFW) Priority Habitats and Species (PHS) Map within which a Priority Species is known to have a Primary Association;
- C. Naturally occurring ponds under twenty 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 three years duration) and landscape amenities. However, 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;
- D. Lakes, ponds, creeks and rivers planted with native fish populations, including fish planted under the auspices of federal, state, local or tribal programs or which supports priority fish species as identified by the Washington State Department of Fish and Wildlife;
- E. Washington State Wildlife Areas as identified on Washington Department of Fish and Wildlife maps; and
- F. Washington State Natural Area Preserves and Natural Resource Conservation Areas as identified on Washington Department of Natural Resources maps.

"Float" means an anchored (not directly to the shore) floating platform that is free to rise and fall with water levels and is used for water-dependent recreational activities such as boat mooring, swimming or diving. Floats may stand alone with no over-water connection to shore or may be located at the end of a pier or ramp.

"Flood" or "Flooding" means a general and temporary condition of partial or complete inundation of normally dry land areas from:

- A. The overflow of inland or tidal waters and/or
- B. The unusual and rapid accumulation of runoff of surface waters from any source.

"Flood insurance rate map (FIRM)" means the official map on which the Federal Emergency Management Agency has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

"Flood Insurance Study" means the official report provided by the Federal Emergency Management Agency that includes flood profiles, the Flood Boundary and Floodway Map (FBFM), and the water surface elevation of the base flood.

"Floodplain" is synonymous with the one hundred-year floodplain and means that land area susceptible to inundation with a one percent chance of being equaled or exceeded in any given year. The limit of this area shall be based upon flood ordinance regulation maps or a reasonable method which meets the objectives of the SMA.

"Floodway" means the area, as identified in this Master Program, that either:

- A. Has been established in Federal Emergency Management Agency Flood Insurance Rate Maps or floodway maps; or
- B. Consists of those portions of a river valley lying streamward from the outer limits of a watercourse upon which flood waters are carried during periods of flooding that occur with reasonable regularity, although not necessarily annually, said floodway being identified, under normal condition, by changes in surface soil conditions or changes in types or quality of vegetative ground cover condition, topography, or other indicators of flooding that occurs with reasonable regularity, although not necessarily annually.

Regardless of the method used to identify the floodway, the floodway shall not include those lands that can reasonably be expected to be protected from flood waters by flood control devices maintained by or maintained under license from the federal government, the state, or a political subdivision of the state.

"Frequently Flooded Areas" means those areas of Benton County subject to inundation by a base flood (100-Year Flood) and other flood hazard areas such as creeks, wasteways, wetlands, canyons, and closed depressions which are shown on the County's Geologic Hazards Maps. See also "Area of Special Flood Hazard."

"Geologically Hazardous Areas" are areas which pose potential threats to life or property because of unstable soil, geologic or hydrologic conditions, or steep slopes. Geologically Hazardous Areas shall include, but are not limited to, all landslide and seismic hazard areas.

"Geotechnical report" or "geotechnical analysis" means a scientific study or evaluation conducted by a qualified expert that includes a description of the ground and surface hydrology and geology, the affected land form and its susceptibility to mass wasting, erosion, and other geologic hazards or processes, conclusions and recommendations regarding the effect of the proposed development on geologic conditions, the adequacy of the site to be developed, the impacts of the proposed development, alternative approaches to the proposed development, and measures to mitigate potential site-specific and cumulative geological and hydrological impacts of the proposed development, including the potential adverse impacts to adjacent and down-current properties. Geotechnical reports shall conform to accepted technical standards and must be prepared by qualified professional engineers or geologists who have professional expertise about the regional and local shoreline geology and processes.

"Grade" means the vertical location of the ground surface. "Natural grade" is the grade as it exists or may have existed in its original undisturbed condition. "Existing grade" is the current grade in either its undisturbed, natural condition or as disturbed by some previous modification. "Rough grade" is a stage where grade conforms approximately to an approved plan. "Finish grade" is the final grade of the site which conforms to an approved plan. "Average grade level" is the average of the natural or existing topography of the portion of the lot, parcel, or tract of real property which will be directly under the proposed building or structure. In the case of structures to be built over water, average grade level shall be the elevation of the ordinary high water mark. Calculation of the average grade level shall be made by averaging the ground elevations at the midpoint of all exterior walls of the proposed building or structure.

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

"Groin" means a barrier type of structure that extends from the stream bank into a waterbody for the purpose of the protection of a shoreline and adjacent uplands by influencing the movement of water or deposition of materials. Groins may serve a variety of functions, including bank protection, pool formation, and increased roughness, and may include rock structures, debris jams, or pilings that collect wood debris. See also "Weir."

"Groundwater" means the supply of fresh water under the surface of the ground in an aquifer that forms a natural reservoir of potable water.

"Guidelines" means those standards adopted by the Department of Ecology into the Washington Administrative Code (WAC) to implement the policy of Chapter 90.58 RCW for regulation of use of the shorelines of the state prior to adoption of master programs. Such standards also provide criteria for local governments and the Department of Ecology in developing and amending master programs.

"Hard structural shoreline stabilization" means shoreline erosion control practices using hardened structures that armor and stabilize the shoreline from further erosion. Hard structural shoreline stabilization typically uses concrete, boulders, dimensional lumber or other materials to construct linear, vertical or near-vertical faces. These include bulkheads, rip-rap, and similar structures.

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

"Houseboat" or "floating home" means a dwelling unit constructed on a float that is moored, anchored, or otherwise secured in the water and is not designed for navigation under its own power.

"Hyporheic" means a groundwater area adjacent to and below channels where water is exchanged with channel water and water movement is mainly in the downstream direction

"Impervious Surface" means any material which reduces or prevents absorption of water into previously undeveloped land.

"Industry" means facilities for processing, manufacturing, and storage of finished or semi-finished goods, wholesale trade or storage, together with necessary accessory uses such as parking, loading, and waste storage and treatment.

"In-stream structures" are structure placed by humans within a stream or river waterward of the OHWM that either causes or has the potential to cause water impoundment or the diversion, obstruction, or modification of

water flow. In-stream structures may include those for hydroelectric generation, irrigation, water supply, flood control, transportation, utility service transmission, fish habitat enhancement, recreation, or other purpose.

"Landslide" means episodic downslope movement of a mass of soil or rock.

"Landslide Hazard Area" refers to those areas of Benton County subject to a severe risk of landslide which include the following:

- A. Any areas with a combination of:
 - 1. Slopes greater than fifteen (15) percent;
 - 2. Impermeable soils (typically silt and clay) frequently inter-bedded with granular soils (predominately sand and gravel); or,
 - 3. Springs or ground water seepage.
- B. Any area which has shown movement during the Holocene epoch (from ten thousand 10,000 years ago to present) or which is underlain by mass wastage debris of that epoch;
- C. Any area potentially unstable as a result of rapid stream incision, stream bank erosion or undercutting by water action, including stream channel migration zones, or surcharge by upslope irrigation district canals or waterworks;
- D. Any area located on an alluvial fan, presently subject to or potentially subject to inundation by debris flows or deposition of stream-transported sediments.

"Maintenance, Normal" means those usual acts to prevent a decline, lapse, or cessation from a legally established condition. See "Repair, Normal."

"Manufactured Home" means a structure, transportable in one or more sections, which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term "manufactured home" does not include a recreational vehicle.

"Manufactured Home Park" or "Subdivision" means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

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

"Mining" means the removal of naturally occurring minerals and materials from the earth for commercial value. Mining includes processing and batching. Mining does not include large excavations for structures, foundations, parking areas, etc.

"Mitigation (sequencing)" means the use of any or all of the following actions that are listed in descending order of preference:

- A. avoiding the impact altogether by not taking a certain action or parts of an action;
- B. minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts;
- C. rectifying the impact by repairing, rehabilitating or restoring the affected sensitive area;
- D. reducing or eliminating the impact over time by preservation or maintenance operations during the life of the development proposal;

E. compensating for the impact by replacing, enhancing or providing substitute sensitive areas and environments;

F. monitoring the impact and taking appropriate corrective measures.

"Monitoring" means the ongoing evaluation of the impacts of a development proposal on the biological, hydrologic and geologic conditions of Critical Areas. Monitoring includes the gathering of baseline data and the assessment of the performance of required mitigation measures through the collection and analysis of data for the purposes of understanding and documenting changes in natural ecosystems and features.

"Moorage facility" means a marina, pier, dock, mooring buoy, or any other similar fixed moorage site.

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

"Native vegetation" refers to plant species which are indigenous to the Central Basin region and which reasonably could have been expected to naturally occur on the site. Native vegetation does not include noxious weeds.

"Natural or existing topography" means the topography of the lot, parcel, or tract of real property immediately prior to any site preparation or grading, including excavation or filling.

"New Construction" means structures for which the "start of construction" commenced on or after the effective date of this Title.

"Nonconforming," when used in reference to a use or structure, means a land use or structure that was lawful when established, but which does not now conform to the use regulations of the zone in which it is located. A use or structure shall be considered established if it conformed to applicable development regulations at any time or if it commenced or was constructed under a permit that has not expired.

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

"No net loss of ecological functions" means a public policy goal and requirement to maintain the aggregate total of the County's shoreline ecological functions at its current level. For purposes of reviewing and approving this SMP, "current" is equivalent to the date of the Final Shoreline Analysis Report (April 2013). As a development standard, it means the result of the application of Mitigation Sequencing, in which impacts of a particular shoreline development and/or use, whether permitted or exempt, are identified and addressed, such that there are no adverse impacts on shoreline ecological functions or processes relative to the legal condition just prior to the proposed development and/or use.

"Ordinary High Water Mark" (OHWM) means that mark on lakes and streams which 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 ordinary years, as to mark upon the soil a character distinct from that of the abutting upland.

"Outcrop" refers to a geologic layer exposed at the earth's surface.

"Permit", for the purposes of this SMP, means any substantial development, variance, conditional use permit, or revision authorized under chapter 90.58 RCW.

"Pier" means a fixed platform above the water and supported by piles, usually perpendicular to the shoreline. See also "Dock."

"Preferred uses" are those uses which are consistent with control of pollution and prevention of damage to the natural environment, or are unique to or dependent upon use of the shoreline. "Preferred" uses include single-family residences, ports, shoreline recreational uses, water-dependent industrial and commercial developments, and other developments that provide public access opportunities.

"Priority habitat" means a habitat type with unique or significant value to one or more species. An area classified and mapped as priority habitat must have one or more of the following attributes: Comparatively high fish or wildlife density; comparatively high fish or wildlife species diversity; fish spawning habitat; important wildlife habitat; important fish or wildlife seasonal range; important fish or wildlife movement corridor; rearing and foraging habitat; refuge; limited availability; high vulnerability to habitat alteration; unique or dependent species; or shellfish bed. 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. Alternatively, a priority habitat may consist of a specific habitat element (such as talus slopes, caves, snags) of key value to fish and wildlife. A priority habitat may contain priority and/or non-priority fish and wildlife.

"Priority species" means species requiring protective measures and/or management guidelines to ensure their persistence at genetically viable population levels. Priority species are those that meet any of the criteria listed below:

- A. State-listed or state proposed species. State-listed species are those native fish and wildlife species legally designated as endangered (WAC 232-12-014), threatened (WAC 232-12-011), or sensitive (WAC 232-12-011). State proposed species are those fish and wildlife species that will be reviewed by the Department of Fish and Wildlife (POL-M-6001) for possible listing as endangered, threatened, or sensitive according to the process and criteria defined in WAC 232-12-297.
- B. 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. Examples include heron colonies, seabird concentrations, and marine mammal congregations.
- C. Species of recreational, commercial, and/or tribal importance. Native and nonnative fish, shellfish, and wildlife species of recreational or commercial importance and recognized species used for tribal ceremonial and subsistence purposes that are vulnerable to habitat loss or degradation.
- D. Species listed under the federal Endangered Species Act as either proposed, threatened, or endangered.

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

"Public interest" means the interest shared by the citizens of the state or community at large in the affairs of government, or some interest by which their rights or liabilities are affected including, but not limited to, an effect on public property or on health, safety, or general welfare resulting from a use or development.

"Public access" means 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.

"Public Trust Doctrine" is a common law principle generally holding that the waters of the state are a public resource owned by and available to all citizens equally for the purposes of navigation, conducting commerce, fishing, recreation and similar uses. While the doctrine protects public use of navigable water bodies below the ordinary high water mark, the doctrine does not allow the public to trespass over privately owned uplands to access the tidelands.

"Qualified Professional" means an accredited or licensed professional with a combination of education and experience in the discipline appropriate for the subject matter under review, or someone who would qualify as an expert in their field.

"Recharge Area" refers to an area in which water is absorbed and added to the groundwater reservoir.

"Recreation" means an experience or activity in which an individual engages for personal enjoyment and satisfaction. Shore-based outdoor recreation includes but is not limited to fishing; various forms of boating,

swimming, hiking, bicycling, horseback riding, picnicking, watching or recording activities such as photography, painting, bird watching or viewing of water or shorelines, nature study and related activities.

"Recreational uses" refers to public, private, or commercial uses which offer activities, pastimes, and experiences that allow for the refreshment of mind and body. Examples include, but are not limited to, parks, viewpoints, trails, public access facilities, public parks, and other low-intensity use outdoor recreation areas. Recreational uses that do not require a shoreline location, nor are related to the water, nor provide significant public access, are considered non-water-oriented. For example, a recreation use solely offering indoor activities would be considered non-water-oriented.

"Recreational Vehicle" is a vehicle which is a travel trailer, motor home, truck camper, or camping trailer that is designed and used as temporary living quarters or overnight camping, is either self-propelled or mounted on or drawn by another vehicle, has a body length of no more than forty-five (45) feet; or, any structure inspected, approved and designated as a recreational vehicle by an agency bearing the insignia of the State of Washington or any other state or federal agency having the authority to approve recreational vehicles.

"Regulated Substance" means the toxic or natural substances and dangerous waste which have the potential to cause adverse impacts to ground and surface water quality and are controlled to ensure proper management and handling. Toxic and dangerous substances are listed in but not limited to Washington Administrative Code (WAC) 173-201A-040, and WAC 173-303-080.

"Repair, Normal" means to restore a development or structure to a state comparable to its original, legally established condition, including but not limited to its size, shape, configuration, location and external appearance, within a reasonable period after decay or partial destruction, except where repair causes substantial adverse effects to shoreline resource or environment. Replacement of a structure or development may be authorized as repair where such replacement is the common method of repair for the type of structure or development and the replacement structure or development is comparable to the original structure or development including but not limited to its size, shape, configuration, location and external appearance and the replacement does not cause substantial adverse effects to shoreline resources or environment. See also "Maintenance, Normal."

"Residential" means buildings, structures or portions thereof that are designed and used as a place for human habitation. Included are single, duplex or multi-family dwellings, manufactured homes, and other structures that serve to house people, as well as the creation of new residential lots through land division. This definition includes accessory uses common to normal residential use, including but not limited to, residential appurtenances, accessory dwelling units, and home occupations.

"Restore," "restoration" or "ecological restoration" means the reestablishment or upgrading of impaired ecological shoreline processes or functions. This may be accomplished through measures including, but not limited to, revegetation, removal of intrusive shoreline structures, and removal or treatment of toxic materials. Restoration does not imply a requirement for returning the shoreline area to aboriginal or pre-European settlement conditions.

"Riparian Corridor" means the natural vegetation which lines the sides and tops of banks along rivers, creeks and streams. Typical vegetation include willows, cottonwood, maples, alder and other brushy understory which transitions into upland vegetation as distance from the bank increases.

"River" means the Yakima and Columbia Rivers.

"Salmonid" means a member of the fish family salmonidae. In Benton County, these include, but are not limited to, coho, Chinook, sockeye, resident rainbow, brown trout, steelhead, and whitefish.

"Seismic Hazard Areas" mean those areas of Benton County that are potentially subject to severe risk of earthquake damage as a result of seismically induced ground shaking, slope failure, settlement, soil liquefaction or surface faulting.

"Setback". See "Building Setback."

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

"Shorelands" or "shoreland areas" means those lands extending landward for two hundred feet in all directions as measured on a horizontal plane from the ordinary high water mark; floodways and contiguous floodplain areas landward two hundred feet from such floodways; and all wetlands and river deltas associated with the streams and lakes which are subject to the provisions of this chapter; the same to be designated as to location by the Department of Ecology.

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

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

"Shorelines of statewide significance" means the following shorelines of the state:

- A. Those lakes, whether natural, artificial, or a combination thereof, with a surface acreage of one thousand acres or more measured at the ordinary high water mark;
- B. Those natural rivers or segments east of the crest of the Cascade range downstream of a point where the annual flow is measured at two hundred cubic feet per second or more, or those portions of rivers east of the crest of the Cascade range downstream from the first three hundred square miles of drainage area, whichever is longer; and
- C. Those shorelands associated with A and B, above.

"Shorelines of the state" are the total of all "shorelines" and "shorelines of statewide significance" within the state.

"Shoreline environment designations" are a classification of shorelines established by this SMP in order to provide a uniform basis for applying policies and use regulations within distinctively different shoreline areas.

"Shorelines Hearings Board", a quasi-judicial body within the state Environmental and Land Use Hearings Office, which hears appeals by any aggrieved party on the issuance of a shoreline permit. See RCW 90.58.170 et seq. for the role of the Washington State Shorelines Hearings Board.

"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.

"Shoreline stabilization" means structural or non-structural modifications to the existing shoreline intended to address erosion impacts to property and dwellings, businesses, or structures caused by natural processes, such as current, flood, wind, or wave action. They are generally located parallel to the shoreline at or near the OHWM.

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

"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 to functions provided by such vegetation. The removal of invasive or noxious weeds does not constitute significant vegetation removal. Tree pruning, not including tree topping, where it does not affect ecological functions, does not constitute significant vegetation removal.

"Slide" refers to the downward mass movement of soil, rock, or snow resulting from failure of that material under stress.

"Slope" refers to the inclination of the surface of the land from the horizontal.

"SMA" means the Washington State Shoreline Management Act, chapter 90.58 RCW.

"Soft structural shoreline stabilization" means shoreline erosion control and restoration practices that contribute to restoration, protection or enhancement of shoreline ecological functions. Soft structural shoreline stabilization typically includes a mix of gravels, cobbles, boulders, logs and native vegetation placed to provide shore stability in a non-linear, generally sloping arrangement. Linear, vertical faces are an indicator of Hard Structural Shoreline Stabilization (see above definition).

"State master program" is the cumulative total of all shoreline master programs and amendments thereto approved or adopted by rule by Ecology.

"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, except for vessels.

"Substantial development" shall mean any development of which the total cost or fair market value exceeds seven thousand, and forty seven dollars ~~six thousand, four hundred, and sixteen dollars~~, or any development which materially interferes with the normal public use of the water or shorelines of the state. The dollar threshold must be adjusted for inflation by the Office of Financial Management every five years, beginning July 1, 2007, based upon changes in the consumer price index during that time period. "Consumer price index" means, for any calendar year, that year's annual average consumer price index, Seattle, Washington area, for urban wage earners and clerical workers, all items, compiled by the Bureau of Labor and Statistics, United States Department of Labor. The Office of Financial Management must calculate the new dollar threshold and transmit it to the Office of the Code Reviser for publication in the Washington State Register at least one month before the new dollar threshold is to take effect. 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, equipment or materials. See WAC 173-27-040 for a list of developments that are not considered substantial.

"Substantially degrade" means to cause significant ecological impact.

"Transportation" means roads and railways, related bridges and culverts, fills, embankments, causeways, parking areas, and trails.

"Use" means the activity or purpose for which land or structures or combination of land and structures are designed, arranged, occupied, or maintained together with any associated site improvement. This definition includes the construction, erection, placement, movement or demolition of any structure or site improvement and

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any physical alteration to land itself including any grading, leveling, paving or excavation. Use also means any existing or proposed configuration of land, structures, and site improvements, and the use thereof.

"Utility" means a primary or accessory service or facility that produces, transmits, stores, processes, or disposes of electrical power, gas, water, sewage, communications, oil, and the like.

"Vadose Zone Analysis" means the characterization of the soil profile above the water table.

"Variance" is a means to grant relief from the specific bulk, dimensional or performance standards set forth in this Master Program and not a means to vary a use of a shoreline.

"Vegetation" means any and all organic plant life growing at, below, or above the soil surface.

"Vessel" includes ships, boats, barges, or any other floating craft which are designed and used for navigation and do not interfere with the normal public use of the water.

"Water-dependent use" means a use or portion of a use which cannot exist in a location that is not adjacent to the water and which is dependent on the water by reason of the intrinsic nature of its operations.

"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.

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

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

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

- A. The use has a functional requirement for a waterfront location such as the arrival or shipment of materials by water or the need for large quantities of water; or
- B. The use provides a necessary service supportive of the water-dependent uses and the proximity of the use to its customers makes its services less expensive and/or more convenient.

"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.

"Wetland" or "wetlands" means that area inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas. Wetlands do not include those artificial wetlands intentionally created from non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1,

1990, that were unintentionally created as a result of the construction of a road, street, or highway. However, wetlands may include those artificial wetlands specifically intentionally created from non-wetland areas to mitigate conversion of wetlands.

"Wetland Edge" means the line delineating the outer edge of a wetland established by using the procedures in the currently approved Federal Wetland Delineation Manual.

"Wetland Functions" refer to the natural processes performed by wetlands and include functions which are important in facilitating food chain production, providing habitat for nesting, rearing and resting site for aquatic, terrestrial or avian species, maintaining the availability and quality of water such as purifying water, acting as recharge and discharge areas for groundwater aquifers and moderating surface water and storm water flows as well as performing other functions including but not limited to those set out in U.S. Army Corps of Engineers regulations at 33 C.R.R. Section 320.4(b)(2) (1988).

Section 15.03 Shoreline Jurisdiction and Use Preferences

03.010 Definition

- (a) As defined by the Shoreline Management Act of 1971, shorelines include certain waters of the State plus their associated "shorelands." The waterbodies designated as shorelines of the State are streams whose mean annual flow is 20 cubic feet per second (cfs) or greater and lakes whose area is greater than 20 acres. In Benton County, only the Yakima River and the Columbia River meet shoreline criteria.
- (b) Shorelands, as adopted by Benton County and indicated on the Official Shoreline Maps are available for review in the Planning Department as either hard copy or computer-generated images of the County's Geographic Information System, are defined as:
"those lands extending landward for 200 feet in all directions as measured on a horizontal plane from the ordinary high water mark; floodways and contiguous floodplain areas landward 200 feet from such floodways; and all wetlands and river deltas associated with the streams, lakes, and tidal waters which are subject to the provisions of this chapter...." (RCW 90.58.030)
- (c) The extent of shoreline jurisdiction is indicated on the Official Shoreline Maps available for review in the Planning Department as either hard copy or computer-generated images of the County's Geographic Information System. The purpose of the Official Shoreline Maps is to identify Environment Designations (Section 15.04 below). The maps only approximately identify or depict the lateral extent of shoreline jurisdiction. The actual lateral extent of the shoreline jurisdiction shall be determined on a site-specific basis based on the location of the ordinary high water mark (OHWM), floodway, floodplain, and presence of associated wetlands.
- (d) In circumstances where shoreline jurisdiction does not include an entire parcel, only that portion of the parcel within shoreline jurisdiction and any use, activity or development proposed within shoreline jurisdiction on that portion of the parcel is subject to this Shoreline Master Program.

03.020 General Shoreline Use Preferences

- (a) This SMP adopts the following policy provided in RCW 90.58.020, and fully implements it to the extent of its authority under this SMP:

It is the policy of the State to provide for the management of the shorelines of the State by planning for and fostering all reasonable and appropriate uses. This policy is designed to insure the development of these shorelines in a manner which, while allowing for limited reduction of rights of the public in the navigable waters, will promote and enhance the public interest. This

policy contemplates protecting against adverse effects to the public health, the land and its vegetation and wildlife, and the waters of the State and their aquatic life, while protecting generally public rights of navigation and corollary rights incidental thereto...

In the implementation of this policy, the public's opportunity to enjoy the physical and aesthetic qualities of natural shorelines of the State shall be preserved to the greatest extent feasible consistent with the overall best interest of the State and the people generally. To this end uses shall be preferred which are consistent with control of pollution and prevention of damage to the natural environment, or are unique to or dependent upon use of the state's shoreline. Alterations of the natural condition of the shorelines of the state, in those limited instances when authorized, shall be given priority for single family residences and their appurtenant structures, ports, shoreline recreational uses including but not limited to parks, marinas, piers, and other improvements facilitating public access to shorelines of the state, industrial and commercial developments which are particularly dependent on their location on or use of the shorelines of the state and other development that will provide an opportunity for substantial numbers of the people to enjoy the shorelines of the state....

