

ACKNOWLEDGMENTS

The City of Napavine would like to acknowledge the many public and private agencies that have developed information on the shorelines of Lewis County that was used in this report.

This report was prepared with Grant Funding from the Washington State Department of Ecology SMA Grant Agreement No. G1200036

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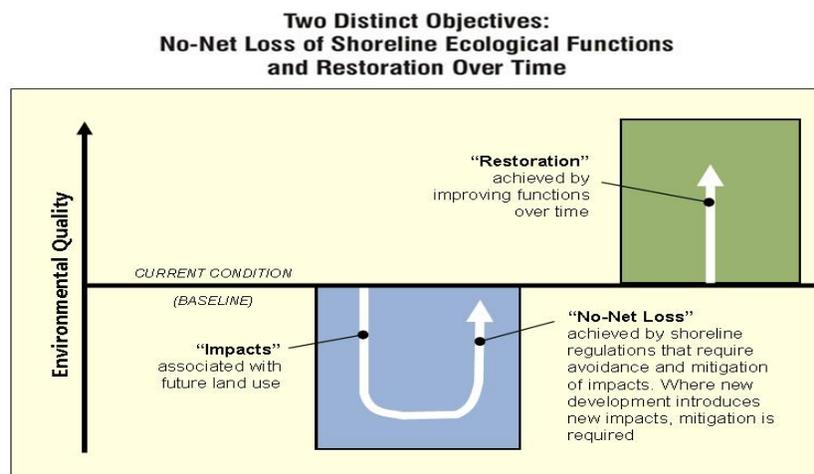
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INTRODUCTION

BACKGROUND

This report is the proposed restoration plan for the City of Napavine. The document has been prepared to comply with the state’s Shoreline Master Program guidelines for restoration planning (WAC 173-26-201(2)(f)) and is meant to provide a planning-level framework for understanding how and where shoreline ecological functions can be restored¹ in the City. The plan is not a regulatory document or a set of regulatory requirements, and is only meant to be used as a resource for future shoreline restoration efforts.

Guidelines for the creation of Shoreline Master Programs require that master programs contain goals, policies and actions for restoration of impaired ecological functions. Beyond preventing further loss of ecological functions, master programs provisions should be designed to “...achieve overall improvements in shoreline ecological functions over time when compared to the status upon adoption of the master program.”² A visual depiction of this overall improvement or restoration of shoreline ecological functions is displayed within Figure 1.



¹ Restoration is defined under the shoreline guidelines as “reestablishment or upgrading of impaired ecological shoreline processes or functions.” It is important to note that, for the purposes of shoreline management, the term does not imply returning shoreline areas to aboriginal or pre-European settlement conditions.

² The mandate to improve ecological functions over time provides the basis for restoration planning and creates the distinction between project-related mitigation and environmental restoration in the context of the SMP. Under the Shoreline Management Act, applicants for shoreline permits must fully mitigate new impacts caused by their proposed development, but are not required to restore past ecosystem damages as a condition of permit approval. Project applicants are also not required to implement the restoration measures identified in this plan as mitigation for project-related impacts, except in those instances where restoration is deemed appropriate. The two white arrows within Figure 1 display this distinction: the upward portion of the left white arrow represents project-related mitigation, while the right white arrow displays restoration.

**Conceptual view of the Objectives of the Shoreline Management Act
(Source, WA Department of Ecology)**

To achieve this overall improvement, the guidelines recommend that restoration plans:

- Identify degraded areas, impaired ecological functions, and sites with potential for restoration;
- Establish overall goals and priorities for restoration of degraded areas and impaired ecological functions;
- Identify existing and ongoing projects and programs that are currently being implemented, or are reasonably assured of being implemented (based on an evaluation of funding likely in the foreseeable future), which are designed to contribute to local restoration goals;
- Identify additional projects and programs needed to achieve local restoration goals, and implementation strategies, including identifying prospective funding sources for those projects and programs;
- Identify timelines and benchmarks for implementing restoration projects and achieving local restoration goals; and
- Provide mechanisms or strategies to ensure that restoration projects and programs will be implemented according to plans and to appropriately review the effectiveness of the projects and programs in meeting the overall restoration goals.

