

NO NET LOSS REPORT
for Benton County's Shoreline Master Program

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The logo for The Watershed Company, featuring a stylized wave graphic in a red square next to the text "THE WATERSHED COMPANY".

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TABLE OF CONTENTS

| | PAGE # |
|-----------------------------------------------------------------------------|-----------|
| 1 Introduction..... | 1 |
| 2 Shoreline Jurisdiction | 1 |
| 3 Shoreline Environment Designations | 2 |
| 3.1 Aquatic | 2 |
| 3.2 Natural..... | 3 |
| 3.3 Conservancy..... | 3 |
| 3.4 Hanford | 3 |
| 3.5 Rural..... | 3 |
| 3.6 Residential | 4 |
| 3.7 Rural Industrial..... | 4 |
| 3.8 Urban Transition Area..... | 4 |
| 4 Goals, Policies, And Regulations..... | 5 |
| 4.1 Critical Areas | 6 |
| 4.2 Shoreline Vegetation Conservation | 6 |
| 4.3 Water Quality, Stormwater and Non Point Pollution..... | 7 |
| 4.4 Shoreline Stabilization | 7 |
| 4.5 Other Shoreline Modifications..... | 8 |
| 4.6 Shoreline Use | 9 |
| 4.7 Shoreline Habitat and Natural Systems Enhancement Projects | 11 |
| 5 Restoration Opportunities | 12 |
| 6 Cumulative Impacts..... | 12 |
| 7 Conclusions Regarding No Net Loss..... | 13 |
| 8 References | 14 |

NO NET LOSS REPORT

BENTON COUNTY'S SHORELINE MASTER PROGRAM

1 INTRODUCTION

The Shoreline Management Act guidelines (Guidelines) require local shoreline master programs (SMPs) to regulate new development to “achieve no net loss of ecological function.” This No Net Loss (NNL) Report provides a summary of how the development of the SMP and supporting documents, including the Shoreline Analysis Report, Shoreline Restoration Plan, and Cumulative Impacts Analysis (CIA), will ensure that ecological functions will not be degraded or minimized over time as the SMP is implemented. The CIA evaluated the effects of foreseeable development under the proposed SMP and demonstrated that the goals, policies and regulations in the proposed SMP will prevent degradation of ecological functions relative to the existing conditions, as documented in the County’s Shoreline Analysis Report.

2 SHORELINE JURISDICTION

As defined by the Shoreline Management Act of 1971, shorelines include certain waters of the state plus their associated “shorelands.” At a minimum, the waterbodies designated as shorelines of the state are streams whose mean annual flow is 20 cubic feet per second (cfs) or greater, lakes whose area is greater than 20 acres, and all marine waters. Shorelands 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... Any county or city may determine that portion of a one-hundred-year floodplain to be included in its master program as long as such portion includes, as a minimum, the floodway and the adjacent land extending landward two hundred feet therefrom. Any city or county may also include in its master program land necessary for buffers for critical areas...” (RCW 90.58.030).

In Benton County, the Columbia and Yakima Rivers are the only two waterbodies meeting shoreline jurisdiction criteria. Both are considered a Shoreline of Statewide Significance ($\geq 1,000$ cubic feet per second). The areas

meeting the shoreline jurisdiction criteria include 330 miles of river shoreline and 14.93 square miles of upland shorelands, which includes floodways, associated floodplains, and wetlands. Federal lands make up approximately 35 percent of that acreage, or 3,369 acres total.

3 SHORELINE ENVIRONMENT DESIGNATIONS

The County's Shoreline Analysis Report evaluated existing conditions in the County's shorelines. The Columbia and Yakima Rivers were each divided into discrete reaches, and environment designations were proposed for each reach based on site-specific conditions and likely changes in land use.

The assignment of shoreline designations is an important step in achieving no net loss of ecological function. The assignment of shoreline designations can help minimize impacts by concentrating development activity in lower functioning areas that are not likely to experience significant function degradation with incremental increases in new development or redevelopment.

The SMP Guidelines recommend a six-category shoreline environment designation scheme. The Shoreline Analysis Report recommended the development of several alternative designations to supplement those of the Guidelines. The Draft Benton County SMP incorporated a combination of these recommendations, resulting in eight designations, described below. The two designations suggested for consideration in the Shoreline Analysis Report, but omitted from the SMP (Agriculture and Shoreline Parks), were eliminated because the Rural designation provided all the necessary accommodation and benefits to agricultural uses, and the Conservancy and Natural designations (in combination with special buffer provisions) provided all the necessary accommodation and benefits to recreational uses.

