CITY OF ROCK ISLAND

Subarea Plan

Rock Island Waterfront

March 2019

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Rock Island Community

The City of Rock Island would like to thank all of the community members and representatives of local organizations who participated in this planning process.

Department of Ecology

The Department of Ecology provides Integrated Planning Grant (IPG) funding to local governments that are facilitating the adaptive reuse of a brownfield property. This planning process was funded by an IPG and Interlocal Agreement that supported existing conditions inventory, site characterization, conceptual site planning, the Planned Action Environmental Impact Statement, and this Subarea Plan.

Introduction

Purpose

The City of Rock Island (City) and the Port of Douglas County (Port) have collaborated to develop this plan for the future of the Rock Island Waterfront. This Subarea Plan provides policy guidance to position the Waterfront to achieve its potential for economic and community development. This Subarea Plan serves as a statement of the City's commitment and direction for the Waterfront and as a resource for potential investors, property owners, the community, and public agencies. This Subarea Plan supports the City's Comprehensive Plan, while focusing on issues and opportunities at a scale that is responsive to the subarea's specific needs. Under the Washington State Growth Management Act, adoption of a Subarea Plan supplements, but does not replace, the goals and policies of the Comprehensive Plan.

This Subarea Plan illustrates a vision for future development of the Rock Island Waterfront and establishes goals, a conceptual land use plan, and supporting policies. It also identifies capital improvements needed to achieve the vision. This Subarea Plan supports business expansion and investment, strengthens existing assets, expands transportation infrastructure, and improves environmental conditions on the Waterfront.

This Subarea Plan is supported by a Planned Action Environmental Impact Statement (EIS) and a Planned Action Ordinance. The coordination of this Subarea Plan with the Planned Action EIS allows for a predevelopment environmental review that identifies ways to address environmental and community concerns while reducing development uncertainty and risk. The Planned Action Ordinance establishes criteria and procedures for administrative review of future building and development permit applications for the Waterfront Subarea. The ordinance references this approved Subarea Plan, the final EIS, and mitigating conditions.

Location

Rock Island, Washington, is a small and growing community located on the northern shoreline of the Columbia River three miles upstream of the Rock Island hydroelectric project in Douglas County, Washington. The Rock Island Waterfront planning area includes the property within the city municipal boundary between State Route (SR) 28 and the Columbia River (see Figure 1). This area covers approximately 207 acres. Over 90 percent of the area is vacant or underutilized. The western portion of the planning area was annexed into the city in December 2018.

The Waterfront is currently accessed from SR 28 at two intersections: Rock Island Drive and Nature Shores Drive (see Figure 2). The planning areas is bisected by the Burlington Northern Santa Fe Railroad (BNSF) main rail line. Other prominent features of the Waterfront include the former Silicon Smelter facility, the City wastewater treatment plant, and three high-voltage power transmission lines.

Figure 1. General Location Map

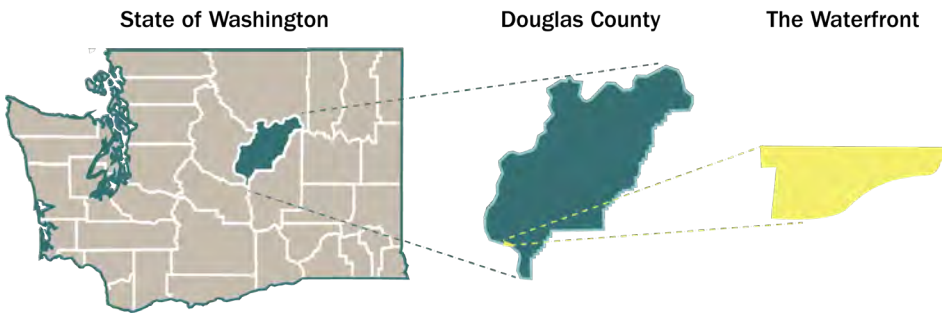
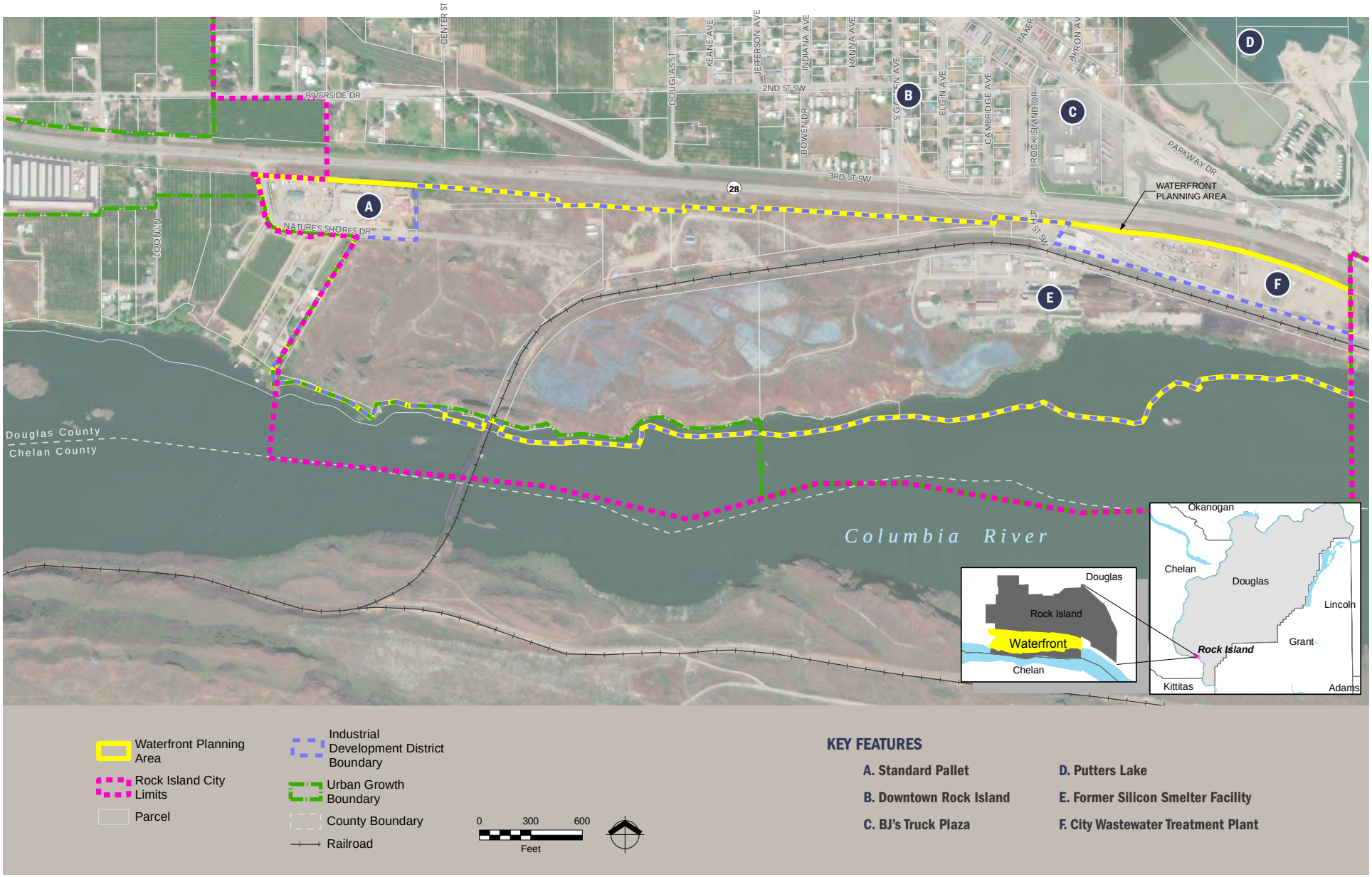


Figure 2. Rock Island Waterfront Context Map



History of the Subarea

Rock Island and the Waterfront have a rich history. Rock Island was historically the homeland of the Wenatchi, Yakama, and Moses-Columbia (or Sinqayuse) people. Previous studies have identified artifacts of Native American use of the Waterfront. These archaeological resources are protected under federal and state law, as well as policies in this Subarea Plan. European settlement of the area began in the late 1800s. The railroad bridge crossing of the Columbia River that lands in the planning area was completed in 1915. The bridge was the first rail crossing of the Columbia River. It is listed on the National Register of Historic Places and is still active today. The city was incorporated in 1930 in the midst of economic growth associated with construction of the Rock Island dam, the first hydroelectric project on the Columbia River.

