Draft NEPA Environmental Assessment

Salmon Creek Greenway Conversion of Use and Replacement Property at Foley Park

A conversion of land protected under Section 6(f)(3) of the Land and Water Conservation Fund Act, Public Law 108-198

Submitted to:
Washington State Recreation and Conservation Office
1111 Washington Street S.E.
Olympia, Washington 98501

For:
The National Park Service
Community Assistance Programs
909 First Avenue
Seattle, WA 98104

For more information:
Vancouver-Clark Parks and Recreation Department
415 West 6th Street
Vancouver, Washington 98660

September 2013

Draft NEPA Environmental Assessment
Salmon Creek Greenway Conversion of Use and Replacement Property at Foley Park

Submitted to:
Washington State Recreation and Conservation Office
1111 Washington Street S.E.
Olympia, Washington 98501

For:
The National Park Service
Community Assistance Programs
909 First Avenue
Seattle, WA 98104

For more information:
Vancouver-Clark Parks and Recreation Department
415 West 6th Street
Vancouver, Washington 98660

Prepared by:
PBS Engineering and Environmental Inc.
4412 SW Corbett Avenue
Portland, Oregon, 97239

The Land and Water Conservation Fund (LWCF), Stateside Assistance grant program, provides funds to states, and through states to local agencies, for the acquisition and development of outdoor recreation resources. Lands that have received funding through LWCF are protected by section 6(f)(3) of the Act unless a conversion is approved by the Secretary of the Interior as delegated to the National Park Service.

TABLE OF CONTENTS

SUPPORTING DATA

Figures

Tables

Appendices

ACRONYMS

AQI	Air Quality Index
CARA	Critical Aquifer Recharge Area
EA	Environmental Assessment
FONSI	Finding of No Significant Impact
IAC	Interagency Committee for Outdoor Recreation (renamed to RCO)
LWCF	Land and Water Conservation Fund
NEPA	National Environmental Policy Act
NPS	National Park Service
RCO	Washington State Recreation and Conservation Office
SCORP	Statewide Comprehensive Outdoor Recreation Plan

1 SUMMARY

Clark County proposes to transfer federal contract responsibilities from a portion of the Salmon Creek Greenway for two reasons: 1) to construct a sewer pump station and 2) to exchange land with an adjacent property owner to acquire property more interior to the Salmon Creek Greenway. Clark County proposes to mitigate this impact with acquisition and development of the Foley Neighborhood Park. Salmon Creek Greenway and Foley Neighborhood Park are located in the City of Vancouver urban growth area of Clark County (See Figure 1).

This action is needed to facilitate improvements to Clark County's sanitary sewer system and to consolidate land ownership within the park. In addition to the proposed action, Clark County also evaluated the following alternatives:

- Do not provide replacement property for the converted properties
- Remove the pump station facilities and buy back the exchanged property

Based upon the effects of the alternatives, Clark County is requesting that the Washington State Recreation and Conservation Office (RCO) forward a recommendation to the National Park Service (NPS) to approve the proposed conversion of park land and the replacement park as mitigation.

2 INTRODUCTION

Between 1976 and 1993, the Vancouver-Clark Parks and Recreation Department (VCPRD)[1] acquired 21 properties totaling approximately 430 acres, dedicated an additional 78 acres to parks use, and developed a portion of the park using funds from the Land and Water Conservation Fund (LWCF) and other state grant money thereby protecting it for public outdoor recreation under section 6(f)(3) of the LWCF Act. LWCF project numbers for these grants are 53-00313 (RCO #76-023A), 53-00405 (RCO #79-037A), and 53-00634 (RCO #93-058D). Additional RCO grant project numbers are #83-053A, #90-060A, and #02-1213D. All of these actions occurred within the Salmon Creek Greenway. Salmon Creek Community Park and Salmon Creek Regional Park are both found within the greenway (Figure 2). The Klineline pump station is located on property acquired with LWCF grant # 53-00313.[2]

Section 6(f)(3) of the LWCF Act requires that protected park land that is converted to a use other than outdoor recreation be replaced with property that is of at least equal fair market value and equivalent recreation utility as the property that was converted. The replacement property must constitute a viable recreation unit or be acquired as an addition to an existing recreation unit. Development of the replacement property may be required to ensure that a level of recreation utility is achieved similar to what was lost at the converted site. Figure 3 shows the location of the two proposed Conversion Areas.

