

**GRANT # G1400373
TASK 9, DELIVERABLE 2**

NO NET LOSS REPORT

City of Ilwaco Shoreline Master Program

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NO NET LOSS REPORT

CITY OF ILWACO SHORELINE MASTER PROGRAM

1 INTRODUCTION

The Shoreline Master Program Guidelines (Guidelines) require each local Shoreline Master Program (SMP) to regulate new development to achieve “no net loss” of ecological function (WAC 173-26-186[8][b]). This No Net Loss Report provides a summary of how the development of the City of Ilwaco (City) SMP (dated February 2016) and supporting documents, including the Shoreline Analysis Report, Shoreline Restoration Plan, and Cumulative Impacts Analysis, ensure that ecological functions will not be diminished over time as the SMP is implemented. This No Net Loss Report is a required element of the SMP update process.

2 SHORELINE ENVIRONMENT DESIGNATIONS

In Ilwaco, the Columbia River, Wallacut River, Black Lake, and Pacific Ocean qualify as Shorelines of the State. The City’s proposed shoreline jurisdiction covers approximately 291 acres of upland shorelands spread across approximately 8.2 miles of shoreline.

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

The Shoreline Analysis Report evaluated existing conditions in the City’s shorelines and informed the development of environment designations. The inventory of shoreline conditions and evaluation of ecological functions was completed using 12 distinct reaches.

The assignment of environment designations was based on the existing use pattern, the biological and physical character of the shoreline, and the goals and aspirations of the community. The SMP features four upland environment designations: High-Intensity,

Shoreline Residential, Urban Conservancy, and Natural. All areas waterward of the ordinary high water mark are designated Aquatic.

The purpose of the High-Intensity environment is to provide for high-intensity water-oriented commercial, transportation, and industrial uses while protecting existing ecological functions and restoring ecological functions in areas that have been previously degraded. The Shoreline Residential environment is intended to accommodate residential development and appurtenant structures. The purpose of the Urban Conservancy environment is to 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. Finally, the Natural environment is intended to protect shoreline areas that are relatively free of human influence or that include intact or minimally degraded shoreline functions intolerant of human use.

3 POLICIES & REGULATIONS

The Shoreline Analysis Report evaluated existing conditions, with particular attention to ecological conditions, in the City's shorelines. The overarching purpose of recording baseline conditions is to ensure that the adopted regulations achieve no net loss of shoreline ecological function. The report includes recommendations for translating findings into various SMP elements, including SMP policies and regulations. Key recommendations for SMP policies and regulations related to no net loss goals are presented in Tables 1 through 3, with a brief description of how those recommendations are addressed in the SMP.

Table 1. Implementation of key Shoreline Analysis Report general provision recommendations related to no net loss.

| General Provision | Report Recommendation Summary | Recommendation Implementation |
|--|--|--|
| Critical Areas | Incorporate the updated critical areas ordinance into the SMP. Consider whether the updated critical areas ordinance should be incorporated into the SMP by direct inclusion, as an appendix, or by reference. | Updated shoreline critical areas regulations are incorporated into the SMP as Appendix B. |
| | Recognize that some interdunal wetlands may be hydrologically associated with the shoreline and may be considered as shoreline jurisdictional wetlands, even when they are well beyond 200 feet from the shoreline's OHWM. Interdunal wetlands are frequently associated with many rare and endangered plant species, and their associated fauna and should be given careful consideration for protection. | Potential interdunal wetlands are included on the Shorelines Map. Interdunal wetlands are protected under the wetlands provisions in SMP Appendix B section 2. |
| Shoreline Vegetation Conservation | Ensure that vegetation standards allow adequate provisions to allow for treatment and removal of invasive vegetation that poses a threat to shoreline ecological functions. | SMP regulation 6.6(7) states that hand removal or spot spraying of 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 allowed. SMP regulation 6.6(8) addresses aquatic weed control. |
| | Ensure that vegetation standards for coastal dunes acknowledge the habitat value of sparsely vegetated dune communities. | SMP regulation 7.4(1) indicates that coastal dune modification is only allowed when it will not result in a net loss of shoreline ecological functions. |