The following discussion provides a brief description of each of the environment designations established in the County's proposed SMP.

3.1 Aquatic

The purpose of the Aquatic environment designation is to protect, restore, and manage the unique characteristics and resources of the areas waterward of the ordinary high-water mark. Management policies focus on water-dependent uses and ecological restoration, and aim to minimize impacts to the fish and wildlife habitat, views, water quality, natural hydrologic conditions, and surface navigation.

3.2 Natural

The Natural environment designation is intended to protect those shoreline areas that are relatively free of human influence or that include intact or minimally degraded shoreline functions intolerant of human use. Only low-intensity uses are permitted in the Natural designation. Single-family residential, very low-intensity agriculture, research, and water-oriented recreational uses may be considered provided that ecological impacts can be avoided or minimized.

3.3 Conservancy

The purpose of the Conservancy environment designation is to protect ecological functions of open space, floodplain and other sensitive public or protected lands and ensure appropriate management and development of existing and future public parks and recreation areas. Management policies for the Conservancy environment limit uses 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. Except in support of agriculture, aquaculture, and recreation uses, commercial and industrial uses should not be allowed. Water-oriented uses are given priority over nonwater-oriented uses. Water-dependent and water-enjoyment recreation facilities and uses that do not deplete the resource over time are preferred, provided adverse impacts to the shoreline are mitigated.

3.4 Hanford

The purpose of the Hanford environment designation is to recognize and foster the unique economic, environmental and recreational values of the Hanford area as it transitions over time from federal energy purposes to other land uses and management consistent with the Hanford Reach National Monument designation. Management policies focus on shoreline uses for preservation of cultural, ecological and natural resources with limited public access where appropriate. High intensity uses in shoreline jurisdiction will be limited to heavy and light industry, energy generation and transmission, research and development, and environmental cleanup.

3.5 Rural

The purpose of the 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. Management policies promote agricultural activities on agricultural lands, allow new agricultural activities and expansions of current agricultural activities on previously un-

farmed lands consistent with the SMP, and limit non-agricultural uses to those compatible with agriculture. Development standards seek to conserve soils and water resources suitable for agricultural purposes.

3.6 Residential

The purpose of the Residential environment designation is to accommodate residential development and accessory structures that are consistent with a rural character and provide appropriate public access and recreational uses. Standards for residential development require projects to 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.

3.7 Rural Industrial

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. Management policies emphasize that no net loss of shoreline ecological functions shall occur as a result of new development. Where applicable, new development must include environmental cleanup and restoration of the shoreline to comply with any relevant state and federal law.

3.8 Urban Transition Area

The purpose of the Urban Transition Area environment designation is to ensure optimum utilization of shorelines occurring within designated Urban Growth Areas by managing development and uses so that it enhances and maintains shorelines for a variety of future urban uses and protect and restore ecological functions of open space, floodplain and other sensitive lands where they exist in urban and developed settings, while allowing a variety of compatible uses. Management Policies state that shoreline regulations should reflect each UGA's unique character and in regulating uses priority is given to water-dependent uses. 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 are allowed if the use is otherwise compatible with the purpose of the environment and the setting.

4 GOALS, POLICIES, AND REGULATIONS

The County's proposed SMP recognizes that the Columbia and Yakima River shorelines in Benton County are Shorelines of Statewide Significance and must be given consideration as a major resource from which all people derive benefit. The proposed SMP includes several goals intended to conserve these shoreline area's ecological functions. These include the following selected goals:

- SMP Goal 1 - To foster and promote the best use of Benton County shorelines. To encourage shoreline development and modifications which are wisely placed, consistent with the physical limitations of the areas, serve the needs and desires of the local citizens, and protect the functions and values of the shorelines.

- SMP Goal 4 - To encourage economic development along shorelines in a manner compatible with environmental conditions and desired land use character of the shorelines.

- SMP Goal 12 - To achieve sustainability of resource functions and values and no-net-loss of ecological functions by allowing shoreline development and modifications when impacts are minimized through mitigation sequencing and by encouraging and incentivizing restoration of ecological functions where they have been impaired.

- SMP Goal 17 - To upgrade shoreline ecological functions and aesthetics to a level commensurate with their importance to the community and to achievement of regional goals for species and habitat recovery such as through the projects, programs and plans established within the SMP Shoreline Restoration Plan.