Permitted uses in the shorelines of the State shall be designed and conducted in a manner to minimize, insofar as practical, any resultant damage to the ecology and environment of the shoreline area and any interference with the public's use of the water.

- (b) When determining allowable uses and resolving use conflicts on shorelines within jurisdiction consistent with the above policy, the following preferences and priorities as listed in WAC 173-26-201(2)(d) shall be applied in the order presented below:
 - (1) Reserve appropriate areas for protecting and restoring ecological functions to control pollution and prevent damage to the natural environment and public health.
 - (2) Reserve shoreline areas for water-dependent and associated water related uses ... Local governments may prepare master program provisions to allow mixed-use developments that include and support water-dependent uses and address specific conditions that affect water-dependent uses.
 - (3) Reserve shoreline areas for other water-related and water-enjoyment uses that are compatible with ecological protection and restoration objectives.
 - (4) Locate single-family residential uses where they are appropriate and can be developed without significant impact to ecological functions or displacement of water-dependent uses.
 - (5) Limit non-water-oriented uses to those locations where the above described uses are inappropriate or where non-water-oriented uses demonstrably contribute to the objectives of the Shoreline Management Act.

03.030 Shorelines of Statewide Significance

03.030.01 Designation Criteria

Certain shoreline waterbodies and their associated shorelands have elevated status under the SMA if they are streams and rivers in Eastern Washington that are "...downstream of a point where the annual flow is measured at two hundred cubic feet per second or more, or those portions of rivers east of the crest of the Cascade range downstream from the first three hundred square miles of drainage area, whichever is longer" (RCW 90.58.030(2)(e)(v)(B)). These waterbodies are considered to be "shorelines of statewide significance," and have unique supplemental provisions outlined in Sections 15.03.030.02 and 15.03.030.03 below. All of Benton County's shorelines, the Yakima and Columbia Rivers, are Shorelines of Statewide Significance.

03.030.02 *Use Preferences*

- (a) In accordance with RCW 90.58.020, the following management and administrative policies are hereby adopted for all Shorelines of Statewide Significance in the County and UGAs, as defined in RCW 90.58.030(2)(e). Consistent with the policy contained in RCW 90.58.020, preference shall be given to the uses in the following order that are consistent with the statewide interest in Benton County's shorelines. These are uses that:
 - (1) Recognize and protect the statewide interest over local interest;
 - (2) Preserve the natural character of the shoreline;
 - (3) Result in long term over short term benefit;
 - (4) Protect the resources and ecology of the shoreline;
 - (5) Increase public access to publicly owned areas of the shorelines;
 - (6) Increase recreational opportunities for the public in the shoreline;
 - (7) Provide for any other element as defined in RCW 90.58.100 deemed appropriate or necessary. (WAC 173-26-251(2))
- (b) Uses that are not consistent with these preferences should not be permitted on shorelines of statewide significance.

03.030.03 *Policies*

Consistent with the use preferences for Shorelines of Statewide Significance contained in RCW 90.58.020 and identified in Section 15.03.030.02, the County will base decisions administering this SMP on the following policies in order of decreasing priority:

- (a) Recognize and protect the state-wide interest over local interest.
 - (1) Solicit comments and opinions from groups and individuals representing state-wide interests by circulating amendments to the Master Program, and any proposed amendments affecting Shorelines of Statewide Significance, to state agencies, affected Tribes, adjacent local governments', citizen's advisory committees and local officials, and state-wide interest groups.
 - (2) Recognize and take into account state agencies' policies, programs and recommendations in developing and administering use regulations and in approving shoreline permits.
 - (3) Solicit comments, opinions and advice from individuals with expertise in ecology and other scientific fields pertinent to shoreline management.
- (b) Preserve the natural character of the shoreline.
 - (1) Designate and administer shoreline environments and use regulations to protect and restore the ecology and environment of the shoreline as a result of human intrusions on shorelines.
 - (2) Restore, enhance, and/or redevelop those areas where intensive development already exists in order to reduce adverse impact on the environment and to accommodate future growth rather than allowing high-intensity uses to extend into low-intensity use or underdeveloped areas.
 - (3) Protect and restore existing diversity of vegetation and habitat values, wetlands, and riparian corridors associated with shoreline areas.
 - (4) Protect and restore habitats for State-listed "priority species."
- (c) Support actions that result in long-term benefits over short-term benefits.
 - (1) Evaluate the short-term economic gain or convenience of developments relative to the long-term and potentially costly impairments to the natural shoreline.

- (2) Preserve resources and values of Shorelines of Statewide Significance for future generations and restrict or prohibit development that would irretrievably damage shoreline resources.
- (3) Ensure the long-term protection of ecological resources of statewide importance, such as anadromous fish habitats and unique environments.
- (d) Protect the resources and ecology of the shoreline.
 - (1) All shoreline development should be located, designed, constructed and managed consistent with mitigation sequencing provisions outlined in Section 15.05.020 to minimize adverse impacts to regionally important wildlife resources, including spawning, nesting, rearing and habitat areas, and migratory routes and result in no net loss of shoreline ecosystems and ecosystem-wide processes.
 - (2) Actively promote aesthetic considerations when contemplating new development, redevelopment of existing facilities, or general enhancement of shoreline areas.
- (e) Increase public access to publicly owned areas of the shoreline.
 - (1) Give priority to developing paths and trails to shoreline areas and linear access along the shorelines, especially those trail corridors that would be a regional recreational and transportation resource.
 - (2) Locate development landward of the OHWM so that access is enhanced and opportunities for access are not precluded.
 - (3) Increase public access opportunities for those with disabilities consistent with the Americans with Disabilities Act.
 - (4) Provide incentives to landowners that provide shoreline public access, such as development incentives, tax reductions, or other measures.
- (f) Increase recreational opportunities for the public on the shoreline.
 - (1) Plan for and encourage development of facilities for public recreational use of the shoreline, including facilities for boating, swimming, fishing, and other water-oriented activities.
 - (2) Reserve areas for lodging and related facilities on uplands with provisions for appropriate public access to the shoreline.

Section 15.04 Shoreline Environment Designations

04.010 Urban Transition Area

04.010.01 Purpose:

The purpose of assigning an area to an Urban Transition Area environment designation is to:

- (a) Ensure optimum utilization of shorelines occurring within designated Urban Growth Areas by managing development and uses so that they enhance and maintain shorelines for a variety of future urban uses, and
- (b) Protect and restore ecological functions of open space, flood plain and other sensitive lands where they exist in urban and developed settings, while allowing a variety of compatible uses.

The Urban Transition Area designation also reflects Benton County's coordinated planning with its cities.

04.010.02 Designation Criteria:

Assign an Urban Transition Area environment designation to Urban Growth Areas, where high intensity land-uses, including residential, commercial, recreational and industrial development or supporting utilities and

transportation exist or are planned for in the future or where there is existing or planned development that is compatible with maintaining or restoring the ecological functions of the area.

04.010.03 *Management Policies:*

- (a) Recognize the cities' SMP development standards in Urban Transition Area areas. Shoreline regulations should reflect each UGA's unique character. Major Urban Transition Areas are described below:
 - (1) Richland UGA North: Richland intends this shoreline have a natural character. The shoreline in this area has a low level of human disturbance, or has been disturbed in the past but either has been isolated from human activity in the near past or is subject to a restoration program designed to restore natural ecological processes and functions. Scientific, historical, cultural, educational research uses, and low-intensity water-oriented recreational access uses may be allowed provided that no significant ecological impact on the area will result.
 - (2) Benton City UGA: UGA lands vary in existing and planned character, allowing a range of residential, suburban agricultural, commercial, recreational, and transportation uses, designed in a manner to achieve no-net-loss of ecological function.
 - (3) Kennewick UGA: UGA lands are suitable for urban development that is compatible with maintaining or restoring of the ecological functions of the area.
 - (4) Prosser UGA: The Prosser UGA shorelines are intended for residential, industrial, and other low intensity development compatible with maintaining or restoring of the ecological functions of the area.
- (b) In regulating uses in the Urban Transition Area environment, first priority should be given to water-dependent uses. Second priority should be given to water-related and water-enjoyment uses. Nonwater-oriented uses should be allowed in limited situations where they do not conflict with or limit opportunities for water-oriented uses or on sites where there is no direct access to the shoreline.
- (c) When expanding the Urban Transition Area environment, first consider the availability of existing Urban Transition Area land for water-oriented development.
- (d) Uses that preserve the natural character of the area or promote preservation of open space, floodplain or sensitive lands either directly or over the long term are encouraged. Uses that result in restoration of ecological functions should be allowed if the use is otherwise compatible with the purpose of the environment and the setting.
- (e) Policies and regulations shall assure no net loss of shoreline ecological functions as a result of new development.
- (f) Public access should be required on public lands. Private development that creates a demand for shoreline access should provide visual or physical access unless there are constitutional or legal limitations, safety, security, environment, or other similar factors that limit its feasibility.

04.020 Rural Industrial

04.020.01 *Purpose:*

The purpose of the Rural Industrial environment designation is to provide for intensive water-oriented commercial, transportation, power production, and industrial uses, while protecting existing ecological functions. This designation will provide the opportunity for the development, redevelopment and infill of existing rural industrial and commercial developments or former industrial or commercial sites consistent with the rural character of Benton County.

04.020.02 *Designation Criteria:*

Assign a Rural Industrial environment designation to shoreline areas in industrial or commercial areas of intensive rural development if they currently support concentrations of commerce, transportation, power production, or navigation; or are suitable and planned for intensive water-oriented uses.

04.020.03 *Management Policies:*

- (a) In regulating uses in the Rural Industrial environment, first priority should be given to water-dependent uses. Second priority should be given to water-related and water-enjoyment uses. Nonwater-oriented uses should be allowed in limited situations where they do not conflict with or limit opportunities for water-oriented uses or on sites where there is no direct access to the shoreline.
- (b) Policies and regulations shall assure no net loss of shoreline ecological functions as a result of new development. Where applicable, new development shall include environmental cleanup and restoration of the shoreline to comply with any relevant state and federal law.
- (c) Public access should be required on public lands. Private development that creates a demand for shoreline access should provide visual or physical access unless there are constitutional or legal limitations, safety, security, environment, or other similar factors that limit its feasibility.
- (d) Full utilization of existing industrial areas and altered lands should be achieved before further expansion of intensive development is allowed.

04.030 Residential

04.030.01 *Purpose:*

The purpose of the Residential environment designation is to accommodate residential development and accessory structures that are consistent with this chapter. An additional purpose is to provide appropriate public access and recreational uses.

04.030.02 *Designation Criteria:*

Assign a Residential environment designation to shoreline areas that are predominantly single-family residential development or are planned and platted for residential development.

04.030.03 *Management Policies:*

- (a) Shoreline development standards should ensure no net loss of shoreline ecological functions, taking into account the environmental limitations and sensitivity of the shoreline area, the level of infrastructure and services available, and other comprehensive planning considerations.
- (b) Subdivisions and recreational developments should provide public or community access.
- (c) Access, utilities, and public services should be available and adequate to serve existing needs and those planned for future development.
- (d) Commercial development, including commercial recreation and agri-tourism, should be consistent with underlying rural zoning and limited to water-oriented uses within shoreline jurisdiction.

04.040 Rural

04.040.01 *Purpose:*

The purpose of assigning an area to a Rural environment designation is to promote agricultural use and activities, including associated irrigation and support facilities, and accommodate low-density rural home sites, function as a separation between urban areas, and maintain an open space character and provide opportunities for recreational uses compatible with agricultural activities.

04.040.02 *Designation Criteria:*

Assign a Rural environment designation to those areas characterized by:

- (a) agricultural lands of long-term commercial significance and low-density rural home sites;
- (b) commercial agricultural potential; or
- (c) parallel roads, railroads, canals, levees or other alterations in shoreline jurisdiction that limit shoreline ecological functions.

04.040.03 *Management Policies:*

- (a) Promote agricultural activities on agricultural lands.
- (b) Allow new agricultural activities and expansions of current agricultural activities on previously un-farmed lands consistent with this SMP.
- (c) Non-agricultural uses should be limited to those compatible with agriculture. Shoreline development within or adjacent to designated agricultural resource lands should incorporate measures to reduce compatibility impacts, such as open space landscaped separations or other measures to address impacts to agricultural operations.
- (d) Development standards should seek to conserve soils and water resources suitable for agricultural purposes.
- (e) Activities and uses should be designed for compatibility with the rural character, including the overall density pattern.

04.050 Hanford

04.050.01 *Purpose:*

The purpose of the Hanford environment is to recognize and foster the unique economic, environmental, and recreational values of the area as it transitions over time from federal energy purposes to other land uses and management consistent with the Hanford Reach National Monument designation.

04.050.02 *Designation Criteria:*

Assign a "Hanford" environment designation to shoreline areas located in the U.S. Department of Energy's Hanford site.

04.050.03 *Management Policies:*

To the extent that this SMP is applicable to federal lands, the following policies should guide uses in shoreline jurisdiction:

- (a) Predominant shoreline uses should include preservation of cultural, ecological and natural resources with limited public access where appropriate.
- (b) High intensity uses in shoreline jurisdiction should be limited to heavy and light industry, energy generation and transmission, research and development, and environmental cleanup.
- (c) High-intensity and low-intensity public access and recreation should be accommodated where consistent with local environmental conditions, and safety and security concerns.
- (d) Uses and activities should be consistent with the Benton County Comprehensive Land Use Plan and Benton County zoning regulations.

04.060 Conservancy

04.060.01 *Purpose:*

The purpose of the Conservancy environment is to:

- (a) protect ecological functions of open space, floodplain and other sensitive public or protected lands and conserve existing natural resources and valuable historic and cultural areas while allowing a variety of compatible uses; and
- (b) Ensure appropriate management and development of existing and future public parks and recreation areas.

04.060.02 *Designation Criteria:*

Assign a Conservancy environment designation if any of the following characteristics apply:

- (a) They are within existing or planned public parks or public lands intended to accommodate public access and recreational developments;
- (b) They are suitable for water-related or water-enjoyment uses;
- (c) They are open space, floodplain or other sensitive areas that should not be more intensively developed;
- (d) They have potential for ecological restoration;
- (e) They retain important ecological functions, even though partially developed; or
- (f) They have the potential for development that is compatible with ecological restoration.

04.060.03 *Management Policies:*

- (a) Uses in the Conservancy environment should be limited to those which sustain the shoreline area's physical and biological resources and uses of a non-permanent nature that do not substantially degrade ecological functions or the rural or natural character of the shoreline area.
- (b) Except in support of agriculture, aquaculture, and recreation uses, commercial and industrial uses should not be allowed.
- (c) Water-oriented uses should be given priority over nonwater-oriented uses. Water-dependent and water-enjoyment recreation facilities and uses that do not deplete the resource over time, such as boating facilities, fishing, hunting, wildlife viewing trails, swimming beaches, and scientific, historical, cultural, and educational research uses, are preferred, provided adverse impacts to the shoreline are mitigated.
- (d) Shoreline development standards should ensure that new development does not result in a net loss of shoreline ecological functions or further degrade other shoreline values.
- (e) Existing uses and development, including roadways and railroads, may be maintained and expanded consistent with provisions of this SMP.
- (f) Public access and public recreation objectives on public lands should be implemented when appropriate and when adverse ecological impacts can be mitigated.
- (g) Construction of new structural shoreline stabilization and flood control works should only be allowed where there is a documented need to protect an existing structure or ecological functions, and only when mitigation is applied.

04.070 Natural

04.070.01 *Purpose:*

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

04.070.02 *Designation Criteria:*

A Natural environment designation should be assigned to shoreline areas if any of the following characteristics apply:

- (a) The shoreline is ecologically intact and therefore currently performing an important, irreplaceable function or ecosystem-wide process;
- (b) The shoreline is considered to represent ecosystems and geologic types that are of particular scientific and educational interest; or
- (c) The shoreline is a publicly managed portion of the Umatilla National Wildlife Refuge

04.070.03 *Management Policies:*

- (a) Any use that would substantially degrade the ecological functions or natural character of the shoreline area should not be allowed.
- (b) The following new uses should not be allowed in the Natural environment:
 - (1) Commercial uses.
 - (2) Industrial uses.
 - (3) Nonwater-oriented recreation with no relationship to the shoreline and waterbody.
 - (4) Roads, utility corridors, and parking areas that can be located outside of "Natural" designated shorelines.
- (c) Single-family residential development may be allowed as a conditional use within the Natural environment if the density and intensity of such use is limited as necessary to protect ecological functions and be consistent with the purpose of the environment.
- (d) Irrigation withdrawals and other agricultural uses of a very low-intensity nature may be consistent with the Natural environment when such use is subject to appropriate limitations or conditions to assure that the use does not expand or alter practices in a manner inconsistent with the purpose of the designation.
- (e) Scientific, historical, cultural, educational research uses, and low-intensity water-oriented recreational access uses, including non-motorized trails, may be allowed provided that no significant ecological impact on the area will result.
- (f) New development or significant vegetation removal that would reduce the capability of vegetation to perform normal ecological functions should not be allowed. Do not allow the subdivision of property in a configuration that, to achieve its intended purpose, will require significant vegetation removal or shoreline modification that adversely impacts ecological functions. That is, each new parcel must be able to support its intended development without significant ecological impacts to the shoreline ecological functions.
- (g) Consistent with the policies of the designation, the County should include planning for restoration of degraded shorelines within this environment.

04.080 Aquatic

04.080.01 *Purpose:*

The purpose of the Aquatic environment is to protect, restore, and manage the unique characteristics and resources of the areas waterward of the ordinary high-water mark.

04.080.02 *Designation Criteria:*

Assign an Aquatic environment designation to lands waterward of the ordinary high-water mark.

04.080.03 *Management Policies:*

- (a) Allow new over-water structures only for water-dependent uses, including docks associated with single-family residences; public access; or ecological restoration.

- (b) The size of new over-water structures should be limited to the minimum necessary to support the structure's intended use.
- (c) In order to reduce the impacts of shoreline development and increase effective use of water resources, multiple use of over-water facilities should be encouraged.
- (d) All developments and uses on navigable waters or their beds should be located and designed to minimize interference with surface navigation, to consider impacts to public views, and to allow for the safe, unobstructed passage of fish and wildlife, particularly those species dependent on migration.
- (e) Shoreline uses and modifications should be designed and managed to prevent adverse impacts to ecological functions and ecosystem-wide processes, including degradation of water quality and alteration of natural hydrographic conditions. Adverse impacts should not be allowed except where necessary to achieve the objectives of the Shoreline Management Act, and then only when mitigated as necessary to assure no net loss of ecological functions.

04.090 Environment Designation Interpretation

- (a) If disagreement develops as to the exact location of an environment designation boundary line, the Official Shoreline Maps shall prevail consistent with the following rules:
 - (1) Boundaries indicated as approximately following lot, tract, or section lines shall be so construed.
 - (2) In cases where boundary line adjustments or subdivisions occur, the designation applied to the parent parcel prior to the boundary line adjustment or subdivision shall not change as a result. The shoreline designation can be redesignated through an SMP amendment.
 - (3) Boundaries indicated as approximately following roads and railroads shall be respectively construed to follow the nearest right-of-way edge.
 - (4) Boundaries indicated as approximately parallel to or extensions of features indicated in (1), (2), or (3) above shall be so construed.
- (b) In the event of an environment designation mapping error where the SMP update or amendment record, including the public hearing process, is clear in term of the correct environment designation to apply to a property, the Shoreline Administrator shall apply the environment designation approved through the SMP Update or Amendment process and correct the map. Appeals of such interpretations may be filed pursuant to Section 15.09 and the County's appeal procedures referenced in Section 15.09 of this SMP. If the environment designation criteria were misapplied, but the map does not show an unintentional error (e.g. the SMP hearing and adoption record does not indicate another designation was intended), a SMP amendment may be obtained consistent with WAC 173-26-100 and Section 15.09.130.
- (c) All shoreline areas waterward of the OHWM shall be designated Aquatic.
- (d) Upland environment designations shall apply to shorelands.
- (e) Only one environment designation shall apply to a given shoreland area. In the case of parallel designations, designations shall be divided along an identified linear feature and the boundary shall be clearly noted on the map (for example: "boundary is 100 feet upland from the OHWM").

04.100 Official Shoreline Maps and Unmapped or Undesignated Shorelines

- (a) The Official Shoreline Maps at the time of SMP adoption, which illustrate the delineation of shoreline jurisdiction and environment designations in the County and UGAs, are available for review in the Planning Department as either hard copy or computer-generated images of the County's Geographic Information System. The official map shall include the following language: "We hereby certify that this map constitutes the Official Shoreline Map as approved by Ordinance 2014-440 of the Board of County Commissioners and signed by its chairman dated this 3rd day of June, 2014." The Official Shoreline Maps

- (b) Any areas within shoreline jurisdiction that are not mapped and/or designated due to minor mapping inaccuracies in the lateral extent of shoreline jurisdiction from the shoreline waterbody related to site-specific surveys of OHWM, floodway, and/or floodplain are automatically assigned the category of the contiguous waterward shoreline environment designation. Where the mapping inaccuracy results in inclusion of an unmapped associated wetland, that wetland shall be assigned a Conservancy designation. Correction of these minor mapping inaccuracies may be made and incorporated into the Official Shoreline Maps without an SMP amendment.
- (c) All other areas of shoreline jurisdiction that were neither mapped as jurisdiction nor assigned an environment designation shall be assigned a Conservancy designation until the shoreline can be redesignated through an SMP amendment process conducted consistent with WAC 173-26-100 and SMP Section 15.09.130.
- (d) The actual location of the OHWM, floodplain, floodway, and wetland boundaries must be determined at the time a development is proposed. Wetland boundary and OHWM determinations are valid for five years from the date the determination is made. Floodplain and floodway boundaries should be assessed using FEMA maps or the most current technical information available.
- (e) In addition, any property shown in shoreline jurisdiction that does not meet the criteria for shoreline jurisdiction (e.g., is more than 200 feet from the OHWM or floodway, is no longer in floodplain as documented by a Letter of Map Revision from FEMA, and does not contain associated wetlands) shall not be subject to the requirements of this SMP. Revisions to the Official Shoreline Maps may be made as outlined in this Section 15.04.100(e) without an SMP amendment.

- (a) Table 04.110-1 indicates which shoreline activities, uses, developments, and modifications may be allowed or are prohibited in shoreline jurisdiction within each shoreline environment designation. Activities, uses, developments, and modifications are classified as follows:
- (1) Uses allowed by Shoreline Substantial Development Permit are indicated by an “S” on the use matrix.
 - (2) Uses allowed by Shoreline Conditional Use Permit are indicated by a “C” on the use matrix.
 - (3) Prohibited activities, uses, developments, and modifications are not allowed and are shown as an “X” on the use matrix.
 - (4) Uses or activities not applicable to the shoreline environment designation in question are shown as “N/A” on the matrix.
 - (5) Uses in the Urban Transition Area shall be allowed subject to the most restrictive of the City or County Shoreline Master Program use allowances.