CONTEXT

This restoration plan has been created as part of the Shoreline Master Program update for the City of Napavine and is included in Phase 4 of the overall update. A timeline for the update is shown below:

TABLE 1

Timeline for the Shoreline Master Program Update for the City of Napavine

Phase	Update Schedule	Timeline
1	<ul style="list-style-type: none"> • Prepare Jurisdiction Maps • Prepare a Public Participation Plan 	Fall 2012
2	<ul style="list-style-type: none"> • Analyze and characterize shoreline conditions 	Winter 2012
3	<ul style="list-style-type: none"> • Complete Draft Shoreline Master Program Update • Complete Cumulative Impact Analysis Report 	Spring 2013
4	<ul style="list-style-type: none"> • Complete Draft Restoration plan and Implimentation Strategy • Complete No Net Loss Report 	Winter 2013 Spring 2014
5	<ul style="list-style-type: none"> • Conduct public hearings • Planning Commission Recommendation • City Council Action 	Spring - Summer 2014

6	<ul style="list-style-type: none"> • Ecology Review • Ecology Action • Final Adoption by Ecology and the City Council 	Spring- Summer 2014
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RESTORATION GOALS, POLICIES AND DEVELOPMENT STANDARDS

This restoration plan builds upon the identification of degraded areas, impaired ecological functions, and sites with the potential for ecological restoration as identified in the *Shoreline Inventory and Characterization for Napavine* (2013) conducted in Phase 2 of the update and is based on the following restoration goals found within section 5 of the *Proposed Shoreline Master Program*:

1. Improve impaired shoreline ecological functions and/or processes through voluntary and incentive-based public and private programs and actions that are consistent with the Shoreline Master Program and other approved restoration plans.
2. Provide fundamental support to restoration work by various organizations by identifying shoreline restoration priorities, and by organizing information on available funding sources for restoration opportunities.
3. Target restoration and enhancement towards improving habitat requirements of priority and/or locally important wildlife species.

The plan also builds on the priorities for restoration projects identified in subsection E of the Restoration and Enhancement Policies in Section 8 of the *Proposed Shoreline Master Program*. This policy states that restoration actions and stand alone projects are prioritized in the following order:

1. Create dynamic and sustainable ecosystems.
2. Restore connectivity between stream/river channels, floodplains and hyporheic zones.
3. Restore natural channel-forming geomorphologic processes.
4. Mitigate peak flows and associated impacts caused by high stormwater runoff volume.
5. Reduce sediment input to streams and rivers and associated impacts.
6. Improve water quality.

7. Restore native vegetation and natural hydrologic functions of degraded and former wetlands.
8. Replant native vegetation in riparian areas to restore functions.
9. Remove obsolete and no longer needed shoreline modifications.

EXISTING PROJECTS

There are development plans for several parcels adjacent to the Napavine shoreline. Currently there are no restoration projects since the current critical areas ordinance restricts activity within the 200 foot buffer from OHW. The adoption and implementation of the SMP will provide additional latitude for restoration/revegetation projects within the shoreline area.

RESTORATION OPPORTUNITIES

Sites with the potential for restoration, along with a short description of potential restoration projects on the site, and the restoration priority that the projects would address are presented within Table 2. The location of these projects is shown in Map 1 (found at the back of this document).³

TABLE 2

Potential Restoration Projects in Napavine

Shoreline	Opportunity Site	Potential Project Description	Restoration Priority
Newaukum River	Site A	Arrange for legal access across adjacent property and replant riparian vegetation	<ul style="list-style-type: none"> • Replant native vegetation in riparian areas to restore functions (Priority 8)
	Site B	Obtain a conservation easement for property adjacent to the shoreline buffer, fence riparian buffer, and replant riparian vegetation and trees along the river	<ul style="list-style-type: none"> • Reduce sediment input into the creek (Priority 5) • Restore native vegetation and natural hydrologic functions of degraded and former wetlands and riparian areas (Priorities 7 and 8)

³ In addition to these opportunity sites, additional private riparian restoration efforts have a similar potential to enhance the shoreline habitat along the Newaukum River, for example between Rush Road and Interstate 5. Private restoration opportunities would be consistent with Goal 1 of the Shoreline Master Program, which seeks to improve impaired shoreline ecological functions and/or processes through voluntary and incentive-based public and private programs, but these types of projects were not specifically analyzed in Table 2 due to the large number and variety of potential restoration efforts that could occur. If the city was interested in facilitating private restoration efforts among landowners, the City could coordinate with a non-profit organization to conduct a project such as the planting of riparian vegetation (trees and shrubs) along the shore.