The Waterfront area south of the rail line is the site of the former Rock Island Silicon Smelter. The smelter was constructed in 1942 by the U.S. Department of Defense. The smelter produced ferrous silicon and silicon metal. Before it closed in 2000, the silica smelter plant was the largest employer in the city.

Other development in the Waterfront has included industrial businesses, electrical transmission line construction, and essential public facilities. The City completed construction of a wastewater treatment plant at the eastern end of the planning area in 2012.

Public and Private Partnerships

The City and the Port have fostered partnerships with public agencies and private landowners and businesses to develop this Subarea Plan to promote redevelopment of the Waterfront. A fundamental purpose of this planning process is to identify the most effective opportunities for the public sector to support privately led redevelopment. The City and the Port established an advisory committee including local business leaders and owners of property in the Subarea to provide perspective to the plan. The City and the Port also convened a technical group, including representatives of the Washington State Department of Transportation (WSDOT), BNSF, the Douglas County Public Utility District (PUD), the Chelan County PUD, and the Chelan-Douglas Transportation Council, to inform analysis of the planning area and review development concepts.

In 2017, the Port established an Industrial Development District (IDD), encompassing a portion of the Waterfront, to promote redevelopment within the Waterfront. The IDD provides the Port and City with additional tools that may be utilized, if necessary, to support infrastructure improvements and redevelopment.

Left: Existing buildings from the former smelter operations on the east side of the Waterfront planning area. Above: Aerial oblique view of the west side of the Waterfront planning area.

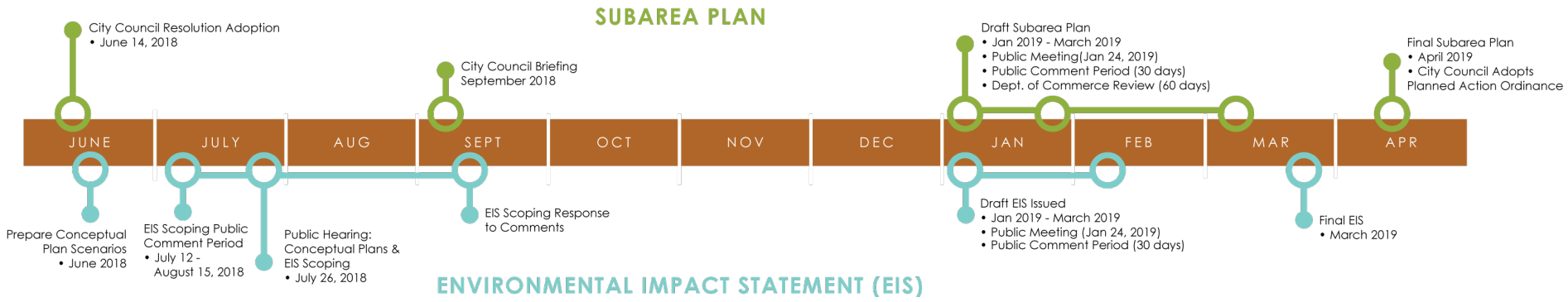
Planning Process

The City approved Resolution 18-164 on June 14, 2018, stating the intent to collaborate with the Port and Douglas County in preparing a Subarea Plan and Planned Action EIS. These efforts have been coordinated to ensure a robust and transparent public planning process and evaluation of the natural and built environment in order to help the City identify impacts of development and mitigation measures in advance of specific project proposals (see Figure 3). After inception of the planning process, areas that were in the County have been annexed into the City.

This Subarea Plan process also included five meetings of a technical group, including representatives of state, regional, and local public agencies and the following public engagement opportunities:

- City Council Briefing (December 14, 2017)—Discuss potential partnership with Port and purpose of Waterfront planning.
- Advisory Group Meeting (December 7, 2017)—Discuss purpose and goals for the Waterfront plan, review existing conditions, and discuss potential future land uses.
- Community Meeting (January 23, 2018)—Discuss goals for the Waterfront, community assets, and redevelopment concepts.
- Advisory Group Meeting (March 15, 2018)—Review goals and conceptual development options; discuss feasibility and benefit of different land use types.
- City Council Meeting (June 14, 2018)—Approve resolution to conduct Planned Action EIS and prepare Subarea Plan.
- City Council Public Hearing (July 26, 2018)—Review conceptual development alternatives and provide comments on scope of EIS.
- City Council Briefing and Community Meeting (January 24, 2019)—Review draft Subarea Plan and draft EIS.
- City Council Briefing (March 28, 2019) - Review final Subarea Plan, Final EIS, and Planned Action Ordinance.
- City Council Action—Adopt Subarea Plan and Planned Action Ordinance (Scheduled for April 2019).

Figure 3. Planning Process



Vision for the Future

Vision Statement

The Rock Island Waterfront will be a vibrant destination that honors our past and serves our future. The Waterfront links historic industry to the innovation economy. It provides workforce development opportunities to connect local employees to the regional and global economy. The Waterfront is connected to our community through safe and efficient roads and pedestrian-friendly sidewalks and trails. The Waterfront showcases the natural beauty of the Columbia River valley through open spaces and amenities that attract visitors from near and far. Through sensitive development, the Waterfront will enhance the quality of our environment.

Figure 4 illustrates this future vision.

Goals

The goals of the Waterfront Plan are to:

- Promote economic development and capitalize on the unique opportunity for industrial, commercial, recreation, and mixed use development presented by the Waterfront.
- Efficiently leverage existing infrastructure, including rail access, highway access, water access, and sewer service to promote economic and community development.
- Enhance public access to and along the Columbia River and promote recreational opportunities.
- Address legacy environmental contamination concerns where necessary and protect natural resources of the Waterfront.
- Acknowledge and protect cultural and archaeological resources on the Waterfront property.

Figure 4. Waterfront Redevelopment Vision (Credit: Graham Baba Architects)

Case Studies

Repurposing underdeveloped or abandoned industrial areas can be challenging. But with thoughtful planning and willing private sector participation, it can be done! Here are two notable examples:

Old Mill District | Bend, OR

For nearly a century, timber production was the unchallenged king in Bend, most of it taking place along the Deschutes River. The waterfront was dominated by two mills operated by Shevlin-Hixon Co and Brooks-Scanlon. These were the two largest pine sawmills in the world, each employing over 2,000 workers.The mills began facing dwindling timber supplies in the 1950s and the mill sites closed in the 1980s.

A decade later, William Smith Properties purchased the land and renovated it into what is known today as the Old Mill District. This renovation restored nine historic buildings, including retaining three signature smokestacks, and restored 14,000 lineal feet of the river area, which had been off limits to the public for nearly 80 years. The Old Mill District is a mixed use development that houses recreational retail, office, and open space.

American Tobacco Factory | Durham, NC

The American Tobacco factory produced some of the most famous tobacco products, including Lucky Strike and Bull Durham, for over 100 years. However, American Brands closed the factory in 1987, leaving the property and surrounding community to decline.

In 2004, the Capitol Broadcasting Company reopened the factory campus and began renovation. After more than $200 million in investment, the American Tobacco Factory has been recognized nationally as the definitive example of repurposing and redeveloping historic properties. The renovated campus provides an active, mixed-use development that includes offices, shops, restaurants, residential apartments, a public park, and a 2,500-seat amphitheater.

The American Tobacco Factory attracts approximately two million visitors every year.

Analysis of Opportunities and Challenges

The Waterfront Subarea Plan planning process included a broad assessment of existing conditions, including examination of economic trends, physical conditions, natural resources, infrastructure, and development regulations. The findings of that assessment are presented in an Existing Conditions Report. An overview of the land use framework, existing infrastructure, and natural resources is presented in Figures 5 through 8. The key findings of the existing conditions assessment and implications relative to redevelopment potential are presented in Table 1.

Economics

Economic and real estate market trends were assessed to identify development opportunities and evaluate comparative advantages of the Waterfront. Market conditions were analyzed at the local and regional levels. The market assessment report is provided in the Economic Impact Study (see Appendix C-4). Key findings of the assessment include:

Employment—The largest employment sectors in Douglas and Chelan counties are agriculture and forestry, retail trade, and health care and social assistance. Employment rates have generally followed state and national trends, with unemployment rising during the Great Recession and decreasing through the recovery. Variability of unemployment rates has been less extreme than rates for the state and nation.

Income and Wages—Per capita income has grown steadily over the last 30 years. As of 2015, per capital income in Chelan County was nearly $45,000 and was just over $36,000 in Douglas County.