Shoreline Use or Modification	Urban Transition Area	Rural Industrial	Rural	Residential	Conservancy	Natural	Farmland	Aquatic
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Key:								
S = Shoreline Substantial Development Permit or Exemption								
C = Shoreline Conditional Use Permit								
X = Not allowed N/A = Not Applicable								
Agriculture								
Agricultural Activities, Existing and New	S	S	S	S	S	C	X	N/A
Commercial Dairying, Poultry Raising, Commercial Hog Ranches, Animal Feedlots and Stockyards	X	X	X	X	X	X	X	N/A
Agricultural Stands	S	S	S	S	X	X	X	N/A
Agricultural Related Industries	C	S	S	X	X	X	X	N/A
Agri-tourism	C	S	S	X	X	X	X	N/A
Aquaculture								
Commercial	X	C	C	X	X	X	X	see adjacent upland environment
Non-commercial	S	C	S	X	C	C	S	see adjacent upland environment
Boating and Private Moorage Facilities								
Boat Launches								
Public	S	X	S	C	C	X	X	see adjacent upland environment
Commercial/Industrial	C	S	C	X	C	X	X	see adjacent upland environment
Other private	X	X	X	X	X	X	X	X
Pier/Dock								
Residential, including community	S	S	S	S	S	S	X	see adjacent upland environment
Commercial, industrial, aquaculture, recreational or public access use	S	S	S	C	C	C	S	see adjacent upland environment
Marinas	C	C	C	X	X	X	X	see adjacent upland environment
Breakwaters, Jetties, and Groins								
To protect or restore ecological functions	S	S	S	S	S	S	S	S
To maintain existing water-dependent uses	C	C	C	C	C	C	C	see adjacent upland environment
All other purposes	C	C	C	C	X	X	X	see adjacent upland environment
Commercial and Service Uses								
Visitor-serving uses	S	S	S	S	X	X	X	C
Recreation concessions	S	S	S	S	S	S	S	S
Other retail, trade or service	C	C	C	C	X	X	X	C
Dredging and Dredge Material Disposal								

Shoreline Use or Modification	Urban Transition Area	Rural Industrial	Rural	Residential	Conservancy	Natural	Hanford	Aquatic
Key: S = Shoreline Substantial Development Permit or Exemption C = Shoreline Conditional Use Permit X = Not allowed N/A = Not Applicable								
Dredging for water-dependent use and public access	S	S	S	S	C	C	C	see adjacent upland environment
Dredging for existing navigation uses	NA	NA	NA	NA	NA	NA	NA	S
Dredging or disposal of dredged material for habitat restoration	S	S	S	S	S	S	S	S
Dredging, other	NA	NA	NA	NA	NA	NA	NA	C
Disposal of dredged material inside CMZ	C	C	C	C	C	C	C	C
Disposal of dredged material outside CMZ	S	S	C	C	X	X	X	see adjacent upland environment
Implementation of dredging maintenance plan	S	S	S	S	S	S	S	S
Fill								
Waterward of the OHWM - restoration	N/A	N/A	N/A	N/A	N/A	N/A	N/A	S
Waterward of the OHWM	N/A	N/A	N/A	N/A	N/A	N/A	N/A	C
Upland of the OHWM	S	S	S	S	S	C	S	N/A
Flood Hazard Reduction Measures								
Modification of Existing Flood Hazard Facilities (including relocation farther landward)	S	S	S	S	C	C	C	N/A
New Facilities	S	S	C	C	C	C	C	N/A
Forest Practices								
Forest Practices	X	X	X	X	X	X	X	N/A
Industry / Manufacturing / Storage								
Water-Oriented	S	S	S	X	X	X	S	C
Non-Water-Oriented								
General	X	C	X	X	X	X	C	X
Separated from Shoreline ¹	S	S	S	X	X	X	S	N/A
Mixed-use project that includes a Water-Dependent Use	S	S	S	X	X	X	S	C
In-Stream Structures								
To protect public facilities	S	S	S	S	C	C	S	see adjacent upland environment
To protect, restore, or monitor ecological functions or processes	S	S	S	S	S	S	S	S
To support agriculture	S	S	S	S	S	C	S	see adjacent upland environment

Shoreline Use or Modification	Urban Transition Area	Rural Industrial	Rural	Residential	Conservancy	Natural	Hanford	Aquatic
Key: S = Shoreline Substantial Development Permit or Exemption C = Shoreline Conditional Use Permit X = Not allowed N/A = Not Applicable								
Other	S	S	S	S	C	C	N/A	see adjacent upland environment
Mining								
Mining that creates, restores or enhances habitat for priority species	S	S	S	S	S	S	S	S
Other mining and on-site processing	C	S	C	X	X	X	C	C
All mining in channel migration zone	C	C	C	X	X	X	C	C
Recreational Development								
Water-Oriented	S	S	S	S	S	S	S	S
Non-Water-Oriented								
General	C	C	C	C	C	X	C	X
Sites separated from shoreline	S	S	S	S	S	S	S	N/A
Residential Development								
Single-Family Dwelling	S	X	S	S	S	C	X	N/A
Accessory Dwelling Unit	S	X	S	S	C	X	X	N/A
Duplex	S	X	S	S	X	X	X	N/A
Houseboats and Over-Water Residential Uses	N/A	N/A	N/A	N/A	N/A	N/A	N/A	X
Shoreline Habitat and Natural Systems Enhancement Projects								
Shoreline Habitat and Natural Systems Enhancement Projects	S	S	S	S	S	S	S	S
Shoreline Stabilization								
New Hard Stabilization	S	S	S	S	C	X	S	see adjacent upland environment
New Soft Stabilization	S	S	S	S	S	C	S	see adjacent upland environment
Repair and Replacement	S	S	S	S	S	S	S	see adjacent upland environment
Transportation and Parking								
Access Roads Serving Permitted Uses	S	S	S	S	S	C	S	N/A
Highways, Freeways, Arterials & Collectors	S	S	S	S	C	C	S	N/A
Bridges	S	S	S	S	C	C	S	C
Railways	S	S	S	S	C	C	S	C
Airstrips	S	S	C	X	X	X	S	N/A

Shoreline Use or Modification	Urban Transition Area	Rural Industrial	Rural	Residential	Conservancy	Natural	Hanford	Aquatic
Key: S = Shoreline Substantial Development Permit or Exemption C = Shoreline Conditional Use Permit X = Not allowed N/A = Not Applicable								
Trails	S	S	S	S	S	C	S	N/A
Parking for Authorized Use	S	S	S	S	S	C	S	N/A
Park and Ride lots and Similar Stand Alone Parking	C	C	C	X	X	X	C	N/A
Utilities								
Utility Services Accessory to Individual Shoreline Projects	S	S	S	S	S	C	S	C
Utility Services to Projects outside Shoreline Jurisdiction	S	S	S	C	C	X	S	C
Power Generating Facilities	S	S	C	X	C	X	C	C
Wind Turbine and Related Support Structures (Zoning Code)	S	S	C	C	C	X	C	C
Utility Transmission Lines	S	S	S	S	S	C	S	C
Utility Services, General	S	S	S	S	S	C	S	C
Wastewater Treatment Facility	S	S	C	X	C	X	C	C

¹ Applies when a proposed development is physically separated from the shoreline by another property or public right of way.

04.120 Developments Not Required to Obtain Shoreline Permits or Local Reviews

(a) Requirements to obtain a substantial development permit, conditional use permit, variance, letter of exemption, or other review to implement the Shoreline Management Act do not apply to the following:

- (1) Remedial actions. Pursuant to RCW 90.58.355, any person conducting a remedial action at a facility pursuant to a consent decree, order, or agreed order issued pursuant to chapter 70.105D RCW, or to the department of ecology when it conducts a remedial action under chapter 70.105D RCW.
- (2) Boatyard improvements to meet NPDES permit requirements. Pursuant to RCW 90.58.355, any person installing site improvements for storm water treatment in an existing boatyard facility to meet requirements of a national pollutant discharge elimination system storm water general permit
- (3) WSDOT facility maintenance and safety improvements. Pursuant to RCW 90.58.356, Washington State Department of Transportation projects and activities meeting the conditions of RCW 90.58.356 are not required to obtain a substantial development permit, conditional use permit, variance, letter of exemption, or other local review.
- (4) Projects consistent with an environmental excellence program agreement pursuant to RCW 90.58.045.
- (5) Projects authorized through the Energy Facility Site Evaluation Council process, pursuant to chapter 80.50 RCW.

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04.1320 Development Standards

- (a) There shall be a thirty-five (35) foot maximum building height for all structures, except that utility facilities and bridges are not required to meet this standard. To exceed 35 feet, an applicant must apply

for a Shoreline Variance, and comply with the following criteria in addition to standard Shoreline Variance criteria:

- (1) Demonstrate overriding considerations of the public interest will be served, and
 - (2) Demonstrate that the proposal will not obstruct the view of a substantial number of residences on areas adjoining such shorelines or impair views from public lands or impair scenic vistas.
- (b) Minimum shoreline lot frontage shall be consistent with underlying zoning and be no less in width than the following by shoreline environment:
- (1) Urban Transition Area: 70 feet
 - (2) Rural Industrial: 70 feet
 - (3) Rural: 90 feet
 - (4) Residential: 70 feet
 - (5) Conservancy: 90 feet
 - (6) Natural: 90 feet
 - (7) Hanford: 90 feet
- (c) Shoreline buffers: See Section 15.06.030(a).
- (d) Minimum structure setbacks from side property lines in shoreline jurisdiction shall be consistent with the underlying zoning and no less than 5 feet.

Section 15.05 General Regulations and Performance Standards

05.010 Archaeological and Historic Resources

- (a) The County shall require development applicants to consult with DAHP to access data so that every proposal can be screened, and archaeological sites are not disturbed. Review of data and other consultation may occur directly with DAHP or through a professional archaeologist recognized by the State of Washington. Permits issued in areas documented to contain archaeological resources require a site inspection or evaluation by a professional archaeologist. Auger tests may be required before construction and representatives of the DAHP and affected tribes may be invited to observe any tests and construction work, or the County may send results of the test to affected tribes. If auger or historical data indicate probable presence of cultural resources which may be disturbed by excavation, the County shall inform the shoreline permit applicant and may impose conditions on any shoreline permit to assure that such resources are protected, preserved or collected.
- (b) Developers and property owners shall immediately stop work and notify the County, DAHP, and affected tribes if archaeological resources are uncovered during excavation. Following such notification, the County shall require a developer or property owner follow the provisions of Subsection (c).
- (c) Where a professional archaeologist or historian, recognized by the State of Washington, has identified an area or site as having significant value, or where an area or site is listed in, or determined eligible for listing in, national, state or local historical registers, or where through the development application state data has identified the potential for cultural resources, the County shall, with additional DAHP consultation, require a development application to provide an evaluation of the resource, and appropriate conditions, which may include preservation and/or retrieval of data, proposal modifications to reduce impacts, or other mitigation authorized through the State Environmental Policy Act, or other local, state, or federal laws.

- (d) Applicants shall be required to follow applicable provisions of federal and state laws, including but not limited to: Chapter 27.44 RCW Indian Graves and Records and Chapter 27.53 RCW Archaeological Sites and Resources.

05.020 Environmental Protection

- (a) Ecological Functions. Uses and developments on Benton County shorelines must be designed, located, sized, constructed and maintained to achieve no net loss of shoreline ecological functions necessary to sustain shoreline natural resources. New uses and developments must not have an unmitigated adverse impact on other shoreline functions fostered by this SMP.
- (b) Protection of Critical Areas and Buffers. Critical areas, critical areas buffers, and shoreline buffers must be protected in accordance with the provisions of SMP Section 15.06, Critical Areas in Shoreline Jurisdiction.
- (c) Mitigation Requirement. If a proposed shoreline use or development is entirely addressed by specific, objective standards (such as setback distances, pier dimensions, or materials requirements) contained in this SMP, then the mitigation sequencing analysis described in Section 15.05.020(d) is not required. In the following circumstances, the applicant must provide a mitigation sequencing analysis as described in Section 15.05.020(d):
 - (1) if a proposed shoreline use or development is addressed in any part by discretionary standards (such as standards requiring a particular action "if feasible" or requiring the minimization of development size) contained in this Chapter, then the mitigation sequencing analysis is required for the discretionary standard(s); or
 - (2) when an action requires a Shoreline Conditional Use Permit or Shoreline Variance Permit; or
 - (3) when specifically required by regulations contained in Sections 15.05, 15.06, 15.07 or 15.08 of this SMP.
- (d) Mitigation Sequence. In order to ensure that development activities contribute to meeting the no net loss provisions by avoiding, minimizing, and mitigating for adverse impacts to ecological functions or ecosystem-wide processes, an applicant required to complete a mitigation analysis pursuant to Section 15.05.020(c) must describe how the proposal will follow the sequence of mitigation as defined below:
 - (1) Avoid the impact altogether by not taking a certain action or parts of an action;
 - (2) Minimize the impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts;
 - (3) Rectify the impact by repairing, rehabilitating, or restoring the affected environment to the conditions existing at the time of the initiation of the project or activity;
 - (4) Reduce or eliminate the impact over time by preservation and maintenance operations during the life of the action;
 - (5) Compensate for the impact by replacing, enhancing, or providing substitute resources or environments; and
 - (6) Monitor the impact and the compensation projects and take appropriate corrective measures.
- (e) Adverse Impacts. Example of common actions that may result in adverse ecological impacts include, but are not limited to, the following:
 - (1) Removal of native plant communities in shoreline jurisdiction,
 - (2) Removal of native or non-native trees that overhang the water,
 - (3) Removal of native or non-native vegetation on slopes if that vegetation supports maintenance of slope stability and prevents surface erosion,
 - (4) Removal or alteration of priority habitats or habitat for priority species,

- (5) Construction of new or expanded in- and over-water structures,
 - (6) Construction of new or expanded shoreline stabilizations,
 - (7) New discharges of water into the Yakima or Columbia Rivers that may introduce pollutants,
 - (8) Construction of new impervious surfaces whose discharges are not infiltrated and thus may alter hydrologic conditions of shoreline waterbodies,
 - (9) Changes in grading or fill that reduce floodplain capacity.
- (f) Mitigation Plan. All proposed alterations to shoreline jurisdiction that may have adverse effects on ecological functions require mitigation sufficient to provide for and maintain the functions and values of the shoreline area or to prevent risk from a critical areas hazard. The applicant must develop and implement a mitigation plan prepared by a qualified professional. Mitigation in excess of that necessary to ensure that development will result in no net loss of ecological functions will not be required by Benton County, but may be voluntarily performed by an applicant. In addition to any requirements found in Section 15.07, Critical Areas in Shoreline Jurisdiction, a mitigation plan must include:
- (1) An inventory and assessment of the existing shoreline environment including relevant physical, chemical and biological elements;
 - (2) A discussion of any federal, state, or local management recommendations which have been developed for critical areas or other species or habitats located on the site;
 - (3) A discussion of proposed measures which mitigate the adverse impacts of the project to ensure no net loss of shoreline ecological functions;
 - (4) A discussion of proposed management practices which will protect fish and wildlife habitat both during construction, and after the project site has been fully developed;
 - (5) Scaled drawings of existing and proposed conditions, materials specifications, and a minimum three-year maintenance and monitoring plan, including performance standards;
 - (6) A contingency plan if mitigation fails to meet established success criteria; and
 - (7) Any additional information necessary to determine the adverse impacts of a proposal and mitigation of the impacts.
- (g) Alternative Mitigation. When compensatory measures are appropriate pursuant to the mitigation priority sequence above, preferential consideration shall be given to measures that replace the impacted functions on site and in kind. To provide for flexibility in the administration of the ecological protection provisions of this SMP, alternative mitigation approaches may be approved within shoreline jurisdiction where such approaches provide increased protection of shoreline ecological functions and processes over the standard provisions of this SMP and are scientifically supported, or are consistent with the Shoreline Restoration Plan or watershed-level management plans. Potential alternative mitigation tools include in-lieu-fee, advance mitigation, and mitigation banking. Authorization of alternative compensatory mitigation measures may require appropriate safeguards, terms or conditions as necessary to ensure no net loss of ecological functions, and may require approval by other state or federal agencies.

05.030 Shoreline Vegetation Conservation

- (a) Vegetation conservation standards do not apply retroactively to existing legally established uses and developments. Vegetation associated with existing structures, uses and developments may be maintained within shoreline jurisdiction.
- (b) Vegetation within shoreline buffers, other stream buffers, wetlands and wetland buffers, WDFW-mapped priority habitats and species areas, and other critical areas must be managed consistent with Section 15.06, Critical Areas in Shoreline Jurisdiction. Regulations specifying establishment and management of

shoreline buffers (buffers associated with the Yakima and Columbia Rivers) are located in Section 15.06.030, Rivers and Creeks.

- (c) Other vegetation within shoreline jurisdiction, but outside of shoreline buffers, creek buffers, wetlands and wetland buffers, and other WDFW-mapped priority habitats and species areas must be managed according to Section 15.05.020, Environmental Protection, and any other regulations specific to vegetation management contained in this SMP and Benton County Code.
- (d) Vegetation clearing must be limited to the minimum necessary to accommodate approved shoreline development that is consistent with all other provisions of this SMP and Benton County Code. Mitigation sequencing per Section 15.05.020(d), Environmental Protection, must be applied unless specifically excluded by this SMP, so that the design and location of the structure or development, including septic drainfields, minimizes short- and long-term vegetation removal. The County may approve modifications or require minor site plan alterations to achieve maximum tree retention.
- (e) Where vegetation removal conducted consistent with this Section results in adverse impacts to shoreline ecological function, new developments or site alterations are required to develop and implement a supplemental mitigation plan. Examples of actions that may result in adverse impacts include:
 - (1) Removal of native trees, shrubs or groundcovers;
 - (2) Removal of non-native trees or shrubs that overhang aquatic areas or stabilize slopes; or
 - (3) Removal of native or non-native trees or shrubs that disrupts an existing vegetation corridor connecting the property to other critical areas or buffers.

Mitigation plans must be prepared by a qualified professional and must contain information required in Section 15.05.020(e). Performance standards shall require 100 percent survival in Year 1, with 100 percent tree survival and 80 percent shrub and groundcover survival at the end of the monitoring period. Mitigation measures must be maintained over the life of the use or development.

- (f) Shoreline vegetation may be removed to accommodate a temporary staging area when necessary to implement an allowed use or modification, but mitigation sequencing must be utilized and the area must be immediately stabilized and restored with native vegetation once its use as a staging area is complete.
- (g) Native tree removal in shoreline jurisdiction must be mitigated by installation of a similar native tree at a 1:1 impact to mitigation ratio. Non-native tree removal in shoreline buffers must be mitigated by installation of a native or suitable non-native tree at a 1:1 impact to mitigation ratio. All mitigation trees shall be preferentially placed in the shoreline buffer, unless the trees provide connectivity to upland habitats or other critical areas, and shall be held to a 100% survival standard at the end of three years.
- (h) Where a tree poses a safety hazard, it may be removed or converted to a wildlife snag if the hazard cannot be eliminated by pruning, crown thinning, or other technique that maintains some habitat function. If a safety hazard cannot be easily determined by the County, a written report by a certified arborist or other qualified professional is required to evaluate potential safety hazards.
- (i) Selective pruning of trees for views is allowed. Selective pruning of trees for views does not include removal of understory vegetation, and must not compromise the health of the tree.
- (j) Hand removal or spot-spraying of invasive species (such as Russian olive) or noxious weeds included on the Washington State Noxious Weed List as a Class A, B or C weed on shorelands outside of steep or unstable slope areas is encouraged.
- (k) Mechanical removal or large-scale chemical treatment of invasive species.
 - (1) Mechanical removal or large-scale chemical treatment of invasive species (such as Russian olive) or noxious weeds included on the Washington State Noxious Weed List as a Class A, B or C weed on shorelands outside of steep or unstable slope areas is encouraged.

- (2) Coordination with Benton Conservation District is encouraged prior to undertaking invasive or noxious weed removal projects to ensure that the control and disposal technique is appropriate.
 - (3) Where noxious weeds and invasive species removal results in bare soils that may be subject to erosion or recolonization by invasive or noxious species, the area must be stabilized using best management practices and replanted with native plants (in or outside of shoreline or critical area buffers) or suitable non-native plants (outside of shoreline or critical area buffers). The replanted vegetation must be similar in size and structure at maturity to the removed vegetation.
 - (4) Invasive species removal efforts that exceed one-quarter acre should be phased if feasible to minimize potential erosion and sedimentation impacts.
- (l) Aquatic weed control must only be permitted where the presence of aquatic weeds will adversely affect native plant communities, fish and wildlife habitats, or an existing water-dependent recreational use. Aquatic weed control efforts must comply with all applicable laws and standards.

05.040 Water Quality, Stormwater, and Nonpoint Pollution

- (a) Do not degrade ecological functions. Design, construction and operation of shoreline uses and developments shall incorporate measures to protect and maintain surface and groundwater quantity and quality in accordance with all applicable laws, so that there is no net loss of ecological functions.
- (b) Do not degrade views and recreation opportunities. Design, construction and operation of shoreline uses and developments shall incorporate measures to protect and maintain surface and groundwater quantity and quality in accordance with all applicable laws, so that significant impacts to aesthetic qualities or recreational opportunities do not occur. A significant impact to aesthetics or recreation would occur if a stormwater facility and appurtenant structures such as fences or other features have the potential to block or impair a view of shoreline waters from public land or from a substantial number of residences per RCW 90.58.320, or if water quality were visibly degraded such that the color and character were unattractive and discouraged normal uses such as swimming, fishing, boating, or viewing.
- (c) Requirements for new development.
 - (1) New development and re-development shall manage short-term and long-term stormwater runoff to avoid and minimize potential adverse effects on shoreline ecological functions through compliance with the latest edition of the Benton County Hydrology Manual or approved equivalent. If certain thresholds are not met by a development that trigger compliance with the Benton County Hydrology Manual or approved equivalent, best management practices (BMPs) must still be employed to avoid and minimize potential adverse effects.
 - (2) When the Benton County Hydrology Manual applies, deviations from the standards may be approved where it can be demonstrated that off-site facilities would provide better treatment, or where common retention, detention and/or water quality facilities meeting such standards have been approved as part of a comprehensive stormwater management plan.
- (d) Sewage management. To avoid water quality degradation, sewer service is subject to the requirements outlined below.
 - (1) Any existing septic system or other on-site system that fails or malfunctions will be required to connect to an existing municipal sewer service system if feasible, or make system corrections approved by Benton-Franklin Health District.
 - (2) Any new development, business, single-family or multi-family unit in an Urban Growth Area will be required to connect to an existing municipal sewer service system if feasible, or install an on-site septic system approved by Benton-Franklin Health District.

- (e) Materials requirements. All materials that may come in contact with water shall be untreated or approved treated wood, concrete, approved plastic composites or steel, that will not adversely affect water quality or aquatic plants or animals.

05.050 Public Access

- (a) Efforts to implement the public access provisions of this Section shall be consistent with all relevant constitutional and other legal limitations on regulation of private property and the principles of nexus and proportionality.
- (b) Public access does not include the right to enter upon or cross private property, except on dedicated public rights-of-way or easements or where development is specifically designed to accommodate public access.
- (c) The County adopts the following policies and plans as collectively constituting a shoreline public access plan for Benton County shorelines:
 - (1) Benton County Comprehensive Plan Parks and Recreation Element
 - (2) Benton County Comprehensive Parks Plan
 - (3) Hanford Site Comprehensive Land Use Plan Map
- (d) The Shoreline Administrator may approve a public access plan not otherwise listed in Subsection (c) if it:
 - (1) Meets the requirements of WAC 173-26-221(4); and
 - (2) Is developed through an open public process as provided in WAC 173-26-201(3)(b)(i).
- (e) Shoreline development shall not interfere with public access and enjoyment of any nearby publicly owned land areas.
- (f) The County shall not vacate any road, street, or alley abutting a body of water except as provided under RCW 36.87.130 County Roads.
- (g) Shoreline public access shall be required for the following shoreline uses and activities, unless excepted by Subsection (h):
 - (1) Shoreline recreation pursuant to Section 15.07.110;
 - (2) New structural public flood hazard reduction measures, such as dikes and levees;
 - (3) Shoreline development proposed or financed by public entities, including local governments, port districts, state agencies, and public utility districts;
 - (4) New marinas when water-enjoyment uses are associated with the marina;
 - (5) Where commercial use is proposed on land in public ownership;
 - (6) Where the nature of the proposed use, activity or development will likely generate a public demand for one or more forms of physical or visual access to the shoreline;
 - (7) When 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 nonwater-oriented commercial or industrial use; or
 - (8) When 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 (see Section 15.02).
- (h) Notwithstanding the applicability of Subsection (g), an applicant shall not be required to provide public access where the County determines that one or more of the following conditions apply:
 - (1) Reasonable, safe and convenient public access to the shoreline is accessible within one-quarter mile (1,320 feet) of the site;

- (2) The County's shoreline public access plan defined in Subsection (c) does not indicate a need for public access at the property;
 - (3) The site is within or part of an overall development which has previously provided public access through other application processes;
 - (4) The economic cost of providing for public access upon the site is unreasonably disproportionate to the total long-term economic value of the proposed use, activity or development;
 - (5) The proposed use, activity or development only involves the construction of four or fewer single-family or multifamily dwellings;
 - (6) The proposed use, activity or development only involves agricultural activities;
 - (7) The proposal consists of a new or expanded road or utility crossing through shoreline jurisdiction serving development located outside of shoreline jurisdiction;
 - (8) The nature of the use, activity or development or the characteristics of the site make public access requirements inappropriate due to health, safety or environmental hazards based on evidence provided in the proposed application;
 - (9) The proposed use, activity or development has security requirements that are not feasible to address through the application of alternative design features or other measures;
 - (10) Significant and unmitigable harm to the shoreline environment would be likely to result from an increase, expansion or extension of public access upon the site; or
 - (11) Public access is deemed detrimental to threatened and/or endangered species under the Endangered Species Act.
- (i) Public Access Standards. When public access is provided, the following standards shall apply.
- (1) Physical public access is preferred to solely visual access. Where physical public access is not feasible, the applicant shall incorporate visual public access. Visual public access may consist of view corridors, viewpoints, or other means of visual approach to public waters. Physical public access may consist of a dedication of land or easement and a physical improvement in the form of a trail, park, or other area serving as a means of physical approach to public waters.
 - (2) Physical public access shall be designed to connect to existing or future public access features on adjacent or abutting properties, or shall connect to existing public rights-of-way or access easements, consistent with design and safety standards.
 - (3) Public access proposals shall be designed consistent with parks and recreation standards or plans contained in applicable County, State, or Federal codes or approved plans.
- (j) Shared community access may be allowed if there is no existing or planned public access along the shoreline as determined by a review of adopted parks and recreation plans. Where provided, community access is subject to all applicable development standards of this Section. Preference shall be given for consolidated community access over individual lot by lot access in new multi-lot or multi-unit development.
- (k) Where public access is required pursuant to Subsection (g) and not exempt through Subsection (h), an applicant may request that the public access requirement be fulfilled through developing public access on another site – otherwise called off-site public access or by payment of a fee in lieu.
- (1) Off-site public access, either physical or visual, may be permitted by the County where it results in an equal or greater public benefit than on-site public access, or when on-site limitations of security, environment, or feasibility are present. Off-site public access is preferred where it implements adopted County shoreline public access plans defined in Subsection (c). Off-site public access may include, but is not limited to, enhancing a nearby public property (e.g. existing public recreation site;

existing public access; road, street or alley abutting a body of water; or similar) in accordance with County standards; providing, improving or enhancing public access on another property under the control of the applicant/proponent; or another equivalent measure.