The Shoreline Analysis Report evaluated existing conditions, with particular attention to ecological conditions. The overarching purpose of recording baseline is to ensure the adopted regulations, designed to meet the goals above and others contained within the SMP, provide no net loss of shoreline ecological functions. The Analysis Report includes recommendations for translating findings into shoreline designations, SMP policies, and restoration strategies. Key recommendations related to no-net-loss goals are presented below with a brief description of how those recommendations are addressed in the Draft SMP.

4.1 Critical Areas

| <i>Analysis Report Recommendations</i> | <i>SMP Provisions</i> |
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| <ul style="list-style-type: none"> • Review the County’s critical areas regulations and modify where needed to meet SMA requirements regarding no net loss; review the CAO to determine whether changes are needed to accommodate preferred uses consistent with no-net-loss requirements. • Customize the County’s existing stream buffers to consider environment designations and ensure no-net-loss. • Update wetland regulations to specify use of the currently approved federal manual and supplements, the latest Ecology wetland rating system for Eastern Washington, and the latest science-based wetland buffers and mitigation ratios. | <ul style="list-style-type: none"> • The Draft SMP states that it 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. • Wetland regulations are updated to specify the most current manuals and guidance (Section 06.020 c and d). • Stream buffers are designated based on the waterbody and new environment designations, and were developed based on extensive quantitative measurements presented in the analysis (Section 06.030 a). |

4.2 Shoreline Vegetation Conservation

| <i>Analysis Report Recommendations</i> | <i>SMP Provisions</i> |
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| <ul style="list-style-type: none"> • Build on the existing protections provided in the County’s critical areas regulations and current SMP, paying special attention to measures that will promote retention of shoreline vegetation, replacement of invasive vegetation with native vegetation, and development of a well-functioning shoreline which provides both physical and habitat processes. • Ensure that vegetation provisions allow for appropriate modifications to accommodate preferred uses, particularly water-oriented uses and public access. • Consider development of environment designation-specific and possibly waterbody-specific buffer and/or setback strategies that meet requirements for environmental protection and recognition of local conditions. | <ul style="list-style-type: none"> • The Draft SMP states in its goals and policies that development proposals must ensure shoreline vegetation, both upland and waterward of the OHWM, is conserved to maintain shoreline ecological functions and processes. It calls for maintenance of healthy vegetation, retention and planting of large conifers, protection of new and existing native vegetation, and prohibition of invasive plant introduction. Section 05.030 of the Draft SMP describes in detail limits on vegetation clearing and pruning, tree retention plan requirements, mitigation, and vegetation restoration requirements. • Policies encourage management and control of noxious and invasive weeds, and state that control of such species should be done in a manner that retains onsite native vegetation, provides for erosion control, and protects water quality. • Stream buffers are designated based on sampled conditions on each waterbody and in each new environment designation. |

4.3 Water Quality, Stormwater and Non Point Pollution

| Analysis Report Recommendations | SMP Provisions |
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| <ul style="list-style-type: none"> Consider incorporating regulations to facilitate maximum implementation of TMDL plans for DDT and turbidity in the lower Yakima River, and controlling introduction of 303(d)-listed pollutants for which TMDLs have not yet been prepared. Ensure that regulations allow for placement of water quality-related structures or facilities in shoreline jurisdiction. | <ul style="list-style-type: none"> The Draft SMP states that 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 (Section 05.040 a). |

4.4 Shoreline Stabilization

| Analysis Report Recommendations | SMP Provisions |
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| <ul style="list-style-type: none"> Ensure “replacement” and “repair” definitions and standards are consistent with WAC 173-26-231(3)(a). Consider defining a replacement threshold. Fully implement the intent and principles of the WAC Guidelines. Reference appropriate exemptions from a Shoreline Substantial Development Permit related to “normal maintenance and repair” and “construction of the normal bulkhead common to single-family residences.” Give preference to lower-impact, “soft” shoreline modifications. Provide incentives to encourage modification of existing armoring, where feasible, to improve habitat while still maintaining any necessary site use and protection. | <ul style="list-style-type: none"> SMP shoreline stabilization policies require the design of replacement structures to minimize and mitigate impacts on shoreline ecological function and state that replacement shall be regulated as a new shoreline stabilization measure, except for the requirement to prepare a geotechnical analysis. A threshold for repair vs. replacement is established in SMP Section 7.140(g)(2). The draft SMP states that maintenance, repair and replacement of shoreline stabilization structures may meet the criteria for exemption from a SSD Permit, but such activity is not exempt from the policies and regulations of the SMP. Soft shoreline stabilization methods are shown preference in Draft SMP Section 7.140(i)(2)(f) and in several provisions throughout Section 07.140. It states that new hard structural shoreline stabilization measures shall generally not be authorized. |