Commercial Real Estate—Vacancy rates for existing buildings are near zero across the industrial, commercial, and office sectors. Relatively limited building stock is available. Construction of new buildings is limited by availability of land that is properly zoned and served by infrastructure and by lease rates. While lease rates have been increasing with the low vacancy rates, it is still often challenging for lease rates in the region to cover the costs of new construction. The zoning designation of the Waterfront aligns with potential industrial, commercial, and office development, but infrastructure improvements will be a significant financial challenge.

Emerging Opportunities—There has been dramatic growth in demand for industrial space for blockchain technology firms. Because these technologies have high power demand and Central Washington has some of the lowest electricity costs in the nation, the local PUDs have received numerous requests for power service. The existing electrical transmission infrastructure in the Waterfront planning area makes this location particularly well suited for high power demand uses.

Tourism and Recreation—The two-county area is home to many outdoor recreational opportunities, including ski areas, 11 golf courses, sports complexes, fishing and boating on the Columbia River, and miles of hiking and biking trails. The natural setting of the Waterfront planning area provides a locational advantage for tourism and recreational uses.

Land Use Regulatory Framework

Development of land in the Waterfront is regulated by the City. The Chelan County PUD has approval authority over development that is proposed within the Rock Island hydroelectric project boundary. Any projects that would include construction below the ordinary high-water mark of the Columbia River would also require review and permits from state and federal agencies.

Rock Island's Comprehensive Plan—The future land use and zoning map designates the waterfront as Commercial-Industrial. The Comprehensive Plan includes a set of goals and policies supporting the vision for the Waterfront. These include:

- **Promote economic development of the waterfront**
  - Land Use: Urban Growth Sub-Element Goal 3 and Policy 8
  - Land Use: Commercial Sub-Element Goal 1 and Policies 1, 4, 10, 14, and 15
  - Land Use: Industrial Sub-Element Goal 1 and Policies 1, 2, 3, and 9
  - Environment and Critical Areas Element Policy 14
  - Economic Development Element Goals 5, 6, 7, and 8
- **Promote tourism**
  - Economic Development Element Goal 2 and Policies 2.5, 2.6, and 2.7
- **Expansion of parks and trails**
  - Land Use: Commercial Sub-Element Policy 2
  - Land Use: Public Use Sub-Element Goal 2 and Policies 3 and 4
  - Capital Facilities Plan Element Policy 2
  - Transportation Element Goal 3
  - Environment and Critical Areas Element Goal 3 and Policies 6 and 14
  - Recreation Goal 1 and Policies 1.3 and 2.2
- **Protection of natural and cultural resources**
  - Land Use: Industrial Sub-Element Policy 7
  - Capital Facilities Plan Policy 5
  - Transportation Element Policies 10 and 13
  - Environment and Critical Areas Element Goals 2 and 4 and Policies 3, 4, 5, 7, 8, 9, 10
  - Recreation Element Goal 3 and Policy 3.1

Zoning Code—The goals and policies of the Comprehensive Plan are implemented through the zoning code and development regulations of the City. Most of the Waterfront planning area is zoned commercial-industrial (see Figure 5). The commercial-industrial zoning district allows a wide range of commercial, retail, industrial, and recreational uses in the Waterfront. Housing is currently allowed only as an accessory use. Maximum allowed building height in the commercial-industrial zone is 50 feet. Maximum lot coverage is 60 percent.

Shoreline Master Program—The Shoreline Master Program designates use districts and establishes additional development regulations that are applied to property within 200 feet of shorelines of the state. The current Shoreline Master Program was developed by the County in coordination with cities in the county. All Waterfront property that falls within the shoreline jurisdiction has a designation of High Intensity, which allows a large range of activities. Water-dependent and water-related commercial and recreational uses are generally permitted, while some industrial activities may be a conditional use.

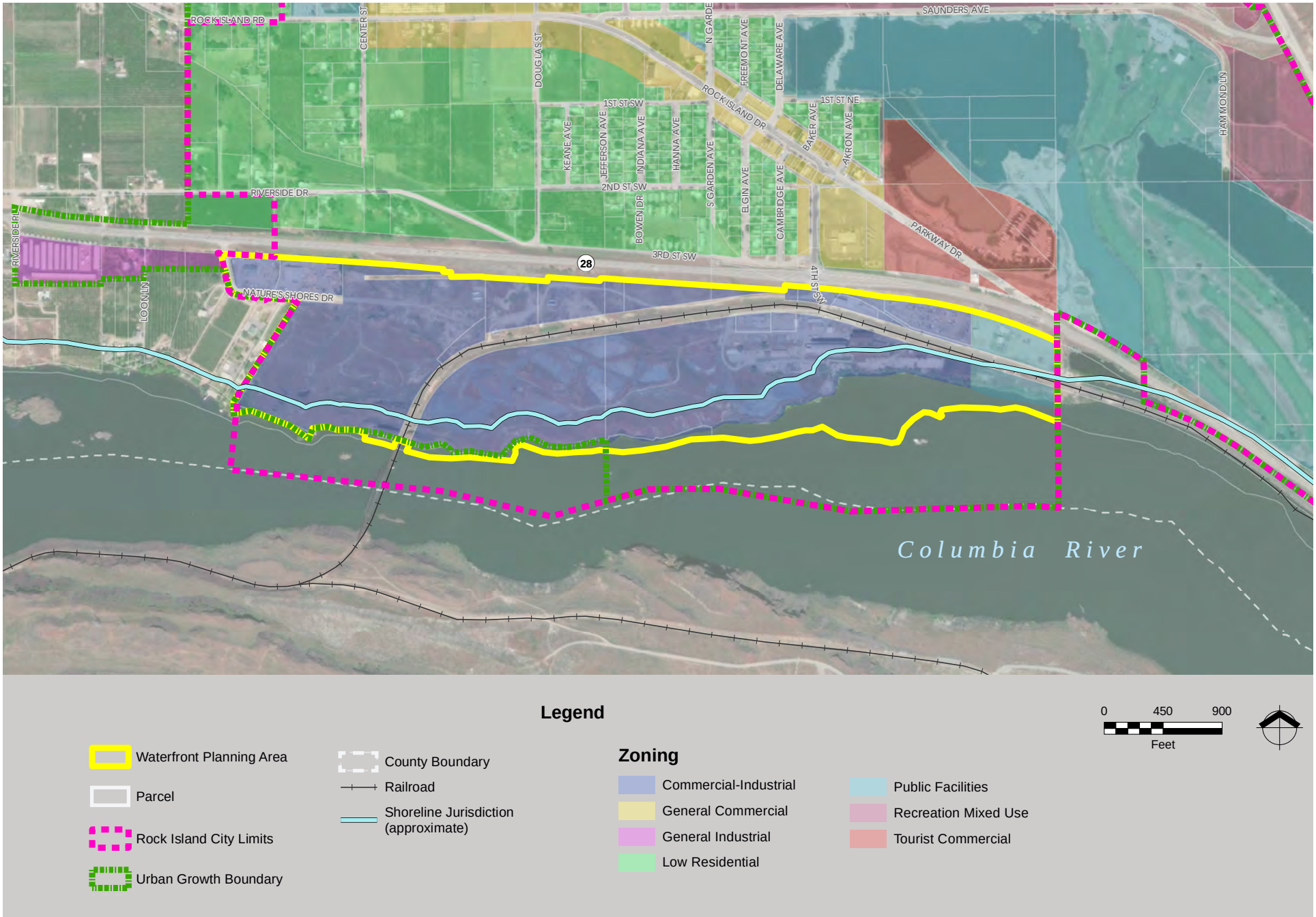
Critical Areas Ordinance—The City's Critical Areas Ordinance is documented in Rock Island Municipal Code (RIMC) 18.04. It's purpose is to protect the functions and values of critical areas, and to protect the public health, safety, and welfare of the citizens of Rock Island. Critical areas within the subarea are shown in Figure 8.

Chelan PUD Land Management Responsibilities—The Chelan County PUD owns and operates the Rock Island hydroelectric project, located approximately 3 miles downstream from the Rock Island city limits. Operation of the hydroelectric project is regulated by its Federal Energy Regulatory Commission (FERC) licensing agreement. As part of the licensing agreement, all nearshore and in-water projects within the hydroelectric project boundary must receive approval by the Chelan County PUD (or in some cases FERC itself). The hydroelectric project boundary is defined by elevation contour 620 feet above mean sea level (MSL). This is generally consistent with the riverbank in the planning area, but also includes a portion of the former smelter property.

