

**WHITMAN COUNTY
GRANT No. G1400494**

CUMULATIVE IMPACTS ANALYSIS

FOR THE CITY OF COLFAX SHORELINE MASTER PROGRAM

Prepared for:



City of Colfax
PO Box 229
Colfax WA, 99111

Prepared by:



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**The Watershed Company
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CUMULATIVE IMPACTS ANALYSIS

CITY OF COLFAX SHORELINE MASTER PROGRAM

1 INTRODUCTION

1.1 Background and Purpose

This Cumulative Impacts Analysis (CIA) is a required element of the City of Colfax’s (City or Colfax) Shoreline Master Program (SMP) update process. The State Master Program Approval/Amendment Procedures and Master Program Guidelines (SMP Guidelines; WAC 173-26-186(8)(d)) state that, “To ensure no net loss of ecological functions and protection of other shoreline functions and/or uses, master programs shall contain policies, programs, and regulations that address adverse cumulative impacts and fairly allocate the burden of addressing cumulative impacts.” The CIA is intended to demonstrate that an SMP will not result in degradation of shoreline ecological functions over a 20-year planning horizon. This CIA can help the City make adjustments where appropriate in its proposed SMP if there are potential gaps between maintaining and degrading ecological functions.

In accordance with the SMP Guidelines, this CIA addresses the following:

- i. “Current circumstances affecting the shoreline and relevant natural processes [Chapter 2 below and *Final Shoreline Analysis Report for Shorelines in Whitman County; the Cities of Colfax, Palouse, Pullman, Tekoa, and the Towns of Albion, Malden, and Rosalia* (The Watershed Company and Berk 2014)];
- ii. Reasonably foreseeable future development and use of the shoreline [Chapter 3 below and *Shoreline Analysis Report*]; and
- iii. Beneficial effects of any established regulatory programs under other local, state, and federal laws.” [Chapter 4 below]

The CIA assesses the policies and regulations in the draft SMP to determine whether no net loss of ecological function will be achieved as new development occurs. The baseline against which changes in ecological function are measured is the current shoreline conditions documented in the *Shoreline Analysis Report*. For those projects or activities that result in degradation of ecological functions, the required mitigation must return the resultant ecological function back to the baseline. This is illustrated in Figure 1-1.

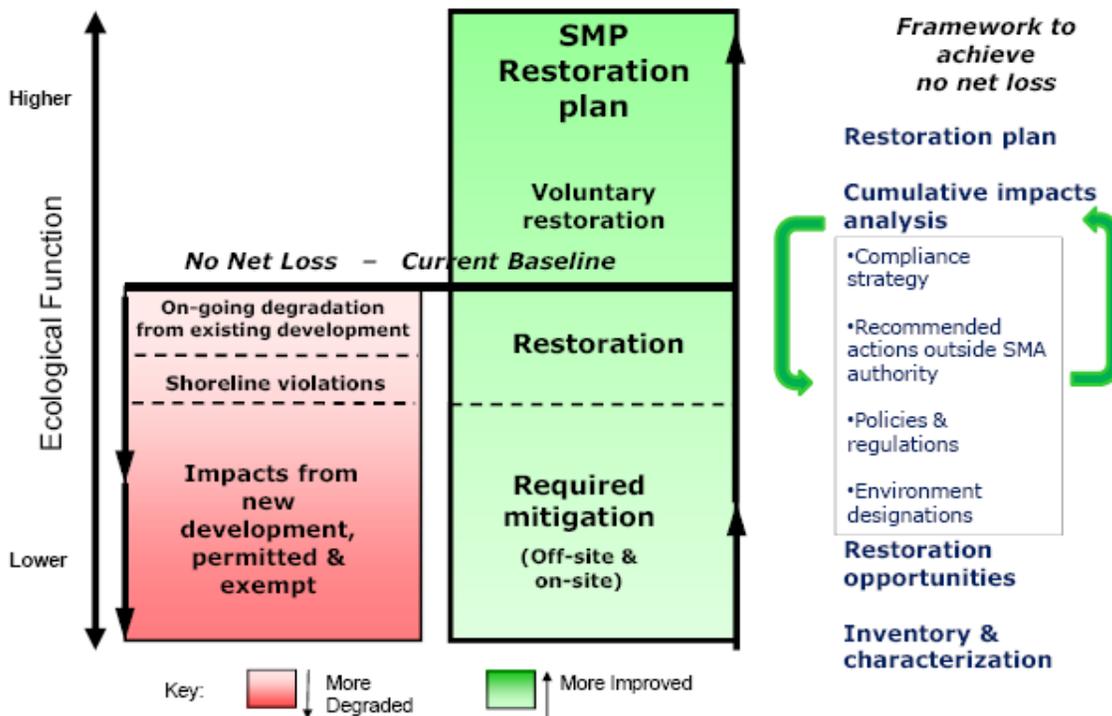


Figure 1-1. Framework for achieving no net loss of shoreline ecological functions (Source: Department of Ecology)

Despite SMP regulations that require avoidance, minimization, and mitigation for any unavoidable losses of function, some uses and developments cannot be fully mitigated. This could occur when mitigation is out-of-kind, meaning that it offsets a loss of function through an approach that is not directly comparable to the proposed impact. A loss of functions may also occur when impacts are sufficiently minor on an individual level, such that mitigation is not required, but are cumulatively significant. Unregulated activities (such as operation and maintenance of existing legal developments) may also degrade baseline conditions. Additionally, the City of Colfax SMP applies only to activities in shoreline jurisdiction (Figure 1-2), yet activities upland of shoreline jurisdiction or upstream in the watershed may have offsite impacts on shoreline functions.