- (2) Instead of on-site or off-site public access improvements, the County may require or an applicant may propose a fee-in-lieu. A fee-in-lieu may be assessed where the off-site improvement is best accomplished by the County or another agency at a later date or better implements the County Public Access Plans listed in Section 15.05.050. The cost of providing the off-site public access shall be proportionate to the total long-term cost of the proposed development or use. The fee-in-lieu agreements, conditions of approval, or mitigation measures shall address the responsibility and cost for operation and maintenance.
- (l) The County may condition public access proposals to ensure compatibility with existing public access or transportation facilities, address environmental conditions or environmental impacts, and/or address compatibility with adjacent properties. Public access facilities shall be made compatible with adjacent private properties through the use of techniques to define the separation between public and private space, including but not limited to, fencing, vegetation, and elevation separations.

05.060 Flood Hazard Reduction

- (a) Development in floodplains shall avoid significantly or cumulatively increasing flood hazards. Development shall be consistent with this SMP, including Section 15.06.050, as well as applicable guidelines of the Federal Emergency Management Agency and an approved flood hazard management plan.
- (b) The channel migration zone (CMZ) is considered to be that area of a stream channel which may erode as a result of normal and naturally occurring processes and has been mapped consistent with WAC 173-26-221(3)(b). The Channel Migration Zone Maps are available for review in the Planning Department as either hard copy or computer-generated images of the County's Geographic Information System. 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), and may include, but is not limited to, historic aerial photographs, topographic mapping, flooding records, and field verification. The CMZ study must be prepared by a licensed geologist or engineer with at least five years of applied experience in assessing fluvial geomorphic processes and channel response.
- (c) The following uses and activities may be authorized within the CMZ or floodway, provided they are also consistent with Section 15.06.050:
 - (1) 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.
 - (2) New development or redevelopment landward of existing legal structures, such as levees, that prevent active channel movement and flooding.
 - (3) Existing and ongoing agricultural activities provided that no new restrictions to channel movement are proposed.
 - (4) Development of new or expansion or redevelopment of existing bridges, utility lines, public stormwater facilities and outfalls, and other public utility and transportation structures, including trails, where no other feasible (see definition in Section 15.02) alternative exists or the alternative

- would result in unreasonable and disproportionate costs¹. Where such structures are allowed, mitigation shall address adversely impacted functions and processes in the affected shoreline.
- (5) New or redeveloped measures to reduce shoreline erosion, provided that it is demonstrated that the erosion rate exceeds that which would normally occur in a natural condition, that the measures do not interfere with fluvial hydrological and geo-morphological processes normally acting in natural conditions, and that the measures include appropriate mitigation of adverse impacts on ecological functions associated with the river or stream.
 - (6) Water-dependent installations which by their very nature must be in the floodway.
 - (7) Modifications or additions to an existing nonagricultural legal use, provided that channel migration is not further limited and that the modified or expanded development includes appropriate protection of ecological functions.
 - (8) 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.
 - (9) Uses and developments allowed in the floodway under BCC 3.26, provided they are otherwise consistent with all provisions of this SMP.
- (d) 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.
 - (e) New development in shoreline jurisdiction, including the subdivision of land, shall not be permitted if it is reasonably foreseeable that the development or use would require structural flood hazard reduction measures within the channel migration zone or floodway.
 - (f) New public and private structural flood hazard reduction measures:
 - (1) shall not be approved, unless a scientific and engineering analysis demonstrates the following:
 - a. that they are necessary to protect existing development;
 - b. that nonstructural measures, such as buffers and setbacks, land use controls, wetland restoration, dike removal, use or structure removal or relocation, biotechnical measures, and stormwater management programs are not feasible;
 - c. that adverse effects upon adjacent properties will not result relative to increased floodwater depths and velocities during the base flood or other more frequent flood occurrences;
 - d. that the ability of natural drainage ways to adequately drain floodwaters after a flooding event is not impaired;
 - e. that the proposal has been coordinated through the appropriate diking district where applicable, and that potential adverse effects upon other affected diking districts have been documented; and,
 - f. that adverse impacts on ecological functions and priority species and habitats can be successfully mitigated so as to assure no net loss.
 - (2) shall be consistent with an approved comprehensive flood hazard management plan.

¹ For the purposes of this Section “unreasonable and disproportionate” means that locations outside of the floodway or CMZ would add more than 20% to the total project cost. Other methods to determine unreasonable and disproportionate cost may be used on a case-by-case basis with approval of the Shoreline Administrator. [20% has been used as a threshold by WSDOT and the Federal Department of Justice for ADA standards]

- (3) shall be placed landward of associated wetlands and designated shoreline buffers, except for actions that increase ecological functions, such as wetland restoration, or when no other alternative location to reduce flood hazard to existing development is feasible as determined by the Shoreline Administrator.
- (g) New public structural flood hazard reduction measures, such as levees, shall dedicate and improve public access pathways unless public access improvements would cause unavoidable health or safety hazards to the public, inherent and unavoidable security problems, unacceptable and unmitigable significant adverse ecological impacts, unavoidable conflict with the proposed use, or a cost that is disproportionate and unreasonable to the total long-term cost of the development.
- (h) 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 County-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.
- (i) The removal of gravel or other riverbed material for flood management purposes shall be consistent with Section 15.07.060, Dredging and Dredge Material Disposal, and be allowed only after a biological and geomorphological study shows that extraction has a long-term benefit to flood hazard reduction, does not result in a net loss of ecological functions, and is part of a comprehensive flood management solution.

Section 15.06 Critical Areas in Shoreline Jurisdiction

06.010 General

- (a) Applicability. This chapter applies to any real property located within the shoreline jurisdiction of unincorporated Benton County.
- (b) Purpose. The purpose of this chapter is to meet the minimum requirements of the Washington State Growth Management Act, Chapter 36.70A RCW, and the Shoreline Management Act, Chapter 90.58 RCW, by designating the Critical Areas located in unincorporated Benton County and providing, through the use of the best science available, for the protection of the functions and values of those resources from incompatible and injurious use, encouraging the development of strategies to conserve and protect such resources, and preventing cumulative adverse environmental impacts to ground and surface water availability, to water quality, and to wetlands and streams, thereby ensuring the public health, safety, and general welfare while attempting to minimize public expenditures and efforts in response to floods, geological activity, and other natural disasters.
- (c) Identification of Critical Areas - Maps.
 - (1) The Critical Areas Overlay Maps for critical areas are used as a general guide to the location, type and extent of critical areas. If present, whether mapped or not, critical areas are protected under all the provisions of this title and all related titles.
 - (2) The Critical Areas Overlay Maps are available for review in the Planning Department as either hard copy or computer generated images of the County's Geographic Information System. The maps will be amended over time to accurately reflect improvements in the accuracy of the data base.
 - (3) The Critical Areas Overlay Maps are also intended to alert the development community, appraisers, and current and prospective property owners of the potential encounter with natural site constraints due to critical areas, which may limit or cause alterations of development plans.

- (4) If the SMP Administrator has reason to believe that the property proposed for development contains a critical resource based on other map or data sources or review of aerial photographs, then the SMP Administrator may require that additional information be provided prior to the County's acceptance of a development application as complete and ready for processing under current Benton County Codes.
 - (5) When any other title of the Benton County Code conflicts with this chapter, the more restrictive provision will apply.
- (d) Initial Review. The SMP Administrator shall perform an initial Critical Areas Review of any application for development or use. The initial review shall accomplish the following:
- (1) identify which critical areas or their buffers are present on the site;
 - (2) determine whether or not the development falls within the potential critical area(s) and potential buffer(s);
 - (3) in the case of a wetland, determine if it is subject to review under this chapter and if a delineation and wetland rating are necessary to establish whether a development may affect the wetland or its buffer;
 - (4) determine if the development is likely to have an adverse impact on the functions and values of the critical area(s). Development consisting of new construction or a related activity connected with an existing single-family residence shall not be considered an adverse impact to, or displacement of, the functions and values of a critical area if ground coverage is not increased by more than twenty (20) percent, native vegetation is not altered, and no portion of any new construction is located closer to a critical area than the existing principal structure;
 - (5) refer the applicant to such mitigating measures sufficient to protect the functions and values of the critical area and shall assist the applicant in the modification of the development to include specific measures, and appropriate monitoring strategy (where necessary), which meet the title's standards for the protection of the resource(s); and
 - (6) determine if a Critical Areas Special Study is required.
- (e) Critical Areas Special Study - Requirements.
- (1) The SMP Administrator may require an applicant to conduct a "Critical Areas Special Study" if the Administrator determines that the development could have adverse impacts on a critical area. The purpose of a Critical Areas Special Study is to adequately evaluate the proposal and all potential adverse impacts on a critical area. The study may be included as part of the environmental review process under SEPA as administrated by the County, in accordance with the provisions of this title.
 - (2) The study shall be performed by a professional who is licensed or qualified as an expert in the critical areas at issue. The study shall include the following where applicable:
 - a. the resume of the principal author(s) which disclose(s) their technical training and experience and demonstrates their stature as a qualified professional;
 - b. identification and characterization of the critical area;
 - c. an assessment of any potential hazards associated with the proposed development;
 - d. an assessment of the impacts of the development proposal on any critical area; and
 - e. a mitigation plan which specifies maintenance, monitoring and bonding measures (where necessary).
- (f) Buffer Requirements.

- (1) For any development or use subject to the requirements to provide a buffer around critical areas, the SMP Administrator may allow buffer width averaging when the project proponent can demonstrate application of mitigation sequencing and that project elements would provide an equal or greater contribution to permanent critical resource protection than would the application of the standard buffer. The maximum reduction allowed in any location is 25 percent.
- (2) The SMP Administrator may require a wider than standard buffer when analysis of impacts by qualified individuals indicates that the standard requirement will not protect a critical area's functions and values.
- (3) Where a legally established road or railway crosses a shoreline or critical area buffer, the SMP Administrator may approve a modification of the minimum required buffer width to the waterward edge of the improved road if a study submitted by the applicant and prepared by a qualified professional demonstrates that the part of the buffer on the upland side of the road sought to be reduced:
 - a. does not provide additional protection of the shoreline waterbody; and
 - b. provides insignificant biological, geological or hydrological buffer functions relating to the waterward portion of the buffer adjacent to the shoreline waterbody.

If the improved roadway corridor is wider than 20 feet, a study is not required.

- (g) Critical Areas Resource Mitigation Fund. There is hereby created a Critical Areas Resource Mitigation Fund which shall be administered by the Benton County Treasurer's Office. All funds derived from payments received in-lieu of on/off-site mitigation shall be deposited in the fund which shall be used for off-site critical area enhancement or critical area lands acquisition. Monies in said fund not needed for immediate expenditure shall be invested for the benefit of the Critical Areas Resource Mitigation Fund pursuant to RCW 36.29.020. For investment purposes, the Benton County Treasurer is hereby designated the fund manager.
- (h) Permit Issuance.
 - (1) The SMP Administrator may issue, issue with conditions, or deny the issuance of a permit, or its extension, in order to comply with and carry out the goals, purposes, objectives and requirements of this chapter. The permit shall include the findings listed in Section 15.06.010(h)(2).
 - (2) A permit may be issued if:
 - a. after consideration of all feasible Best Management Practices, including alternative designs, scale (size), locations, and management plans, the proposed development meets the standards of this title, protects the functions and values of critical areas, and that required mitigation reduces impacts to insignificant levels on an individual and/or cumulative project basis; or,
 - b. adverse impacts to critical area functions and values are both unavoidable and necessary because of public health and safety, or if specific local or regional economic considerations override the public interest in the protection of the critical areas, or because all reasonable economic uses for the property would be denied as a result of circumstances peculiar to the subject property; and all unavoidable adverse impacts are offset by enhancement of other critical areas on or off-site.

06.020 Wetlands

- (a) Applicability. This chapter applies to wetlands and all development activities within or adjacent to such wetlands located within the shoreline jurisdiction of unincorporated Benton County. The following activities are subject to permitting if they occur in a regulated wetland or its buffer:

- (1) The removal, excavation, grading, or dredging of soil, sand, gravel, minerals, organic matter, or material of any kind.
 - (2) The dumping of, discharging of, or filling with any material.
 - (3) The draining, flooding, or disturbing the water level or water table.
 - (4) Pile driving.
 - (5) The placing of obstructions.
 - (6) The construction, reconstruction, demolition, or expansion of any structure.
 - (7) The destruction or alteration of wetland vegetation through clearing, harvesting, shading, intentional burning, or planting of vegetation that would alter the character of a regulated wetland.
 - (8) Activities that result in:
 - a. A significant change of water temperature.
 - b. A significant change of physical or chemical characteristics of the sources of water to the wetland
 - c. A significant change in the quantity, timing or duration of the water entering the wetland.
 - d. The introduction of pollutants.
- (b) Developments Permitted. Developments within wetlands or their buffers as set forth in this chapter are permitted when sited, designed, and operated in a manner which protects the functions and values of the wetland when such developments meet the requirements of this title.
- (c) Identification and Delineation. Wetlands shall be identified and delineated by a qualified professional in accordance with WAC 173-22-035 and designated based on the definitions, methods, and standards set forth in the currently approved Federal Wetland Delineation Manual and applicable regional supplement.
- (d) Categories. Criteria for categorizing a wetland are those specified in the Washington State Department of Ecology's Washington State Wetland Rating System for Eastern Washington, or as revised (Publication #14-06-030).
- (1) Category I Wetlands are: 1) alkali wetlands; 2) wetlands that are identified by scientists of the Washington Natural Heritage Program/DNR as wetlands of high conservation value; 3) bogs; 4) mature and old-growth forested wetlands over ¼ acre with slow-growing trees; 5) forests with stands of aspen; and 6) wetlands that perform many functions very well. These wetlands are those that 1) represent a unique or rare wetland type; or 2) are more sensitive to disturbance than most wetlands; or 3) are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; or 4) provide a high level of function.
 - (2) Category II Wetlands are: 1) forested wetlands in the floodplains of rivers; 2) mature and old-growth forested wetlands over ¼ acre with fast-growing trees; 3) vernal pools; and 4) wetlands that perform functions well.
 - (3) Category III Wetlands are: 1) vernal pools that are isolated and 2) wetlands with a moderate level of functions. These wetlands generally have been disturbed in some ways and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands.
 - (4) Category IV Wetlands are wetlands that should be able to be replaced, and in some cases improved. However, experience has shown that replacement cannot be guaranteed in any specific case. These wetlands may provide some important functions and also need to be protected.
- (e) Buffer Requirements for Designated Wetlands.
- (1) Vegetative buffers shall be measured from the wetland edge. The width of the buffer shall be determined according to the wetland type. The standard buffer widths are provided in Table 06.020-1 below.

- (2) The use of the standard buffer widths requires the implementation of the measures in Table 06.020-2, where applicable, to minimize the impacts of the adjacent land uses.
- (3) If an applicant chooses not to apply the minimization measures in Table 06.020-2, then a 33% increase in the width of all buffers is required. For example, a 75-foot standard buffer would become a 100-foot buffer if the minimization measures are not implemented.
- (4) The standard buffer widths assume that the buffer is vegetated with a native plant community appropriate for the ecoregion. If the buffer is unvegetated, sparsely vegetated, or vegetated with invasive species that do not perform needed functions, the buffer should either be planted to create the appropriate plant community or the buffer should be widened to ensure that adequate functions of the buffer are provided.

Table 06.020 – 1. Wetland Buffers

Wetland Category	Standard Buffer Width Scores 3-4 habitat points	Additional buffer width if wetland scores 5 habitat points*	Additional buffer width if wetland scores 6-7 habitat points*	Additional buffer width if wetland scores 8-9 habitat points*
Category I: Based on total score	75 ft	Add 15 ft	Add 45 ft	Add 75 ft
Category I: Forested	75 ft	Add 15 ft	Add 45 ft	Add 75 ft
Category I: Bogs	190 ft	NA	NA	NA
Category I: Alkali	150 ft	N/A	NA	NA
Category I: Natural Heritage Wetlands	190 ft	N/A	NA	NA
Category II: Based on total score	75 ft	Add 15 ft	Add 45 ft	Add 75 ft
Category II: Vernal pool	150	NA	NA	NA
Category II: Forested	75 ft	Add 15 ft	Add 45 ft	Add 75 ft
Category III (all)	60 ft	Add 30 ft	Add 60 ft	~~NA-Add 90 ft~~
Category IV (all)	40 ft	NA	NA	NA

* When the Department of Ecology updates its Wetland Rating Forms, these point ranges should be modified using Ecology's conversion table once developed.

Table 06.020-2. Required measures to minimize impacts to wetlands

(Measures are required, where applicable to a specific proposal)

Disturbance	Required Measures to Minimize Impacts
Lights	Direct lights away from wetland
Noise	▪ Locate activity that generates noise away from wetland ▪ If warranted, enhance existing buffer with native vegetation plantings adjacent to noise source ▪ For activities that generate relatively continuous, potentially disruptive noise, such as certain

Commented [BF3]: Per Wetland Guidance for CAO updates, E WA version, 2016 SMP Checklist item 2016b. All other standards are updated

Disturbance	Required Measures to Minimize Impacts
	heavy industry or mining, establish an additional 10' heavily vegetated buffer strip immediately adjacent to the outer wetland buffer
Toxic runoff	- Route all new, untreated runoff away from wetland while ensuring wetland is not dewatered - Establish covenants limiting use of pesticides within 150 ft of wetland - Apply integrated pest management
Stormwater runoff	- Retrofit stormwater detention and treatment for roads and existing adjacent development - Prevent channelized flow from lawns that directly enters the buffer - Use Low Intensity Development techniques (per PSAT publication on LID techniques)
Change in water regime	Infiltrate or treat, detain, and disperse into buffer new runoff from impervious surfaces and new lawns
Pets and human disturbance	- Use privacy fencing OR plant dense vegetation to delineate buffer edge and to discourage disturbance using vegetation appropriate for the ecoregion. - Place wetland and its buffer in a separate tract or protect with a conservation easement
Dust	Use best management practices to control dust
Disruption of corridors or connections	- Maintain connections to offsite areas that are undisturbed - Restore corridors or connections to offsite habitats by replanting

- (5) Increased Wetland Buffer Width. Buffer widths shall be increased on a case-by-case basis as determined by the SMP Administrator when a larger buffer is necessary to protect wetland functions and values. This determination shall be supported by appropriate documentation showing that it is reasonably related to protection of the functions and values of the wetland. The documentation must include but not be limited to the following criteria:
- The wetland is used by a plant or animal species listed by the federal government or the state as endangered, threatened, candidate, sensitive, monitored or documented priority species or habitats, or essential or outstanding habitat for those species or has unusual nesting or resting sites such as heron rookeries or raptor nesting trees; or
 - The adjacent land is susceptible to severe erosion, and erosion-control measures will not effectively prevent adverse wetland impacts; or
 - The adjacent land has minimal vegetative cover or slopes greater than 30 percent.
- (6) Buffer averaging to *improve wetland protection* may be permitted when all of the following conditions are met:
- 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.
 - 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 as demonstrated by a critical areas special study from a qualified wetland professional.
 - The total area of the buffer after averaging is equal to the area required without averaging.
 - The buffer at its narrowest point is never less than either $\frac{1}{4}$ of the required width or 75 feet for Category I and II, 50 feet for Category III and 25 feet for Category IV, whichever is greater.
- (7) All other proposals to reduce a wetland buffer may only be approved through the Shoreline Variance process.
- (f) Protection of Water Quality. The following provisions shall be followed to ensure the protection of the quality of water.

- (1) New surface water discharged to wetlands from developments, including retention/detention facilities, pre-settlement ponds, or other surface water management structures may be allowed provided that the discharge does not decrease the water quality of the wetland;
 - (2) Category I and II wetlands may be used for regional retention/detention facilities only when the use will employ the use of pre-settlement ponds and the use will not lower the wetland's level of function and value, or its category;
 - (3) Use of wetland buffers for surface water management activities other than retention/detention facilities, such as energy dissipators and associated pipes, may be allowed only if:
 - a. no practicable alternative exists; and,
 - b. the functions of the buffer or the wetland are not adversely impacted.
- (g) Subdivisions. The subdivision and/or short subdivision of land in wetlands and associated buffers are subject to the following:
- (1) Land that is located wholly within a wetland or its buffer may not be subdivided.
 - (2) Land that is located partially within a wetland or its buffer may be subdivided provided that an accessible and contiguous portion of each new lot is:
 - a. Located outside of the wetland and its buffer; and
 - b. Meets the minimum lot size requirements of the underlying zoning district.
- (h) Allowed Uses in Wetlands and Buffers
- (1) Buffers and application of the normal mitigation sequencing process in Section 05.020, Environmental Protection, is not required of isolated Category III and IV wetlands less than 1,000 square feet that are not associated with a riparian area or buffer, are not part of a wetland mosaic, do not contain habitat identified as essential for local populations of priority species, and are not a vernal pool or alkali wetland. They may be filled if impacts are fully mitigated based on provisions in Section 15.06.020(i). If available, impacts should be mitigated through the purchase of credits from an in-lieu fee program or mitigation bank, consistent with the terms and conditions of the program or bank. In order to verify the following conditions, a critical area special study for wetlands meeting the requirements in Section 15.06.010(e) must be submitted.
 - (2) Activities Allowed in Wetlands and Buffers. The activities listed below are allowed in wetlands and buffers without submission of a Critical Areas Special Study, except where such activities result in a loss of the functions and values of a wetland or wetland buffer. These activities include:
 - a. Conservation or preservation of soil, water, vegetation, fish, shellfish, and/or other wildlife that does not entail changing the structure or functions of the existing wetland or buffer.
 - b. The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops and provided the harvesting does not require tilling of soil, planting of crops, chemical applications, or alteration of the wetland or buffer by changing existing topography, water conditions, or water sources.
 - c. Passive recreation. Passive recreation facilities, including:
 1. Walkways and trails, provided that those pathways are limited to minor crossings having no adverse impact on water quality. They should be generally parallel to the perimeter of the wetland, located only in the outer twenty-five percent (25%) of the wetland buffer area except for crossings and infrequent view points, and located to avoid removal of significant trees. They should be limited to pervious surfaces no

more than five (5) feet in width for pedestrian use only. In wetlands, raised boardwalks utilizing non-treated pilings may be acceptable.