In addition to the land management authority of the Chelan County PUD within the Rock Island hydroelectric project boundary, there is a restrictive easement along the shoreline of the Columbia River in the Waterfront planning area. The easement reserves the right to impound the waters of the Columbia River and the water table up to elevation between 617.5 feet and 620 feet MSL for operation of the Rock Island Project.

Planned Action Ordinance—The Planned Action Ordinance establishes criteria and procedures that expedite environmental review and require the mitigation measures established in the Final EIS for this Subarea Plan (see Appendix B).

Figure 5. Land Use Regulations



Infrastructure

TRANSPORTATION

The Waterfront is accessed via SR 28 (see Figure 6). The section of SR 28 that runs along the north side of the Waterfront is classified as a Freight and Goods Transportation System T-2 freight corridor, meaning that it carries between 4 million and 10 million tons of freight per year. This section of SR 28 is designated as Partial Control Limited Access. There are currently two intersections with SR 28 in the Waterfront planning area: Rock Island Drive and Nature Shores Drive. Rock Island Drive provides the primary connection between the Waterfront and the rest of Rock Island. The Rock Island Drive intersection with SR 28 is currently side-street stop-controlled.

Access to the western side of the Waterfront is provided via Nature Shores Drive from SR 28, also a side-street stop-controlled intersection. Nature Shores Drive provides access to two operating businesses and several residences. The intersection spacing between Nature Shores Drive and Rock Island Drive is approximately 0.8 mile.

An active BNSF mainline runs east-west through the Waterfront before crossing south over the historic Rock Island Railroad bridge. The rail line, known as the "High Line" connecting Seattle and Chicago, is an R1 Freight Rail Corridor, meaning that it ships more than 5 million tons per year. Approximately 30 to 45 trains traverse the Waterfront daily. The bridge and curvature in the rail line require a speed limit of 40 miles per hour in this area.

There is currently one at-grade crossing where Rock Island Drive meets the railroad tracks. This is a private crossing authorized by an agreement between BNSF and the owner of the former silicon smelter. There is also a siding of approximately 2,000 feet available to the smelter property, with three spurs of varying length in each of the remaining buildings. (See Appendix C-3 for the full Transportation Assessment).

POWER

The Waterfront is crossed by a set of high-tension overhead power transmission lines (see Figure 7). The high-voltage transmission lines are owned by the Bonneville Power Administration, the Chelan County PUD, and the Douglas County PUD. Easements for the power lines encumber approximately 22 acres of land. Uses allowed under the power lines are understood to include roads, parking, and ballfields, but not buildings. The Hannah power substation, operated by the Douglas County PUD, lies in the study area. The substation currently provides approximately 12 megawatts of power. The existing substation is expected to provide sufficient power to support residential, commercial, and light industrial development, but improvements will have to be made to support energy-intensive uses such manufacturing, data farms, and blockchain servers.

WATER

The City is the purveyor of potable water within the city limits. However, because of the historical pattern of development, the existing water infrastructure is provided via separate systems. Future development will require extension of the City water system. Capacity and water rights in the City water system are sufficient to support the redevelopment vision for the Waterfront.

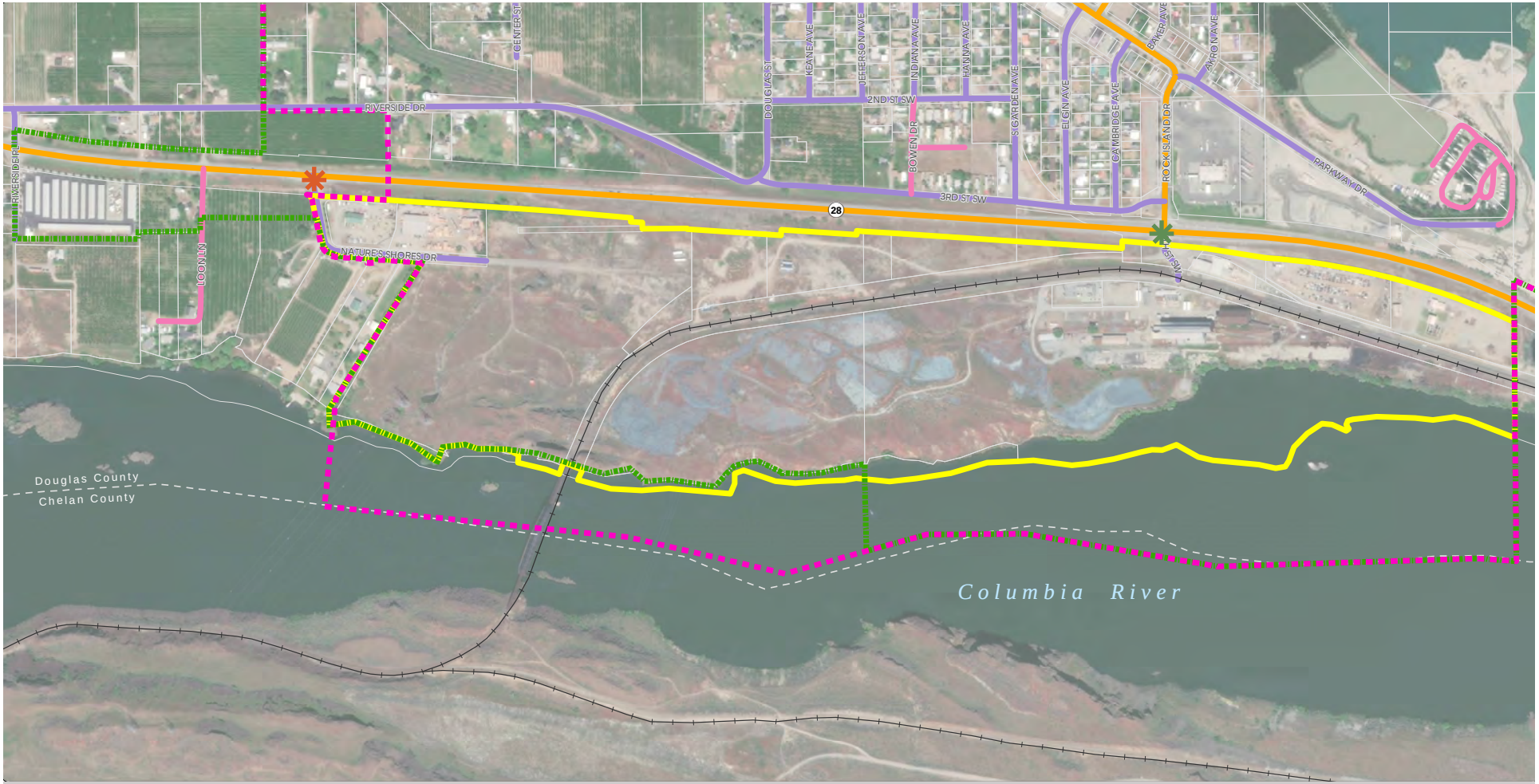
SEWER

The City provides sanitary sewer service to the Waterfront. The City wastewater treatment plant is located in the eastern end of the Waterfront study area. Sewer service currently does not extend to the western half of the study area. Preliminary plans for the sewer system have identified the need for at least two pump stations to serve the Waterfront. The headworks of the wastewater treatment plant are sized to accommodate flows from redevelopment of the entire waterfront. It may be necessary to add biological treatment pools, depending on the density of development.

STORMWATER

The Waterfront contains minimal stormwater collection infrastructure. Stormwater management facilities, whether regional or in individual developments, would require design and construction at the time of development under the guidelines of the Stormwater Management Manual for Eastern Washington per City regulations.