Shoreline	Opportunity Site	Potential Project Description	Restoration Priority
	Site C	Obtain a conservation easement and replant riparian vegetation and trees along the river	<ul style="list-style-type: none"> Restore native vegetation and natural hydrologic functions of degraded and former wetlands and riparian areas (Priorities 5, 7 and 8)
	Site D		
	Site E	Obtain a conservation easement and create a potential outdoor classroom with interpretative trail for the elementary, middle and high school students	<ul style="list-style-type: none"> Create dynamic and sustainable ecosystems (Priority 1) Restore connectivity between stream/river channels, floodplains and hyporheic zones (Priority 2) Restore natural channel forming processes (Priority 3) Restore native vegetation and natural hydrologic functions of degraded and former wetlands and riparian areas (Priorities 7 and 8)

Of these potential restoration projects, the three with the highest potential priority rankings (listed in order of priority) are: Opportunity Site E, Opportunity Site B and Opportunity Site C.

PRIORITY 1: OPPORTUNITY SITE E

Opportunity Site E provides the potential to enhance habitat along the river, create an environment for outdoor education in collaboration with the Napavine School District, and potentially create a trail head or view point that could be usable by the general public. The site has moderate quality riparian habitat in its lower portions, including a small stand of fir and alder trees adjacent to a sidestream with a large gravel bar; however, the ecological functions of the upper site are minimized due to the previous clearing and scrub brush growth as a result of past agricultural activities. Restoration of the area would enhance ecological functions and could provide educational opportunities for the adjacent school districts and/or provide public access.

To achieve the project, acquisition of the property or an easement would be required, and a habitat restoration effort would have to be undertaken between the river and Rush Road. This restoration effort could focus solely on the area along the river, or could include some additional upland habitat enhancement. At minimum, the project would involve planting trees along the river. When considering the WRIA 22/23 limiting factors report, focusing tree planting along the river on interplanting conifers could also help provide large wood to the system. Larger projects that included restoration efforts in the upland areas could include removing and replacing invasive species with native vegetation, functionally reconnecting the river with its floodplain and creating a view point or trailhead for a future trail along the river.



Opportunity Site E – Looking South from Site B towards Site E

PRIORITIES 2 AND 3: OPPORTUNITY SITES B AND C

Opportunity Sites B and C provide an additional opportunity to plant riparian vegetation along the river and could potentially include a trail that would be accessed from site E. The restoration project would include planting native trees and vegetation and could consider providing a fence or other barrier between the trail and the riparian corridor. Such a barrier may be useful to limit sediment transport to the river and potential impacts to riparian vegetation associated with the adjacent commercial development sites or public access. These projects will provide an opportunity for the City and developers to plan facilities that could be designed to promote the interests of both parties.



Opportunity Sites B and C – Looking Southeast Towards the Rush Road Bridge

IMPLEMENTATION STRATEGIES

These restoration projects could be implemented in a number of ways, but the most likely method will be a close collaboration between the City of Napavine, a non-profit organization, and a willing land owner. Recognizing this likely collaboration, the identification of potential partners and the nature of their work is essential.

PRIMARY RESTORATION PARTNERS

Of all the potential restoration partners that could assist the City of Napavine with these projects, the most likely partners are: the Heernet Environmental Foundation, developers planning to develop properties in and adjacent to the shoreline and the Lewis County Conservation District.

Heernet Environmental Foundation – Seeks to protect and preserve native wildlife, plants, and stream systems through out the Chehalis River basin. The foundation has worked on a number of habitat restoration, protection and education efforts. Several of these projects have been focused on Cozy Valley in the uplands to the east of Tenino, where the Foundation owns and is actively restoring 780 acres of property.