Table 2. Implementation of key Shoreline Analysis Report shoreline modification provision recommendations related to no net loss.

| Modification Provision | Report Recommendation Summary | Recommendation Implementation |
|--------------------------------|---|--|
| Shoreline Stabilization | Consider requiring a shoreline conditional use permit for any new hard shoreline stabilization. | A shoreline conditional use permit is required for new hard shoreline stabilization in the Urban Conservancy and Natural |

| Modification Provision | Report Recommendation Summary | Recommendation Implementation |
|---|---|---|
| | | <p>environments. New hard shoreline stabilization in the High-Intensity or Shoreline Residential environments requires a shoreline substantial development permit or exemption (SMP Table 7-1). New hard shoreline stabilization would need to comply with the shoreline stabilization regulations in SMP section 7.18, including SMP regulation 7.18(3), which stipulates when new or enlarged shoreline stabilization measures are allowed, and SMP regulation 7.18(7)A, which stipulates that soft structural shoreline stabilization measures must be used prior to hard stabilization measures unless demonstrated not to be sufficient.</p> |
| Piers & Docks | <p>Regulations for piers and docks should be developed to provide applicants with as much predictability as possible, while still allowing for an appropriate amount of flexibility based on site-specific conditions and use specific needs.</p> | <p>The boating facility regulations in SMP section 7.5, which address piers and docks, in concert with the shoreline use, development, and modification matrix (SMP Table 7-1), attempt to balance predictability and flexibility. A key provision, SMP regulation 7.5(5)B, directs that boating facility size must be restricted to the minimum necessary to meet the needs of the proposed use.</p> |
| Breakwaters, Jetties, Groins & Weirs | <p>Consider prohibiting new breakwaters, jetties, groins, or weirs in the SMP, except where they are essential to restoration or maintenance of existing water-dependent uses.</p> | <p>Breakwaters, jetties, and groins located waterward of the ordinary high water mark are allowed only when necessary to support water-dependent uses, public access, shoreline stabilization or other specific public purpose (SMP regulation 7.6.1). New breakwaters, jetties and groins, other than those installed to protect or restore ecological functions, require a conditional use permit. Weirs would be regulated as an in-stream structure and, except in the High-Intensity environment, would require a shoreline conditional use permit unless for the protection or restoration of ecological functions</p> |

| Modification Provision | Report Recommendation Summary | Recommendation Implementation |
|--|--|--|
| | | (SMP Table 7-1) . |
| Dredging & Dredge Material Disposal | Establish provisions to allow for continued dredging while addressing long-term ecological issues. | SMP regulation 7.8(3) identifies the purposes for which dredging may be allowed. Significant ecological impacts must be minimized and mitigation provided. |
| | Continue to prohibit dredging and fill in tidal wetlands. | Dredging and fill in tidal wetlands would be regulated through several means, including dredging and dredge material disposal regulations (SMP section 7.8), fill and excavation regulations (SMP section 7.9), and the wetlands regulations in SMP Appendix B section 2. While these regulations do not prohibit dredging and fill in tidal wetlands, they would allow these activities only under very limited circumstances and when compensatory mitigation is provided. |

Table 3. Implementation of key Shoreline Analysis Report shoreline use provision recommendations related to no net loss.