[1] VCPRD provides parks and recreation planning, development, and operation services to the City of Vancouver and unincorporated Clark County. VCPRD, as an agent for Clark County, will own and operate the replacement property, and owned and operated the conversion property prior to conversion.
[2] The grant was issued by the Interagency Committee for Outdoor Recreation (IAC), which later became the Recreation and Conservation Office.

Figure 1: Vicinity Map

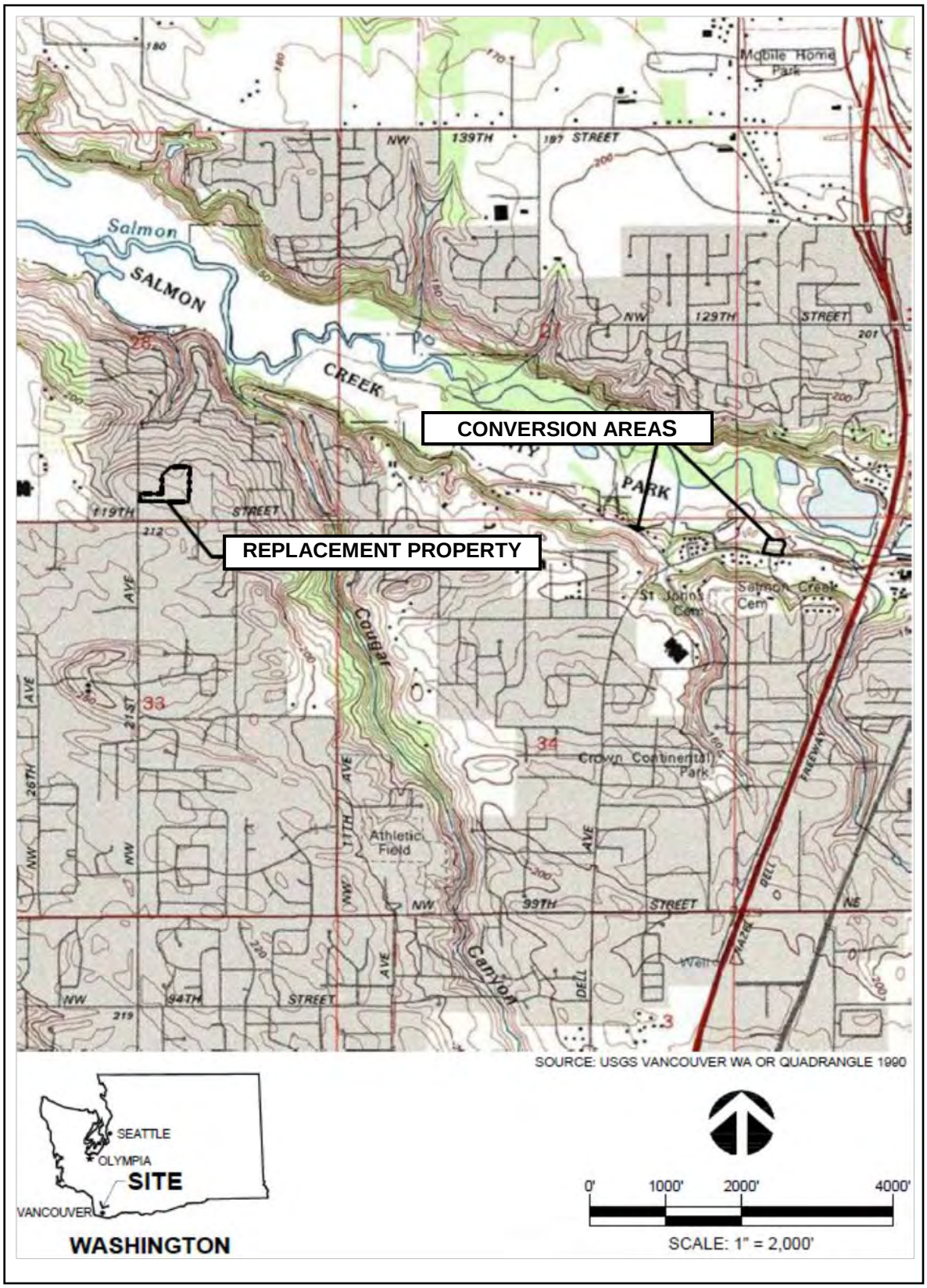


Figure 2: Salmon Creek Park Boundaries Map

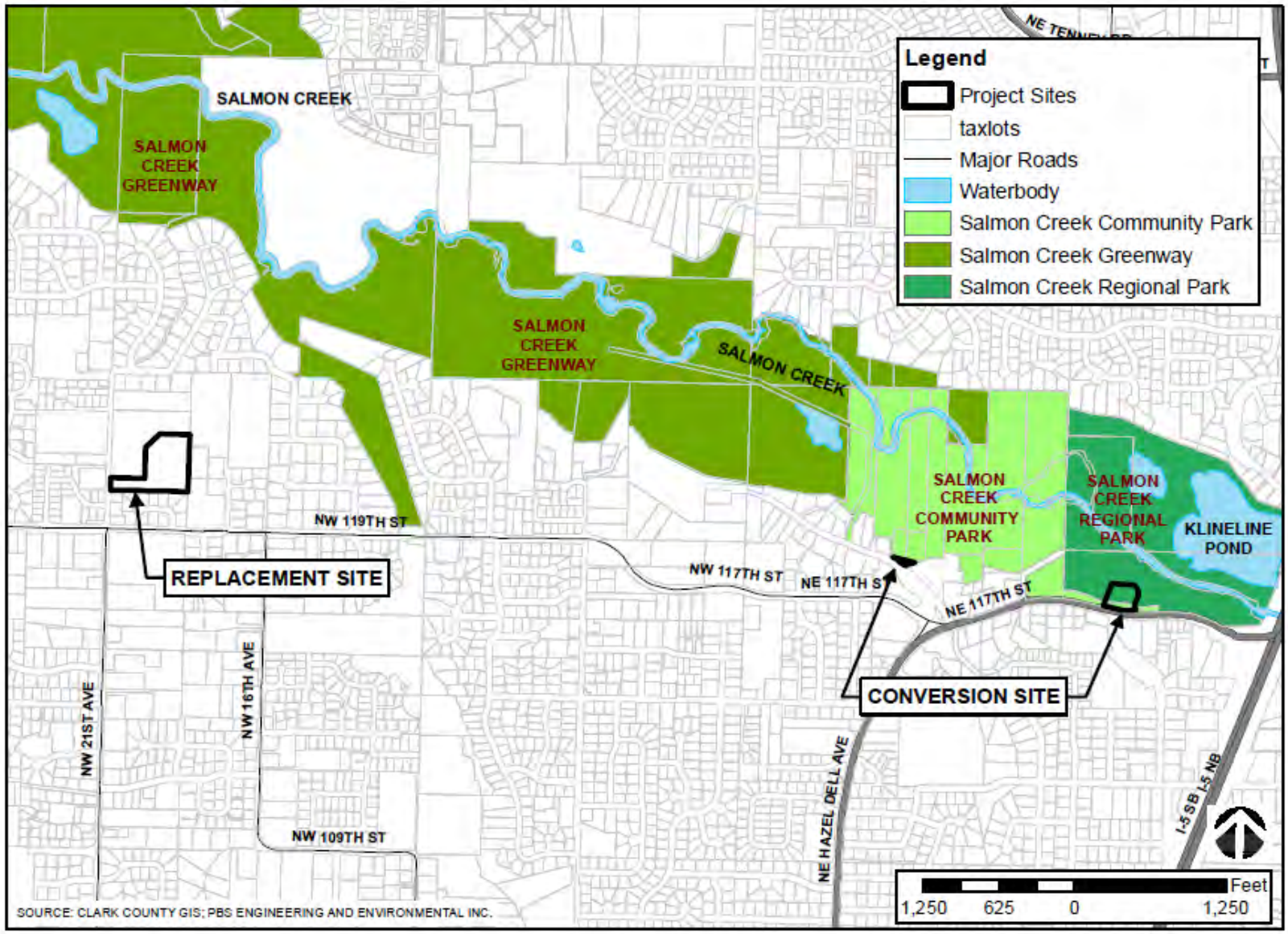


Figure 3: Location of Conversion Areas

2.1 Purpose, Need and Background

The purpose of this project is to remove federal protection from 0.76 acres of the Salmon Creek Greenway for the construction of the sewer pump station and to exchange land with an adjacent property owner to acquire property more interior to the greenway. This action is needed to facilitate improvements to Clark County's sanitary sewer system and to consolidate land ownership within the park. The pump station was constructed to increase the sanitary sewer transmission capacity of the Salmon Creek Regional Wastewater Management System to allow for future growth in the area.

Clark County proposes to convert a portion of Salmon Creek Greenway and replace it with Foley Park. Initial development at Foley Park includes fencing around the park, a small gravel parking area, signage, and a short trail. Figure 4 shows the location of Foley Park relative to the Salmon Creek Greenway and the Conversion Areas.

This Environmental Assessment is required to help the National Park Service evaluate the environmental consequences of the proposed action on the human environment and to assist the affected public in understanding the context of the proposed action.