Lewis County Conservation District – Works to administer programs to conserve natural resources and promote voluntary stewardship among private landowners in Lewis County. The Conservation District restores riparian habitats; provides technical assistance to landowners in conservation planning; and conducts, oversees and participates in various restoration projects throughout the county.

TABLE 3

Primary Restoration Partners

Group	Description	Restoration Activities
Heernet Foundation	The Heernett Environmental Foundation is located in South Thurston County. The foundation’s mission is to protect and preserve native wildlife, plants, and streams systems through out the Chehalis basin.	The foundation owns approximately 780 acres in the upper Scatter Creek watershed and performs a number of restoration efforts including education, outreach, land acquisition, and habitat enhancement.
Lewis County Conservation District	The Lewis County Conservation District (LCCD) promotes voluntary stewardship among private landowners in Lewis County. Conservation Districts are governmental entities that administer programs to conserve or restore natural resources.	The LCCD oversees and participates in various restoration projects throughout Lewis County. The conservation district works to restore riparian habitats; and is involved with agricultural assessments, education and outreach.

ADDITIONAL POTENTIAL RESTORATION PARTNERS

Additional restoration partners beyond these primary partners, include a number of government and non-profit groups that work in the Chehalis River Basin and/or provide funding for restoration projects. Several of these groups are listed in Table 4.

TABLE 4

Additional Potential Restoration Partners

Group	Description	Restoration Activities
Chehalis Basin Land Trust	The Chehalis Basin Land Trust conserves wildlife habitat and natural areas by accepting donations of conservation easements and gifts of land, and by working with partners to purchase lands.	The Chehalis Basin Land Trust recently restored trees and shrubs along the Discovery Trail in Centralia.
Chehalis Basin Education Consortium	The Chehalis Basin Education Consortium (CBEC) is an education and outreach partnership comprised of Educational Service District 113, school districts, natural resource agencies, Grays Harbor College, the Chehalis River Council and other nonprofit agencies within the Chehalis watershed.	The Chehalis Basin Education Consortium supports the stewardship of the Chehalis basin through environmental education geared to students located within the watershed. The consortium also may involve students in “action” projects whereby it has also done some riparian restoration projects. The Napavine School District is a Member District in the consortium.
Chehalis Basin Fisheries Task Force	The Chehalis Basin Fisheries Task Force was established to bring diverse interest groups together with the common goal of enhancing fisheries resources. The Task Force works to produce salmon for sport and commercial fisheries; enhance Steelhead and Cutthroat trout resources; and restore, enhance and protect stream habitat critical to these species.	The Chehalis Basin Fisheries Task Force functions as a funding agency, a coordinator of technical resources and a provider of public education. The Task Force also supports some habitat restoration activities.

TABLE 4 – (continued)

Additional Potential Restoration Partners

Group	Description	Restoration Activities
Chehalis Basin Partnership	The Chehalis Basin Partnership was formed in 1998, as part of the Watershed Management Act, to provide a framework for local citizens, interest groups, and government organizations to work collaboratively to identify and solve water-related issues in the Chehalis Basin. Interested towns and cities are able to participate in the organization, Napavine is listed as a member city but does not currently have any City personnel assigned.	<p>The Chehalis Basin Partnership conducts watershed planning for the Chehalis basin and conducts information and advocacy outreach efforts focused on:</p> <ul style="list-style-type: none"> • Improvement of water quality • Management of water resources • Reduction of the effects of flooding • Increase in recreational opportunities and • Increase in watershed awareness through education. <p>The group also has work groups that pursue restoration projects within the basin.</p>
Chehalis River Council	Education and Advocacy Non-Profit	The Chehalis Basin Partnership publishes Drops of Water, which reports on water-related issues throughout the Chehalis River Basin. The publication has been in print (available for free within local newspapers), but is shifting to a primarily online presence with some printed material still available. The Council also facilitates communication between the many groups working for the natural environment in the basin.

These partners have their own distinct capacities (whether fundraising, land acquisition or habitat enhancement) and could be asked to provide technical assistance or support to any of the projects identified. Additionally, individuals that live within the City or the surrounding area that possess these or similar capacities could also be identified and solicited to support restoration efforts.