Figure 6. Transportation



Legend

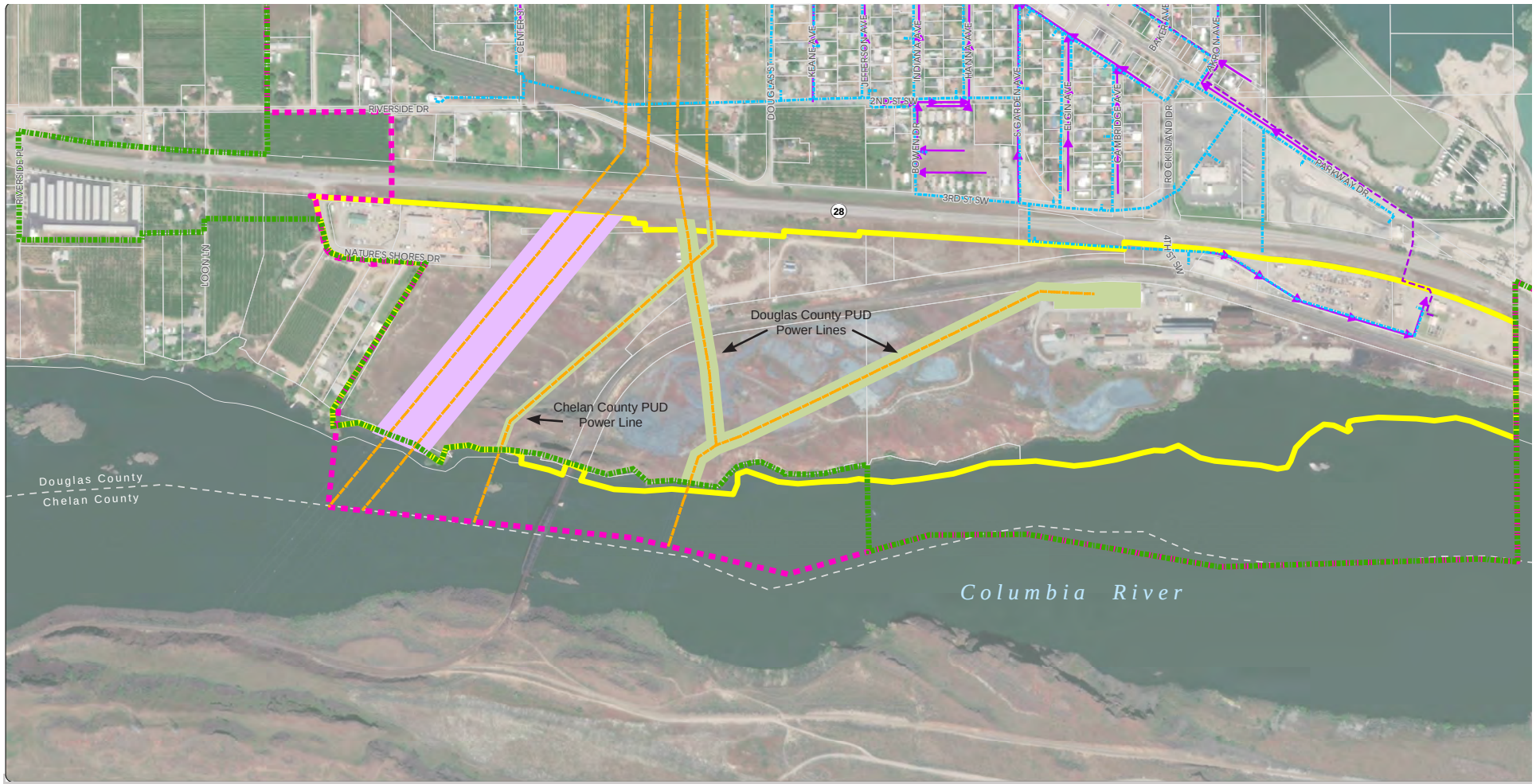
- Waterfront Planning Area
- Parcel
- Rock Island City Limits
- Urban Growth Boundary
- County Boundary
- Railroad
- SR 28/Rock Island Drive Entry Point
- Nature Shores Drive Entry Point

Road Classifications

- Major Public Road
- Minor Public Road
- Private

0 300 600
Feet

Figure 7. Utilities



Legend

- Waterfront Planning Area
- Parcel
- Rock Island City Limits
- Urban Growth Boundary
- County Boundary
- Railroad
- Water Line
- Forcemain Sanitary Sewer Line
- Gravity Sanitary Sewer Line
- Power Line
- BPA Easement
- Chelan County PUD Easement

0 300 600
Feet

Natural and Cultural Resources

NATURAL RESOURCES

The Waterfront is characterized by varying topography. Most of the approximately 1.5 miles of shoreline is characterized by steep banks (see Appendix C-1). The shoreline slopes are gentler at the east and west ends of the study area. The sparse vegetation along the shoreline of the Waterfront has been characterized as relatively low-quality habitat. Soils in the Waterfront consist largely of sand and gravel, which are well-drained. There are several large basalt outcrops in the vicinity of the railroad bridge crossing. Upland habitat in the Waterfront planning area is generally characterized by semiarid shrub-steppe vegetation interspersed with developed land (see Figure 8).

This reach of the Columbia River supports at least 42 species of indigenous and introduced fish. Three fish species listed under the federal Endangered Species Act occur in this reach: upper Columbia River spring-run Chinook salmon (listed as endangered), upper Columbia River summer steelhead (listed as threatened), and upper Columbia River bull trout (listed as threatened). Both the Rocky Reach and Rock Island dams have upstream fish passage facilities and also provide downstream passage for juvenile salmonids through collection facilities or fish spill. The Chelan PUD has developed a Habitat Conservation Plan for the Rock Island hydroelectric project with the goal of achieving no net impact to anadromous fish.

Most of the subarea is within a wellhead protection area (WHPA) associated with a City well (Source #2, Well #2 ABR438) located north of the Waterfront and depicted on Figure 8. WHPAs are designated as a critical aquifer recharge area that are based on the groundwater travel time to the well and subject to the City's critical areas ordinance (see Figure 8). Studies of the planning area have indicated that groundwater flows southward towards the Columbia River, suggesting that the Waterfront is downgradient of the well and poses low risk to municipal drinking water quality.

CULTURAL RESOURCES

Multiple cultural resources studies have been conducted in the planning area (see Appendix C-2). Three cultural sites of archaeological significance have been identified in the Waterfront. Previously undisturbed areas of the planning area are considered to have a high probability of containing as-yet unrecorded archaeological sites. Future development will have to follow established procedures for archaeological monitoring.

The Rock Island Railroad Bridge is listed on the National Register of Historic Places and the Washington Heritage Register. The former silicon smelter buildings and former Great Northern Railway Warehouse have been evaluated and deemed ineligible for listing on the National Register of Historic Places because of modifications from their historic character.