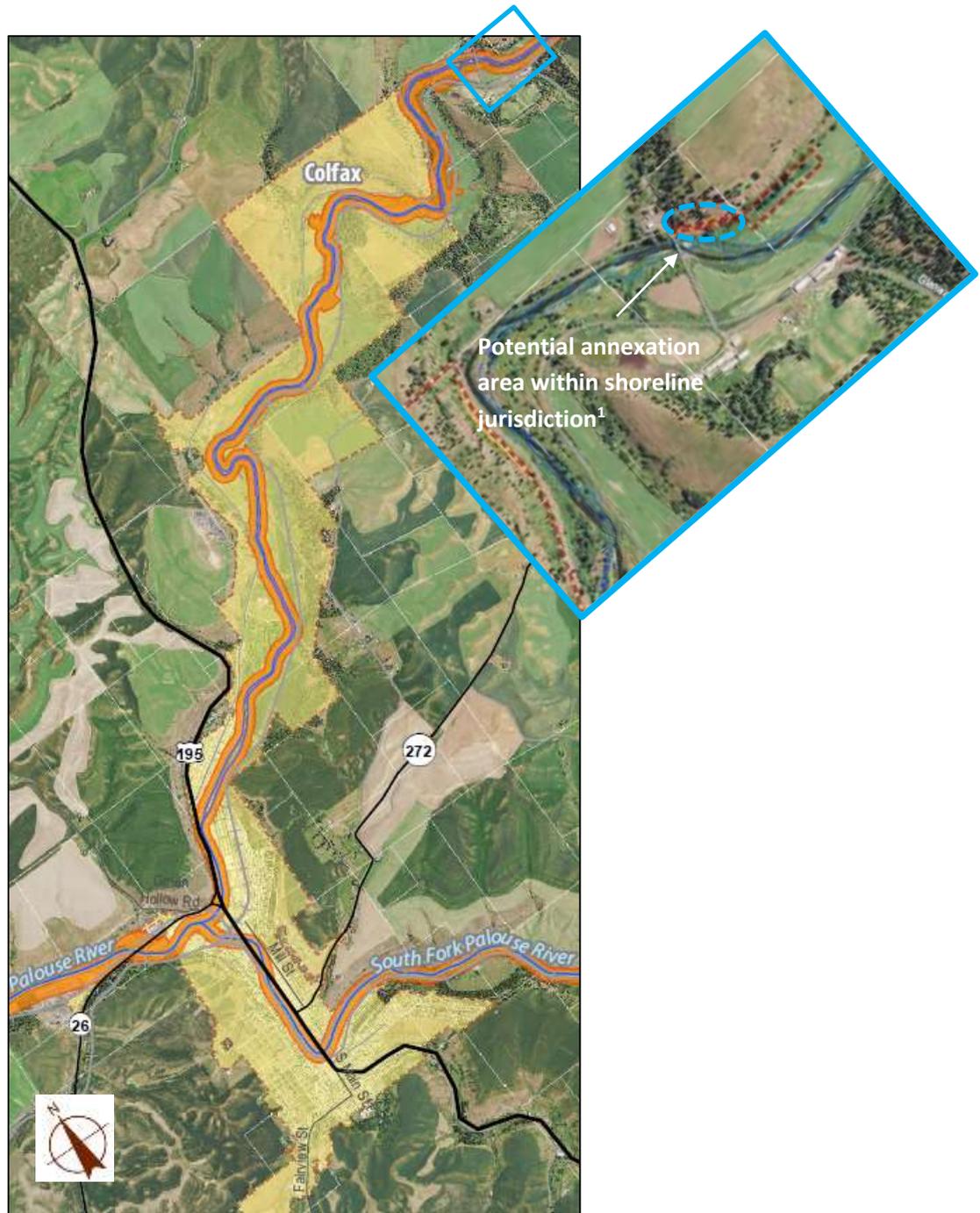


Figure 1-2. Colfax shoreline jurisdiction (orange shading within the yellow city limits, plus potential annexation area¹)

Together, these different project impacts may result in cumulative, incremental, and unavoidable degradation of the overall baseline condition unless additional restoration of

¹ Note that while the Official Shoreline Maps and other SMP documents identify this area as a potential annexation area, it is now incorporated into the City. The annexation became effective on April 11, 2015.

ecological function is undertaken. Accordingly, the *Shoreline Restoration Plan* (The Watershed Company 2015) is intended to be a source of ecological improvements implemented voluntarily that may help to bridge a gap between minor cumulative, incremental, and unavoidable damages and ensure no net loss of shoreline ecological functions.

1.2 Approach

This CIA was prepared consistent with direction provided in the SMP Guidelines as described above. Existing conditions were first evaluated using the information, both textual and graphic, developed and presented in the *Shoreline Analysis Report*. Likely development identified in the *Shoreline Analysis Report* was addressed further to understand the extent, nature, and general location of potential impacts.

The effects of likely development were then evaluated in the context of SMP provisions, as well as other related plans, programs, and regulations. For the purpose of evaluating impacts, areas with a likelihood of high densities of new development or redevelopment were evaluated in greatest detail. Cumulative impacts were analyzed quantitatively where possible. A qualitative approach was used where specific details regarding redevelopment likelihood or potential were not available at a level that could be assessed quantitatively or the analysis would be unnecessarily complex to reach a conclusion that could be derived more simply.

2 SUMMARY OF EXISTING CONDITIONS

The following summary of existing conditions is based on the *Shoreline Analysis Report*. More detailed information on specific shoreline areas is provided in the *Shoreline Analysis Report*.

2.1 Ecological

The City of Colfax and its annexation area are located in the Palouse watershed (WRIA 34), at the confluence of the north and south forks of the Palouse River. WRIA 34 covers the majority of Whitman County. The Palouse River originates in the Bitterroot Mountains in northern Idaho, and flows westerly into Whitman County before joining the Snake River at the Whitman/Franklin County line. The topography of the Palouse watershed transitions from mountainous terrain in Idaho to rolling hills composed of basalt covered with loess in the central portion of the watershed. The far western portion of the watershed is in an area called the Channeled Scablands. This area was shaped by massive floods over the past million years, which left behind exposed channels of the underlying basalt amongst islands of loess (HDR and EES 2007).

Precipitation primarily occurs in the winter months, and ranges from 10 inches in the west to 50 inches in the eastern portion of the watershed (HDR and EES 2007). Many of the smaller stream channels are dry in the summer. Major tributaries in the watershed include the North and South Forks, Rebel Flat Creek, Rock Creek, Pine Creek, Union Flat Creek and Cow Creek.

Historically, the dominant vegetation in the Palouse watershed was a bunchgrass association. Much of that vegetation has been converted to dryland agriculture or altered by rangeland uses. Soil erosion resulting from storm water runoff has been a continuing problem throughout WRIA 34 as a result of land conversions to agriculture. An estimated 40% of the topsoil in the Palouse has been lost to erosion during this time (HDR and EES 2007). Most livestock grazing occurs in the westernmost portion of the basin, within the Channeled Scablands. Urban development makes up a small portion of the watershed; however, several cities and towns are located directly adjacent to the Palouse River and its tributaries. Riparian areas have been significantly altered by land use in the South Fork Palouse subbasin, and many small intermittent streams have been converted to drainage ditches throughout the North and South Fork subbasins.

Water quality concerns are primarily from non-point sources throughout most of the watershed, including erosion, livestock, fertilizers, and septic systems, which contribute sediment, fecal coliforms, and nutrients. Temperature is also a concern in many of the waterbodies in the watershed.

Although there are no man-made dams on the Palouse River, the 185-foot Palouse Falls, approximately 6 miles upstream from the River's confluence with the Snake River, prevents anadromous salmon passage (Golder Associates, Inc 2009). There are no ESA-listed salmonids or other listed aquatic species above the Palouse Falls. Resident fish species above the falls include rainbow trout, brown trout, smallmouth bass, sculpin, largescale sucker, northern squawfish, shiner perch and speckled dace (HDR and EES 2007). Trout are less common in the lower portions of the watershed, presumably as a result of temperature and water quality constraints in the lower watershed.

Throughout much of the Palouse watershed in Whitman County, riparian forest and shrub vegetation is limited. This occurs as a combination of naturally limited water sources, the basalt landscape, and topography. Additionally, riparian vegetation is often limited as a result of ongoing agricultural activity adjacent to the watercourse.

Through Colfax, the Palouse River is almost completely contained within a system of concrete levees and flumes and shoreline functions tend to be low overall. The north fork of the Palouse meanders through recreational, residential, and agricultural uses before entering a concrete

flume. Most of the south fork meanders through more dense residential and commercial areas and is contained with a concrete flume for most of its length. Downstream of the confluence, the Palouse River continues along some minor residential uses and primarily industrial uses.

For the purposes of the *Shoreline Analysis Report*, nine reaches were delineated. A qualitative



reach ranking of hydrologic, vegetative, habitat, and hyporheic functions provided a broad scale description of function (Table 5-16 in the *Shoreline Analysis Report*). Most of the reaches are heavily impacted due to proximity to intense development, bank alteration and the presence of roads or railroads. Much of the channel is enclosed by the concrete flume or bounded by levees, thus hydrologic and habitat functions are particularly limited. The highest functioning shorelines areas are Reach 2, a

small area in the west of the City, and Reach 4, the agricultural area in the northeast arm of the City, which lack armoring, have substantial floodplain and a wetland fringe present, as well as riparian vegetation.

Colfax's potential annexation area² consists of 3.82 acres northeast of the current City limits that contains a pump house and unpaved access road. Only 0.44 acre are in shoreline jurisdiction, which predominantly consists of the access road area. This area was analyzed with the County reaches in the *Shoreline Analysis Report*. The potential annexation area within shoreline jurisdiction includes 371.8 SF of potentially associated wetland and is partially within the floodplain. Scattered trees are present on the slope north of the road and a few trees and agricultural areas are present south of the road. Glenwood Road crosses the river at the western end of the annexation area. No other development is present other than the access road.