4.5 Other Shoreline Modifications

| Analysis Report Recommendations | SMP Provisions |
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| <p>Piers and Docks</p> <ul style="list-style-type: none"> • Develop detailed dimensional and material standards for new piers and replacement/modified piers, customized for the Columbia River environment. • Be consistent, to the extent practicable based on local conditions and requirements for no net loss, with Washington Department of Fish and Wildlife and U.S. Army Corps of Engineers design standards, WAC 332-30-144 regarding private recreational docks, and the McNary Shoreline Management Plan; recognize special local issues or circumstances. • Recognize that there is a variety of pier and dock types in the Columbia River system, with highly variable design requirements – from single-family residential dock to a barge-loading facility. • Evaluate the suitability and potential for new docks on the Yakima River and establish appropriate river-specific regulations. | <ul style="list-style-type: none"> • Section 7.030e details specific construction and design standards for boating facilities and private moorage structures. 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. • Docks standards for the Columbia River were based on the McNary Shoreline Management Plan, with some modifications to address larger and public boating facilities. Dock standards for the Yakima River were based on additional consultation with WDFW. |
| <p>Fill</p> <ul style="list-style-type: none"> • Encourage restoration fills | <ul style="list-style-type: none"> • Section C(7) policy 24 of the proposed SMP specifically states to encourage fill when it is associated with restoration projects. Section 04.110 (Use Matrix) identifies restoration-related fills as permitted (SDP or exemption). |
| <p>Breakwaters, Jetties, Groins and Weirs</p> <ul style="list-style-type: none"> • Consider prohibiting new breakwaters, weirs, jetties, and groins except where needed for maintenance of existing water-dependent uses or restoration. | <ul style="list-style-type: none"> • New, expanded or replacement breakwaters, jetties, groins and weirs are only 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. SMP Section 04.110 (Use Matrix) requires CUP or prohibits these structures unless related to restoration. |
| <p>Dredging and Dredge Material Disposal</p> <ul style="list-style-type: none"> • Consider prohibiting dredging and dredge material disposal except for shoreline restoration, flood hazard reduction, and maintenance | <ul style="list-style-type: none"> • The Draft SMP does not prohibit dredging outside of the recommended activities, but it states that dredging may only be permitted for development of new or expanded wet moorages, harbors, ports or water-dependent industries of economic |

| Analysis Report Recommendations | SMP Provisions |
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| <p>of existing legal moorage and navigation.</p> | <p>importance to the region only when there are no feasible alternatives or other alternatives may have a greater ecological impact (Section 07.060 d(1)). SMP Section 04.110 (Use Matrix) requires CUP or prohibits many dredging or disposal actions.</p> <ul style="list-style-type: none"> • 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 (07.060c). |

4.6 Shoreline Use

| Analysis Report Recommendations | SMP Provisions |
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| <p>Aquaculture</p> <ul style="list-style-type: none"> • Ensure that any salmon recovery-related aquaculture activities are facilitated in the aquatic and appropriate upland environments. | <ul style="list-style-type: none"> • The Draft SMP aquaculture policies (Section 07.020) encourage aquaculture that supports the recovery of endangered or threatened fish species and restricts it in areas where it would result in a net loss of ecological functions. • Section 4.110 (Use Matrix) provides clear permit preference for non-commercial aquaculture in suitable environments. |
| <p>Boating Facilities</p> <ul style="list-style-type: none"> • Develop regulations for over- and in-water components of commercial, public and private boating facilities, including port uses and community and park boat moorage and launching facilities with as much predictability as possible, while still allowing for an appropriate amount of flexibility based on site-specific conditions and use-specific need. | <ul style="list-style-type: none"> • Draft SMP Section 07.030 specifies regulations 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. |
| <p>Commercial Development</p> <ul style="list-style-type: none"> • Recognize commercial uses and consider incentives to attract water-oriented uses in appropriate locations along the shoreline. Identify criteria for where future commercial uses may be appropriate and support the Cities' efforts to provide for | <ul style="list-style-type: none"> • Commercial development in shoreline areas shall be designed, located, and constructed to achieve no net loss of ecological functions (Section 07.050). |