2. Wildlife-viewing structures.

- d. Drilling for utilities/utility corridors under a wetland or wetland buffer, with entrance/exit portals located completely outside of the wetland buffer, provided that the drilling does not interrupt the groundwater connection to the wetland or percolation of surface water down through the soil column. Specific studies by a hydrologist are necessary to determine whether the groundwater connection to the wetland or percolation of surface water down through the soil column will be disturbed.
 - e. Enhancement of a wetland or wetland buffer through the removal of non-native invasive plant species. Removal of invasive plant species shall be restricted to hand removal unless permits from the appropriate regulatory agencies have been obtained for approved biological or chemical treatments. All removed plant material shall be taken away from the site and appropriately disposed of. Plants that appear on the Washington State Noxious Weed Control Board list of noxious weeds must be handled and disposed of according to a noxious weed control plan appropriate to that species. Re-vegetation with appropriate native species at natural densities is allowed in conjunction with removal of invasive plant species.
 - f. Educational and scientific research activities
 - g. Normal and routine maintenance and repair of any existing public or private facilities within an existing right-of-way, provided that the maintenance or repair does not expand the footprint or use of the facility or right-of-way.
- (3) Stormwater management facilities. Stormwater management facilities are limited to stormwater dispersion outfalls and bioswales. They may be allowed within the outer twenty-five percent (25%) of the wetland 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; and
 - c. Stormwater management facilities are not allowed in buffers of Category I or II wetlands.
- (i) Compensatory Mitigation.
- (1) Projects that propose compensation for wetland acreage and/or functions are subject to State and Federal regulations. Compensatory mitigation for alterations to wetlands shall provide for no net loss of wetland functions and values, and must be consistent with the mitigation plan requirements of Section 15.05.020(f). The following documents were developed to assist applicants in meeting the above requirements.
- a. Compensatory mitigation for alterations to wetlands shall be used only for impacts that cannot be avoided or minimized and shall achieve equivalent or greater biologic functions. Compensatory mitigation plans shall be consistent with Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans--Version 1, (Ecology Publication #06-06-011b, Olympia, WA, March 2006 or as revised), and Selecting Wetland Mitigation Sites Using a Watershed Approach (Eastern Washington) (Publication #10-06-07, November 2010).
 - b. Wetland mitigation ratios shall be consistent with Table 06.020-3.

Table 06.020-3. Wetland Mitigation Ratios

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

- c. To more fully protect functions and values, and as an alternative to the mitigation ratios in Table 06.020-3, the SMP Administrator may allow mitigation based on the “credit/debit” method developed by the Department of Ecology in “Calculating Credits and Debits for Compensatory Mitigation in Wetlands of Eastern Washington: Final Report” (Ecology Publication #11-06-015, August 2012, or as revised).
- d. Impacts to wetland buffers shall be mitigated at a 1:1 ratio. Compensatory buffer mitigation shall replace those buffer functions lost from development.

(2) Wetland Mitigation Banks.

- a. Credits from a wetland mitigation bank may be approved for use as compensation for unavoidable impacts to wetlands when:
 - 1. The bank is certified under RCW Ch. 90.84 or WAC Ch. 173-700,
 - 2. The SMP Administrator determines that the wetland mitigation bank can provide appropriate compensation for the authorized impacts, and
 - 3. The proposed use of credits is consistent with the terms and conditions of the bank’s certification.
- b. Replacement ratios for projects using bank credits shall be consistent with replacement ratios specified in the bank’s certification.
- c. Credits from a certified wetland mitigation bank may be used to compensate for impacts located within the service area specified in the bank’s certification. In some cases, bank service areas may include portions of more than one adjacent drainage basin for specific wetland functions.

- (3) Advance Mitigation. Mitigation for projects with pre-identified impacts to wetlands may be constructed in advance of the impacts if the mitigation is implemented according to federal rules, State policy on advance mitigation, and State water quality regulations. If the project with impacts would take place in shoreline jurisdiction, it must also be evaluated via the appropriate shoreline permit process.
- (4) Monitoring. Mitigation monitoring shall be required for a period necessary to establish that performance standards have been met, but not for a period less than five years. If a scrub-shrub or forested vegetation community is proposed, monitoring may be required for ten years or more. The

project mitigation plan shall include monitoring elements that ensure certainty of success for the project's natural resource values and functions. If the mitigation goals are not obtained within the initial five-year period, the applicant remains responsible for restoration of the natural resource values and functions until the mitigation goals agreed to in the mitigation plan are achieved.

06.030 Rivers and Creeks

- (a) Buffer and building setback requirements. The minimum buffers for above ground development located in the vicinity of rivers and creeks are as follows:

Table 06.030 – 1. River and Creek Buffers

Environment Designation	Columbia River	Yakima River	Other Creeks
Urban Transition Area	Consistent with interlocal agreement to apply city SMP. If no agreement is in place: • Water-dependent: 0 • Water-related: 50 • Other: 50	Consistent with interlocal agreement to apply city SMP. If no agreement is in place: • Water-dependent: 0 • Water-related: 50 • Other: 50	Consistent with interlocal agreement to apply city SMP. If no agreement is in place: • Fish-bearing: 100 • Non-fish-bearing: 50
Rural Industrial	• Water-dependent: 0 • Water-related: 50 • Nonwater-oriented: 100	NA	Fish-bearing: 100 Non-fish-bearing: 50
Residential	50 buffer + 50 building setback	75 buffer + 25 building setback	Fish-bearing: 100 Non-fish-bearing: 50
Rural	• Water-dependent: 0 • Water-related: 50 • Other: 100	• Water-dependent: 0 • Water-related: 75 • Other: 100	Fish-bearing: 100 Non-fish-bearing: 50
Hanford	200	NA	Fish-bearing: 100 Non-fish-bearing: 50
Conservancy	• Water-dependent: 0 • Other water-oriented: see Section 15.06.030(e)(4) • Nonwater-oriented: 200	• Water-dependent: 0 • Other water-oriented: see Section 15.06.030(e)(4) • Nonwater-oriented: 150	Fish-bearing: 100 Non-fish-bearing: 50
Natural	200	NA	Fish-bearing: 100 Non-fish-bearing: 50

*All dimensions measured in feet horizontally upland of the ordinary high water mark.

- (b) The introduction of any vegetation or wildlife which is not indigenous to the Central Basin region into any river or creek or its nearshore riparian area is prohibited unless authorized by a State of Washington or a federal license or permit. This provision does not apply to vegetation alterations to existing landscaped or agricultural areas.
- (c) Alterations to buffers that occur incidental to construction of an approved use or structure upland of the buffer must be restored to the condition prior to the construction activity once construction is concluded.
- (d) Use of river and creek buffers for surface water management activities other than retention/detention facilities, such as energy dissipators and associated pipes, may be allowed only if the applicant demonstrates that no practicable alternative exists.

(e) The following uses are allowed in river and creek buffers and building setbacks provided that mitigation sequencing (see Section 15.05.020(d)) is demonstrated and any adverse impacts to ecological functions are mitigated.

- (1) Water-dependent uses. Consistent with the use allowances for each environment designation, water-dependent uses, modifications and activities may be located in shoreline buffers at the water's edge.
- (2) Accessory to water-dependent uses. Uses, developments and activities accessory to water-dependent uses should be located outside any applicable standard or reduced shoreline buffer unless at least one of the following is met:
 - a. proximity to the water-dependent project elements is critical to the successful implementation of the facility's purpose and the elements are supportive of the water-dependent use and have no other utility (e.g., a road to a boat launch facility, facilities that support non-commercial aquaculture);
 - b. in parks or on other public lands where high-intensity recreational development is already legally established and whose use is primarily related to access to, enjoyment and use of the water, they do not conflict with or limit opportunities for other water-oriented uses; or
 - c. the applicant's lot/site has topographical constraints where no other location of the development is feasible (e.g., the water-dependent use or activity is located on a parcel entirely or substantially encumbered by the required buffer).

In these circumstances, uses and modifications accessory to water-dependent uses must be designed and located to minimize intrusion into the buffer. All other accessory uses, developments and activities proposed to be located in a shoreline buffer must obtain a Shoreline Variance unless otherwise allowed by other regulations in this Section or in this SMP.

- (3) In the Residential environment, the shoreline building setback may contain lawn, landscaping, decks, patios and other alterations that are no taller than 36 inches in height. Minor non-permanent structures taller than 36 inches that are normal residential accessories, such as play structures, picnic tables and benches, or trellises, may also be located in the shoreline building setback. All alterations in shoreline jurisdiction, including the shoreline buffer and the building setback, must also comply with requirements of Section 15.05.030 (Shoreline Vegetation Conservation).
- (4) Water-oriented public access and recreation facilities.
 - a. In recognition of the existing condition of current and planned public shoreline parks and recreation facilities located in the Conservancy environment designation, the following standards shall guide new development and redevelopment of water-oriented public access and recreation facilities in lieu of shoreline buffers. Applicants shall submit a management plan that addresses compliance with each of the following applicable standards and principles, and contains additional information listed in Subsection (4)b below. The County may review and condition the project to more fully implement the principles below.

**Table 06.030 – 2. Water-Oriented Public Access and Recreation Facilities:
Design and Management Standards in Lieu of Shoreline Buffers**

Design Element	Design and Management Standards
i. Category of Use	The following use preferences apply in priority order: • Water-dependent uses located waterward, at or immediately upland of the OHWM

Design Element	Design and Management Standards
	- Water-related and/or water-enjoyment uses located upland of water-dependent uses. Water-related and water-enjoyment uses shall not displace existing or planned water-dependent uses. If water-dependent uses are not feasible, then water-related or water-enjoyment uses are allowed consistent with applicable performance standards. - Nonwater-oriented recreation uses located upland of water-oriented recreation uses. The preference is that nonwater-oriented uses occupy existing structures upland of water-oriented recreation uses rather than be established in new structures. Where new nonwater-oriented uses are proposed upland of water-oriented uses, but will not occupy existing structures, they shall avoid native and riparian vegetation consistent with Subsection iv below. - Accessory, nonwater-oriented uses located upland of water-oriented uses. However, parking for those with disabilities, when no other location is feasible, may be located per "iii" below. - Existing primary nonwater-oriented uses may only expand if they are located upland of water-oriented uses and if the expansion does not displace water-oriented uses. - Water-enjoyment recreational uses may be expanded. - Existing water-oriented uses may not be converted to a nonwater-oriented use except when the existing water-oriented use is separated from the OHWM by another property.
ii. Impervious Surface and Stormwater Management	- New and expanded pollution-generating impervious surfaces (e.g., surfaces used predominantly by vehicles, such as parking areas, roads) must provide water quality treatment before discharging stormwater through use of oil-water separators, bioswales, or other approved technique. This provision does not apply to boat launches. - Treated runoff from pollution-generating impervious surfaces and runoff from non-pollution-generating impervious surfaces shall be infiltrated if feasible. - New or expanded pollution-generating impervious surfaces within 50 feet of the OHWM or within already disturbed areas shall be limited to those necessary to provide vehicle access to boat launches, to improve existing informal parking areas, to expand existing parking, or to provide ADA parking as outlined below under iii. Parking. - New or expanded trail systems shall avoid existing riparian areas and comply with vegetation management requirements below. Existing trail systems may only be expanded in response to increased demand, and shall be expanded landward of existing trail where feasible. Parallel trails shall be placed at least 50 feet upland of the OHWM in the Conservancy environment, when feasible. Parallel portions of trails may be constructed closer to the aquatic area if the trail is located on or upland of previously disturbed rights-of-way, access and/or utility easements, and legally altered sites. Viewing platforms and crossings are allowed in buffers, provided they are also located to avoid significant vegetation removal.
iii. Parking	- New parking accessory to shoreline parks shall be at least 100 feet upland of the OHWM, except where a minimum number of parking spaces are provided closer than 100 feet to accommodate those with disabilities or where parking is provided on existing impervious surfaces. - Existing parking closer than 100 feet upland of the OHWM may only be expanded in response to increased demand. Expanded parking shall be expanded in the following order of preference, with 1) being the most preferred: 1) landward of existing parking and 2) laterally of the existing

Design Element	Design and Management Standards
	parking, if it is serving a previously existing authorized use and is located on existing impervious surface. Parking shall not be located closer than 50 feet upland of the OHWM unless the proposed expansion area is already an impervious surface or is necessary to accommodate those with disabilities.
iv. Vegetation Management	• New and expanded uses in shoreline jurisdiction shall be located to avoid and minimize intrusion into riparian areas, as well as avoid tree and shrub removal. • New and expanded uses in shoreline jurisdiction shall comply with Section 15.05.030, Shoreline Vegetation Conservation. • Landscape designs for new and modified recreation facilities in shoreline jurisdiction shall incorporate the following. ▪ Select species that are suitable to the local climate, having minimal demands for water, minimal vulnerability to pests, and minimal demands for fertilizers. Native species shall comprise 50 percent of the landscaped area, not counting lawn area. Redevelopment of lawn areas shall be no closer than 20 feet from the OHWM. Native grasses may be used within the first 20 feet landward of the OHWM. If lawn areas are not currently established within 50 feet of the OHWM, the existing riparian vegetation within 50 feet of the OHWM shall be maintained, unless a mitigation plan demonstrates improved ecological function. ▪ Preserve existing soil and vegetation (especially trees) where possible. Amend disturbed soils with compost. Mulch existing and proposed landscapes regularly with wood chips, coarse bark, leaves or compost. ▪ Group plants by water need, use more efficient irrigation methods like drip and soakers under mulch, and design and maintain irrigation systems to reduce waste. ▪ Place vegetation to maximize the following benefits: – development or supplementation of a native vegetated wildlife corridor, – development or supplementation of riparian vegetation adjacent to the water's edge, – screening parking areas from views from the water or the park, and/or – discouragement of wildlife that may directly or indirectly interfere with park use or human health (e.g., geese), • While a specified buffer is not required for certain water-oriented recreational uses and developments in public access and recreation areas, recreational improvement projects shall place an emphasis on shoreline restoration/enhancement within 50 feet of the OHWM. This emphasis shall not require the removal of existing lawn areas, but should place an emphasis on incorporation of riparian plantings if the public access area is underutilized or public access would not be impaired by the plantings.
v. Chemical Applications	A lawn and landscape management strategy for any allowed uses in shoreline jurisdiction shall be developed that incorporates the following: • A site-specific plan for use of integrated pest management technique, if applicable. • A detailed plan identifying anticipated use of fertilizers, herbicides and

Design Element	Design and Management Standards
	pesticides, to include method of application that ensures these materials will not enter the water. Phosphorus-containing fertilizer treatments shall not be applied to turf or landscaping within 50 feet of the OHWM. Natural applications and hand removal are preferred over synthetic applications.
vi. Lighting	- Outdoor lighting fixtures and accent lighting must be shielded and aimed downward, and shall be installed at the minimum height necessary. The shield must mask the direct horizontal surface of the light source. The light must be aimed to ensure that the illumination is only pointing downward onto the ground surface, with no escaping direct light permitted to contribute to light pollution by shining upward into the sky. - Outdoor lighting fixtures and accent lighting shall not directly illuminate the shoreline waterbody, unless it is a navigational light subject to state or federal regulations.
vii. Campgrounds	Proposed new campgrounds and their associated parking areas shall be a minimum of 50 feet from the OHWM, unless buffer averaging or reduction is applied.

b. Application requirements:

1. Drawings of existing park facilities, including a narrative that identifies area (sq. feet) and description of trails, parking, riparian vegetation, campsites, recreational facilities (ball parks, picnic table, grilling areas), upland vegetation and lawn areas.
2. Drawings of proposed park facilities, including a narrative that identifies area (sq. feet) and description of trails, parking, riparian vegetation, campsites, recreational facilities (ball parks, picnic table, grilling areas), upland vegetation and lawn areas.
3. Any increases in impervious surfaces (trail size, parking facilities, recreational facilities, etc.) shall include an explanation as part of the application that addresses the requirement for increased public facilities, what size facilities are needed by existing and projected park users, and the nearest locations of similar facilities.
4. Expansion of public/park facilities shall be accompanied by a mitigation plan that addresses the design elements and the design and management standards above, addresses any critical area impacts, addresses mitigation sequencing, and demonstrates no net loss of shoreline ecological functions.

(5) Shoreline residential access.

a. A private access pathway constructed of pervious materials may be installed, a maximum of four (4) feet wide, through the shoreline buffer to the OHWM. Impervious materials may be used only as needed to comply with ADA requirements to construct a safe, tiered pathway down a slope. A railing may be installed on one edge of the pathway, a maximum of 36 inches tall and of open construction. Pathways to the shoreline should take the most direct route feasible consistent with any applicable ADA standards.

a-b. The external or internal retrofitting of an existing structure with the exclusive purpose of compliance with the Americans with Disabilities Act of 1990 (42 U.S.C. Sec. 12101 et seq.) or to otherwise provide physical access to the structure by individuals with disabilities.

Commented [BF4]: ECV SMP checklist item 2016a.

06.040 Critical Aquifer Recharge Areas

- (a) Permitted Development. Developments are permitted when sited, designed, and operated in a manner which protects the functions and values of critical aquifer recharge/interchange areas and when such developments meet the requirements of this title.
- (b) Site Analysis Required. An additional site analysis is required for the following types of activities if such activities have the potential to impact recharge/interchange areas:
 - (1) divisions of land;
 - (2) commercial, industrial, manufacturing, and multiple residential projects in excess of four (4) units; or
 - (3) projects or land use activities which process, stockpile, store, receive, transport, discharge, or produce any chemical or organic product or by-product which may contaminate ground or surface water, except where those projects have the primary purpose of water conservation.
- (c) General Information Requirements for Unconfined Aquifers. The SMP Administrator may require some or all of the following information relative to any unconfined aquifer in order to conduct the site analysis:
 - (1) depth to groundwater;
 - (2) hydro-geological susceptibility to contamination and contamination loading potential;
 - (3) hydraulic conductivity and gradient on-site and for relevant adjacent land;
 - (4) soil permeability and contamination attenuation;
 - (5) a vadose zone analysis including permeability and attenuation properties;
 - (6) existing aquifer water quality analysis; and
 - (7) a summary of the proposed activity's potential effect on the water quality of any unconfined aquifer.
- (d) General Information Requirements for Regulated Substances. The SMP Administrator may require any of the following where regulated substances are associated with a development which has potential to impact an aquifer:
 - (1) a description of operations and an identification of regulated substances associated with the project;
 - (2) a list of names and volumes of toxic or concentrated organic substances which will be used on the property;
 - (3) a list of all substances to be monitored;
 - (4) a detailed description of how substances are to be handled at the site;
 - (5) a description of the containment devices to be used to comply with the requirements of this chapter and other applicable state and federal requirements;
 - (6) a proposed "Regulated Substance Management Plan" or a "Site Management Plan";
 - (7) a description of the procedures for inspection and maintenance to assure the proper functioning of containment devices and systems;
 - (8) a site map showing the location of the facility and property boundaries and the locations within the facility where regulated substances in containers larger than five (5) gallons or forty (40) pounds are stored, unloaded, tested, used, and/or produced. The location of each containment device (system if there is one) shall also be shown.
- (e) Protection of Water Quality.
 - (1) The contamination of groundwater by surface water use, discharge, or runoff shall be prevented.
 - (2) New developments, during both construction and operational phases, which generate surface drainage or runoff to ground or surface water shall:

- a. assure that the use, handling, discharge, or disposal of regulated substances be accomplished in a manner which prevents their entry into ground or surface waters;
- b. retain and clean, to current state discharge standards, runoff prior to its discharge into ground or surface water; and
- c. ensure that runoff or stormwater drainage will not result in soil erosion or water quality degradation.

(3) Water quality standards for critical aquifer re-charge/interchange areas shall correspond with appropriate State and Federal standards.

06.050 Frequently Flooded Areas

Benton County Code 3.26 BCC (Flood Hazard Prevention, Adopted 1987, revised 2010) and 15.30 BCC (Frequently Flooded Areas, Adopted 1994, revised 1997) are adopted by reference.

06.060 Geologically Hazardous Areas

- (a) Applicability. This chapter applies to development activities within or adjacent to geologically hazardous areas in shoreline jurisdiction, including steep slopes, channel migration zones, or hillsides located in unincorporated Benton County. A steep slope is defined as one with a slope of fifteen (15) percent or more or where Critical Areas Overlay Maps indicate potentially hazardous conditions.
- (b) Permitted Development. Development as set forth in this chapter is permitted when sited, designed, and operated in a manner which protects life, property, and the public welfare and when such development meets the requirements of this title.
- (c) Prohibited Development. New development and creation of new lots that would cause foreseeable risk from geological conditions during the life of the development or would require structural shoreline stabilization over the life of the development (except as allowed under BCC 15.07.140) is prohibited.
- (d) Minimum hazard setback requirements. For the purposes of this chapter, a minimum hazard setback for development within or adjacent to a Geologically Hazardous Area shall be the hazard setback recommended in the Site Analysis and/or by the Building Department.
- (e) Site Analysis – General Requirements. A site analysis is required within geologically hazardous areas and within 200 feet of geologically hazardous areas. In order to complete an analysis, the SMP Administrator may require any of the following:
 - (1) the physical features of the site, including identification of surface and subsurface soil types, vegetation, streams, canyons, alluvial fans, and drainage ways. Topography shall be shown in five (5) foot contours unless prior approval is received for contours greater than five (5) feet;
 - (2) lot and parcel sizes, proposed lot coverage, type of dwelling units, square footage, dimensions, general type of construction and location of all structures, the existing and proposed utility systems including wells, sanitary sewers, electric, gas, and telephone, and other pertinent information requested by the SMP Administrator;
 - (3) the general location and different circumstances that might be expected to precipitate a geological event;
 - (4) the geologic, topographic, and hydrologic factors that might contribute to slope instability and the location of the site susceptible to instability;
 - (5) suitable buildable areas taking into consideration the long term stability and maintenance of access roads and all other permanent infrastructure needs that would be affected by both the underlying geology and soils;
 - (6) recommended hazard setbacks to protect the geologic and topographic features;

- (7) relying on existing data, areas with known or potential for seismic hazard;
 - (8) the rate and extent of any potential hazards such as erosion, sliding, slumping etc., must be analyzed in light of the potential to impact the public health, safety and welfare;
 - (9) the potential impact of residential landscape irrigation, drain-fields, upslope and off-site irrigation activities, storm water generation from upslope properties and proposed impervious surfaces on-site, and the influence of street conveyance on slope stability;
 - (10) proposed access, parking, and basic internal vehicle/pedestrian circulation system;
 - (11) the proposed system for retention and release (detention) of storm and surface water runoff generated from the site;
 - (12) general landscaping plan indicating the type and placement of materials used around all structures, parking areas and other cleared portions of the site;
 - (13) the relationship between the proposed development and existing and proposed adjacent areas;
 - (14) where development is proposed downslope of lands in, or with the potential for agriculture, analysis of the impact of surface and subsurface movement of waste irrigation water on the proposed development site shall be provided. The analysis shall include descriptions of the relevant soils, geologic, and hydrologic conditions of the project site and the upslope lands;
 - (15) for public buildings and facilities: identification of minimum design standards where seismic activity has the potential to occur.
- (f) Required Plans.
- (1) A site development and grading plan which meets the requirements of BCC 06.060(e) and accomplishes the following objectives shall be developed and submitted to the SMP Administrator for projects within 200 feet of geologically hazardous areas:
 - a. assure long term structural integrity of all development;
 - b. protect the public health, safety, and welfare by minimizing the potential for public expenditures for post-project geologic, soils, and hydrology hazards remediation;
 - c. avoid documented seismic and landslide hazard areas as locations for building construction, roads or utility systems where mitigation is not feasible;
 - d. eliminate as completely as practicable, any public or private exposure to landslide hazards or to abnormal maintenance or repair costs through the application of post construction slope stabilization and appropriately upgraded road construction specifications where appropriate;
 - e. minimize storm water runoff and soil erosion impacts;
 - f. control dust during all construction phases;
 - g. achieve maximum feasible retention, in their natural condition, of existing topographic features such as drainage swales, streams, slopes, structurally important ridge lines and rock outcroppings; and
 - h. minimize grading where it will adversely impact slope stability.
 - (2) All development and grading plans shall be approved by the appropriate County departments in order to ensure compliance with the current application of the County's Side Hill Development Standards.
 - (3) All development and grading plans shall adhere to the requirements of the Benton-Franklin Health District.
 - (4) In areas of steep slopes and natural drainages, when construction will extend into the rainy season and potentially cause eroded sediments to move offsite, the storm and surface water runoff

retention and detention system must be completed before other phases of site development are begun so that it can serve as a sediment trap during the remainder of the construction.