Vancouver-Clark Parks and Recreation Department contacted RCO in 2004 regarding an interest by Clark County Public Works to locate a sewer pump station within the Salmon Creek Greenway. As the project progressed, the conversion process was delayed in an effort to combine conversions within the Salmon Creek Greenway into one action and further refine the extent of the conversion areas.

Vancouver-Clark Parks and Recreation Department notified RCO regarding the land exchange in 1998. RCO approved the land exchange in 1998 as it related to the state's grant funding. The National Park Service was not consulted at the time for impacts to the LWCF funding. It was later determined that the land exchange conversion area was within NPS' jurisdiction.

Figure 4: Location of Foley Property

3 DESCRIPTION OF ALTERNATIVES

The NEPA implementing regulations require that a range of reasonable alternatives be evaluated including a No Action Alternative. Reasonable alternatives are any available alternatives that meet the project purpose and need.

3.1 Alternatives Considered But Dismissed

Two alternatives were considered but dismissed. As discussed below, the alternatives were dismissed for different reasons.

3.1.1 Alternative 1: No Action Alternative

NEPA requires the analysis of a “No Action Alternative,” against which the effects of the "Action Alternatives" can be evaluated and compared. In this case, however, the conversion activities have already occurred and the No Action Alternative would assume that no replacement for the conversion of use would be provided, which would be in violation of federal law. Therefore, this alternative was determined to be unacceptable. The County is committed to fulfilling the requirements of the Act to provide a suitable substitute for the Conversion Areas.

3.1.2 Alternative 2: Remove the Sewer Pump Station and Purchase Back the Property Exchanged