| Analysis Report Recommendations | SMP Provisions |
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| commercial development in their centers along the rivers. | |
| <p>Industry</p> <ul style="list-style-type: none"> Recognize current industrial uses and consider incentives to attract water-oriented uses in appropriate locations along the shoreline | <ul style="list-style-type: none"> The Draft SMP states (07.080 g) that in consideration of shoreline environment designation amendments, and in the review of shoreline permits, the County will encourage industrial uses and redevelopment to locate where environmental cleanup and restoration can be accomplished. |
| <p>In-stream Structural Uses</p> <ul style="list-style-type: none"> Accommodate anticipated new diversion structures, and repair/maintenance and possible expansion of existing projects. In particular, if studies of inter-basin water transfer indicate that in-stream structures would contribute to improved water quality and shoreline functions, such structures should be accommodated. | <ul style="list-style-type: none"> Management policies (Section 07.090) ensure the location, design, construction and maintenance of in-stream structures give due consideration to the full range of public interests, watershed functions and processes, and environmental concerns, with special emphasis on protecting and restoring priority habitats and species and encourage non-structural and non-regulatory approaches such as land or easement acquisition, education, voluntary protection and enhancement projects, as an alternative to in-stream structures. |
| <p>Mining</p> <ul style="list-style-type: none"> Clearly differentiate between upland and aquatic mining, and address recreational mining. | <ul style="list-style-type: none"> Mining in aquatic areas requires a CUP except for any mining for restoration purposes (see 04.110 – Use Matrix). Recreation mining is addressed in 07.100(a). |
| <p>Recreational Development</p> <ul style="list-style-type: none"> Include provisions for existing and potential recreational uses, including boating, swimming, and fishing. Work with local, state and federal parks and refuge officials to ensure consistency between shoreline policies and regulations and long-term parks management plans. Policies and regulations related to parks management should provide clear preferences for shoreline restoration consistent with public access needs and uses. Existing “natural” parks should be protected and enhanced. | <ul style="list-style-type: none"> Draft SMP policies (07.110) state that the location, design, and operation of recreational facilities must be consistent with the purpose of the environmental designation. Recreational uses and facilities must 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 and open space areas and trail access. The NWR is designated Natural, as are the high-value wetland complexes of Two Rivers Park – consistent with parks management and ecological conditions. |
| <p>Residential Development</p> <ul style="list-style-type: none"> Residential uses are particularly prevalent and planned along the Yakima River and would be a relatively less prevalent use on the | <ul style="list-style-type: none"> Residential development is subject to critical area setbacks and no-net-loss provisions. Residential development must include facilities for water supply, wastewater, stormwater, solid waste, |

| <i>Analysis Report Recommendations</i> | <i>SMP Provisions</i> |
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| Columbia River. Recognize current and planned shoreline residential uses with adequate provision of services and utilities as appropriate to allow for shoreline recreation and ecological protection. | access, utilities and other support facilities in conformance with County standards and which do not result in harmful effects on the shoreline or waters (07.120(b)). |
| <p>Transportation and Parking</p> <ul style="list-style-type: none"> Allow for maintenance and improvements to existing roads and parking areas and for necessary new roads and parking areas where other locations outside of shoreline jurisdiction are not feasible. Address railroads. Promote additional trail connections consistent with local and regional plans. | <ul style="list-style-type: none"> New roads and parking are required to meet SMP shoreline buffer requirements and no-net-loss provisions (07.150(b)). New roads must be build outside of shoreline jurisdiction whenever feasible, and no net loss of ecological function must be maintained when expansions in shoreline jurisdiction is unavoidable (07.150(a)). Railroads are included in the transportation policies of section 07.150. |
| <p>Utilities</p> <ul style="list-style-type: none"> Allow for new, expanded, and maintained utilities with criteria for location and vegetation restoration as appropriate | <ul style="list-style-type: none"> Proposed policies (07.160) require that new utilities be located outside shoreline jurisdiction unless alternative locations are unfeasible. Design and location of structures must minimize disruption of public access to the shoreline, obstruction of visual access to the water, and loss of shoreline ecological function. All projects within shoreline jurisdiction must be designed to achieve no-net-loss of shoreline ecological function. |

4.7 Shoreline Habitat and Natural Systems Enhancement Projects

| <i>Analysis Report Recommendations</i> | <i>SMP provisions</i> |
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| <ul style="list-style-type: none"> Include incentives to encourage restoration projects, especially in lower-functioning areas. | <ul style="list-style-type: none"> Restoration is generally incentivized through an easier permit pathway (SDP or exemption, versus CUP in many cases). |

5 RESTORATION OPPORTUNITIES

The County's Shoreline Restoration Plan, prepared as part of this SMP update, will serve as a framework for the County and its restoration partners to identify and implement opportunities to improve impaired ecological functions in the County's shorelines. Several restoration opportunities were identified to address ecological impairments identified in the Shoreline Analysis Report. Restoration recommendations focus on protecting and restoring shoreline riparian vegetation, setting back levees and revetments to improve floodplain connectivity and functions, and increasing shoreline complexity through the addition of large woody debris. The Shoreline Restoration Plan identified plentiful partners with whom the County may partner to achieve its shoreline restoration goals.