2.2 Land Use

City

Current Land Use

Colfax's population is 2,846. A significant portion of the City lies within shoreline jurisdiction. Shoreline land use within the City's 368 acres of shoreline jurisdiction includes open space and agriculture at the south end of town; commercial and residential uses through the Main Street

² The annexation became effective on April 11, 2015.

corridor; and residential and industrial uses at the north end of town. Colfax has railroad and road infrastructure throughout. Current land uses within the City's shorelines are as follows:

Resource production and extraction	54%
Transportation, communication, and utilities	15%
Residential	9%
Undeveloped land and water areas	8%
Trade	6%
Cultural, entertainment, and recreational	4%
Manufacturing	4%
Services	1%

Colfax's shorelines are unique in the County. In the 1960s, a concrete channel system for the North Fork, South Fork and Mainstem of the Palouse River was constructed through town. The primary purpose of the system is to protect the low-lying residential, commercial and business areas of the City. The system, which is operated and maintained by the City, includes two components. The Colfax No. 1 levee system is located along the North Fork and Mainstem. The project consists of approximately 3,700 feet of concrete-lined channel, 4,900 feet of revetted channel, 2,300 feet of unrevetted channel, and drainage structures (USACE 2014). The Colfax No. 2 Flood Reduction Project is located along the South Fork and Spring Flat Creek (a tributary). The project consists of approximately 7,190 feet of concrete-lined channel, 2,610 feet of left and right bank revetted levees, and drainage structures (USACE 2014). Both were completed in 1965. As a result of the levee system, a large portion of the City's shorelines are fenced and do not provide the typical visual experience of a free-flowing stream.



Agriculture (seen primarily in the Colfax–Agriculture reach) is the most common use in the City's shorelines. The use is largely located northeast of the town center along the North Fork. This area was recently annexed into the City in 2006 and, at 1,140 acres, doubled the land area of the City and greatly increased its shoreline jurisdiction as well. The City has applied a new

zoning district to this area – Rural Residential. Current land use in the area is predominantly agriculture with cattle grazing. Residential development is extremely low density. The City views this area as appropriate for continued low-density residential development provided water and sewer services are extended (City of Colfax 2007).

Southeast of town, a large area of open space occurs. Several parks are located within the City's shoreline as well. Open space, parks and recreational activities comprise approximately 10 percent of the City's shorelines. Through the Main Street corridor, shoreline jurisdiction includes the west side of Main Street, which is characterized by retail, commercial, service and hotel/motel uses. Residential uses surround the commercial district and residential uses along the west bank of the South Fork are within shoreline jurisdiction as well.

Shoreline land use north of the town center and past the confluence includes more residential uses, but also includes industrial uses. The City's 6.5-acre wastewater treatment plant and settling pond are located in the northwest portion of the City between SR 26 and the Palouse River. After treatment, effluent is discharged to the Palouse River. The facility was last refurbished in 2004 (City of Colfax 2007).

Zoning

Zoning through the City generally follows the current land use pattern with the exception of the northeast annexed area described above. Commercial zoning is applied along the South Fork through the City's business district and in the northwest section of the City. It is surrounded by residential zoning. Areas of manufacturing zoning are generally located to the north of the town center.

Water-Oriented Uses

Water-oriented uses within Colfax are limited. None of the rivers through the City are commercially navigable. Activities such as boating, fishing and swimming are not possible in the fenced concrete channel areas. Agricultural uses in the northeast part of town may be considered water-oriented. There are approximately 197 shoreline acres in agricultural use.

Transportation

There is significant transportation infrastructure within the City's shorelines including rail, roads, and three bridges. About 50 percent of the roads are classified as rural local access. The remaining roads are classified as major roads, including approximately 0.5 mile of US Highway 195 (crosses the Palouse River in the Colfax-Residential and Colfax –Industrial/Commercial reaches) and a stretch of US Highway 26 (crosses the Palouse River in the Colfax – Industrial/Commercial reach) where it meets US Highway 195.

Public Access

The City's shoreline public access sites are also considered water-oriented. There are approximately 35 acres of identified parks, open space and recreational activities within the City's shorelines. Public access sites and trails include:

- **Colfax Golf and Country Club** is a nine-hole public course on the North Fork with fairways, water hazards, sand traps, and chipping and putting areas (image to the right). The Club has a pro shop and a full service bar.
- **Eels Park** features a fountain, restrooms, a half-basketball court, and a playground.
- **McDonald Park** is an athletic compound along the North Fork Palouse River. It has a regulation baseball field, a softball field, two multipurpose fields, and a soccer field. There is a press building with restrooms, an office, meeting rooms, and concession stands. The park is surrounded by a lighted path for walking/jogging (image to the right).
- **Schmuck Park** offers a large covered picnic area, day use facilities, a playground, a sand volleyball court, a horse shoe pit, and a tennis court.
- **Good Park** is located on SR 195 at the south end of town.



Water-enjoyment amenities include trails, ball parks, and viewpoints. Some of the commercial uses adjacent to the shoreline may be considered water-enjoyment uses. The City's wastewater treatment plant is considered water-related and its outflow is considered water-dependent. Other utility outfalls would also be considered water-oriented.

Annexation Area

Current Land Use

The total annexation area is 3.82 acres, 0.44 acres of which are in shoreline jurisdiction. The area in jurisdiction intersects two parcels. The existing land use is classified as Resource Production and Extraction. Ownership of the potential annexation area is unknown.

Zoning

The entire annexation area was zoned for Agriculture (Agriculture classified under current use chapter 84.34 RCW) prior to annexation. The annexation became effective on April 11, 2015 and it has now been zoned Rural Residential.

Transportation

There are no roads or rail.

3 REASONABLY FORESEEABLE FUTURE DEVELOPMENT

3.1 City

This section considers potential future development within and along the shorelines of the City of Colfax. Consistent with the State Guidelines, the analysis will “address the cumulative impacts on shoreline ecological functions that would result from future shoreline development and uses that are reasonably foreseeable” (WAC 173-26-201(3)(d)(iii)). Reasonably foreseeable development is defined as development that is likely to occur during the next 20 years based on the proposed shoreline environment designations, proposed land use density and bulk standards, and current shoreline development patterns.

The zoning and proposed shoreline environment designations control the availability of land for development in the shoreline jurisdiction. The majority of shoreline parcels have no zoning (71%). The remaining parcels are mainly zoned either residential (18%) or commercial and business (8%), with some manufacturing. Relevant zoning in Colfax’s shoreline is summarized as follows:

- The R-1 and R2 zones allow residential with accessory uses, specified home occupations, child care, parks and playgrounds. R-1 is limited to single- and two-family residential. R-2, mainly located downtown, additionally allows apartments and condominiums.

Generally, R-1 is more appropriate for denser development than the R-2 zone, which is located on the outskirts of the city.

- The Commercial and Business zones, both located along Main Street and WA Route 26, provide areas for business to occur. The Commercial zone allows heavy retail sales and light manufacturing while the Business zone allows for a mix of uses, including mixed use and apartment residential dwellings.

Only 8% of Colfax's 2,846 shoreline acres are undeveloped (this category does not include agricultural land), and there are no known plans for future development at this time. The City of Colfax has decreased in population year to year, since 2006. Colfax saw a steady increase in population from 1991 to 1999, and then from 2003 to 2006, but has not experienced any population growth since. In 2010, there were 2,805 people living in Colfax. Housing units in the City of Colfax have steadily increased year to year since 1991, but appear to be leveling off and remaining steady beginning in 2008. In 2010, there were 1,405 housing units in Colfax.

There are some potential new uses, developments and activities that are likely to occur in the shoreline. According to City staff (Pers. Comm. Andy Burgard, 2014; Pers. Comm. Michael Rizzitiello, 2015), the following new uses and developments may occur:

- The owners of the storage facility on West River Drive along the Palouse River have expressed a desire to expand.
- SEPA documentation and a shoreline permit have been submitted for construction of new homes between Ballinger Street and West Railroad Avenue (North Pointe Development) (image to right).
- Several park improvements are being contemplated and are described under Public Access.
- There is potential for new parking facilities to be developed downtown in the Flume environment. The City is exploring opportunities to provide parking over the water as a means to increase parking in the downtown center without requiring removal of historic buildings.



- The Light Industrial area on Lower A Street has potential for conversion to R-1 residential.
- Some of the Urban Conservancy environment up the North Fork, which is currently in agricultural use, could experience future conversion to low-density residential. The minimum lot size in this zone varies from 2 to 5 acres depending on water source, and the minimum lot width is 125 feet.

No new water-oriented uses are expected. There are limited water-oriented opportunities in Colfax. None of the rivers through the City are commercially navigable. Because of the concrete channel, activities such as boating, fishing and swimming are not possible in the flume. Agricultural uses in the northeast part of town may be considered water-oriented, but no additional agricultural development is expected beyond the existing 197 shoreline acres in agricultural use.