Removing the sewer pump station and buying back the property exchanged to allow the re-establishment of public park uses on the Conversion Areas was considered as a potential alternative, but was determined to be infeasible for further consideration due to the following:

- The site selection process for the sewer pump station identified the greenway as the preferred location to construct this facility,
- It would be considered unfeasible and an inappropriate use of public funds to remove the sewer pump station and reconstruct it elsewhere,
- The land exchanged is now developed as part of a residential home site and would require likely condemnation to buy back the property.

3.2 Proposed Alternative

Under the proposed alternative, the Conversion Areas would be replaced by the Foley Neighborhood Park Property, located one-and-a-half miles west of the Conversion Areas (Figure 4). NPS will make the final determination as to whether to remove federal protection from the Conversion Areas and transfer it to the replacement park.

3.2.1 Description of Salmon Creek Greenway

The Conversion Areas are located on county owned land within Salmon Creek Community Park and Salmon Creek Regional Park, both of which lie in the Salmon Creek Greenway (Figure 2). Salmon Creek Greenway Regional Park is located approximately 5 miles north of downtown Vancouver. The greenway extends from Lake River on the west to Klineline Pond just east of Interstate-5 (I-5). The County ownership within the greenway is over 600 acres. Both Salmon Creek Regional Park and Salmon Creek Community Park are located within the

greenway. Figure 2 shows the boundaries of the regional and community parks within the greenway. Site improvements at the Salmon Creek Regional Park include an extensive trail system, swimming and fishing pond, lawn and informal picnic areas, concession stand, bath house, group shelter, maintenance warehouse, and parking areas. Salmon Creek Community Park includes league ball fields, trails, and a parking lot.