6 CUMULATIVE IMPACTS

The Cumulative Impacts Analysis determined that the proposed SMP is expected to maintain existing shoreline functions within Benton County while accommodating the reasonably foreseeable future shoreline development.

The following are some of the key features identified in the Cumulative Impacts Analysis that protect and enhance shoreline ecological functions to ensure that the no net loss standard is met.

- Shoreline environment designations are based on existing shoreline conditions. Allowed uses focus high-intensity development in areas with a high level of existing alterations, while limiting future uses in areas where ecological functions and processes are more intact.
- SMP standards require applicants to avoid, minimize, and then compensate for unavoidable impacts to shoreline functions. Where SMP standards do not provide specific, objective measures that clarify avoidance, minimization, and mitigation measures, a mitigation sequencing analysis is required.
- Shoreline critical areas regulations are consistent with recommended state guidance to maintain ecological functions.
- Specific policies and regulations government shoreline uses and modifications ensure that potential impacts are regulated to avoid a net

loss of ecological function, while also meeting the requirements of the Shoreline Management Act pertaining to public access, prioritization of shoreline uses, and private property rights.

- The SMP includes an emphasis on achieving no net loss of shoreline ecological functions throughout shoreline jurisdiction.

7 CONCLUSIONS REGARDING NO NET LOSS

The SMP update process has provided the opportunity to identify existing environmental conditions, anticipate future impacts to shoreline functions, and promote restoration opportunities within Benton County's shoreline jurisdiction. The SMP update was based on the evaluation of existing conditions identified through the Shoreline Analysis Report. The proposed SMP provides a high level of protection to shoreline ecological functions. Major elements of the SMP that ensure no net loss of ecological functions fall into three general categories: 1) environment designations (SMP Chapter 3), 2) general provisions (SMP Chapter 5), and 3) shoreline use and modification provisions (SMP Chapter 7). In addition to the mandatory components of the SMP, the Shoreline Restoration Plan identifies voluntary restoration opportunities that will help the County identify and prioritize opportunities to restore shoreline ecological functions.

The Shoreline Analysis Report provided the information necessary to assign environment designations to the County's shoreline. Shoreline uses and modifications were then individually determined to be either permitted (as substantial developments or conditional uses) or prohibited in each of those environment designations.

Regulations emphasize avoidance and minimization of ecological impacts primarily via protection of vegetation. These factors are balanced with uses and modifications that are essential to maintaining the existing water-dependent use and necessary modifications. Recommendations from the Shoreline Analysis Report were weighed and generally followed in the development of the SMP. Deviations from the Analysis Report recommendations were made to ensure that 1) regulations did not interfere with the potential for shoreline restoration or enhancement, or prevent future public access/recreation improvements; and 2) existing uses were allowed to continue to operate. All of the shoreline modification regulations emphasize minimization of size of structures and use of appropriate materials, and use of designs that do not degrade and may even enhance shoreline functions. The proposed SMP emphasizes protection and

enhancement of shoreline resources such that no net loss of ecological functions will be achieved over time.

Several potential voluntary restoration projects, programs, and partners were identified in the Shoreline Restoration Plan. Specific opportunities and/or implementation strategies for restoration both within and outside of shoreline jurisdiction were proposed.

Given the above provisions, implementation of the proposed SMP is anticipated to achieve **no net loss of ecological functions in Benton County's shorelines.**

8 REFERENCES

Benton County. April 2014. Draft Shoreline Master Program.

The Watershed Company and BERK. April 2013. FINAL Shoreline Analysis Report for Shorelines in Benton County: Yakima and Columbia Rivers. Prepared for the Benton County Planning Department, Prosser, WA

The Watershed Company. June 2013. Shoreline Restoration Plan for Shorelines in Benton County: Yakima and Columbia Rivers. Prepared for Benton County Planning Department, Prosser, WA

The Watershed Company and BERK. November 2013. Cumulative Impacts Analysis for Benton County's Shoreline Master Program. Prepared for the Benton County Planning Department, Prosser, WA