| Use Provision | Report Recommendation Summary | Recommendation Implementation |
|---------------------------|--|--|
| Aquaculture | Consider where and what types of aquaculture would be appropriate in the City. | Aquaculture is allowed as a shoreline conditional use in the Aquatic environment where it can be located, designed, constructed, and managed to avoid all of the following: a net loss of shoreline ecological functions, spreading diseases to native aquatic life, adversely impacting native eelgrass and macroalgae species, and significantly conflicting with navigation and public access (SMP regulation 7.3[1]). General associated upland facilities for aquaculture are allowed only in the High-Intensity environment (SMP Table 7-1). |
| Boating Facilities | Ilwaco includes commercial and public boating facilities, including a marina, Port uses, and community launching facilities. Regulations for | The boating facility regulations in SMP section 7.5, which address piers and docks, in concert with the shoreline use, development, |

| Use Provision | Report Recommendation Summary | Recommendation Implementation |
|--------------------------------|---|--|
| | the overwater components should be developed to provide applicants with as much predictability as possible, while still allowing for an appropriate amount of flexibility based on site-specific conditions and use-specific needs. | and modification matrix (SMP Table 7-1), attempt to balance predictability and flexibility. A key provision, SMP regulation 7.5(5)B, directs that boating facility size must be restricted to the minimum necessary to meet the needs of the proposed use. |
| Commercial Development | Incorporate clear dimensional criteria for commercial development, such as setbacks/buffers. | Shoreline buffers and setbacks are specified in SMP Appendix B Table B3-1. SMP regulation 7.1(4) typically limits structure heights in shoreline jurisdiction to 35 feet. |
| Forest Practices | Per the Guidelines, the City's SMP should rely on the Forest Practices Act and its implementing rules, as well as the Forest and Fish Report for adequate management of commercial forest uses within shoreline jurisdiction. | SMP policy 4.2.10(1) states that the City's SMP should rely on the Forest Practices Act and implementing rules, as well as the Forest and Fish Report as adequate management of commercial forest uses within shoreline jurisdiction. |
| Industry | Incorporate clear dimensional criteria for industrial development, such as setbacks/buffers. | Shoreline buffers and setbacks are specified in SMP Appendix B Table B3-1. SMP regulation 7.1(4) typically limits structure heights in shoreline jurisdiction to 35 feet. |
| Mining | Consistent with the Seashore Conservation Area of Washington State Parks, prohibit the mining of sand along the ocean beaches. | Ocean beach mineral prospecting must be conducted under a valid Hydraulic Project Approval issued by the Washington Department of Fish and Wildlife (SMP regulation 7.13[1]). |
| | Consider whether mining should be allowed or prohibited in shoreline jurisdiction. If mining is allowed, clearly differentiate between upland and aquatic mining. And if upland mining is allowed, consider including policies that emphasize mining as far as practicable from shorelines, floodplains, and streams. | Mining is prohibited within the City's shoreline jurisdiction, except for ocean beach mineral prospecting conducted under a valid Hydraulic Project Approval issued by the Washington Department of Fish and Wildlife (SMP regulation 7.13[1]). |
| Residential Development | Incorporate clear dimensional criteria for residential development, such as setbacks/buffers. | Shoreline buffers and setbacks are specified in SMP Appendix B Table B3-1. SMP regulation 7.1(4) typically limits structure heights in shoreline jurisdiction to 35 feet. |

| Use Provision | Report Recommendation Summary | Recommendation Implementation |
|-------------------------------------|--|--|
| Transportation & Parking | Allow for maintenance and improvements to existing roads, parking areas, or other transportation facilities. | Improvements to existing transportation and parking facilities are allowed if consistent with SMP section 7.19. Normal maintenance and repair are exempt (WAC 173-27-040[2][b]). |
| Utilities | Allow for maintenance and improvements to existing utility facilities. | Improvements to existing utility facilities are allowed if consistent with SMP section 7.20. Normal maintenance and repair are exempt (WAC 173-27-040[2][b]). |

4 RESTORATION OPPORTUNITIES

As part of a comprehensive SMP update, as elaborated on in the SMP Guidelines, local jurisdictions are required to plan for the restoration of impaired shoreline functions. Such planning should be designed to achieve overall improvements in shoreline ecological function over time, when compared to the status upon adoption of the master program (WAC 173-26-201[2][f]). The purpose of the Shoreline Restoration Plan is to plan for the restoration of impaired shorelines for the City.