06.070 Fish and Wildlife Conservation Areas

- (a) Applicability. The provisions of this chapter shall apply within unincorporated Benton County to upland Priority Species and Priority Habitats of Priority Species. While wetlands, rivers and creeks, and their buffers may also be considered Fish and Wildlife Conservation Areas, other provisions of this SMP and Section 15.06 provide specific standards for study, protection and application of mitigation sequencing to those types of Fish and Wildlife Conservation Areas.
- (b) Permitted Development. Developments adjacent to upland Priority Species or adjacent to or within Priority Habitats of Priority Species and their buffers are permitted when sited, designed, and operated in a manner which protects the functions and values of upland Priority Species and their Priority Habitats, and when such development meets the requirements of this title.
- (c) Minimum Buffer Requirements. Buffers for upland Priority Species and Priority Habitats shall be determined by the SMP Administrator based upon Washington Department of Fish and Wildlife recommendations after consultation with the applicant, state, and where appropriate, federal agencies and the Yakama Nation.
- (d) Site Analysis Required.
 - (1) Where a regulated development or use is proposed on a parcel containing a mapped upland Priority Species or wholly or partially within a mapped upland Priority Habitat, the parcel shall be surveyed to determine if the following are associated with the parcel:
 - a. federal and state listed endangered, threatened, sensitive, or candidate species; and
 - b. any listed plant or animal species on the Washington Department of Natural Resources Natural Heritage Program lists.
 - (2) A Critical Area Special Study shall be performed if the resources identified in BCC 15.06.070(d)(1) are found to be associated with the parcel. The following shall be identified:
 - a. the nature and extent of the species' primary association with the habitat area;
 - b. the relative density and species richness, breeding, habitat, seasonal range dynamics and movement corridors;
 - c. the relative tolerance of species to human activities;
 - d. the influence of the project, individually and cumulatively, on the wildlife and associated habitats;
 - e. mitigative measures for any project element that would potentially threaten baseline populations and reproduction rates over the long term; and
 - f. information about the presence of migratory species and any migratory patterns.
- (e) General Standards for Habitat Management. The maintenance of sufficient habitat to support baseline populations for all species identified in BCC 15.06.070(d)(1) shall be the objective pursued through the application of flexible site planning and timing of construction, Best Management Practices, and habitat management programs.

Section 15.07 Use-Specific and Modification Regulations and Performance Standards

07.010 Agriculture

- (a) For Shoreline purposes, Section 15.02 (Definitions), WAC 173-26-020 (Definitions), and WAC 173-26-241(3)(a)(ii) (Agriculture) shall determine the need for shoreline review for agricultural activities.
- (b) The provisions of this SMP do not limit or require modification of agricultural activities on agricultural lands as of the date of adoption of the SMP. In determining whether lands meet the definition of agricultural activities, the Shoreline Administrator shall consider laws and rules included in Subsection (a) and information regarding typical agricultural practices for the subject agricultural use, current use taxation records, conservation easements, farm plans, and other relevant information. Examples of agricultural practices that could vary by the type of agriculture include but are not limited to: rotations of fields for grazing, cultivation, production, and harvests; animal breeding, feeding, or forage activities; type and frequency of maintenance, repair and replacement of agricultural facilities; and other typical practices.
- (c) SMP provisions shall apply in the following cases:
 - (1) new agricultural activities on land not meeting the definition of agricultural land;
 - (2) expansion of agricultural activities on non-agricultural lands, or conversion of non-agricultural lands to agricultural activities;
 - (3) conversion of agricultural lands to other uses;
 - (4) other development on agricultural land that does not meet the definition of agricultural activities; and
 - (5) agricultural development and uses not specifically excluded by the SMA and WAC 173-26-020 (Definitions), and WAC 173-26-241(3)(a)(ii).
- (d) Feed lots and stockyards are prohibited in shoreline jurisdiction.
- (e) New agricultural activities and facilities subject to the SMP in Section 15.07.010(c) shall comply with water quality provisions of Section 15.05.040 and Shoreline Vegetation Conservation provisions in Section 15.05.030.
- (f) Vegetative buffers consistent with Section 15.06.030 shall be maintained between the ordinary high water mark and cultivated ground for purposes of erosion control and riparian vegetation protection, and shall apply to uses and activities subject to the SMP in Section 15.07.010(c).
- (g) Diversion of water for agricultural purposes shall be consistent with federal and state water rights laws and rules.
- (h) No equipment or material shall be abandoned or disposed of in shoreline jurisdiction.
- (i) Development in support of agricultural uses shall be consistent with the environment designation intent and management policies, located and designed to assure no net loss of ecological functions, and shall not have a significant adverse impact on other shoreline resources and values.

07.020 Aquaculture

- (a) Aquacultural facilities must be designed and located to avoid:
 - (1) The spreading of disease, especially to native aquatic life;
 - (2) Introducing new non-native species which cause significant ecological impacts;
 - (3) Significantly conflicting with navigation and other water-dependent uses;
 - (4) A net loss of ecological functions; or
 - (5) Significantly impacting the aesthetic qualities of the shoreline.

- (b) Potential locations for aquaculture are relatively restricted due to specific requirements for water quality, temperature, flows, oxygen content, adjacent land uses, wind protection, and commercial navigation. The technology associated with some forms of present-day aquaculture is still in its formative stages and experimental. Therefore, some latitude in the development of this use shall be given, while the potential impacts on existing uses and natural systems are recognized.
- (c) Aquaculture structures and activities that do not require a waterside location must be located landward of the shoreline buffers required by this SMP.

07.030 Boating Facilities and Private Moorage Structures

- (a) Applicability.
 - (1) This Section applies to all over- and in-water structures and uses that facilitate as their primary purpose the launching or mooring of vessels, or serve some other water-dependent purpose.
 - (2) Uses and modifications covered in this Section include private residential docks (including community docks); docks for commercial, industrial, aquaculture, recreational or public access use; marinas; and boat launches.
- (b) General regulations.
 - (1) New docks shall be allowed only for water-dependent uses or public access. As used here, a dock associated with a single-family residence is a water-dependent use provided that it is designed and intended as a facility for access to watercraft and otherwise complies with the provisions of this SMP.
 - (2) No single-use residential docks may be authorized unless the applicant can demonstrate that reasonable community dock options have been investigated and found infeasible.
 - (3) For all new residential development of two or more waterfront dwelling units or subdivisions or other divisions of land occurring after the effective date of this SMP, only community docks may be allowed.
 - (4) No more than one private, noncommercial dock is permitted per platted or subdivided shoreline lot or unplatted shoreline tract owned for residential or recreational purposes.
 - (5) Floating and other over-water homes, including liveaboards, are prohibited.
 - (6) Extended moorage on waters of the state without a lease or permission is prohibited except as allowed by applicable state regulations. When allowed per state regulations and this SMP, mitigation of any adverse impacts to navigation and public access is required.
 - (7) Overwater structure design, construction, and use must:
 - a. Minimize degradation of aquatic habitats.
 - b. Not impede any juvenile or adult salmonid life stage, including migration, rearing, and spawning.
 - c. Not enhance habitats used by potential salmonid predators (especially fishes and birds).
 - d. Be engineered or use proven methods to maximize human safety and minimize potential for flood-related detachment of the facility from shore.
 - (8) Consistent with requirements for mitigation sequencing, all boating facilities and private moorage structures must be the minimum size necessary and designed to avoid and then minimize potential adverse impacts. All unavoidable adverse impacts must be mitigated, and a mitigation plan submitted.
- (c) General location regulations. New and expanded boating facilities and private moorage structures must be located to:

- (1) Minimize hazards and obstructions to public navigation rights.
 - (2) Avoid blocking or obstructing lawfully existing or planned public shoreline access.
 - (3) Minimize the need for new or maintenance dredging.
 - (4) Eliminate the need for new shoreline stabilization, if feasible. Where the need for stabilization is unavoidable, only the minimum necessary shoreline stabilization to adequately protect facilities, users, and watercraft may be allowed.
- (d) General materials regulations.
- (1) Boating facilities and private moorage structures shall be built with materials that do not leach preservatives or other chemicals.
 - (2) No treated wood of any kind shall be used on any boating facilities and private moorage structures.
 - (3) No paint, stain, or preservative shall be applied to boating facilities and private moorage structures.
- (e) General design and operation regulations.
- (1) Piers and ramps.
 - a. To prevent damage to shallow-water habitat, piers and/or ramps shall extend at least 40 feet perpendicular from the OHWM on the Columbia River and as needed to reach acceptable float conditions on the Yakima River, unless determined to be impractical due to specific site considerations.
 - b. Piers and ramps shall be the minimum size necessary to achieve their intended purpose.
 - c. The bottom of both the pier or landward edge of the ramp shall be elevated at least 2 feet above the plane of OHWM.
 - d. Grating shall cover the entire pier and ramp for residential structures, and as much area as practicable for other structures. Open areas of grating shall be at least 50 percent, as rated by the manufacturer, unless determined to be infeasible due to specific site or project considerations.
 - (2) Floats.
 - a. Floats shall not be located in shallow-water habitat where they could ground or impede the passage or rearing of any salmonid life stage.
 - b. To prevent damage to shallow-water habitat, floats on the Columbia River shall be positioned at least 40 feet horizontally from the OHWM but no more than 100 feet from the OHWM, as measured from the landward-most edge of the float, unless determined to be impractical due to specific site considerations. Floats on the Yakima River must be located to maintain clearance of at least 18 inches between the riverbed and the bottom of the float between April 15 and July 15 in all years.
 - c. Grating shall cover the entire surface area of the float(s) not underlain by float tubs or other material that provides buoyancy. The open area of the grating shall be a minimum of 50 percent, as rated by the manufacturer, or as otherwise required by state or federal agencies during permit review unless determined to be infeasible due to specific site or project considerations.
 - d. Functional grating will cover no less than 50 percent of the float, or as otherwise required by state or federal agencies during permit review, unless determined to be infeasible due to specific site or project considerations.
 - e. Floating docks shall be designed or seasonally removed to prevent the dock from resting on the river bed during periods of lower flow.

- f. Flotation materials shall be permanently encapsulated to prevent breakup into small pieces and dispersal in water.
- (3) No new skirting is allowed on any structure.
- (4) Protective bumper material will be allowed along the outside edge of the float as long as the material does not extend below the bottom edge of the float frame or impede light penetration.
- (5) Safety railings, if proposed, must meet International Building Code requirements and must be an open framework that does not unreasonably interfere with shoreline views.
- (6) Boating facilities and private moorage structures must be marked with reflectors, or otherwise identified to prevent unnecessarily hazardous conditions for water surface users during the day or night.
- (7) Exterior finish of all structures must be generally non-reflective, to reduce glare.
- (8) New covered moorage is prohibited, except when necessary for operation of a water-dependent use at commercial, industrial, or transportation-related facilities.
- (9) Shoreline armoring (i.e. bulkheads, rip-rap, and retaining walls) shall not occur in association with installation of the overwater structure, if feasible.
- (10) Nothing shall be placed long term on the overwater structure that will reduce natural light penetration through the structure.
- (11) Pilings.
 - a. New piling for residential docks shall not exceed 8 inches in diameter, except where larger pilings are required for safety or site-specific engineering reasons. New piling for other docks must be the smallest diameter necessary.
 - b. All pilings shall be fitted with devices to prevent perching by piscivorous (fish-eating) birds.
- (f) General construction regulations.
 - (1) Construction of overwater structures shall be completed during allowed in-water work windows.
 - (2) Construction impacts shall be confined to the minimum area needed to complete the project.
 - (3) The boundaries of clearing limits associated with site access and construction shall be flagged to prevent ground disturbance of riparian vegetation, wetlands, and other sensitive sites. This action shall be completed before any significant alteration of the project area.
 - (4) All temporary erosion controls shall be in place and appropriately installed downslope of project activities until site restoration is complete.
 - (5) Any large wood, native vegetation, topsoil, and/or native channel material displaced by construction shall be stockpiled for use during site restoration.
 - (6) No existing habitat features (i.e., wood, substrate materials) shall be removed from the shoreland or aquatic environment without approval.
 - (7) If native vegetation is moved, damaged, or destroyed, it shall be replaced with a functionally equivalent native species during site restoration.
 - (8) Project construction shall cease under high flow conditions that could result in inundation of the project area, except for efforts to avoid or minimize resource damage.
 - (9) Temporary moorages are allowed for vessels used in the construction of boating facilities provided:
 - a. Upon termination of the project, the aquatic habitat in the affected area is returned to its pre-construction condition within one year.
 - b. Construction vessels may not ground or otherwise disturb substrates.
 - c. Temporary moorage is located to minimize shading of aquatic vegetation.

- (g) Private residential dock (including community dock) regulations.
- (1) No boat lifts or watercraft lifts of any type will be placed on, or in addition to, the overwater structure unless the applicant can demonstrate that the proposed boat lift meets the intent of the criteria to minimize structure, maximize light penetration, and maximize depth.
 - (2) No electricity shall be provided to, or on, the overwater structure.
 - (3) Piers and ramps shall be no more than 4 feet in width.
 - (4) Shoreline concrete anchors must be placed at least 10 feet landward from the OHWM, if feasible. Shoreline concrete anchors must be sized no larger than 4 feet wide by 4 feet long unless demonstrated insufficient. The maximum anchor height shall be only what is necessary to elevate the bottom of either the pier or landward edge of the ramp at least 2 feet above the plane of OHWM. Alternate anchoring methods may be allowed if approved in advance by WDFW for application on the Yakima River.
 - (5) Float components for private docks shall not exceed the dimensions of 8 feet by 20 feet, or an aggregate total of 160 square feet. Float components for community docks shall not exceed the dimensions of 8 feet by 40 feet, or an aggregate total of 320 square feet, for all float components.
 - (6) Piling and float anchors.
 - a. Pilings shall be spaced at least 18 feet apart on the same side of any component of the overwater structure. The pier/ramp and float are separate components.
 - b. Each overwater structure shall utilize no more than 4 piles total for the entire project. A combination of two piles and four helical anchors may be used in place of four piles.
 - c. Submerged float anchors will be constructed from concrete; and shall be horizontally compressed in form, by a factor of 5 or more, for a minimum profile above the stream bed (the horizontal length and width will be at least 5 times the vertical height).
 - (7) No in-water fill material (including uncured concrete or its by-products) will be allowed, with the exception of pilings and float anchors.
- (h) Docks for commercial, industrial, aquaculture, recreational or public access use.
- (1) The amounts of overwater cover, including length and width; the number of in-water structures; and the extent of any necessary shoreline stabilization or modification must be minimized.
 - (2) Accessory development may include, but is not limited to, parking, non-hazardous waste storage and treatment, stormwater management facilities, and utilities where these are necessary to support the water-oriented use. Nonwater-dependent accessory uses must be located outside of shoreline jurisdiction or outside of the shoreline buffer whenever possible.
 - (3) Garbage or litter receptacles must be provided and maintained by the operator at locations convenient to users.
- (i) Marinas.
- (1) No part of a marina may be wider than 8 feet, except that components up to 10 feet wide may be approved administratively if justified in documentation.
 - (2) New marinas must provide physical and/or visual public access for as many water-oriented recreational uses as possible, commensurate with the scale of the proposal.
 - (3) New marinas must provide adequate restroom and sewage disposal facilities.
 - (4) New or enlarged marinas must provide facilities and procedures for receiving, storing, dispensing, and disposing of oil or hazardous products, as well as a spill response plan.

- (5) Marina operators must post all regulations pertaining to handling, disposal and reporting of waste, sewage, fuel, oil or toxic materials where all users may easily read them. Rules for spill prevention and response must also be posted on site.
- (j) Boat launch ramps.
- (1) New public, commercial, or industrial boat launch ramps may be approved only if they provide public access to waters that are not adequately served by existing access facilities, if use of existing facilities is documented to exceed the designed capacity, or the ramp is necessary to serve the water-oriented commercial or industrial use.
 - (2) New private boat launches not for commercial or industrial use are prohibited.
 - (3) New public or commercial boat launch facilities must provide adequate restroom facilities.
 - (4) Boat launch ramps must be located where there is adequate water mixing and flushing and where water depths are adequate to eliminate or minimize the need for dredging or filling. Boat launch ramps must be located to minimize the obstruction of currents, alteration of sediment transport, and the accumulation of drift logs and debris.
- (k) Replacement of existing boating facilities and private moorage structures. If any of the following are proposed during a five-year period, the project is considered a new facility and must comply with applicable standards for new facilities.
- (1) Replacement of the entire facility.
 - (2) Replacement of 75 percent or more of support piles.
 - (3) Replacement of 75 percent or more of a boat launch, by area.

(l) A Substantial Development Permit exception applies to construction of a dock, including a community dock, designed for pleasure craft only, for the private noncommercial use of the owner, lessee, or contract purchaser of single-family and multiple-family residences, if the fair market value of the dock does not exceed: (A) twenty thousand dollars for docks that are constructed to replace existing docks, are of equal or lesser square footage than the existing dock being replaced; or (B) Ten thousand dollars for all other docks constructed. However, if subsequent construction occurs within five years of completion of the prior construction, and the combined fair market value of the subsequent and prior construction exceeds the amount specified above, the subsequent construction shall be considered a substantial development.

~~(m)~~(n) Modification or enlargement of existing boating facilities and private moorage structures.

- (1) Applicants must demonstrate that there is a need for modification or enlargement due to increased or changed use or demand, safety concerns, or inadequate depth of water.
- (2) Enlarged portions of existing boating facilities and private moorage structures must comply with applicable standards for new facilities.

~~(m)~~(n) Repair of existing boating facilities and private moorage structures.

- (1) Repairs to existing legally established boating facilities and private moorage structures are permitted consistent with all other applicable codes and regulations.
- (2) All repairs must utilize any material standards specified for new facilities.

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~~(a)(1)~~ Mitigation.

- (1) Consistent with mitigation sequencing, new or expanded boating facilities and private moorage structures shall be designed to avoid and then minimize impacts, prior to pursuing mitigation.
- (2) Mitigation proposals must provide impact mitigation at a minimum one-to-one ratio, by area, using one or more of the potential mitigation measures listed below. The ratio should be increased if the measure will take more than one year to provide equivalent function or if the measure does not have a high success rate. Applicants should consult with other permit agencies, such as Washington Department of Fish and Wildlife and/or U.S. Army Corps of Engineers, for additional specific mitigation requirements.
- (3) For all new or expanded boating facilities and private moorage structures, appropriate mitigation may include one or more of the following measures. In-kind measures are preferred over out-of-kind measures when consistent with the objective of compensating for adverse impacts to ecological function. Mitigation may not include measures that are already required by regulations.
 - a. Removal of any legal existing over- or in-water structures that are not the subject of the application.
 - b. Replacement of areas of existing solid over-water cover with grated material or use of grating on altered structures.
 - c. Planting of native vegetation along the shoreline immediately landward of the OHWM consisting of a density and composition of trees and shrubs typically found in undisturbed areas adjacent to the subject waterbody.
 - d. Removal or ecological improvement of hardened shoreline. Improvement may consist of softening the face and toe of the hardened shoreline with soil, gravel and/or cobbles, and/or incorporating vegetation or large woody debris.
 - e. Removal of man-made debris waterward of the OHWM.
 - f. Placement of large woody material if consistent with local, state and federal regulations.
 - g. Participation in an approved mitigation program.

~~(a)(2)~~ Submittal requirements.

- (1) For all new or expanded boating facilities and private moorage structures, applicants must provide:
 - a. An assessment of potential impacts to existing ecological processes, including but not limited to sediment transport, hydrologic patterns, and vegetation disturbance.
 - b. A mitigation plan for unavoidable adverse impacts to ecological functions or processes, if applicable.
- (2) For all new or expanded boating or private moorage facilities other than private residential moorage facilities and commercial or industrial structures, applicants must additionally provide an assessment of need and demand. At a minimum, the assessment shall include the following:
 - a. Existing approved facilities, or pending applications, within the service range of the proposed new facility and relevant characteristics of those facilities, such as level of use and condition.
 - b. The expected service population and relevant characteristics of the population, including any characteristics that justify specific design elements of the proposed facility.
 - c. An assessment of existing water-dependent uses in the vicinity and potential impacts to those uses, and a description of proposed mitigation measures, if applicable.

07.040 Breakwaters, Jetties, Groins, and Weirs

- (a) New, expanded or replacement structures shall only be allowed if it can be demonstrated that they will not result in a net loss of shoreline ecological functions and that they support water-dependent uses, public access, shoreline stabilization, or other specific public purpose.
- (b) Breakwaters, jetties, and groins shall be limited to the minimum size necessary.
- (c) Breakwaters, jetties, and groins must be designed to protect critical areas, and shall implement mitigation sequencing to achieve no net loss of ecological functions.
- (d) Proposed designs for new or expanded structures shall be designed by qualified professionals, including both an engineer and a biologist.

07.050 Commercial Development

- (a) Commercial development in shoreline areas shall be designed, located, and constructed to achieve no net loss of ecological functions.
- (b) Preference shall be given to water-dependent commercial uses over non-water-dependent commercial uses. Water-related uses and water-enjoyment uses shall be given priority over nonwater-oriented uses.
- (c) Commercial development that is not water-dependent shall not be allowed over water except where it is located within the same building and is accessory to a water-dependent use.
- (d) Non-water-oriented commercial development shall not be allowed unless:
 - (1) The use is part of a mixed-use project that includes water-dependent uses and provides a significant public benefit with respect to provision of public access or ecological restoration; or
 - (2) Navigability is severely limited at the proposed site, and the commercial use provides a significant public benefit with respect to provision of public access or ecological restoration.
- (e) In areas of the shoreline designated for commercial uses, non-water-oriented commercial uses may be allowed on sites physically separated from the shoreline by another property or public right-of-way.
- (f) New commercial developments shall provide public access to the shorelines, subject to Section 15.05.050, Public Access.

07.060 Dredging and Dredge Material Disposal

- (a) As regulated in this SMP, dredging is the removal of bed material from below the OHWM or wetlands using other than unpowered, hand-held tools for one of the allowed dredging activities listed in Section (d) below. This Section is not intended to cover other removals of bed material waterward of the OHWM or wetlands that are incidental to the construction of an otherwise authorized use or modification (e.g. shoreline crossings, bulkhead replacements). These in-water substrate modifications should be conducted pursuant to applicable general and specific use and modification regulations of this SMP.
- (b) New development must be sited and designed to avoid or, if that is not possible, to minimize the need for new and maintenance dredging.
- (c) Dredging and dredge material disposal must be done in a manner that avoids or minimizes significant ecological impacts. Impacts that cannot be avoided must be mitigated in a manner that assures no net loss of shoreline ecological functions.
- (d) Dredging may only be permitted for the following activities:
 - (1) Development of new or expanded wet moorages, harbors, ports or water-dependent industries of economic importance to the region only when there are no feasible alternatives or other alternatives may have a greater ecological impact.
 - (2) Development of essential public facilities when there are no feasible alternatives.
 - (3) Maintenance of irrigation reservoirs, drains, canals, or ditches for agricultural purposes.