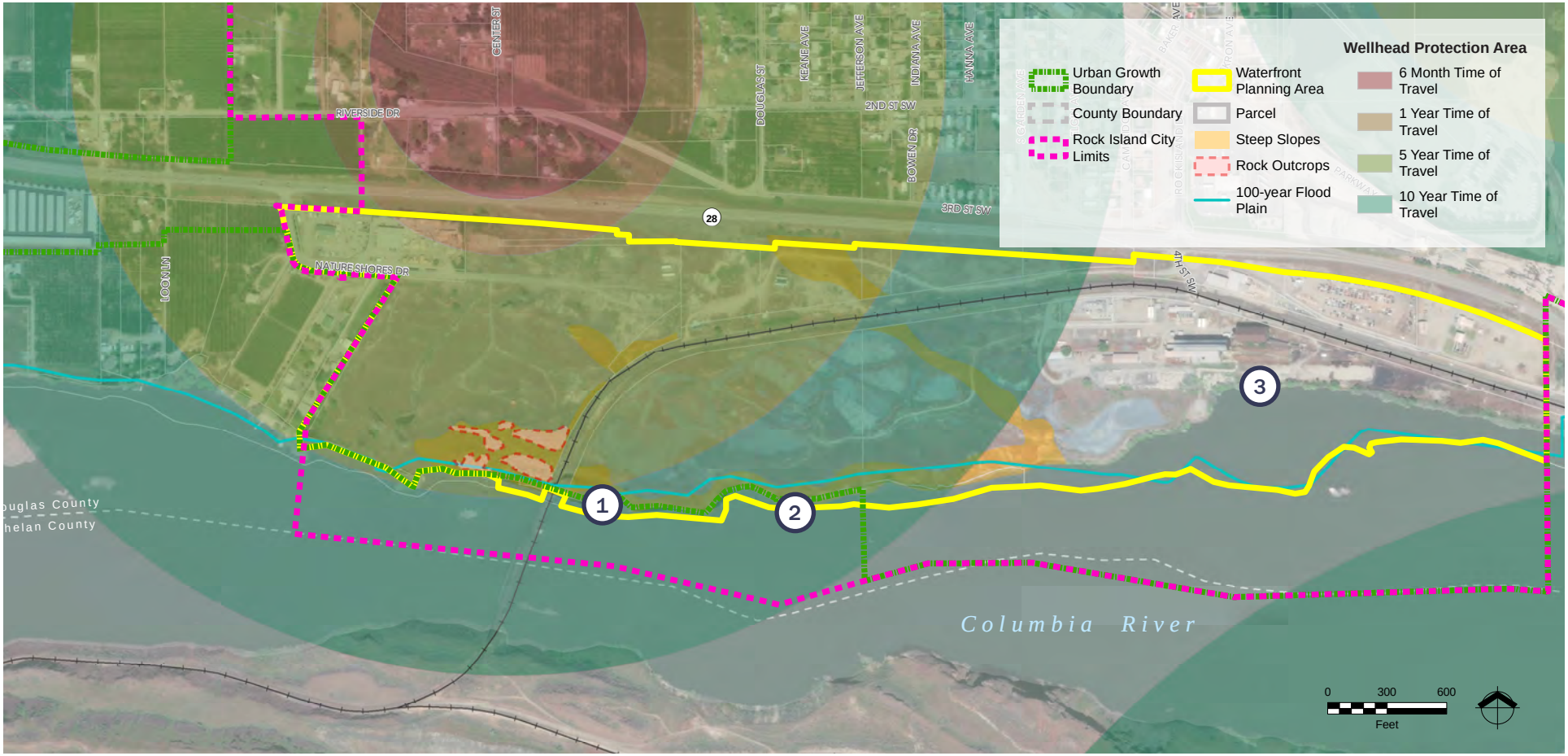
Environmental

With its history of industrial use, the former silicon smelter facility presents reasonable likelihood of environmental contamination. The silicon smelter facility was constructed in 1942 to support production for the war effort. The silicon smelter closed operations in 2000. Operating equipment has been removed and many of the former structures have been demolished. Today, the facility consists of an out-of-use raw materials building and stockpile area; former processing buildings (including a furnace building); a waste disposal area; eight unlined fume settling ponds; and a fume storage area.

A number of environmental studies have been conducted on the former smelter property. The most recent study was conducted by the U.S. Environmental Protection Agency (USEPA) in 2013. The USEPA conducted an assessment of the fume ponds and fume storage area. The study found elevated concentrations of metals in fume material, including cadmium, copper, lead, and zinc. However, soil below the fume ponds and storage areas did not appear to be impacted and groundwater in the vicinity of the fume did not exceed federal cleanup levels. Two underground fuel storage tanks have been removed, but one may still remain. The Port is conducting additional environmental site assessment work to more fully characterize environmental impacts.

Concerns about potential environmental impacts on the former smelter property will have to be resolved to support future investment in redevelopment of the property.

Figure 8. Critical Areas



Implications for Redevelopment

The current conditions in the Waterfront redevelopment area provide opportunities and challenges for redevelopment. The key implications for redevelopment are summarized in the following table.

Table 1. Existing Conditions and Implications for Redevelopment

Factor	Existing Conditions	Implications for Redevelopment
Property	• The Waterfront planning area encompasses approximately 207 acres. • Ninety percent of the Waterfront area is in private ownership. Ten percent is in public ownership (City and both county PUDs) • The Port has established an IDD that encompasses the currently vacant and underutilized properties. • Rolling topography with several large basalt rock outcrops.	• The Waterfront provides a large land area for higher-intensity uses. • Decisions by private landowners and investors will drive redevelopment. The public sector can establish a shared vision and plan for infrastructure improvements. • The IDD provides additional funding tools to support infrastructure improvements. • Development is limited in areas characterized by steep slopes and basalt outcrops.
Economics	• Major employment sectors in Douglas and Chelan counties are agriculture, retail, and health care. • Employment and population growth have been relatively steady in the last ten years. • Vacancy rates for building space in industrial and office space are near zero; however, there is a large amount of undeveloped land available in the region. • The recent large increase in demand is related to cryptocurrency and blockchain technology. • Lease rates in industrial and office sectors generally do not support the costs of new construction. • Housing vacancy rates are low.	• Current rents do not support speculative real estate development. Identifying future site tenants, especially a large anchor, will be important to facilitating redevelopment. • Emerging sectors include value-added agriculture and information technology (blockchain and cryptocurrency). • Residential development in Rock Island is likely to increase demand for retail and commercial services.

Table 1. Existing Conditions and Implications for Redevelopment (cont)

Factor	Existing Conditions	Implications for Redevelopment
Land Use	• The City has recently annexed all of the land in the planning area. • The City has changed the zoning in the planning area to hybrid commercial-industrial that will allow a wide range of uses. • Large parcels likely will have to be subdivided to create developable lots. • Several easements constrain uses on the Waterfront, including power transmission lines and the Chelan County PUD flowage easement. • The Chelan County PUD "project boundary" is located at 1620 feet. • Development projects in the river will require state and federal permits.	• Annexation makes the City the primary authority for permitting land development, streamlining the process. • The new zoning district will provide more flexibility and potential for a vibrant mix of uses. • While no permanent structures can be built beneath the power transmission lines, the land can be used for parking, open space, and stormwater management. • The Chelan County PUD flowage easement and project boundary will limit development potential at elevations below 620 feet (approximately 34 acres along the riverfront). • Any construction projects in the river will require review and permitting by local, state, and federal agencies; this should be expected to take one to two years.
Infrastructure	• Transportation—the study area is accessed from SR 28 via two intersections, Rock Island Drive and Nature Shores Drive. Stacking distance between the Rock Island Drive intersection and the rail crossing creates traffic concerns. • Rail—The existing at-grade crossing is by private agreement. • Power—The Douglas County PUD operates the Hannah substation within the planning area (12 available megawatts). Three transmission lines cross the Waterfront (Bonneville Power Administration, Chelan County PUD, and Douglas County PUD). • Water—The municipal system does not currently extend to the Waterfront, but it is in the service area. Existing developments on the western end of the study area have private wells. • Sewer—The municipal system does not currently extend to the Waterfront, but the expansion has been planned.	• Transportation—Creative design will be needed to address the stacking distance concern at Rock Island Drive and the rail crossing. Secondary, emergency access will be required to support substantial development at the former smelter property. The feasibility of providing an alternative access under SR 28 to the downtown area should be considered. • Rail—The private crossing should be transitioned to a public crossing to support redevelopment. A second crossing should be considered, including the potential for a grade-separated crossing near the bridge landing. • Power—Relocation/consolidation of transmission lines would reduce encumbrances on the Waterfront. An energy-intensive industrial user will require an upgrade to the substation. • Water and Sewer—extension of municipal systems will be needed to serve redevelopment. Two sewer lift stations have been planned for the system to serve the entire Waterfront. A second water line across SR 28 to the area may be required to support needed fire flow.

Table 1. Existing Conditions and Implications for Redevelopment (cont)

Factor	Existing Conditions	Implications for Redevelopment
Natural Resources	• Columbia River—Approximately 1.5 miles of riverfront. Some low bank on the west and east ends of the study area. Multiple Endangered Species Act-listed fish species live in the Columbia River. • Floodplain—Portions of the shoreline appear to lie within the 100-year floodplain. • Wetlands—Potential for riparian wetlands along the low bank areas. • Geologic Hazards—The steep slopes occur on portions of the planning area. • WHPA—More than half of the Waterfront lies within the WHPA for a municipal well.	• Development along the riverfront is limited by natural resource and floodplain regulations as well as the Chelan County PUD easements and ownership. • Future development should avoid steep slopes to the extent practicable. • To protect the municipal water system, restrictions and controls will need to be placed on potential pollution-generating uses per the City's critical areas ordinance.
Cultural Resources	• Archaeology—Previous studies have found archaeological artifacts in the study area. • Historic Buildings—Previous studies have found that the buildings associated with the former smelter do not meet criteria to merit listing on National Historic Register.	• Archaeology—Monitoring should be performed during earthwork and an Inadvertent Discovery Plan should be developed.
Environmental	• Studies have found elevated concentrations of metals in soil and groundwater at the former smelter property. The USEPA has indicated that the property does not merit listing on the National Priorities list, but it is included on the Washington State Hazardous Sites list.	• Environmental impacts can be addressed as part of redevelopment. • Additional environmental assessment should be conducted to define the extent of impacts.

Subarea Land Use Map and Policies

The subarea land use map and policies provide a long-term coordinated framework for achieving the vision for the Waterfront. They comprise a companion document to the Planned Action EIS and Planned Action Ordinance. This Subarea Plan is intended to provide certainty in setting expectations for desired future land use in the Waterfront and flexibility to adjust to market conditions as they change over time.

The conceptual land use map and policies promote economic development and community benefit by fostering a synergistic mix of technology, business, education, hospitality, commercial, residential, and recreational uses. Successful redevelopment will integrate public-sector activities, including education, parks, and trails, with private-sector enterprises.