3.2 Annexation Area

The annexation area will be used for public utility purposes. No other development is anticipated.

4 EFFECTS OF ESTABLISHED PROGRAMS

4.1 Current County Regulations and Programs

All development activity within the City is required to comply with the Colfax Municipal Code (CMC). Provisions in the CMC that potentially affect how future development is implemented and the extent of potential ecological impacts include critical areas and zoning regulations. The following are descriptions of these relevant regulations and how they help to maintain shoreline functions.

Critical Areas Regulations

City regulations applicable to critical areas are contained in Colfax Municipal Code Title 17, adopted via Ordinance 13-02 in May 2013. These regulations require wetland buffers of between 50 and 250 feet based solely on wetland category (CMC 17.14.040.C). No stream buffer widths are specified, although the regulations require preparation of a habitat management plan based on best available science and a demonstration that a project would not degrade functions and values of the habitat (CMC 17.14.060). The City's Critical Areas regulations also apply to geologically hazardous areas, critical aquifer recharge areas, and frequently flooded areas.

Zoning Code

City zoning standards direct the location of uses, building bulk, and scale. These standards are important in planning for future growth and focusing development in a sustainable manner. A variety of different zoning designations are present in shoreline jurisdiction including Residential (R1 and R2), Commercial and Business. Each zone has different permitted uses which help to concentrate development in areas appropriate and suitable for similar uses. (CMC Title 17).

4.2 State Agencies/Regulations

Aside from the Shoreline Management Act (SMA), state regulations most pertinent to moderation of ecological impacts of development in the City's shoreline include the State Hydraulic Code, the Growth Management Act, State Environmental Policy Act (SEPA), tribal agreements and case law, and Water Resources Act. A variety of agencies (e.g., Washington Department of Ecology, Washington Department of Fish and Wildlife, Washington Department of Natural Resources) are involved in implementing these regulations or managing state-owned lands. The Department of Ecology reviews all shoreline projects that require a shoreline permit, but has specific regulatory authority over Shoreline Conditional Use Permits and Shoreline Variances. Other agency reviews of shoreline developments are typically triggered by in- or over-water work, discharges of fill or pollutants into the water, or substantial land clearing. During the comprehensive SMP update, the City has considered other state regulations to ensure consistency as appropriate and feasible with the goal of streamlining the shoreline permitting process. A summary of some of the key state regulations by agency responsibilities follows.

Washington Department of Natural Resources

Projects on state-owned aquatic lands may be required to obtain an Aquatic Use Authorization from Washington Department of Natural Resources (WDNR) and enter into a lease agreement. WDNR will review lease applications to determine if the proposed use is appropriate, and to ensure that proposed mitigation for impacts to aquatic resources are sufficient.

WDNR is also responsible for administering the Surface Mining Act. The Act requires a permit for each mine that: 1) results in more than 3 acres of mine-related disturbance, or 2) has a high-wall that is both higher than 30 feet and steeper than 45 degrees. A reclamation plan is required that describes how the site will be restored following mining activity to maintain stable slopes, diverse landscape features, and dense, native vegetation. In coordination with SMP standards, the Act helps ensure that mining activities do not result in long-term adverse effects on shoreline functions.

Washington Department of Ecology

The Washington Department of Ecology may review and condition a variety of project types, including any project that needs a permit from the U.S. Army Corps of Engineers (see below), any project that requires a Shoreline Conditional Use Permit or Shoreline Variance, and any project that disturbs more than 1 acre of land. Project types that may trigger Ecology involvement include pier and shoreline modification proposals and wetland or stream modification proposals, among others. Ecology's three primary goals are to: 1) prevent pollution, 2) clean up pollution, and 3) support sustainable communities and natural resources (<http://www.ecy.wa.gov/about.html>). Ecology may comment on local SEPA review if it is an agency of jurisdiction.

Washington Department of Fish and Wildlife

Via the Hydraulic Code (chapter 77.55 RCW), the Washington Department of Fish and Wildlife (WDFW) has the authority to review, condition, and approve or deny "any construction activity that will use, divert, obstruct, or change the bed or flow of state waters." Practically speaking, these activities include, but are not limited to, installation or modification of piers, shoreline stabilization measures, culverts, and bridges. WDFW typically conditions such projects to avoid, minimize, and/or mitigate for damage to fish and other aquatic life, and their habitats.

4.3 Federal Agencies/Regulations

Federal review of shoreline development is in most cases triggered by in- or over-water work, or discharges of fill or pollutants into the water. Depending on the nature of the proposed development, federal regulations can play an important role in the design and implementation of a shoreline project, ensuring that impacts to shoreline functions and values are avoided, minimized, and/or mitigated. A summary of some of the key federal regulations follows.

Clean Water Act

Major components of the Clean Water Act include Section 404, Section 401, and the National Pollutant Discharge Elimination System (NPDES).

Section 404 provides the Corps, under the oversight of the U.S. Environmental Protection Agency, with authority to regulate "discharge of dredged or fill material into waters of the United States, including wetlands" (http://www.epa.gov/owow/wetlands/pdf/reg_authority_pr.pdf). The extent of the Corps' authority and the definition of fill have been the subject of considerable legal activity. As applicable to the City's shoreline jurisdiction, however, it generally means that the Corps must review and approve many activities in streams, lakes and wetlands. These activities may

include wetland fills, stream and wetland restoration, and culvert installation or replacement, among others. The Corps requires projects to avoid, minimize, and compensate for impacts.

A Section 401 Water Quality Certification is required for any applicant for a federal permit for any activity that may result in any discharge to waters of the United States. States and tribes may deny, certify, or condition permits or licenses based on the proposed project's compliance with water quality standards. In Washington State, the Department of Ecology has been delegated the responsibility by the U.S. Environmental Protection Agency for managing implementation of this program.

The NPDES is similar to Section 401, and it applies to ongoing point-source discharge. Permits include limits on what can be discharged, monitoring and reporting requirements, and other provisions designed to protect water quality. Examples of discharges requiring NPDES permits include municipal stormwater discharge, wastewater treatment effluent, or discharge related to industrial activities or aquaculture facilities.

Endangered Species Act (ESA)

Section 9 of the ESA prohibits "take" of listed species. Take has been defined in Section 3 as: "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." The take prohibitions of the ESA apply to everyone, so any action that results in a take of listed fish or wildlife would be a violation of the ESA and is strictly prohibited. Per Section 7 of the ESA, activities with potential to affect federally listed or proposed species and that either require federal approval, receive federal funding, or occur on federal land must be reviewed by the National Marine Fisheries Service (NOAA Fisheries) and/or U.S. Fish and Wildlife Service (USFWS) via a process called "consultation." Activities requiring a Section 10 or Section 404 permit also require such consultation if these activities occur in waterbodies with listed species.

Northwest Power Act

The Northwest Power Act was passed in 1980 as a component of the Federal Power Act. The Act seeks to ensure that the hydropower production is balanced with the maintenance of healthy fish and wildlife populations in the Columbia Basin, including salmon and steelhead. The Act establishes the Northwest Power and Conservation Council and directs the Council to adopt a regional energy conservation and electric power plan and a program to protect, mitigate and enhance fish and wildlife in the Columbia and Snake Rivers and their tributaries.

5 APPLICATION OF THE SMP

This section describes how the proposed SMP protects shoreline functions. The following components of the SMP are integral to ensuring no net loss of shoreline functions. Each of these components is discussed in further detail below.

- 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.

5.1 Environment Designations

The assignment of environment designations can help minimize cumulative impacts by concentrating development activity in lower functioning areas or areas with more intensive existing development that are not likely to experience significant function degradation with incremental increases in new development or redevelopment. According to the SMP Guidelines (WAC 173-26-211), the assignment of environment designations must be based on the existing use pattern, the biological and physical character of the shoreline, and the goals and aspirations of the community as expressed through a comprehensive plan.