The current Klineline Pond and its immediate vicinity were extensively mined for gravel until the early 1970s. Klineline Pond and other ponds are remnants of this historical mining activity. In the first half of the twentieth century, the general area was sparsely populated, with a few homes to the south. Most of the land to the south and north of the current park was used for agriculture. Development of ball fields and other amenities within the park began in earnest in the 1970s, with much of park infrastructure in place by the late 1980s. Klineline Pond has become one of Clark County's most heavily used swimming and fishing areas. The pond provides a year-round trout fishery and swimming beach.

The portion of the greenway between Seward Road and NE 20th Avenue has been associated with numerous state and federal acquisition and development grants, consisting of approximately 430 acres (based upon current assessor data).

The Conversion Areas footprint is composed of two areas: the Salmon Creek sewer pump station, referred to as Area A in this report; and the land sold to the adjacent property owner as part of a land exchange, referred to as Area B in this report. Both areas are located in the eastern portion of the Salmon Creek Greenway in Township 3 North, Range 1 East, Section 27 in the Willamette Base and Meridian (W.M.) (Figure 1). The converted areas are shown on Figure 3. Area A is north of NE 117th Street and approximately 1,000 feet west of I-5. Area B is north of NE Bassel Road and approximately 3,000 feet west of I-5. The total acreage of the Conversion Areas is 1.126 acres (1.016 acres at Area A and 0.11 acres at Area B). The market value of the converted areas at the time of conversion was $20,250.[3]

Prior to conversion, the areas were in undeveloped portions of the Salmon Creek Community and Regional Parks that were used for passive recreation. Park users had open access to the Conversion Areas, but there were no formal recreational facilities constructed on these sections of the park. Historical photographs dating back to 1930s show that both Areas A and B were

[3]Area A was appraised in May 2006 by Mulligan and Associates Appraisal Co, Inc. at $16,250. The appraisal was conducted in accordance with the Uniform Appraisals Standards for Federal Land Acquisitions (UASFLA) and LWCF requirements.
Area B was appraised prior to the Jeffries land exchange in May 1997 by Dean Potter at $4,000 and affirmed by Lowell Weiss in July, 1997.

undeveloped spaces largely dominated by grasses with some native trees and shrubs (Appendix B).

3.2.2 Area A - Salmon Creek Sanitary Sewer Pump Station

Area A includes the actual Salmon Creek Sanitary Sewer Pump Station (within tax parcel 189470) and the property extending up to NE 117th Street (within tax parcel 189476). The total acreage of Area A is 1.016 acres. The pump station is located within a 0.65-acre fenced enclosure. Six-foot-high brick walls enclose the pump station, screening the entrance and equipment associated with the pump station. There is a gated entry from the north. Within the fenced area, the entire surface is impervious consisting of buildings and paved areas. Prior to the pump station being constructed, this portion of Area A was a degraded grass field with a few Douglas-fir saplings and no defined recreational use. The area had been heavily impacted by mining. The hillslope to the south between the pump station and NE 117th Street is vegetated with native trees and understory vegetation and was not impacted by the construction of the pump station. To the east of Area A are the caretaker's residence and a public parking lot for the Salmon Creek Regional Park. To the west are stormwater wetlands. Immediately to the north is the overflow parking lot for the park and open undeveloped space, with the remainder of the park and the Klineline Pond further north.