Subarea Land Use Concept

Consistent with the vision, the subarea land use plan identifies areas for a mix of uses. The land use concept encourages, but does not require, the specific location of uses. The zoning code continues to provide the regulatory authorization of approved and conditional uses. The range of these uses could be approved across the Waterfront in compliance with the zoning code and development regulations (see Table 2 and Figure 9).

The land use concept includes the following uses:

- **Innovation District**—The intent of the district is economic development through technology innovation, research, and workforce training as well as adaptive reuse of the buildings. The existing buildings provide unique character and connection to history. Adaptive reuse could support a mix of office space, focused on innovative technology and energy efficiency. The combination of uses is intended to foster creativity and collaboration between business and education and to promote the Waterfront as a unique destination.
- **Trails and Open Space**—The concept includes a linear waterfront trail along the Columbia River with opportunities for large open spaces adjacent to the former smelter buildings, under the power lines, and encompassing the basalt rock outcrops. Public spaces should capitalize on views of the Columbia River and surrounding landscape, making the area available for public enjoyment.
- **Commercial Development**—Land along SR 28 is expected to develop with commercial and light industrial uses similar in character to other areas along the highway. A frontage road would be needed to provide access to this part of the planning area.
- **Mixed Use Development**—Land on the west side of the Waterfront has characteristics that support a mix of restaurant, commercial, and residential uses. This area has a low bank, with potential for future boating access to the Columbia River. This mix of uses provides a transition from the adjacent agricultural and residential uses to the more intensive uses of the innovation and commercial/industrial business park areas.
- **Industrial Park**—This area is expected to support light industrial businesses. Because of its distance from access points to the Waterfront and topography, it is expected that this area will be developed in later phases.

Table 2. Developed Area by Land Use Type

Development Type	Developable Land (SF)	Building (SF)
Highway Commercial/Light Industrial	1,274,000	454,800
Mixed Use	836,000	257,500
Open Space & Trails	469,000	-
Innovation District	1,704,000	429,400
Industrial Park	797,000	279,000
Total Land Area Developed	**5,080,000**	**1,420,700**

Figure 9. Conceptual Land Use Plan

LEGEND

- Highway Commercial
- Mixed Use
- Light Industrial
- Innovation District
- Open Space
- Waterfront Trail
- Potential Railroad or Highway Underpass
- SR 28/Rock Island Drive Proposed Roundabout
- Opportunities for Connectivity to Downtown Rock Island
- Alternative Roundabout Location

0 500 1,000
Feet

Policies

The following set of policies complements and augments existing policies established in the City Comprehensive Plan. The policies address land use, economic development, recreation, housing, natural resources, utilities, and transportation. A context statement is provided for each policy area.

LAND USE

This Subarea Plan envisions a mix of compatible land uses in the Waterfront; these uses are intended to activate and create an attractive place for local residents and tourists. The Waterfront represents all of the Commercial-Industrial zoned land in Rock Island.

LU-1. Allow for an appropriate mix of uses in the subarea that will make the Rock Island Waterfront a place to live, work, and play while supporting compatibility with the industrial character of the area.

LU-2. Appropriate building and site design guidelines should be established to ensure that new construction and renovation establish a unified look and feel along the Waterfront and minimize the impacts, such as light and glare, of this development on the environment.

LU-3. View corridors of the Columbia River should be preserved and/or incorporated into development plans; including along the rail bridge landing.

LU-4. Where structural uses are limited because of easements, such as under the power lines, these areas should be used for surface parking, stormwater management, and open space.

LU-5. When appropriate, shared parking, rather than separate lots for each building, should be developed.

LU-6. Adopt a Planned Action Ordinance and amend the municipal zoning and subdivision code as needed to support the vision, goals, and policies of this Subarea Plan.

LU-7. Physical development of the waterfront should generally comply with the preferred land use concept with flexibility granted to meet market conditions.

LU-8. For areas within the Rock Island Hydroelectric project boundary, coordinate development review and permitting with the Chelan County PUD.

ECONOMIC DEVELOPMENT

The Waterfront was historically a major center of employment. This Subarea Plan envisions this area becoming a significant land base for future employment and economic development.

ED-1. Encourage public-private partnerships to support infrastructure improvements and redevelopment of the Waterfront.

ED-2. Encourage opportunities for increased employment with a focus on technology and light industrial uses.

ED-3. Future uses that support education and workforce development opportunities should be prioritized.

ED-4. Support activities and uses to create a waterfront destination, including hotel, dining, shopping, arts and entertainment events, and public recreation.

ED-5. Support industrial uses that can utilize rail access.

ED-6. Encourage remediation of historical environmental impacts to support redevelopment.

PARKS AND RECREATION

The Comprehensive Plan prioritizes outdoor recreation as a key element of quality of life in Rock Island. The Waterfront has great potential to expand recreational opportunities through providing public access to the Columbia River and to large, open-space parks.

PR-1. Provide recreational opportunities that capitalize on the Waterfront and are amenities for local residents and tourists.

PR-2. Allow open space and recreational uses in areas constrained by easements, such as beneath power lines and within the flowage easement if compliant with easement requirements.

PR-4. Encourage connections with regional trails, including the Apple Capitol Loop trail and those identified in the City Parks and Recreation Plan.

PR-5. Allow active recreational opportunities such as a public boat launch or marina, if determined feasible, with a plan to minimize and/or mitigate environmental impacts.

PR-6. Coordinate planning, design, and construction of recreational amenities with Douglas County and Chelan County PUD.

HOUSING

The Comprehensive Plan directs most of the residential development in Rock Island to the north of SR 28. Population forecasts and buildable land analysis indicate that there is adequate space to accommodate residential growth in the city. It is important to allow a limited amount of housing in the Waterfront to increase activity and enhance the financial feasibility of development.

H-1. While the priority goal for the Waterfront is job creation and economic development, housing should be permitted as an accessory element necessary to create a 24-hour district.

H-2. To maximize the benefit of this unique location, multifamily housing for all income levels, rather than single-family residences on individual lots, is encouraged.

NATURAL AND CULTURAL RESOURCES

The subarea is located along the Columbia River, which is a designated critical area providing habitat for fish and wildlife, including salmonids listed under the Endangered Species Act. Property below elevation 620 feet within the subarea is constrained by a flowage easement related to the Rock Island Hydroelectric Project. There are known and identified cultural resource sites in the subarea.

NR-1. Development shall conform to the City Critical Areas Protection requirements (RIMC 18.04). This includes measures to protect groundwater within the WHPA.

NR-2. To the extent feasible, development should protect the basalt outcrops.

NR-3. Proposed projects shall comply with state and federal laws and regulations related to historic and archaeological resources.

NR-4. To minimize the impact of development on the Columbia River, landscaping plans are encouraged to protect existing native vegetation, to use native and/or drought-tolerant noninvasive species, and to implement best management practices for pesticide and herbicide use in landscaped areas.

NR-5. To balance protection of critical areas with goals for recreational use and economic development, the City may allow development near critical areas provided there is no net loss of function.

UTILITIES

City utility plans include provisions for extension of water and sewer service to the Waterfront. The Waterfront contains an existing substation and power transmission lines. Expansion and updating of utilities are fundamental to redevelopment of the Waterfront.

U-1. Ensure that public facilities and services necessary for supporting development are provided commensurate with level of development intensity.

U-2. Provide capital improvements to correct existing deficiencies, to replace deteriorated or obsolete facilities, and to accommodate desired future growth.

U-3. Provide a framework for public-private cost sharing for the extension of Rock Island utilities to support new and anticipated development.

U-4. Identify major utility improvements in the City's Capital Facilities Plan where local agencies will take the lead in development. Pursue multiple funding sources, including state and federal grants, to support facility improvements.

U-5. Allow for regional stormwater management systems in the Waterfront subarea as an alternative to individual systems.

TRANSPORTATION

Access to the Waterfront will have to be improved to support significant development. These improvements will have to be coordinated with state, regional, and local agencies as well as private parties.

T-1. A primary public crossing of the BNSF rail line should be established, possibly at the current crossing or at an alternative location if determined feasible. A secondary public, grade-separated crossing should also be established when development south of the rail line exceeds 125,000 square feet.

T-2. The feasibility of a pedestrian and vehicular undercrossing of SR 28 should be explored to promote transportation connectivity between the Waterfront and downtown Rock Island.

T-3. The Rock Island Drive intersection with SR 28 should be improved to enhance safety as well as the experience of arrival at the Waterfront. The City should coordinate with WSDOT on the location and design of the intersection improvement.