Consistent with SMP Guidelines, the City's environment designation system is based on the existing use pattern, the biological and physical character of the shoreline, and community interests. The *Shoreline Analysis Report* provided information on shoreline conditions and functions that informed the development of environment designations. The proposed upland environment designations include: Flume, High Intensity, Shoreline Parks, Shoreline Residential, and Urban Conservancy generally listed in order by decreasing intensity of allowed use. All areas waterward of the OHWM are designated Aquatic. Criteria for each environment designation are provided in Table 5-1.

Table 5-1. Environment designation criteria

Environment Designation	Classification Criteria
Flume	The concrete-lined channel of the Palouse River and shoreline areas extending 200 feet upland of the ordinary high water mark
High Intensity	Areas that currently support high-intensity uses related to commerce, transportation or navigation; or are suitable and planned for high-intensity water-oriented uses.
Shoreline Parks	<p>Areas where any of the following apply:</p> <ul style="list-style-type: none"> • They are within existing or planned public parks or public lands intended to accommodate public access and recreational developments; • They are suitable for water-related or water-enjoyment uses; • They are open space, floodplain or other sensitive areas that should not be more intensively developed; • They have potential for ecological restoration; • They retain important ecological functions, even though partially developed; or • They have the potential for development that is compatible with ecological restoration.
Shoreline Residential	Areas that are predominantly single-family or multi-family residential development or are planned and platted for residential development.
Urban Conservancy	<p>Those areas:</p> <ul style="list-style-type: none"> • Planned for development that is compatible with the principals of maintaining or restoring the ecological functions of the area, • Suitable for water-enjoyment uses, • That are open space or floodplains, or • That retain important ecological functions which should not be more intensively developed.
Aquatic	Lands waterward of the ordinary high-water mark.

The proposed environment designations reflect the generally rural-agricultural nature of much of the City’s shorelands which are outside of the flume areas, particularly the largely undeveloped and agricultural area in the northeast along the North Fork. The Shoreline Parks designation protects open space and sensitive areas that are not suitable for more intense development, but which can provide public access and recreational enjoyment of the shorelines. The Flume, High Intensity and Shoreline Residential designations appropriately focus potential commercial and residential development activity in existing disturbed areas with higher levels of alterations and lower ecological functions compared to other reaches. Those existing disturbed shorelines are not likely to experience significant function degradation with incremental increases in new development.

The relative distribution of shoreline area in Colfax by environment designation is shown in Figure 4-1.

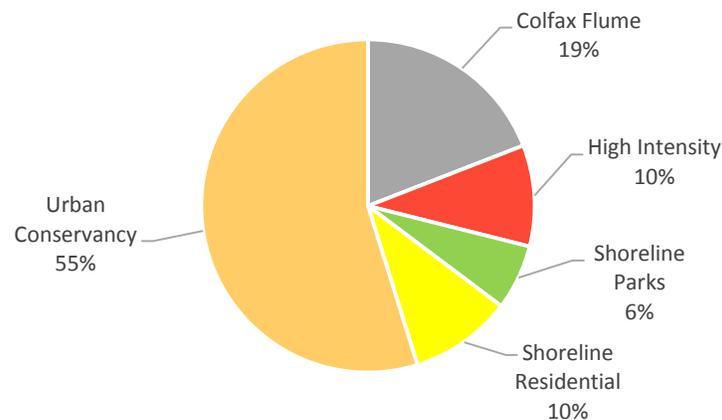


Figure 4-1. Distribution of Upland Environment Designations in Colfax by Area

Not included in the breakdown of environment designations presented in Figure 4-1 and discussed above is the area identified on the Official Shoreline Maps as a 0.44-acre potential annexation area located just northeast of the City limits. The area contains an access road to a pump house located outside of shoreline jurisdiction. This area was pre-assigned an Urban Conservancy environment designation based on the existing conditions and projected use of the areas after annexation (no change in use is anticipated). The annexation became official on April 22, 2015.

5.2 Effects of Critical Areas Regulations

The SMP includes policies and regulations to avoid cumulative effects to critical areas (SMP Appendix B). Mitigation sequencing is required for all proposed impacts to shoreline critical areas, including wetlands, fish and wildlife habitat conservation areas (which includes streams), critical aquifer recharge areas, frequently flooded areas and geologically hazardous areas (Appendix B, Section 2.E.1). SMP regulations proposed for wetlands and streams include buffer areas, which are discussed in greater detail below.

Wetlands

The SMP requires vegetated buffers for all shoreline wetlands. Mitigation sequencing is required for impacts to wetland buffers, as well as to wetlands. The proposed standard wetland buffer widths are based on the wetland category and habitat scores and are consistent with Ecology's "Wetlands in Washington State-Volume 2: Guidance for Protecting and Managing Wetlands," modified to use with the 2014 Washington State Rating System for Eastern Washington (Granger et al. 2005). Use of the standard buffer widths also requires

implementation of measures to minimize impacts of adjacent land use. If the prescribed minimization measures are not applied the buffer width must be increased (Appendix B, 3.C). Buffer averaging is permitted provided that 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 and that minimum buffer widths in Appendix B, 3.E(3-4) are met. The proposed SMP standards should ensure that wetland functions are maintained over time.

Streams

The proposed SMP establishes buffer and setback regulations (Appendix B, 5(E)(2)(d)) on shorelines of the state that were developed to be consistent with existing conditions, as generally described as part of the *Shoreline Analysis Report*. The following buffers are proposed:

- In the Urban Conservancy environment designation on the South Fork Palouse River, a buffer the smaller of 75 feet or the waterward edge of an improved public road. On the North Fork and Mainstem Palouse River, a buffer the smaller of 100 feet or the waterward edge of an improved public road.
- In the Shoreline Residential environment designation, a buffer the smaller of the landward edge of the toe of a levee or 75 feet.
- In the Shoreline Parks environment designation, a buffer the smaller of the landward edge of the toe of a levee or 75 feet.
- In the High Intensity environment on the South Fork Palouse River, a buffer of 50 feet. On the North Fork and Mainstem Palouse River, a buffer the smaller of the landward edge of the toe of a levee or 60 feet. On the South Fork, the functioning vegetated area is 50 feet wide on the western edge of the parcel. As the parcel continues east, the vegetated area widens in places, and the 100-year floodplain widens even farther, which provides additional limitations on development potential.
- In the Flume designation, a building setback of 15 feet from the top of the concrete-lined channel wall. This setback is based on existing conditions, as mentioned above, but is also based on requirements of the Corps' that structures be set back 15 feet, and the area maintained "free of shrubs, brush and trees larger than two inches in diameter."

Spring Flat Creek, a tributary of the South Fork Palouse River in a concrete-lined channel, is required to have a 15-foot building setback from the ordinary high water mark or the top of the concrete-lined channel wall within shoreline jurisdiction. Buffers on non-shoreline streams

within shoreline jurisdiction help ensure that riparian functions are maintained at ecologically significant confluence areas.

Water-dependent developments have no buffer due to the nature of the activity which necessitates that the development be adjacent to the shoreline. However, mitigation sequencing must still be followed which will ensure no net loss of function through compensation of unavoidable impacts.

These standards help ensure that new uses are located, designed, and operated to minimize effects to water quality and existing riparian features, while still allowing for improvements to shoreline public access. Buffer width averaging is permitted under certain circumstances provided that the overall stream and habitat functions are not decreased (Appendix B, 5.E(2)(f)).

5.3 Mitigation Sequencing

The proposed SMP includes general regulations requiring projects to be designed, located, sized, constructed and maintained to achieve no net loss of shoreline ecological functions. The mitigation sequence is a series of measures that can be applied to a project to ensure that it achieves no net loss of ecological function (Subsection 4.3(B)(3 and 4)). Mitigation sequencing applies to all projects in shoreline jurisdiction.

For some development activities, provisions in the SMP stipulate specific, objective standards for avoiding impacts (e.g. placement), minimizing impacts (e.g. size), and compensating for unavoidable impacts (e.g. planting requirements). If a proposed shoreline use or development is entirely addressed by such standards, then further mitigation sequencing analysis is not required.