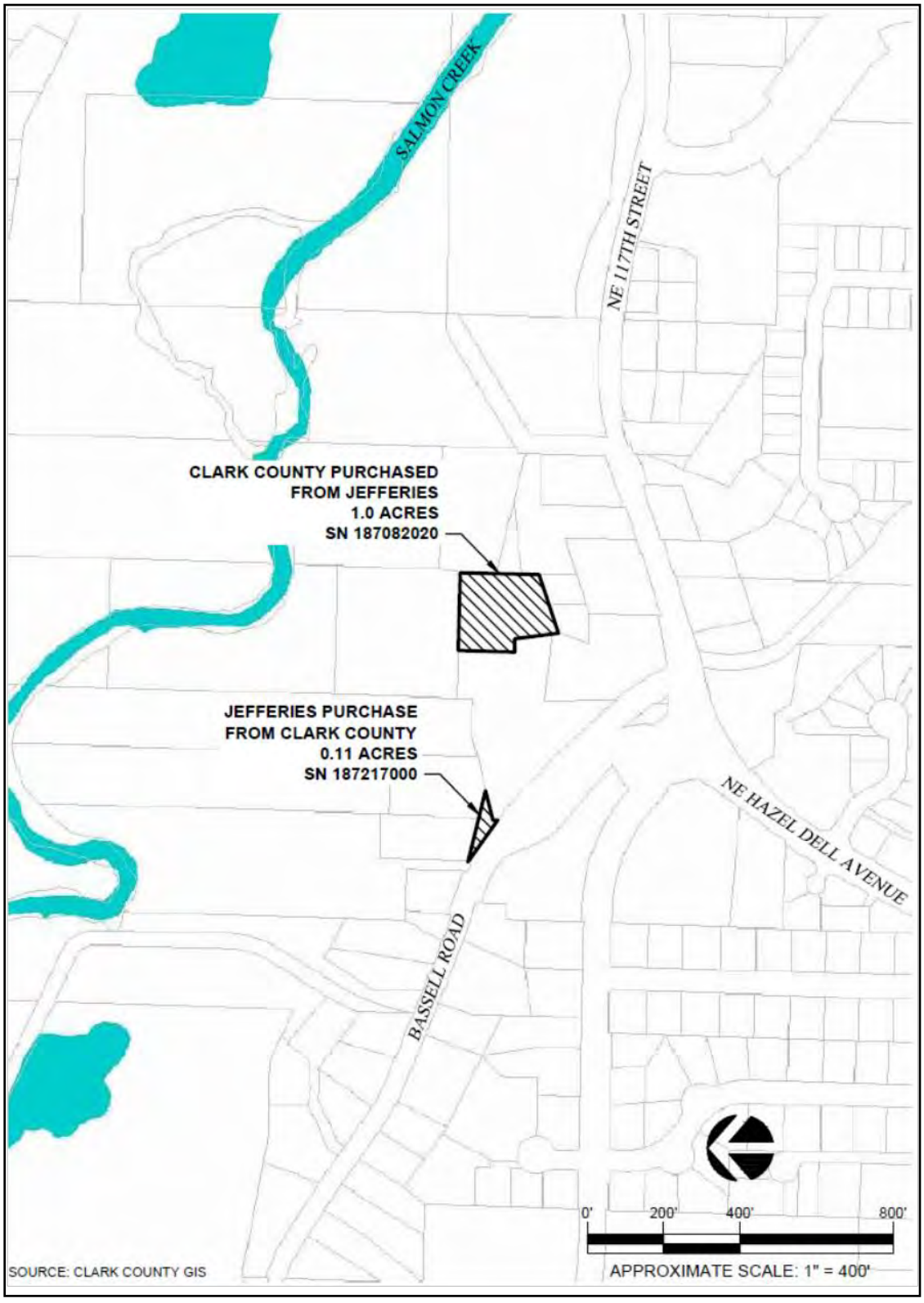
Area A: Klineline Pump Station

3.2.3 Area B – Jeffries Land Exchange

Area B is a small triangular 0.11-acre property located on tax parcel 187217000, bordering NE Bassel Road to the north, 150 yards west of the intersection of NE 117th Street with NE Bassel Road. It is up on the hillside and bordered by the landowner residence to the east, a stormwater pond at the bottom of the slope to the north, and other residences to the west. The exchange was initiated in an effort to consolidate park ownership. The Jeffries' owned property more interior to the greenway that they were willing to sell to the county in exchange for purchase of the property along NE Bassel Road (Area B). The exchange was based upon the fair market value of the properties at the time of the exchange. Area B was sold to the landowner and is now part of a residential development lot with landscaped lawn and a driveway. The property acquired from the landowner is now part of the greenway, adjacent to the ball fields and partially used for a stormwater wetland. Figure 5 shows the properties that were included in the land exchange with the Jeffries.