- (4) Restoration or enhancement of shoreline ecological functions and processes benefiting water quality and/or fish and wildlife habitat.
 - (5) Trenching to allow the installation of necessary underground utilities if no alternative, including boring, is feasible; impacts to fish and wildlife habitat are avoided to the maximum extent possible; and the installation does not alter the natural rate, extent, or opportunity of channel migration.
 - (6) Establishing, expanding, relocating or reconfiguring navigation channels where necessary to assure safe and efficient accommodation of existing navigational uses.
 - (7) Maintenance dredging of established navigation channels and basins when restricted to maintaining previously dredged and/or existing authorized location, depth, and width.
- (e) Dredging for the primary purpose of obtaining fill material is prohibited, except when the material is necessary for the restoration of ecological functions. The site where the fill is to be placed must be located waterward of the OHWM. The project must be either associated with a Model Toxics Control Act or Comprehensive Environmental Response, Compensation, and Liability Act habitat restoration project or, if approved through a Shoreline Conditional Use Permit, any other significant habitat enhancement project.
- (f) Dredge material disposal within shoreline jurisdiction is permitted under the following conditions:
- (1) Shoreline ecological functions and processes will be preserved, restored or enhanced, including protection of surface and groundwater; and
 - (2) Erosion, sedimentation, floodwaters or runoff will not increase adverse impacts to shoreline ecological functions and processes or property.
- (g) Dredge material disposal in open waters may be approved only when authorized by applicable state and federal agencies, and when one of the following conditions apply:
- (1) Land disposal is infeasible, less consistent with this SMP, or prohibited by law.
 - (2) Nearshore disposal as part of a program to restore or enhance shoreline ecological functions and processes is not feasible.
- (h) All applications for dredging or dredge material disposal shall include the following information, in addition to other application requirements:
- (1) A description of the purpose of the proposed dredging activities.
 - (2) A site plan outlining the perimeter of the area proposed to be dredged and the dredge material disposal area, if applicable.
 - (3) A description of proposed dredging operations, including, but not limited to:
 - a. The method of removal.
 - b. The length of time required.
 - c. The quantity of material to be initially removed.
 - d. The frequency and quantity of projected maintenance dredging.
 - (4) A description of proposed dredge material disposal, including, but not limited to:
 - a. Size and capacity of disposal site.
 - b. Means of transportation to the disposal site.
 - c. Future use of the site and conformance with land use policies and regulations, if applicable.
 - (5) Plans for the protection and restoration of the shoreline environment during and after dredging operations.
 - (6) An assessment of potential impacts to ecological functions or processes from the proposal.

- (7) A mitigation plan to address identified impacts, if necessary.

07.070 Fill

- (a) All fills shall be located, designed and constructed to protect shoreline ecological functions and ecosystem-wide processes, including channel migration. Any adverse impacts to shoreline ecological functions must be mitigated.
- (b) Fills in wetlands, floodways, channel migration zones or waterward of the OHWM may be allowed only when necessary to support one or more of the following:
 - (1) Water-dependent uses.
 - (2) Public access.
 - (3) Cleanup and disposal of contaminated sediments as part of an interagency environmental clean-up plan.
 - (4) Disposal of dredged material considered suitable under, and conducted in accordance with, the Dredged Material Management Program of the Department of Natural Resources and/or the Dredged Material Management Office of the U.S. Army Corps of Engineers.
 - (5) Expansion or alteration of transportation facilities of statewide significance currently located on the shoreline where alternatives to fill are infeasible.
 - (6) Ecological restoration or enhancement when consistent with an approved restoration plan.
 - (7) Maintenance or installation of flood hazard reduction measures consistent with a comprehensive flood hazard management plan and this SMP.
 - (8) Protection of cultural resources when fill is the most feasible method to avoid continued degradation, disturbance or erosion of a site. Such fills must be coordinated with any affected Indian tribes.
- (c) Upland fills not located within wetlands, floodways, or channel migration zones may be allowed provided they are:
 - (1) Part of an allowed shoreline use or modification, or necessary to provide protection to cultural resources.
 - (2) Located outside applicable buffers, unless specifically allowed in buffers.
- (d) All fills, except fills for the purpose of shoreline restoration, must be designed:
 - (1) To be the minimum size necessary to implement the allowed use or modification.
 - (2) To fit the topography so that minimum alterations of natural conditions will be necessary.
 - (3) To not adversely affect hydrologic conditions or increase the risk of slope failure, if applicable.
- (e) Unless site characteristics dictate otherwise, fill material within surface waters or wetlands shall be sand, gravel, rock, or other clean material with a minimum potential to degrade water quality and shall be obtained from a state-authorized source.
- (f) A temporary erosion and sediment control (TESC) plan, including BMPs, consistent with the latest edition of the Benton County Hydrology Manual or approved equivalent, shall be provided for all proposed fill activities. Disturbed areas shall be immediately protected from erosion using mulches, hydroseed, or similar methods, and revegetated, as applicable.

07.080 Industry

- (a) Over-water construction associated with industrial development that is not water-dependent shall not be permitted. Docks, piers, and boating facilities necessary for operation of ports and water-related or water-dependent uses shall be permitted in accordance with the provisions of this SMP.

- (b) Industrial and port development shall be located, designed, constructed, and operated in a manner that minimizes impacts to the shoreline, provides for no-net-loss of shoreline ecological function, and avoids unnecessary interference with shoreline use by adjacent property owners.
- (c) In the review of shoreline developments, the County shall preference first to water-dependent uses, then to water-oriented industrial uses.
- (d) Non-water-related industrial development shall be prohibited in the shoreline environment, except when:
 - (1) The use is part of a mixed-use project that includes water-dependent uses and provides a significant public benefit with respect to public access or ecological restoration; or
 - (2) Water navigability is severely limited, and the industrial use provides a significant public benefit with respect to public access or ecological restoration.
- (e) Nonwater-oriented industrial uses may be allowed in shoreline jurisdiction on sites that are physically separated from the shoreline by: 1) another property, 2) public right-of-way, or 3) a levee system maintained by or under license from the federal government, State of Washington, or a local government.
- (f) Industrial and port facilities proposed in areas of the shoreline already characterized by industrial or port development shall be given priority over such facilities proposed in shoreline areas not currently developed for industrial or port uses.
- (g) In the consideration of shoreline environment designation amendments, and in the review of shoreline permits, the County shall encourage Industrial uses and redevelopment to locate where environmental cleanup and restoration can be accomplished.
- (h) New industrial developments shall provide public access to the shorelines, subject to Section 15.05.050, Public Access; exceptions include safety or operational considerations or other significant impediments as described in Section 15.05.050, Public Access.

07.090 In-Stream Structures

- (a) In-stream structures must provide for the protection and preservation of ecosystem-wide processes, ecological functions, and cultural resources, including, but not limited to, fish and fish passage, priority habitats and species, other wildlife and water resources, shoreline critical areas, hydrogeological processes, and natural scenic vistas.
- (b) New in-stream structures shall not interfere with existing water-dependent uses, including recreation.
- (c) In-water structures shall not be a safety hazard or obstruct water navigation.
- (d) In-stream structures shall be designed by a qualified professional.
- (e) Natural in-water features, such as snags, uprooted trees, or stumps, shall be left in place unless it can be demonstrated that they are actually causing bank erosion or higher flood stages or pose a hazard to navigation or human safety.

07.100 Mining

- (a) All mining proposals in shoreline jurisdiction must demonstrate that the mining is dependent on a shoreline location by evaluating geologic factors such as the distribution and availability of mineral resources in the County, as well as evaluation of need for such mineral resources, economic, transportation, and land use factors.
- (b) Mining proposals shall be consistent with the Washington Department of Natural Resources Surface Mine Reclamation standards (WAC 332-18, RCW 78.44).
- (c) New mining and associated activities shall be designed and conducted to comply with the regulations of the environment designation and the provisions applicable to critical areas where relevant. Meeting the

no net loss of ecological functions standard shall include avoidance and mitigation of adverse impacts during the course of mining and reclamation.

- (d) Mining waterward of the OHWM of rivers and streams will not be allowed unless:
 - (1) Removal of specified quantities of sand and gravel or other materials at specific locations will not adversely affect the natural processes of gravel transportation for the system as a whole;
 - (2) the mining and any associated permitted activities will not have significant adverse impacts to habitat for priority species nor cause a net loss of ecological functions of the shoreline.
 - (3) Determinations required by the above requirements must be made consistent with RCW 90.58.100(1) and WAC 173-26-201(2)(a). Such evaluation of impacts should be appropriately integrated with relevant environmental review requirements of SEPA (RCW 43.21C) and the SEPA rules (WAC 197-11).
 - (4) In considering renewal, extension, or reauthorization of other mining operations waterward of the OHWM in locations where they have previously been conducted, the County must require compliance with this Subsection to the extent that no such review has previously been conducted. Where there has been prior review, the County must review previous determinations comparable to the requirements of this Section to assure compliance with this Subsection under current site conditions.
- (e) The proposed subsequent use of mined property must be consistent with the environment designation in which the property is located and the reclamation of disturbed shoreline areas must provide appropriate ecological functions consistent with the setting.

07.110 Recreational Development

The following provisions apply to any development, construction, or use of land or water for recreational purposes within Shoreline jurisdiction, whether public or commercial.

- (a) Recreational development shall demonstrate achievement of no-net-loss of ecological functions.
- (b) Recreational activities must be compatible with existing or proposed uses in the area and must be consistent with County development standards regarding parking, traffic, noise, building location and size, and others.
- (c) The location, design, and operation of recreational facilities shall be consistent with the purpose of the environmental designation.
- (d) Recreational uses and facilities located within shoreline jurisdiction shall include features that relate to access, enjoyment and use of the water and shorelines of the state. Access to recreational areas should emphasize both consolidated park or open space areas and trail access.
- (e) Commercial components of the use that are not explicitly related to the recreational operation must also conform to the Commercial use standards of Section 15.07.050, Commercial Development.

07.120 Residential Development

- (a) Residential development shall be consistent with applicable environment designations and standards and comply with all applicable subdivision, critical area, and zoning regulations.
- (b) Residential development shall include facilities for water supply, wastewater, stormwater, solid waste, access, utilities and other support facilities in conformance with County standards and which do not result in harmful effects on the shoreline or waters.
- (c) Applications for new shoreline residences shall ensure that shoreline stabilization and flood control structures are not necessary to protect proposed residences.

- (d) New residential developments of five or more units shall provide public access to the shorelines, subject to Section 15.05.050, Public Access.
- (e) Parking areas shall be located upland of the uses they serve.
- (f) Residential development shall be sufficiently set back from steep slopes and shorelines vulnerable to erosion so that structural improvements, including bluff walls and other stabilization structures, are not required to protect such structures and uses.
- (g) Residential development shall be designed, configured and developed in a manner that assures that no net loss of ecological functions results from division of land at full build-out of all lots and throughout all phases of development.
- (h) Single-family residences are considered a priority use only when developed in a manner consistent with control of pollution and prevention of damage to the natural environment.
- (i) In the Natural environment, subdivision of property is not allowed if it will require significant vegetation removal or shoreline modification that adversely impacts ecological functions.
- (j) New floating residences and over-water residential structures shall be prohibited in shoreline jurisdiction.

07.130 Shoreline Habitat and Natural Systems Enhancement Projects

- (a) Applicability. Shoreline habitat and natural systems enhancement projects include those activities proposed and conducted specifically for the purpose of establishing, restoring or enhancing habitat for priority species in shorelines. Such projects may include shoreline modification actions such as modification of vegetation, removal of non-native or invasive plants, shoreline stabilization, dredging, and filling, provided that the primary purpose of such actions is clearly restoration of the natural character and ecological functions of the shoreline. This Section does not apply to mitigation.
- (b) Shoreline restoration and enhancement projects must be designed using the best available scientific and technical information, and implemented using best management practices.
- (c) All shoreline restoration and enhancement projects must protect the integrity of adjacent natural resources, including aquatic habitats and water quality.
- (d) Shoreline restoration and enhancement shall not significantly interfere with the normal public use of the navigable waters of the state without appropriate mitigation.
- (e) Long-term maintenance and monitoring shall be included in restoration or enhancement proposals.
- (f) Relief for OHWM shifts. Applicants seeking to perform restoration projects are advised to work with the County to assess whether and how the proposed project is allowed relief under RCW 90.58.580, in the event that the project shifts the OHWM landward.

07.140 Shoreline Stabilization

- (a) New development must be located and designed to avoid the need for future shoreline stabilization, if feasible.
 - (1) Land subdivisions must be designed based on a geotechnical report to assure that future development of the created lots will not require shore stabilization for reasonable development to occur.
 - (2) New development adjacent to steep slopes or bluffs must be set back sufficiently to ensure that shoreline stabilization is unlikely to be necessary during the life of the structure, as demonstrated in a geotechnical report.
- (b) New development that would require shoreline stabilization that would cause significant impacts to adjacent or down-current properties and shoreline areas is prohibited.

- (c) All proposals for shoreline stabilization structures, both individually and cumulatively, must not result in a net loss of ecological functions, and must be the minimum size necessary. Soft approaches shall be used unless demonstrated not to be sufficient to protect primary structures, dwellings, and businesses.
- (d) New or enlarged structural shoreline stabilization measures shall not be allowed, except as follows
 - (1) To protect an existing primary structure, including residences, when conclusive evidence, documented by a geotechnical analysis, is provided that the structure is in danger from shoreline erosion caused by currents or waves. Normal sloughing, erosion of steep bluffs, or shoreline erosion itself, without a scientific or geotechnical analysis, is not demonstration of need. The geotechnical analysis must evaluate on-site drainage issues and address drainage problems away from the shoreline edge before considering hard or soft structural shoreline stabilization.
 - (2) In support of new nonwater-dependent development, including single-family residences, when all of the conditions below apply:
 - a. The erosion is not being caused by upland conditions, such as loss of vegetation and drainage.
 - b. Nonstructural measures, such as placing the development farther from the shoreline, reducing the size or scope of the proposal, planting vegetation, or installing on-site drainage improvements, are not feasible or not sufficient.
 - c. The need to protect primary structures from damage due to erosion is demonstrated through a geotechnical report. The damage must be caused by natural processes, such as currents or waves.
 - (3) In support of water-dependent development when all of the conditions below apply:
 - a. The erosion is not being caused by upland conditions, such as loss of vegetation and drainage.
 - b. Nonstructural measures, such as planting vegetation, or installing on-site drainage improvements, are not feasible over time or sufficient.
 - c. The need to protect primary structures from damage due to erosion is demonstrated through a geotechnical report.
 - (4) To protect projects for the restoration of ecological functions or for hazardous substance remediation projects pursuant to Chapter 70.105D RCW when nonstructural measures, planting vegetation, or installing on-site drainage improvements, are not feasible or not sufficient to adequately address erosion causes or impacts.
- (e) New hard structural shoreline stabilization measures shall not be authorized, except when a report confirms that there is a significant possibility that a primary structure will be damaged within three years as a result of shoreline erosion in the absence of such hard structural shoreline stabilization measures, or where waiting until the need is immediate results in the loss of opportunity to use measures that would avoid impacts on ecological functions. Where the geotechnical report confirms a need to prevent potential damage to a primary structure, but the need is not as immediate as three years, that report may still be used to justify more immediate authorization to protect against erosion using soft measures.
- (f) An existing shoreline stabilization structure, hard or soft, may be replaced with a similar structure if there is a demonstrated need to protect principal uses or structures from erosion caused by currents or waves. While replacement of shoreline stabilization structures may meet the criteria for exemption from a Shoreline Substantial Development Permit, such activity is not exempt from the policies and regulations of this SMP.

- (1) For purposes of this Section, "replacement" means the construction of new structure to perform a shoreline stabilization function of existing structure that can no longer adequately serve its purpose. Any additions to or increases in the size of existing shoreline stabilization measures shall be considered new structures.
 - (2) Replacement shall be regulated as a new shoreline stabilization measure, except for the requirement to prepare a geotechnical analysis. A geotechnical analysis is not required for replacements of existing hard or soft structural shoreline stabilization with a similar or softer measure if the applicant demonstrates need to protect principal uses or structures from erosion caused by waves or other natural processes operating at or waterward of the OHWM.
 - (3) Replacement hard structural shoreline stabilization measures shall not encroach waterward of the OHWM or waterward of the existing shoreline stabilization measure unless the residence was occupied prior to January 1, 1992, and there are overriding safety or environmental concerns. In such cases, the replacement structure shall abut the existing shoreline stabilization structure. All other replacement hard structural shoreline stabilization measures shall be located at or landward of the existing shoreline stabilization structure.
 - (4) Hard and soft shoreline stabilization measures may allow some fill waterward of the OHWM to provide enhancement of shoreline ecological functions through creation of nearshore shallow-water habitat and shoreline rearing habitat for salmonids.
- (g) Repair and maintenance of existing shoreline stabilization measures may be allowed, subject to the following standards. While repair and maintenance of shoreline stabilization structures may meet the criteria for exemption from a Shoreline Substantial Development Permit, such activity is not exempt from the policies and regulations of this SMP.
- (1) Repair and maintenance includes modifications to an existing shoreline stabilization measure that are designed to ensure the continued function of the measure by preventing failure of any part. Limitations on repair and maintenance include:
 - (2) If within a three-year time period, more than 50 percent of the length of an existing structure is removed, including its footing or bottom course of rock, prior to placement of new stabilization materials, such work will not be considered repair and maintenance and shall be considered replacement. Work that only involves the removal of material above the footing or bottom course of rock does not constitute replacement.
 - (3) Any additions to or increases in the size of existing shoreline stabilization measures shall be considered new structures.
 - (4) The placement of a new shoreline stabilization structure landward of a failing shoreline stabilization structure shall be considered a new structure, not maintenance or repair.
 - (5) Areas of temporary disturbance within the shoreline buffer shall be expeditiously restored to their pre-project condition or better.
- (h) Structural shoreline stabilization design and construction standards:
- (1) Structural shoreline stabilization measures shall not extend waterward more than the minimum amount necessary to achieve effective stabilization, except for those elements that enhance shoreline ecological functions and minimize impacts.
 - (2) Stairs or other water access measures may be incorporated into shoreline stabilization measures, but shall not extend waterward of the measure or the OHWM.
 - (3) All structural shoreline stabilization measures must minimize and mitigate any adverse impacts to ecological functions resulting from short-term construction activities. Techniques may include

compliance with timing restrictions, use of best management practices, and stabilization of exposed soils following construction.

- (i) In addition to other submittal requirements, the applicant shall submit the following as part of a request to construct a new, enlarged, or replacement shoreline stabilization measure:
 - (1) For a new or enlarged hard or soft structural shoreline stabilization measure, a geotechnical report prepared by a qualified professional with a Washington state engineering license. The report shall include the following:
 - a. An assessment of the necessity for structural shoreline stabilization by estimating time frames and rates of erosion and reporting on the urgency associated with the specific situation.
 - b. An assessment of the cause of erosion, looking at processes occurring both waterward and landward of the OHWM, and documentation of the OHWM field determination.
 - c. An assessment of alternative measures to shoreline stabilization.
 - d. Where structural shoreline stabilization is determined to be necessary, the assessment must evaluate the feasibility of using soft shoreline stabilization measures in lieu of hard structural shoreline stabilization measures.
 - e. Design recommendations for minimum sizing of hard structural or soft structural shoreline stabilization materials, including gravel and cobble beach substrates necessary to dissipate wave energy, eliminate scour, and provide long-term shoreline stability.
 - (2) For replacements of existing hard structural shoreline stabilization measures with a similar measure, the applicant shall submit a written narrative providing a demonstration of need. The narrative must be prepared by a qualified professional. The demonstration of need shall consist of the following:
 - a. An assessment of the necessity for continued structural shoreline stabilization, considering site-specific conditions such as water depth, orientation of the shoreline, wave fetch or flow velocities, and location of the nearest primary structure.
 - b. An assessment of erosion potential resulting from the action of waves or other natural processes operating at or waterward of the OHWM in the absence of the hard structural shoreline stabilization, and documentation of the OHWM field determination.
 - c. An assessment of alternative measures to shoreline stabilization.
 - d. An assessment of the feasibility of using soft shoreline stabilization measures in lieu of hard structural shoreline stabilization measures.
 - e. Design recommendations for minimizing impacts of any necessary hard structural shoreline stabilization.
 - f. The demonstration of need may be waived when an existing hard structural shoreline stabilization measure is proposed to be repaired or replaced using soft structural shoreline stabilization measures, resulting in significant restoration of shoreline ecological functions or processes.
 - (3) For all structural shoreline stabilization measures, including soft structural shoreline stabilization, detailed construction plans, including, but not limited to, the following:
 - a. Plan and cross-section views of the existing and proposed shoreline configuration, showing accurate existing and proposed topography and OHWMs.
 - b. Detailed construction sequence and specifications for all materials, including gravels, cobbles, boulders, logs, and vegetation.

07.150 Transportation

This Section addresses all forms of transportation including systems for pedestrian, bicycle, and public transportation as well as roads, railroads, and parking.

- (a) Where other options are available and feasible, new roads, road expansions or railroads shall not be built within shoreline jurisdiction. If subdivisions are being proposed, new road placement shall be evaluated at the time of the plat application, or site development planning.
- (b) When railroads, roads or road expansions are unavoidable in the shoreline jurisdiction, proposed transportation facilities shall be planned, located, and designed to achieve the following:
 - (1) Mitigate possible adverse effects on unique or fragile shoreline features;
 - (2) Maintain no net loss of shoreline ecological functions;
 - (3) Avoid adverse impacts on existing or planned water-dependent uses; and
 - (4) Set back from the OHWM to the maximum feasible to allow for a usable shoreline area for vegetation conservation and planned shoreline uses unless infeasible, standards for ADA accessibility and functionality cannot be met, or the cost is disproportionate to the cost of the proposal.
 - (5) Be consistent with critical areas regulations in Section 15.06.
- (c) Public roads within shoreline jurisdiction shall, where possible, provide and maintain visual access to scenic vistas. Visual access may include, but is not limited to, turn-outs, rest areas, and picnic areas.
- (d) Shoreline crossings and culverts shall be designed to mitigate impact to riparian and aquatic habitat and shall allow for fish passage. Crossings shall occur as near to perpendicular with the waterbody as possible, unless an alternate path would minimize disturbance of native vegetation or result in avoidance of other critical areas such as wetlands.
- (e) Crossings that are to be used solely for access to private property shall be designed, located, and constructed to provide access to more than one lot or parcel of property, where feasible, to minimize the number of crossings.
- (f) The provisions of Section 15.06.050, Frequently Flooded Areas shall be addressed in the design of transportation facilities.
- (g) Transportation proposals shall be consistent with circulation system plans for roads, railroads, pedestrian, bicycle, and public transportation. The SMP Administrator shall condition transportation proposals to be consistent with applicable county, city, state, or federal plans and construction standards, as appropriate.
- (h) Public access standards shall be met in Section 15.05.050.
- (i) Parking facilities in shorelines are not a preferred use and shall be allowed only as necessary to support an authorized use and when minimizing environmental and visual impacts. For the purposes of this Section, authorized means a use or activity included in the use matrix in Section 15.04.110 and associated definitions in Section 15.02. New or expanded parking areas shall:
 - (1) Be sited outside of shoreline jurisdiction unless no feasible alternative location exists, for example where a property does not extend outside jurisdiction;
 - (2) Be planted or landscaped to provide a visual and noise buffer for adjoining dissimilar uses or scenic areas; and
 - (3) Observe critical area and shoreline buffers.
- (j) If an applicant proposes to pave a roadway or parking area, the proposal shall comply with applicable water quality, stormwater, landscaping, and other applicable requirements of this SMP and the Benton County Code.

(k) A driveway for an individual single family home is considered a residential appurtenance and is considered part of the primary use, and subject to Section 15.07.120. Private driveways or private roads serving more than one home are subject to the standards of Section 15.07.150.

(l) When a new or expanded roadway or new or expanded parking facility is proposed, the County may condition the proposal to provide a maintenance plan that promotes best management practices to achieve no-net-loss of shoreline ecological function. For example, maintenance standards may include restrictions on the use of herbicides, hazardous substances, sealants or other liquid oily substances, or de-icing practices adjacent to shoreline buffers or critical areas and their buffers.

(m) Pursuant to RCW 47.01.485, the County permit review time shall have a target of 90 days for projects on a state highway.

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07.160 Utilities

- (a) Utility projects within shoreline jurisdiction shall be designed to achieve no-net-loss of shoreline ecological function.
- (b) If an underwater location is necessary, the design, installation and operation of utilities shall minimize adverse ecological impacts.
- (c) Where utility corridors must cross shoreline jurisdiction, such crossings shall be designed to take the shortest, most direct route feasible, unless such a route would result in loss of ecological function, disrupt public access to the shoreline, or obstruct visual access to the shoreline.
- (d) Utility projects within shoreline jurisdiction shall be located within existing transportation or utility corridors or existing cleared areas to the greatest extent feasible.
- (e) Utility production and processing facilities, such as power plants and sewage treatment plants, or parts of those facilities that are non-water-oriented shall not be allowed in shoreline areas unless it can be demonstrated that no other feasible option is available.
- (f) Upon completion of utility system installation, and any maintenance project, the disturbed area shall be regraded to compatibility with the natural terrain and replanted to prevent erosion and provide appropriate vegetative cover.
- (g) The presence of existing utilities shall not justify more intense development. Rather the development shall be consistent with the County Comprehensive Plan, zoning code, and this SMP, and shall be supported by adequate utilities.