However, in the following situations, applicants must provide an analysis of how the project will follow the mitigation sequence:

- If a proposed shoreline use or modification 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 the City’s shoreline regulations, then the mitigation sequence analysis is required for the discretionary standard(s).
- When an action requires a shoreline conditional use permit or shoreline variance permit.
- When specifically required by a provision in the City’s SMP.

The application of mitigation sequencing standards will help ensure that shoreline uses and modifications achieve no net loss of shoreline ecological functions.

5.4 Unregulated, Illegal and Exempt Development

Unregulated Uses

Unregulated shoreline activities include activities that are not “development” and do not require any sort of shoreline permit, including a shoreline exemption. Typically, these unregulated activities involve everyday maintenance and use of shoreline lands in conjunction with an approved land use (e.g., applying fertilizer in a residential yard, driving a car on a road along the shoreline, using a boat that is moored at a dock or launched at a boat ramp). Because these activities are associated with legally permitted land uses, the potential effects of these unregulated uses are addressed in concert with the analysis of land uses below.

Illegal Uses

Illegal activities are expected to occur infrequently in shoreline jurisdiction. Where illegal actions are identified, they are required to be rectified. Where illegal actions are not recognized, they may result in an incremental loss of shoreline functions. These incremental losses are expected to be offset by mitigation requirements for permitted actions that result in minor improvements over time, as well as by voluntary restoration actions identified in the Shoreline Restoration Plan.

Exempt Development

Development and activities that are exempt from requirements for a shoreline substantial development permit are specified in WAC 173-27-040. The SMP explicitly states that development qualifying for a shoreline exemption must still comply with all SMP policies and regulations. Because the SMP provides specific design standards for many exempt developments (such as shoreline stabilization to protect a residence, or a dock) and require that all exempt development types avoid, minimize, and compensate for shoreline impacts, exempt development is not expected to result in a net loss of shoreline functions.

5.5 Effects of SMP Standards on Foreseeable Uses and Modifications

As discussed previously, WAC 173-26-186(8)(d) directs local SMPs to evaluate and consider cumulative impacts of “reasonably foreseeable future development on shoreline ecological functions.” Although future development may include other less common types of development, the location, timing, and impacts of less common uses and development projects are less predictable. WAC 173-26-201(3)(d)(iii) states:

For those projects and uses with unanticipatable or uncommon impacts that cannot be reasonably identified at the time of master program development, the master program policies and regulations should use the permitting or conditional use permitting processes to ensure that all

impacts are addressed and that there is not net loss of ecological function of the shoreline after mitigation.

Results of the analysis of foreseeable future development in Section 3 indicate that the most commonly anticipated changes in shoreline development involve some infill development, potential conversion of industrial or agricultural land to residential uses, and future maintenance and expansions of transportation and utility facilities. These activities include upland development, and may also include the development of shoreline stabilization, utilities, and/or access roads. In addition to these changes, replacements, repair, and maintenance of existing structures are likely to occur. Additionally, even without a change in use, some level of change to vegetation and shoreline modifications may be anticipated.

The following sections summarize how these potential activities may impact ecological functions, and how SMP provisions address those potential effects to avoid cumulative impacts. Uses and modifications which are less likely to commonly occur, but which are also covered in the SMP, are also briefly discussed.

All of the potential new uses and modifications would be required to comply with the shoreline buffer provisions in Appendix B, 5(E)(2)(d), discussed in Section 5.2 above.

Agriculture

Likelihood of development: Existing agriculture practices are likely to continue. New agriculture activities are less likely, but could possibly be proposed.

Application of the SMP: The SMP provisions do not limit or require modification to ongoing agricultural activities. Ongoing uses are not expected to degrade ecological functions relative to existing conditions. However, new agricultural activities could have a number of potential impacts including increased erosion from removal of trees or tilling of soil; alteration of ground water and base flows from irrigation; potential for livestock waste, pesticides, herbicides, and fertilizers to enter waterbodies through runoff; and reduction in native and riparian cover associated with conversion of lands to agricultural uses.

SMP provisions apply to new agricultural activities or expansion of such activities on land not meeting the definition of agricultural land and conversion of agricultural lands to non-agricultural uses. In such cases, shoreline buffers consistent with SMP Appendix B Subsection 5.E(2)(d), as well as other standards applicable to the proposed use and any proposed modifications would apply. 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 (Subsection 5.1(B)(8)).

Aquaculture

Likelihood of development: There are no existing aquaculture facilities in the City, and no new aquaculture facilities are anticipated; however, it is possible that a new hatchery or associated rearing or transfer facility could be developed.

Application of the SMP: Aquaculture can result in a reduction in water quality from substrate modification, supplemental feeding practices, pesticides, herbicides, and antibiotic applications. Aquaculture structures can cause alteration in hydrologic and sediment processes. Accidental introduction of non-native species or potential interactions between wild and artificially produced species is also possible. Only non-commercial aquaculture may be permitted (subsection 4.10, Shoreline Use and Modification Table). Any new aquaculture facility would need to be designed and located to avoid a net loss of ecological functions (subsection 5.2(B)(1)(d)). Mitigation sequencing, as described above, would apply.

Boating Facilities

Likelihood of development: Due to the levee system, boating is not possible through most of Colfax. The river is not commercially navigable, and recreational facilities are not commonly anticipated, though could be proposed. Some recreational boating could occur outside of the levee in the northeast arm of the City. There is potential for canoe launches across the street from the Red Tail Ridge subdivision entry on North Palouse River Rd and on the north end of Schmuck Park.

Application of the SMP: Boating facilities can alter currents and sediment transport, cause disturbance to riparian and aquatic vegetation, and increase the risk of contaminants (e.g. metals, petroleum hydrocarbons) entering the water.

Under the proposed SMP all over and in-water structures are prohibited, greatly reducing any potential impacts from increased shading in shallow-water habitat areas or leaching of chemicals. Soft boat launch areas for public or non-residential private use may be permitted. The SMP includes provisions to limit the effects of soft launch areas by ensuring that the location, design, and construction will minimize degradation of aquatic habitats (subsections 5.3(B)(3-5)). All proposals must provide impact mitigation at a minimum one-to-one ratio, by area, using one or more of a suite of potential mitigation actions (subsection 5.3(B)(9)).

Commercial Development

Likelihood of development: Colfax's shoreline environment currently has a significant number of commercial uses, mostly concentrated downtown in the commercial core and located in the Flume environment. The most likely type of commercial development to occur in the future would be infill development on undeveloped lands or replacement of an existing structure or use.

Application of the SMP: Common effects of commercial development include increased impervious surfaces, increased traffic, and vegetation clearing. Under the proposed SMP, water-oriented commercial uses are given more flexibility than non-water oriented commercial uses.

Recreation concessions would be allowed in all shoreline environments while visitor-serving uses would be conditional in all environments except High Intensity and Flume environments, where it would be permitted with a Shoreline Substantial Development Permit (Section 4.10). General commercial activities would be conditional in all environments except Urban Conservancy, where it would be prohibited (Section 4.10). For sites separated from the shoreline and mixed-use projects that include a water-dependent use, commercial development is either allowed with a Substantial Development Permit or conditional review, depending on the shoreline environment (Section 4.10).

All types of commercial development shall be located, designed, and constructed in a way that ensures no net loss of shoreline ecological functions and without significant adverse impacts to other preferred land uses and public access opportunities.

In-Stream Structural Uses

Likelihood of development: In-stream structures are typically intended to modify flows, which can result in alterations to circulation patterns, water quality, and habitat access and conditions. The fenced concrete flume through the city center already prevents these functions, as well as most other natural processes. New in-stream structures in this area would not be expected to significantly alter the already degraded baseline condition. Outside of the flume, hydrologic function is more intact and may be affected by new in-stream structures. Some new in-stream structures in support of agriculture uses may be expected.

Application of the SMP: The SMP permits in-stream structures that protect public facilities; protect, restore, or monitor ecological functions or processes; or support agriculture. All other structures are a conditional use, except in the High Intensity environment designation. Per Subsection 5.6(B)(1), 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. In addition, natural in-stream 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 (Subsection 5.6(B)(5)).

Industrial Development

Likelihood of development: A small portion of Colfax's shoreline jurisdiction is zoned Heavy Industrial. There are no known plans for new industrial development in this area.