FUNDING OPPORTUNITIES

Opportunities for funding these or other restoration projects within the City’s shoreline area are limited. The most relevant funding sources have been listed in Table 5.

TABLE 5

Potential Funding Opportunities

Funding Source	Description	Restoration Activities
Salmon Recovery Funding Board (SRFB)	Created in 1999 by the Washington State Legislature, the Salmon Recovery Funding Board (SRFB) provides grant funds to protect or restore salmon habitat and assist in related activities. These funds are administered through the Recreation and Conservation Office (RCO) formerly Interagency Committee for Outdoor Recreation (IAC). The RCO works closely with local watershed groups known as lead entities. The SRFB board is composed of five citizens appointed by the Governor and five state agency directors.	The SRFB Board supports salmon recovery by funding habitat protection and restoration projects. It also supports programs and activities that produce sustainable and measurable benefits for fish and their habitat. The SRFB has helped finance over 900 projects, but there are no known projects in Napavine. Past SRFB projects in the vicinity include phase 1 restoration of a parcel at RM 8.4 on the Newaukum River upstream of Napavine.
Aquatic Lands Enhancement Account (ALEA)	The Aquatic Lands Enhancement Account funds are handled through the WA Department of Natural Resources (WDNR).	There are no known ALEA funded projects within or in the vicinity of Napavine.
Washington Wildlife and Recreation Program (WWRP)	The Washington Wildlife and Recreation Program is a state grant program that provides funding to protect habitat, preserve working farms and create new local and state parks. It is administered by the Recreation and Conservation Office (RCO). WWRP is funded by the legislature in the state's capital construction budget.	WWRP grants were used for the acquisition and development of the 32 acre Napavine City Park (not within shoreline jurisdiction). There is a current grant application in to the RCO to acquire and preserve the Olson Farm, which is just upstream of Napavine across Interstate 5.

OTHER RESTORATION MEASURES

Beyond the restoration opportunities listed above, the restoration of shoreline ecological functions could also occur as a result of mitigation of impacts from new development, and the creation and observation of standards that are based on the environmental characteristics of the shoreline environment.

Mitigation and mitigation sequencing requirements can be found throughout the *Proposed Shoreline Master Program*, with compensatory mitigation being required where an impact to the shoreline environment is anticipated as a result of development. In most instances this mitigation is meant to alleviate the impacts of development, however in some instances mitigation and the consideration of mitigation sequencing will allow the overall functioning of the environment to improve. For instance, water oriented commercial development may be authorized within critical area buffers if applicable criteria are met. Ecological restoration must be considered as mitigation for impacts to shoreline resources resulting from such development. If a situation like this occurred, most of the impacts are likely to occur away from the immediate shoreline (where less impact to shoreline functions is likely) and most of the mitigation would occur near the shoreline (where a higher level of shoreline ecological function is possible). If the project was completed in this manner, the mitigation would mitigate the potential impacts of the new use or development, and potentially provide some additional restoration value, as depicted above within Figure 1.

Required setback standards and vegetation retention standards within the *Shoreline Master Program* further provide the opportunity for shoreline functions to be enhanced over time. As plants grow, age and die, they naturally improve shoreline ecological functions by creating habitats and layers that vary in age, shade the river, and eventually create large wood that provides shoreline habitat. Vegetation retention standards also may, over time, contribute to a more diverse vertical habitat structure in the shoreline environment. Critical area buffers and setbacks will ensure these areas are preserved to the extent feasible so that vegetative growth and regeneration are given the opportunity to occur.

CONCLUSION

When considering current conditions, the standards articulated within the *Shoreline Master Program*, and the potential restoration partners and projects that are available for the Napavine shoreline, it is possible that the enhancement of shoreline functions compared with the current ecological conditions could occur. The City of Napavine has several areas that could see some small scale habitat restoration, as well as some larger projects that could contribute to the overall quality and functions of the Newaukum River shoreline environment. This plan has sought to articulate the key pieces of property on which these various types of restoration could occur, and has articulated some of the partners that could be utilized to assist in the process. The completion of the projects will not be easy but, with the strength of the potential partners and the benefits of the potential projects, the successful implementation of the efforts is promising.

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