Section 15.08 Nonconforming Uses, Structures, and Lots

Nonconforming uses or developments are shoreline uses or development which were lawfully constructed or established prior to the effective date of this Master Program, or approved amendments to the Master Program, but which do not conform to present regulations or standards of the Master Program. The intent of this chapter is to provide regulations regarding nonconforming uses, structures, and lots as well as to establish residences as pre-existing legal uses, conforming to the Master Program as allowed by the SMA.

08.010 Non-Conforming Uses and Structures: Continuance and Discontinuance

- (a) Lots, structures, and uses that were legally established prior to adoption of this Master Program or that were in compliance with the Master Program at the time of initial establishment but, due to revision or amendment of the Master Program, have become noncompliant are nonconforming uses that may continue, without regard to ownership changes, so long as in compliance with this chapter. A use of property that is unlawful under other local, state, or federal laws shall not be deemed a nonconforming use.

- (b) Any use which existed prior to adoption of this Master Program or applicability of this Master Program to the property and which is not listed as a permitted use shall be considered a nonconforming use.
- (c) If a nonconforming use is replaced by a conforming use for any length of time, use of the property shall not revert to the nonconforming use. The mere presence of a structure shall not constitute the continuance of a nonconforming use. When a nonconforming use is discontinued for a period of one (1) year or more without replacement by a conforming use, legal conforming use status expires and further use of the structure or lot must be in compliance with the provisions of this Master Program.

08.020 Alteration, Expansion, or Restoration of Nonconforming Uses and Structures

Alteration, expansion, or restoration of nonconforming structures and uses are not allowed except as set forth in this Subsection.

- (a) Single Family Dwelling Units. See BCC 15.08.040.
- (b) Other Structures or Uses – Legally Required Alterations or Expansions. Alteration or expansion of a nonconforming use or structure is allowed if necessary to accommodate handicapped accessibility requirements, fire code, or other life safety related requirements mandated by local, state, or federal law.
- (c) Other Structures or Uses – Dimensional Nonconformities. Legally established structures used for a conforming use but which are nonconforming with regard to setbacks, buffers, or yards; area; bulk; height or density may be maintained and repaired and may be enlarged or expanded, provided that said enlargement does not increase the extent of nonconformity by further encroaching upon or extending into areas where construction or use would not be allowed for new development or uses. For example, vertical, lateral or anterior expansions that do not intrude into a required buffer and which are consistent with the maximum height of this SMP and underlying zoning may be allowed.
- (d) Structures Subject to Variances. A structure for which a variance has been issued shall be considered a legal nonconforming structure, and the requirements of this Section shall apply as they apply to pre-existing nonconformities.
- (e) Movement of a Structure. A nonconforming structure which is moved any distance must be brought into conformance with this Title and the SMA.
- (f) Other Non-conforming Structures. Except as set forth above, nonconforming structures may not be altered or expanded. Such other structures may be restored if less than fifty (50) percent of the gross floor area in flood hazard areas and seventy-five (75) percent of the gross floor area in the remainder of shoreline jurisdiction has been unintentionally destroyed or damaged if:
 - (1) All other requirements of the Benton County Code and the Benton-Franklin Health District are satisfied, including but not limited to setback requirements;
 - (2) The nonconforming use resumes within such structure within one (1) year from the destroying or damaging event; and
 - (3) The restoration of the nonconforming structure does not increase the gross floor area that existed immediately prior to the destruction or damaging event. Structures intentionally destroyed or damaged and those with fifty (50) percent or more of the gross floor area in flood hazard areas and seventy-five (75) percent or more of their gross floor area in the remainder of shoreline jurisdiction unintentionally destroyed or damaged may not be restored or reconstructed.

08.030 Nonconforming Lots

- (a) In any district, any permitted use or structure may be erected on any existing lot or parcel. This provision shall apply even though such lot fails to meet the minimum dimensional requirements of this Title, provided that such structure is allowed within the shoreline environment and all uses of the

nonconforming lot shall comply with all other provisions this Master Program, underlying zoning requirements including setbacks, dimensional standards, and lot coverage requirements and the Benton-Franklin Health District .

- (b) Structures and customary accessory buildings on non-conforming lots shall be set back from the OHWM to the greatest extent feasible. Development proposed inside required buffers shall go through mitigation sequencing and shall require a mitigation plan.

08.040 Pre-Existing Legal Residential Uses – Conforming Legal Residential Structures

Notwithstanding Sections 15.08.010 to 15.08.030, the following shall apply only to pre-existing legal residential structures constructed prior to the effective date of this Title.

- (a) 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: Setback, buffers, or yards; area; bulk; height; or density.
- (b) The County shall allow redevelopment, expansion, or change with the class of occupancy, of the residential structure if it is consistent with the SMP, including requirements for no net loss of shoreline ecological functions. For example, vertical, lateral or anterior expansions that do not intrude farther into a required buffer and which are consistent with the maximum height allowed by this SMP and underlying zoning may be allowed.
- (c) Pre-existing legal residential structures that are damaged or destroyed may be replaced to their prior size and location subject to:
 - (1) all other requirements of the Benton County Code and the Benton-Franklin Health District are satisfied; and
 - (2) to restore a damaged dwelling unit, a complete application for a building permit shall be submitted within one (1) year of the act causing damage or destruction to the dwelling unit.
- (d) For purposes of this Section, “appurtenant structures” means garages, sheds, and other legally established structures. “Appurtenant structures” does not include bulkheads and other shoreline modifications or over-water structures.
- (e) Nothing in this Section shall:
 - (1) Restrict the ability of this Title to limit development, expansion, or replacement of over-water structures located in hazardous areas, such as floodplains and geologically hazardous areas; or
 - (2) Affect the application of other federal, state, or county requirements to residential structures.

Section 15.09 Administration, Permits, and Enforcement

09.010 Purpose

- (a) RCW 90.58.140(3) requires local governments to establish a Program, consistent with the rules adopted by the Washington Department of Ecology, for the administration and enforcement of shoreline development. Also, in accordance with RCW 90.58.050, Benton County has the primary responsibility for administering the regulatory program and Ecology acts primarily in a supportive and review capacity.
- (b) Pursuant to the Shoreline Management Act at RCW 90.58.080 and the Growth Management Act at RCW 36.70A.130, local governments must periodically review, and where appropriate, amend their SMP. Consistent with state laws, Benton County has established a process to evaluate and consider amendments to this SMP.

- (c) The application of this SMP is intended to be consistent with constitutional and other legal limitations on the regulation of private property. The SMP Administrator must give adequate consideration to mitigation measures, dimensional variances, and other possible methods to prevent undue or unreasonable hardships upon property owners.

09.020 Administrative Responsibilities

- (a) The County shall designate a SMP Administrator. The SMP Administrator in Benton County is the Planning Manager and shall have overall administrative responsibility of this SMP. The SMP Administrator or his/her designee is hereby vested with the authority to:
 - (1) Administrate this SMP.
 - (2) Grant or deny exemptions from Shoreline Substantial Development Permit requirements of this SMP.
 - (3) To grant, grant with conditions, or deny Shoreline Substantial Development Permits and time extensions to shoreline permits and their revisions.
 - (4) Make field inspections as needed, and prepare or require reports on shoreline permit applications.
 - (5) Make written recommendations to the Hearings Examiner, Planning Commission and Board of County Commissioners as appropriate. The SMP Administrator shall make recommendations to the Hearings Examiner regarding Shoreline Variances and Shoreline Conditional Use Permits. The SMP Administrator shall recommend SMP amendments to the Planning Commission and Board of County Commissioners.
 - (6) Advise interested persons and prospective applicants as to the administrative procedures and related components of this SMP.
 - (7) Determine and collect fees for all necessary permits as provided in County ordinances or resolutions. The determination of which fees are required shall be established by resolution of the Board of County Commissioners.
 - (8) Make administrative decisions and interpretations of the policies and regulations of this SMP and the SMA.
- (b) The responsible SEPA official or his/her designee is authorized to conduct environmental review of all use and development activities subject to this SMP, pursuant to WAC 197-11 and RCW 43.21C. The responsible official is designated in accordance with the Benton County Code.
- (c) The Hearing Examiner is authorized to:
 - (1) Grant or deny Shoreline Variances, and Shoreline Conditional Use Permits under this SMP.
 - (2) Decide on appeals of administrative decisions issued by the Administrator of this SMP.
- (d) The Planning Commission is authorized to:
 - (1) Review the SMP as part of regular SMP updates required by RCW 90.58.080 as a major element of each County's planning and regulatory program, and make recommendations for amendments thereof to the Board of County Commissioners.
- (e) The Board of County Commissioners is vested with authority to:
 - (1) Initiate an amendment to this SMP according to the procedures prescribed in WAC 173-26-100.
 - (2) Adopt all amendments to this SMP, after consideration of the recommendation of the planning commission, where established. Amendments shall become effective 14 days from the date of the Washington Department of Ecology's written notice of final approval.

09.030 Noticing Requirements

- (a) Applicants shall follow the noticing requirements of the County. At a minimum, the County shall provide notice in accordance with WAC 173-27-110, and shall be consistent with noticing requirements in BCC Title 17.
- (b) Per WAC 173-27-120 the County shall comply with special procedures (public notice timelines, appeal periods, etc.) for limited utility extensions and bulkheads.

09.040 Exemption from Permit Requirements

- (a) An exemption from the Shoreline Substantial Development Permit process is not an exemption from compliance with the SMA or this SMP, or from any other regulatory requirements. To be authorized, all uses and development must be consistent with the policies, requirements and procedures of this SMP and the SMA.
- (b) Exemptions shall be construed narrowly. Only those developments that meet the precise terms of one or more of the listed exemptions may be granted exemption from the Shoreline Substantial Development Permit process.
- (c) 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.
- (d) The burden of proof that a development or use is exempt from the permit process is on the applicant.
- (e) 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.
- (f) The County may attach conditions to the approval of exempted developments and/or uses as necessary to assure consistency of the project with the SMA and this SMP. Additionally, nothing shall interfere with the County's ability to require compliance with all other applicable laws and plans.
- (g) The County shall exempt the shoreline developments listed in WAC 173-27-040 and RCW 90.58.030 (3)(e), 90.58.140(9), 90.58.147, 90.58.355 and 90.58.515, as amended, or successor laws, from the Shoreline Substantial Development Permit requirement.
- (h) Letters of exemption shall be issued by the County when a development application is determined to meet the listed criteria for an exemption and when a letter of exemption is required by the provisions of WAC 173-27-050, as amended.

(h)

09.050 Interpretations

- (a) The SMP Administrator shall provide administrative interpretations in accordance with the SMA, the SMP Guidelines and with BCC 17.10.170.
- (b) The application of this SMP is intended to be consistent with constitutional and other legal limitations on the regulation of private property. The SMP Administrator shall give adequate consideration to mitigation measures, dimensional variances, and other possible methods to prevent undue or unreasonable hardships upon property owners.
- (c) The County shall consult with Ecology to ensure that any formal written interpretations are consistent with the purpose and intent of chapter 90.58 RCW and 173-26 WAC.

09.060 Permit Applications

- (a) Shoreline applications are classified as follows:

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- (1) Substantial Development Permit
 - (2) Conditional Use Permit
 - (3) Variance
 - (4) Shoreline Exemption
- (b) Permits for Substantial Development, Shoreline Conditional use, or Shoreline Variance shall be in a form prescribed and used by the County including a combined permit application form. Such forms will be supplied by the County.
 - (c) The contents of permit applications must be consistent with WAC 173-27-180 and Benton County Code.
 - (d) Where this SMP requires more information than the minimum required by WAC 173-27-180, the SMP Administrator may vary or waive requirements beyond WAC 173-27-180 if the information is unnecessary to process the application.
 - (e) The SMP Administrator may require additional specific information if required by the nature of the proposal or the presence of sensitive ecological features, to ensure compliance with other local requirements or the provisions of this SMP.
 - (f) At the time of application, the applicant must pay the application fee.

09.070 Procedures applicable to all shoreline permits

- (a) All applications for a permit or a permit revision shall be submitted by the County to Ecology upon a final decision by the County. Final decision by the County shall mean the order or ruling, whether it be an approval or denial, which is established after all local administrative appeals related to the permit have concluded or the opportunity to initiate such appeals have lapsed. Filing shall occur consistent with WAC 173-27-130.
- (b) As set forth in WAC 173-27-190, each Substantial Development Permit, Conditional Use Permit, or Variance, issued by the County must contain a provision that construction pursuant to the permit may not begin and is not authorized until twenty-one days from the date of filing as defined in RCW 90.58.140(6) and WAC 173-27-130, or until all review proceedings initiated within twenty-one days from the date of such filing have terminated; except as provided in RCW 90.58.140(5)(a) and (b).
- (c) A permit data sheet shall be submitted to Ecology with each shoreline permit. The permit data sheet form shall be consistent with WAC 173-27-990.
- (d) After the County's approval of a conditional use or variance permit, the County shall submit the permit to the department for Ecology's approval, approval with conditions, or denial. Ecology shall render and transmit to the County and the applicant its final decision approving, approving with conditions, or disapproving the permit within thirty days of the date of submittal by the County pursuant to WAC 173-27-110.
- (e) Ecology shall review the complete file submitted by the County on conditional use and variance permits and any other information submitted or available that is relevant to the application. Ecology shall base its determination to approve, approve with conditions or deny a conditional use permit or variance on consistency with the policy and provisions of the SMA and, except as provided in WAC 173-27-210, the criteria in WAC 173-27-160 and 173-27-170.
- (f) The County shall provide appropriate notification of the Ecology's final decision to those interested persons having requested notification from local government pursuant to WAC 173-27-130.
- (g) All requests for review of any final permit decisions under chapter 90.58 RCW and chapter 173-27 WAC are governed by the procedures established in RCW 90.58.180 and chapter 461-08 WAC, the rules of practice and procedure of the shorelines hearings board.
- (h) Except as specified in 09.110, Revisions to Permits, the applicant must comply with all aspects of an approval granted under this Chapter, including conditions and restrictions.

- (i) Construction and activities authorized by a Shoreline Substantial Development Permit are subject to the time limitations of WAC 173-27-090.

09.080 Procedures applicable to Substantial Development Permits

- (a) A Shoreline Substantial Development Permit shall be required for all development of shorelines, unless the proposal is specifically exempt per Section 09.040 or is not subject to the SMP per Section 01.030, Applicability.
- (b) Shoreline Substantial Development permits shall be processed consistent with this SMP and BCC Chapter 17.10, Permit Review Process.
- (c) A substantial development permit shall be granted only when the development proposed is consistent with:
 - (1) The policies and procedures of the SMA;
 - (2) The provisions of WAC 173-27; and
 - (3) This SMP.
- (d) The County may attach conditions to the approval of permits as necessary to assure consistency of the project with the SMA and this SMP.
- (e) Nothing shall interfere with the County's ability to require compliance with all other applicable plans and laws.

09.090 Procedures Applicable to Shoreline Conditional Use Permits

- (a) Uses specifically classified or set forth in this SMP as conditional uses shall be subject to review and condition by the Hearing Examiner and by Ecology. Shoreline Conditional Use Applications shall be processed consistent with this SMP and BCC Chapter 17.10, Permit Review Process.
- (b) Other uses which are not classified or listed or set forth in this SMP may be authorized as conditional uses provided the applicant can demonstrate consistency with the requirements of this Section and the requirements for conditional uses contained in this SMP.
- (c) Uses which are specifically prohibited by this SMP may not be authorized as a conditional use.
- (d) Uses which are classified or set forth in this SMP as conditional uses may be authorized provided that the applicant demonstrates all of the following:
 - (1) That the proposed use is consistent with the policies of RCW 90.58.020 and the SMP;
 - (2) That the proposed use will not interfere with the normal public use of public shorelines;
 - (3) That the proposed use of the site and design of the project is compatible with other authorized uses within the area and with uses planned for the area under the comprehensive plan and SMP;
 - (4) That the proposed use will cause no significant adverse effects to the shoreline environment in which it is to be located; and
 - (5) That the public interest suffers no substantial detrimental effect.
- (e) In the granting of all conditional use permits, consideration shall be given to the cumulative impact of additional requests for like actions in the area. For example, if conditional use permits were granted for other developments in the area where similar circumstances exist, the total of the conditional uses shall also remain consistent with the policies of RCW 90.58.020 and shall not produce substantial adverse effects to the shoreline environment.

09.100 Procedures Applicable to Shoreline Variances

- (a) The purpose of a variance is to grant relief to specific bulk or dimensional requirements set forth in this SMP where there are extraordinary or unique circumstances relating to the property such that the strict

implementation of this SMP would impose unnecessary hardships on the applicant or thwart the policies set forth in RCW 90.58.020. Variances from the use regulations of the SMP are prohibited. Shoreline Variance Applications shall be processed consistent with this SMP and BCC Chapter 17.10, Permit Review Process.

- (b) Variance permits should be granted in circumstances where denial of the permit would conflict with the goals of the SMA as listed 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.
- (c) Variance permits for development and/or uses that will be located landward of the OHWM, as defined in RCW 90.58.030 (2)(b), and/or landward of any wetland as defined in RCW 90.58.030 (2)(h), may be authorized provided the applicant can demonstrate all of the following:
 - (1) That the strict application of the bulk, dimensional or performance standards set forth in the SMP precludes, or significantly interferes with, reasonable use of the property;
 - (2) That the hardship described in criterion (1) 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;
 - (3) That the design of the project is compatible with other authorized uses within the area and with uses planned for the area under the comprehensive plan and SMP and will not cause adverse impacts to the shoreline environment;
 - (4) That the variance will not constitute a grant of special privilege not enjoyed by the other properties in the area;
 - (5) That the variance requested is the minimum necessary to afford relief; and
 - (6) That the public interest will suffer no substantial detrimental effect.
- (d) Variance permits for development and/or uses that will be located waterward of the OHWM, as defined in RCW 90.58.030 (2)(b), or within any wetland as defined in RCW 90.58.030 (2)(h), may be authorized provided the applicant can demonstrate all of the following:
 - (1) That the strict application of the bulk, dimensional or performance standards set forth in the applicable SMP precludes all reasonable use of the property;
 - (2) That the proposal is consistent with the criteria established under Subsection (c); and
 - (3) That the public rights of navigation and use of the shorelines will not be adversely affected.
- (e) In the granting of all variance permits, consideration shall be given to the cumulative impact of additional requests for like actions in the area. For example if variances were granted to other developments and/or uses in the area where similar circumstances exist the total of the variances shall also remain consistent with the policies of RCW 90.58.020 and shall not cause substantial adverse effects to the shoreline environment.

09.110 Revisions to Permits

- (a) When an applicant seeks to revise a shoreline substantial development permit, conditional use permit, or variance, whether such permit or variance was granted under this SMP, or under the prior effective SMP the SMP Administrator shall request from the applicant detailed plans and text describing the proposed changes to the project. If the Administrative Official determines that the proposed changes are within the general scope and intent of the original substantial development permit, conditional use permit or variance, as the case may be, the revision may be approved by the Shoreline Administrator, without the

need for the applicant to file a new Substantial Development Permit application, provided the development is consistent with the SMA, WAC 173-27-100 (Revisions to Permits), and the SMP.

(b) Within the “scope and intent” of the original permit as referenced in Subsection (a) means the following:

- (1) No additional over-water construction will be involved, except that pier, dock, or float construction may be increased by 500 square feet or 10 percent from the provisions of the original permit, whichever is less.
 - (2) Lot coverage and height may be increased a maximum of 10 percent from the provisions of the original permit,
 - (3) Additional or revised landscaping is consistent with the conditions attached to the original permit and with the SMP.
 - (4) The use authorized pursuant to the original permit is not changed.
 - (5) No adverse environmental impact will be caused by the project revision.
 - (6) The revised permit shall not authorize development to exceed height, lot coverage, setback, or any other requirements of the SMP except as authorized under a variance granted as the original permit or a part thereof.
- (c) If the revision, or the sum of the revision and any previously approved revisions, will violate the criteria specified above, the SMP Administrator shall require the applicant to apply for a new shoreline substantial development or conditional use permit or variance, as appropriate, in the manner provided for herein.
- (d) If proposed revisions to the original permit involve a conditional use or variance, the County shall submit the proposed revision to Ecology for review. Ecology shall respond with its final decision on the proposed revision request within 15 days of the date of receipt by Ecology per WAC 173-27-100(6).

09.120 Enforcement Authority

The County shall apply 173-27 WAC Part II, Shoreline Management Act Enforcement, to enforce the provisions of this SMP.

09.130 Amendments to SMP

- (a) This SMP carries out the policies of the Shoreline Management Act for Benton County. It shall be reviewed and amended as appropriate in accordance with the review periods required in the SMA and in order to:
- (1) Assure that this SMP complies with applicable law and guidelines in effect at the time of the review; and
 - (2) Assure consistency of this SMP with the County's Comprehensive Plan and development regulations adopted under chapter 36.70A RCW, if applicable, and other local requirements.
- (b) This SMP and all amendments thereto shall become effective 14 days from the date of the Washington Department of Ecology's written notice of final approval.
- (c) The SMP may be amended annually or more frequently as needed pursuant to the Growth Management Act, RCW 36.70A.130(2)(a)(iii).
- (d) Future amendments to this SMP may be initiated by any of the following: The Benton County Shoreline Administrator, Planning Commission, or Board of County Commissioners. The following persons may petition the Planning Commission and Benton County Commissioners to support an amendment:
- (1) Any owner of property in unincorporated Benton County, when such request is for an amendment that would affect only that person's property;

- (2) Any resident of unincorporated Benton County supported by ten (10) signatures of persons also residing in unincorporated Benton County; and
- (3) Any local governmental or non-governmental agency operating in Benton County.
- (e) Applications for SMP amendments shall specify the changes requested and any and all reasons therefore. Applications shall be made on forms specified by the County. Such applications shall contain information specified in the County's procedures for Comprehensive Plan and development regulation amendments pursuant to RCW 36.70A, the Growth Management Act, and information necessary to meet minimum public review procedures in Subsection C.
- (f) The County shall accomplish the amendments in accordance with the procedures of the Shoreline Management Act, Growth Management Act, and implementing rules including, but not limited to, RCW 90.58.080, WAC 173-26-100, RCW 36.70A.106 and 130, and Part Six, Chapter 365-196 WAC.
- (g) Proposals for amendment of this SMP shall be heard by the Planning Commission in an open record hearing. After conducting a hearing and evaluating testimony regarding the application, including a recommendation from the Shoreline Administrator, the Planning Commission shall submit its recommendation to the Board of County Commissioners, who shall approve or deny the proposed amendment following their open record hearing.
- (h) Prior to approval, the County shall make a finding that the amendment would accomplish #1 or #2, and must accomplish #3:
 - (1) The proposed amendment would make this Program more consistent with the SMA and/or any applicable Department of Ecology SMP Guidelines; or
 - (2) The proposed amendment would make this Program more equitable in its application to persons or property due to changed conditions in an area; and
 - (3) This Program and any future amendment hereto shall ensure no net loss of shoreline ecological functions and processes on a programmatic basis in accordance with the baseline functions present as of April 2013 (the *Final Shoreline Analysis Report*).
- (i) After approval or disapproval of a SMP amendment by the Department of Ecology as provided in RCW 90.58.090, the County shall publish a notice that the SMP amendment has been approved or disapproved by Ecology pursuant to the notice publication requirements of RCW 36.70A.290.

09.140 Monitoring

- (a) The County will track all shoreline permits and exemption activities to evaluate whether the SMP is achieving no net loss of shoreline ecological functions. Activities to be tracked using the County's permit system include development, conservation, restoration and mitigation, such as:
 - (1) New shoreline development
 - (2) Shoreline Variances and the nature of the variance
 - (3) Compliance issues
 - (4) Net changes in impervious surface areas, including associated stormwater management
 - (5) Net changes in fill or armoring
 - (6) Net change in linear feet of flood hazard structures
 - (7) Net changes in vegetation (area, character)
- (b) Using the information collected in Subsection (a) a no net loss report shall be prepared every eight years as part of the County's SMP evaluation or Comprehensive Plan Amendment process. Should the no net loss report show degradation of the baseline condition documented in the County's Shoreline Analysis

Report, changes to the SMP and/or Shoreline Restoration Plan shall be proposed at the time of the eight-year update to prevent further degradation and address the loss in ecological functions.