Application of the SMP: Common effects of industrial development include increased impervious surfaces, increased risk of contaminant spills and water quality contamination, and shoreline modifications, which may affect instream habitat. The SMP includes provision to minimize the effects of new or redeveloped industrial uses. Industrial development is prohibited in Urban Conservancy, Shoreline Residential and Shoreline Parks environments. Depending on whether the industrial use is water-oriented or not, the level of review for industrial development in the High Intensity, Flume and Aquatic environments varies.

Subsection 5.5(B)(2)(a) would require that industrial development be located, designed, constructed, and operated in a manner that minimizes impacts to the shoreline, and provides for no net loss of shoreline ecological function. Additionally, industrial development and redevelopment shall be encouraged to locate where environmental cleanup and restoration of the shoreline area can be incorporated (5.5(B)(2)(f)).

Recreational Development

Likelihood of development: There is currently a significant amount of recreational access to Colfax's shoreline at McDonald Park, Eels Park, Schmuck Park, Good Park and the Colfax Golf Club. Additional park improvements are being considered at public access sites, including a pedestrian bridge and restroom across the South Fork Palouse at Good Park, a restroom at Codger Pole and pool improvements at Schmuck Park (Google Earth image to right).



Application of the SMP: Recreational development can result in increased impervious surfaces, increased use of pesticides and fertilizers, and increased potential for riparian degradation.

Water-oriented recreational development may be permitted by a Shoreline Substantial Development permit in all environment designations (Section 4.10). General non-water oriented recreational development would be required to obtain a conditional use permit and is prohibited in Urban Conservancy and the Aquatic designation (Section 4.10). On sites separated from the shoreline, a non-water oriented recreational development would be permitted by a Shoreline Substantial Development Permit for all shoreline environments (other than Aquatic, where this type of development does not apply) (Section 4.10).

New development and redevelopment of water-oriented recreation structures are allowed in buffers provided the applicant can demonstrate that the design applies mitigation sequencing and appropriate mitigation is provided to ensure no net loss of ecological functions. Applicants must submit a management plan that specifically addresses compliance with Sections 4.3 (Environmental Protection), 4.4 (Shoreline Vegetation Conservation), 4.5 (Water Quality, Stormwater and Nonpoint Pollution), and Appendix B (Shoreline Critical Areas Policies and Regulations). Improvements to existing park structures would likely be categorized as routine maintenance and repair activities, which does not require a Shoreline Substantial Development Permit (see Redevelopment, Repair, and Maintenance section below) and has little potential impact on shoreline functions.

Residential Development

Likelihood of development: Existing residential development in shoreline jurisdiction is limited (9%). The River Pointe Development, a new community of eight waterfront single-family homes located near the confluence of the North and South Forks, has been approved and the utilities, access road, and asphalt riverfront trail have been installed (see photo to right). It is possible that new residential development could occur in the future outside of downtown (in the



Rural Residential-zoned areas on the North Fork) or in some of the areas currently used for light industrial, but not likely that there would be significant residential development within

shoreline jurisdiction in Colfax. The North Fork areas designated as Urban Conservancy could be subdivided into 2- to 5-acre lots, with a minimum lot width of 125 feet.

Application of the SMP: New residential development is associated with an increase in stormwater runoff and water quality impacts resulting from an increase in impervious surfaces, greater potential for increased erosion, bank instability, and turbidity associated with vegetation clearing, loss or disturbance of riparian habitat during upland development and reduced shoreline habitat complexity and increased water temperatures.

New single-family developments are permitted with a Shoreline Substantial Development Permit within the Urban Conservancy and Shoreline Residential environment designations and are conditional within the Flume environment (Section 4.10). Multi-family structures would require a Shoreline Conditional Use Permit to be developed in the Urban Conservancy and Shoreline Residential environment (Section 4.10). Multi-family structures be allowed with a Shoreline Substantial Development Permit in the High Intensity and Flume designations (Section 4.10). No residential development is allowed in the Shoreline Parks environment (Section 4.10).

Subsection 5.8(B)(3) requires that new residential lots created through land division shall comply with all applicable subdivision and zoning regulations, assure that no net loss of ecological functions result from the plat or subdivision at full build-out of lots, prevent the need for new shoreline stabilization or flood hazard measures. Similarly, new residential development shall meet all applicable critical area, vegetation, and water quality standards of the SMP; be sufficiently set back from steep slopes and shorelines vulnerable to erosion; and be located, designed, and constructed in a manner that assures no net loss of shoreline ecological functions. (Subsection 5.8(B)(4)).

The greatest potential for subdivision and new residential development is on the North Fork in the agricultural areas. The combination of the City zoning standards with SMP standards, requiring a shoreline buffer of 100 feet in the Urban Conservancy environment and compliance with floodplain regulations, is not anticipated to result in a degradation of ecological functions. As indicated in earlier discussions, residential growth in the City has been slow to none, so the development pressure in the thriving agricultural areas is low.

Transportation and Parking

Likelihood of development: Existing transportation infrastructure in shoreline jurisdiction includes local roads, parking areas, rail and bridges. New transportation facilities are not generally anticipated, but are possible. Replacement, repair, and maintenance of existing facilities are

likely to occur. There is potential for the future maintenance and expansion of bridges in the Flume environment, including over-water parking.

Application of the SMP: New transportation and parking facilities are associated with increased stormwater discharge, increased shoreline crossing structures, and riparian disturbance. The SMP limits development of new transportation facilities or parking areas in shoreline jurisdiction if other options outside of shoreline jurisdiction are available and feasible (Subsection 5.9(B)(4 and 5)). When new roads, road expansions, or railroads are unavoidable, proposed transportation facilities shall be planned, located, and designed to minimize possible adverse effects on unique or fragile shoreline, to maintain no net loss of shoreline ecological functions and to be set back from the OHWM to the maximum distance feasible (Subsection 5.9(B)(3)).

New over-water parking facilities, as a primary use, are prohibited (5.9(B)(6)). In the event that a transportation proposal that includes over-water parking in the Flume environment designation is made as part of an expansion or redesign of an existing over-water structure, the regulations in Subsection 5.9(B)(6) would only allow that use if it is first approved by the Corps, WDFW and any other relevant agency; and if the project, with mitigation, can show a net improvement in shoreline ecological functions. Aside from the potential for short-term construction-related impacts, an over-water parking feature in the Flume environment, as part of a bridge expansion, is not expected to have long-term adverse impacts on ecological functions provided that stormwater runoff is captured and treated appropriately. The Flume environment is already highly developed in the shoreline area, which reduces the chance of potential impacts as a result of parking being developed as part of an expansion of overwater transportation facilities.

Repair and maintenance of transportation facilities are addressed below under “Redevelopment, Repair, and Maintenance.”

Utilities

Likelihood of development: Colfax’s wastewater treatment plant and infiltration basins are located in shoreline jurisdiction in the northwest area of the City. The wastewater treatment plant has a flow capacity of 0.60 millions of gallons per day. Colfax’s wastewater treatment system is at capacity and there is likelihood of development in the form of expansion and maintenance.

Application of the SMP: Utilities have the potential to disrupt shoreline functions through an associated need for shoreline armoring; the potential for spills or leakage; and disturbance to riparian areas. In order to limit the special extent of any impacts from new utilities, under Subsection 5.10(B)(1) of the proposed SMP, preference shall be given to utility systems

contained within the footprint of an existing right-of-way or utility easement over new locations for utility systems. Utility projects allowed within shoreline jurisdiction shall be designed to achieve no-net-loss of shoreline ecological function, preserve the natural landscape, and minimize conflicts with present and planned land and shoreline uses while meeting the needs of future population in areas planned to accommodate growth (5.10(B)(2)).

Redevelopment, Repair, and Maintenance

Likelihood of development: As significant development already exists within shoreline jurisdiction, many future activities within will likely fall under the category of repair and maintenance. For example, roads, utilities, and structures all require regular maintenance and repair.