Importantly, the Shoreline Restoration Plan is a non-regulatory component of the City's SMP update. The Shoreline Restoration Plan represents a vision for voluntary restoration to be implemented over time and result in ongoing improvements to shoreline ecological functions within Ilwaco.

The goal of the Shoreline Restoration Plan is to achieve overall improvements in shoreline ecological function over time, when compared to existing conditions. The Shoreline Restoration Plan includes the following objectives that provide more detail of how the City and potential restoration partners might work to achieve a net improvement in shoreline ecological functions:

- *Objective 1* • Protect natural shoreline ecological processes and functions, and restore those processes and functions that have been altered.
- *Objective 2* • Maintain biodiversity and conserve unique, fragile, and valuable species and habitats.

The Shoreline Restoration Plan discusses shoreline issues and potential restoration actions for freshwater, estuarine, and marine shorelines, including reach-specific discussions. The plan provides an implementation framework by identifying several potential restoration partners, funding mechanisms, design and permitting considerations, outreach and education measures, and tracking mechanisms.

5 CUMULATIVE IMPACTS

The Cumulative Impacts Analysis evaluated whether the City's SMP would address adverse environmental impacts such that no net loss of ecological functions would result over a 20-year planning horizon. The Cumulative Impacts Analysis stated that based on previous trends, as well as that much of the undeveloped land in the City's shoreline jurisdiction is publicly owned or otherwise constrained by the presence of steep slopes, floodplains, or wetlands, future development activity in Ilwaco's shoreline jurisdiction is anticipated to be limited in terms of location and extent. Future development activities in shoreline jurisdiction should be expected include new development, and the redevelopment, expansion, repair and maintenance of existing development.

The Cumulative Impacts Analysis determined that implementation of the SMP is anticipated to achieve no net loss of ecological functions. Following are components of the SMP that the Cumulative Impacts Analysis identified as integral to ensuring that the no net loss standard is met:

- *Environment designations:* 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.
- *Shoreline critical areas regulations:* Shoreline critical areas regulations protect shoreline critical areas in accordance with most current, accurate, and complete scientific and technical information available. Shoreline critical areas regulations are based on the City's general critical area regulations, which were developed based on the best available science. Regulations include buffers for Shorelines of the State.
- *Mitigation sequencing:* 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 use and modification regulations:* Specific regulations for shoreline uses and modifications ensure that potential impacts are regulated to avoid a net loss of ecological function.

The Cumulative Impacts Analysis also noted that other local, state and federal regulations, acting in concert with the SMP, will provide further assurances of maintaining shoreline ecological functions. Additionally, voluntary restoration actions in the Shoreline Restoration Plan provide the opportunity for the City's shorelines to be enhanced and restored over time.

6 CONCLUSIONS REGARDING NO NET LOSS

The Ilwaco SMP update process has provided the opportunity to identify existing environmental conditions, anticipate potential future impacts to shoreline functions, and identify restoration opportunities. The Shoreline Analysis Report enabled the SMP update process to rely on current, comprehensive information on the shoreline environment. The Cumulative Impacts Analysis evaluated the effects of reasonably foreseeable development that may occur under the SMP. The Shoreline Restoration Plan identified opportunities to improve impaired ecological functions in the City's shorelines. These elements facilitated the development of an SMP that directly and fully considers the preservation of ecological functions in order to achieve no net loss.

Major elements of the SMP update that ensure no net loss of ecological functions include: 1) shoreline environment designations; 2) general provisions; 3) shoreline use and modification provisions; and 4) the Shoreline Restoration Plan. The first three elements were developed with the goal of achieving no net loss of function and subject to an analysis of potential ecological impacts. The fourth element was developed with the aim of improving shoreline function where the opportunity exists.

Given the above, implementation of the City of Ilwaco's SMP is anticipated to achieve no net loss of shoreline ecological functions.