Area B: Sold to Jeffries as Part of Land Exchange

Figure 5: Jeffries Land Exchange Properties



3.2.4 Description of Foley Park

Under the preferred alternative, the Conversion Areas would be replaced by the Foley Property, located one-and-a-half miles west of the Conversion Areas (Figure 4). The 4.4 acres now comprising Foley Neighborhood Park was originally part of the 10-acre Foley property, and was purchased by the County in 2006. The property was valued at 1.5 million.[4] The Foley family has retained ownership of the remaining 5.6 acres of their land. A vital factor in the decision making was the owner's willingness to release the selected section of their property to the VCPRD. The idea of the property being maintained as a resource for public recreation in perpetuity rather than developed as a subdivision was favorably perceived by the Foley family.

The Foley property is eligible to be used as replacement property as NPS allowed the county to purchase the property for the conversion replacement prior to a final NPS decision. The county's purchase of the property was at the county's sole discretion and did not predetermine NPS' decision to accept the property as suitable replacement property for the conversion.

Foley Neighborhood Park is located at 12019 NW 21st Avenue in the community of Felida just north of Vancouver, Washington, 0.07 miles north of the intersection of NW 119th Avenue and NW 21st Street (Figure 4). The property is located in Township 3 North, Range 1 East, in the southeast quarter of Section 28, W.M. The park was named in honor of Hubert and Ople Foley, who farmed and preserved this acreage for nearly 50 years.

The farm, mainly a pear orchard, originally included 500 pear trees, but also was used to grow varieties of apples, peaches, Italian plums, and cherries (Appendix C). The property represented one of the few remaining undeveloped sites in the area that was both centrally located and suitable for a neighborhood park. It is also the only Clark County park property that includes a community orchard. The property offers an impressive view of Mount St. Helens to the northeast and the southern Washington Cascade Range.

[4] The Foley Neighborhood Park Replacement Property was appraised in July 2006 by PGP Valuation Inc. The appraisal was conducted in accordance with the Uniform Appraisals Standards for Federal Land Acquisitions (UASFLA) and LWCF requirements. The Replacement Property was appraised at $1,579,000. The appraisal value was confirmed by Mulligan and Associates Appraisal, Inc.