Application of the SMP: Potential impacts from repair and maintenance activities are generally temporary in nature, including such effects as turbidity and other temporary water quality impacts. Repair and maintenance activities are exempt from a Shoreline Substantial Development Permit, but SMP standards still apply. Therefore, ongoing maintenance and repair activities shall be conducted consistent with the SMP provisions. Where expansion or redevelopment is proposed, the required provisions shall be related to and in proportion to the proposal, as determined by the SMP Administrator (Subsection 5.11(B)(3)).

Breakwaters, Jetties, Weirs, and Groins

Likelihood of development: Breakwaters, jetties and groins are usually intended to alter currents or to deflect or dissipate wave energy. These structures have the potential to cause unintended impacts on natural bank erosion, sediment transport processes, and habitat. These structures were not observed in Colfax outside of the flume system. Few, if any, new structures are anticipated.

Application of the SMP: Structures for all purposes other than to protect or restore ecological functions are prohibited in the Urban Conservancy environment designation and permitted only as a conditional use in all others (Section 4.10). Where new structures are permitted, they must be the minimum size necessary, must be designed to protect critical areas, and implement mitigation sequencing to achieve no net loss of ecological functions (Subsection 6.2(B)(2-3)).

Dredging and Dredge Material Disposal

Likelihood of development: There are no known plans for new significant dredging or dredge material disposal. However, continued maintenance removal of accumulated sediments in the concrete channel is necessary on a regular basis; this work is typically done when the water levels are low enough to allow equipment access into the channel and the work can occur “in the dry.”

Application of the SMP: Dredging activities have potential short-term and long-term effects on the aquatic environment. Temporary effects include elevated turbidity and direct habitat disturbance. Long-term effects stem from the alteration of currents and sediment transport processes, both to on-site and downstream areas.

Subsection 6.3(B)(3) requires that dredging and dredge material disposal 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. Additionally, dredge disposal is only permitted if shoreline ecological functions and processes will be preserved, restored, or enhanced, and erosion, sedimentation, floodwaters, or runoff will not increase adverse impacts to shoreline ecological functions and processes or property (Subsection 6.3(B)(6)).

Fill and Excavation

Likelihood of development: Fill and excavation would most likely be proposed over relatively small areas of shoreline jurisdiction as part of other shoreline uses or developments.

Application of the SMP: Fill and excavation can result in a change in habitat conditions and temporary effects to water quality. In some cases, these actions can be used to restore habitats that have been degraded as a result of altered watershed processes or past practices. Fill and excavation would likely occur over relatively small areas, such as areas associated with repair of existing shoreline stabilization measures.

All fills and excavations 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 (Subsection 6.4(B)(1)). Fills and excavations may only be permitted when associated with an approved use, and fills in wetlands, floodways, channel migration zones or waterward of the OHWM are further limited in application under the proposed SMP (Subsection 6.4(B)(2-3)).

Shoreline Restoration and Enhancement

Likelihood of development: Several restoration opportunities were identified in the *Shoreline Restoration Plan*. Many of these opportunities originated in planning documents on a watershed scale and would require voluntary actions on the part of the shoreline land owners.

Application of the SMP: SMP Policy 6.5(A)(1) identifies the intent to promote restoration and enhancement actions that improve shoreline ecological functions and processes and target the needs of sensitive plant, fish and wildlife species. Shoreline restoration and enhancement projects must be designed using the best available scientific and technical information, and implemented using best management practices (Subsection 6.5(B)(2)). Long-term maintenance

and monitoring must also be included in restoration or enhancement proposals (Subsection 6.5(B)(5)). In order to eliminate disincentives to restoration resulting from any landward shifts in the OHWM, relief may be granted under RCW 90.58.580 (Subsection 6.5(B)(6)).

Shoreline Stabilization

Likelihood of development: New shoreline stabilization is not anticipated to commonly occur, but it is possible it may be proposed. Existing shoreline stabilization structures are limited (outside of the flume system), and generally only noted at stream crossings; repair and maintenance is expected on an infrequent basis.

Application of the SMP: Shoreline stabilization measures tend to result in the simplification of shoreline habitat complexity and increased flow velocities along the shoreline. The occurrence of new stabilization measures will be limited because new development must be located and designed to avoid the need for future shoreline stabilization, if feasible (Subsection 6.6(B)(1)), and new stabilization shall only be permitted to protect an existing primary structure or new structure that cannot be placed so as to avoid the need for stabilization (Subsection 6.6(B)(4)). 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 (Subsection 6.6(B)(3)).

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 the SMP (Subsection 6.6(B)(6)).

Repair and maintenance of existing shoreline stabilization measures may be allowed. Repair and maintenance includes modifications to an existing shoreline stabilization measure that are designed to ensure the continued function of the measure. Any additions to, increases in the size of, or waterward encroachment of existing shoreline stabilization measures shall be considered new structures. Areas of temporary disturbance within the shoreline buffer shall be expeditiously restored to their pre-project condition or better. 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 the SMP (Subsection 6.6(B)(7)).

5.6 Shoreline Restoration Plan

One of the key objectives that the SMP must address is “no net loss of ecological functions necessary to sustain shoreline natural resources” (Ecology 2011). Although the implementation of restoration actions to restore historic functions is not required by SMP provisions, the SMP Guidelines state that “master programs shall include goals, policies and actions for restoration of impaired shoreline ecological functions. These master program 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” (WAC 173-26-201(2)(f)).

The *Shoreline Restoration Plan* represents a vision for restoration that will be implemented over time, resulting in a gradual improvement over the existing conditions. Although the SMP is intended to achieve no net loss of ecological functions through regulatory standards alone, practically, an incremental loss of shoreline functions at a cumulative level may occur through minor, exempt development; illegal development; failed mitigation efforts; or a temporal lag between the loss of existing functions and the realization of mitigated functions. The *Shoreline Restoration Plan*, and the voluntary actions described therein, can be an important component in making up that difference in ecological function.

Major *Shoreline Restoration Plan* components that are expected to contribute to improvement in ecological functions in the foreseeable future include projects to:

- Restore instream habitat complexity
- Setback dikes
- Address impacts to existing riparian conditions by implementing livestock fencing and other actions that remove activities from the riparian corridor
- Implement best management practices to improve water quality conditions

In Colfax, restoration opportunities exist to reduce shoreline armoring, increase native vegetation cover, and include educational materials such as interpretive nature and/or historical signs, as well as enhancing and maintaining the areas mapped as associated wetland. The city parks provide good opportunities for such improvements.

6 NET EFFECT ON ECOLOGICAL FUNCTION

This CIA indicates that future growth is likely to be targeted in specific areas of the City. This analysis can help inform the county of potential future shoreline impacts and the importance of specific proposed SMP provisions.

The primary types of anticipated development include the following: infill development in the Flume environment, some potential residential development outside of downtown, parks upgrades and enhancements, and regular maintenance and repair of existing facilities.

The proposed SMP is expected to maintain existing shoreline functions within the City of Palouse while accommodating the reasonably foreseeable future shoreline development. Other local, state and federal regulations, acting in concert with this SMP, will provide further assurances of maintaining shoreline ecological functions over time. The *Shoreline Restoration Plan*, and actions described therein, will ensure that incremental losses that could occur despite SMP provisions do not result in a net loss of functions, and these restoration actions may result in a gradual improvement in shoreline functions.

As discussed above, major elements of the SMP that ensure no net loss of ecological functions fall into four general categories: 1) environment designations that focus development on specific areas with existing development and shoreline alterations; 2) shoreline critical areas regulations that protect sensitive areas through appropriate science-based buffers and limitations on new uses; 3) mitigation sequencing, which directs potential development to first avoid, then minimize, and finally mitigate for unavoidable impacts; and 4) shoreline use and modification provisions, which ensure that likely development is guided by regulations that will protect existing functions while allowing priority shoreline activities to occur. The *Shoreline Restoration Plan* identifies ongoing and planned voluntary restoration that will provide an opportunity to improve shoreline conditions over time.

Given the above provisions of the SMP, including the key features listed above, implementation of the proposed SMP is anticipated to achieve **no net loss of ecological functions in the shorelines of the City of Colfax**. Voluntary actions identified and prioritized in the *Shoreline Restoration Plan* will provide the opportunity to enhance and restore shoreline functions over time.

7 REFERENCES

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