T-4. Identify major transportation improvements in the City's Capital Facilities Plan where local agencies will take the lead in development. Pursue multiple funding sources, including state and federal grants, to support facility improvements.

T-5. Work with WSDOT to design the Rock Island Road roundabout consistent with this plan.

Capital Improvements

A set of coordinated infrastructure improvements will be needed to support redevelopment of the Waterfront (see Figure 10). Design and construction of these improvements can be undertaken by public and/or private parties. Because of the scale of this development opportunity, it is expected that partnerships between public and private parties will be needed to achieve the future-use vision for the Waterfront. This capital improvement plan outlines the major improvements that will be needed, planning-level estimates of costs, and potential funding sources. The final construction costs of these improvements will depend on future engineering design.

Transportation Improvements

Access improvements on SR 28 will be required to support additional traffic to the Waterfront.

- **SR 28/Rock Island Drive Intersection**—WSDOT North Central Region had previously anticipated constructing a single-lane roundabout at the Rock Island Drive/SR 28 intersection by 2023 as part of safety improvements. However, WSDOT has determined that turn lane improvements implemented at the intersection improved safety and the roundabout is no longer needed. Given that WSDOT is no longer funding the single-lane roundabout, redevelopment of the Waterfront would result in the need to improve the Rock Island Drive/SR 28 intersection as traffic volumes increase and additional capacity is needed to serve demands. Further analysis has indicated that when development reaches approximately 154,000 square feet (or 185 total weekday PM peak hour trips), a single-lane roundabout will be needed to accomodate traffic. Future design for intersection improvements should consider potential alternative locations that could alleviate the distance constraints between SR 28 and the rail line.
- **SR 28/Nature Shores Drive Intersection**—Increased traffic will require improvements to the Nature Shores Drive/SR 28 intersection at approximately 154,000 square feet of development (or 185 total weekday PM peak hour trips). The preferred option for this is striping and modifications to make this a right in/right out intersection. This modification would limit turns that cross traffic and allow more trips while maintaining safety.
- **At-Grade Railroad Crossing**—The private rail crossing south of Rock Island Drive should be upgraded with signals and crossbars. The crossing should be changed from private to public to facilitate these safety improvements, which are needed to allow more activity on the former smelter property.
- **Railroad Grade-Separated Crossing**—A secondary access to the smelter property will be required for emergency access after development reaches 125,000 square feet in that area. There are two options for achieving this. One option would be to construct a rail underpass west of the existing power substation. The underpass could serve as the primary entrance to the Waterfront to provide more distance for vehicle queuing between the rail crossing and the Rock Island Drive intersection. In this option, the at-grade crossing could serve as a secondary access used for emergencies. Alternatively, an overpass or underpass could be constructed at another location.
- **Interior Streets**—Development of the Waterfront is expected to require a frontage road that will connect Nature Shores Drive and Rock Island Drive parallel to SR 28 with an interior loop road. These streets are assumed to be full-width right-of-way improvements that would meet City street standards.
- **SR 28 Undercrossing**—To increase connectivity between the Waterfront and the rest of Rock Island, an pedestrian and vehicular undercrossing of SR28 could be developed. Likely locations include the existing alignments of Douglas Street, South Garden Avenue, or Elgin Avenue.

Infrastructure Improvements

Utilities will have to be extended through the Waterfront to support redevelopment. The current City water and wastewater plans include provisions to expand service throughout the Waterfront. In addition to water and sewer, improvements will be needed for stormwater management, power, and telecommunications. Natural gas is not available near Rock Island.

- **Potable Water**—Future development will be required to connect to the City water system and meet standards of RIMC 19.30. Connection could be made to the existing 12-inch-diameter line south of SR 28 at Rock Island Drive, or a new connection could be made by boring under SR 28 farther west. To ensure adequate pressure to meet fire flow requirements, a booster pump likely will be needed to support full buildout of the Waterfront. The City will need to track demand and capacity of the water system as the Waterfront develops. Additional water rights may need to be obtained as the City and the Waterfront develops.

- **Sanitary Sewer**—New development in the Waterfront will be required to connect to the City wastewater treatment plant for sewer service and to meet the standards of RIMC 19.40. Based on the City wastewater plan and on topography of the area, it is assumed that two lift stations will be needed to provide sewer services across the Waterfront planning area.

  Increased development within the entire service area may require upgrades to the publicly owned treatment works (POTW). In the City's next update of the General Sewer Plan, the growth projections for the Waterfront should be included in overall growth projects for the service area to determine if and when upgrades may be needed. If new uses produce industrial wastewater, specific plans will need to be developed for treatment since the POTW cannot accept direct discharge of industrial wastewater.

- **Stormwater**—New development will be required to manage stormwater in compliance with RIMC 19.20. As an alternative to individual stormwater management systems for specific projects, a regional stormwater management system could be developed for the Waterfront. Stormwater facilities could be located beneath power transmission lines where easements prohibit construction of buildings.

- **Power**—It is assumed that the existing substation has capacity to serve typical industrial and commercial uses. A high-power user would need to estimate demand and negotiate for any needed improvements, including potential construction of a new substation.

- **Telecommunications**—It is expected that telecommunications improvements will be provided by private parties.

Open Space and Trails

The Waterfront subarea presents an opportunity to significantly increase public access to the Columbia River and provide recreational opportunities for local residents and visitors.

- **Waterfront Trail**—A continuous linear trail should be developed along the approximately 1.5 miles of the Columbia River in the subarea. It is assumed that the trail will be paved for accessibility and will be landscaped with native and drought-resistant plants to enhance habitat and control maintenance costs. The trail will connect to existing and planned local and regional trails.

- **Waterfront Park and Open Space**—Restriction of development in areas with basalt rock outcrops and steep slopes will maintain significant open spaces in the Waterfront even after full buildout is achieved. In addition to these passive open spaces, more intensive recreational areas, such as a waterfront park, ballfields, and outdoor event spaces, could be developed.

Figure 10. Infrastructure Concept Plan

LEGEND

- Regional Stormwater Facility
- Sewer Pump Station
- Water Booster Pump
- Intersection Improvement
- Internal Streets
- Waterfront Trail
- Opportunities for Connectivity to Downtown Rock Island
- Potential Railroad or Highway Underpass Locations
- Alternative Roundabout Location

0 500 1,000
Feet

All locations of new roads and utilities are conceptual. The final location will refined through design and construction of public and private projects.

Capital Improvements Projects List

The planned capital improvements are summarized in the following table. Planning-level cost forecasts are provided, and likely lead parties for projects are identified. Cost estimates are based on typical construction costs for similar projects in the region. Cost estimates will be refined through the design process and construction bids for individual projects.

Table 3. Capital Improvements Project List

Project	Description	Cost Forecast	Project Lead
TRANSPORTATION			
SR 28/Rock Island Drive Intersection	Construct a one-lane roundabout in the existing right-of-way when development reaches approx. 154,000 square feet or 185 total weekday PM peak hour trips	$1,600,000 to $2,500,000	City, WSDOT
SR 28/Nature Shores Drive Intersection	Modify intersection to be right-in/right-out when development reaches approx. 154,000 square feet or 185 total weekday PM peak hour trips	$20,000 to $30,000	City, WSDOT
At-Grade Railroad Crossing Improvement	Install signal and crossbars at existing rail crossing	$1,000,000 to $1,500,000	City, Private
Railroad Grade-Separated Crossing	Grade-separated crossing of rail line to provide second point of access	$8,000,000 to $10,000,000	City, Private
SR 28 Undercrossing	Type, size, and location study for vehicle and pedestrian undercrossing	$150,000 to $250,000	WSDOT, City, Port
Interior Streets	SR 28 frontage street and interior loop. Full width with sidewalk and lighting (approx. 8,000 linear feet)	$3,000,000 to $4,500,000	Private
UTILITIES			
Potable Water	Approximately 7,500 feet of 12-inch-diameter pipe, 16 fire hydrants, and 1 booster pump	$1,250,000 to $1,500,000	City, Port, Private
Sanitary Sewer	Approximately 8,000 feet of gravity main, 4,000 feet of force main and two lift stations	$1,500,000 to $2,000,000	City, Port, Private
OPEN SPACE AND TRAILS			
Waterfront Trail	Approximately 1.5 mile, paved trail	$250,000 to $350,000	City, Chelan PUD, Private
Waterfront Park & Open Space	Passive and active open space areas	TBD	City, Chelan PUD, Private