Entrance to Foley Neighborhood Park

Fruit orchard at Foley Neighborhood

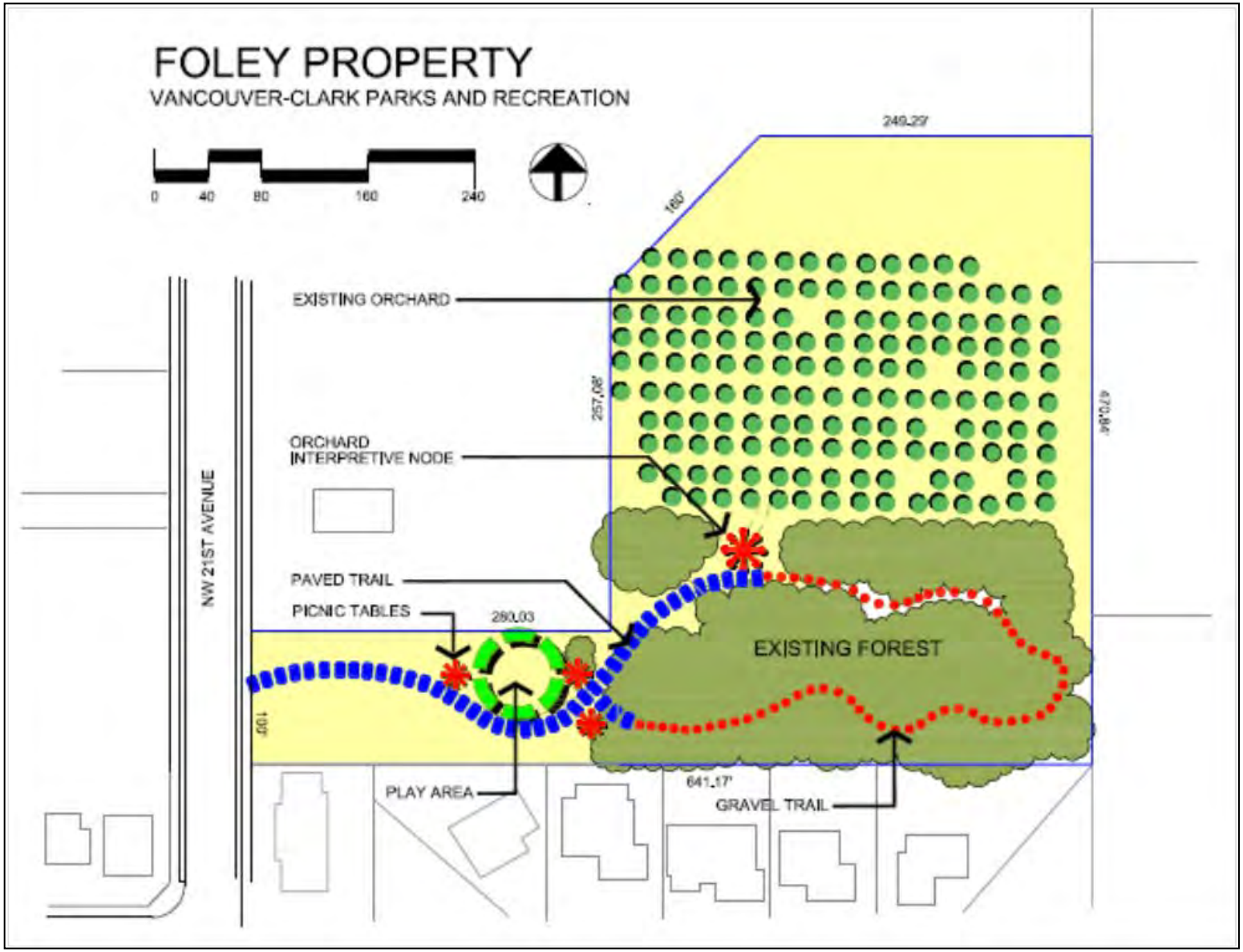
The park is currently open and available for recreation use. It has been developed with minimal improvements to date. There is a small gravel parking area and a fence around the park. The park includes open space, a wooded tree grove, and an orchard of pear and other fruit trees. The neighborhood park is intended to serve as a walk-to and bike-to facility with a half-mile radius service area. Proposed future improvements to the park may include play equipment, benches, walking trails, open grass areas, and shade trees. A portion of the developed property may also be set aside to accommodate a community garden, though no specific park development is planned at this time. Any future park improvements are dependent upon funding. At the time funding becomes available for future development; a formal master planning process will take place, which will include an extensive public involvement process. A conceptual plan of possible park improvements is shown in Figure 6.

The proposed property was selected because it met the standards of the Vancouver-Clark Parks and Recreation Comprehensive Plan and fulfilled the requirements set forth by the NPS and RCO for the suitability of the Replacement Property. The area of the Replacement Property (4.4 acres) exceeds that of the Conversion Areas (1.216 acres). The value of the Conversion Areas ($20,250) is far less than that of the replacement property ($1,579,000). The Foley property is in the proximity of the Conversion Areas and will provide equivalent resources for passive recreation, including open space for undefined recreational use, paved and gravel trails, as well as picnic tables and a play structure.

Future development of the Foley Property will be in accordance with The State Comprehensive Outdoor Recreation Planning (SCORP) goals, which aim to achieve successful outdoor recreation and to protect the resources that provide the recreation. Transferring federal protection to the Foley property would protect the park in perpetuity. SCORP supports close-to-home recreational opportunities and facilities that encourage physical activity to promote public health through

shared-use trails or paths, among others. Foley Neighborhood Park will provide all of the above by virtue of being in a neighborhood and providing walking trails that are at present conceptually part of the park development plans. The property also fulfills the VCPRD goal of providing parks within one-half mile of residents in this area of the county. The neighborhood surrounding Foley Neighborhood Park was un-served prior to the purchase of the park property.

Figure 6: Conceptual Plan for Foley Park



4 AFFECTED ENVIRONMENT

The Affected Environment section provides a description of the physical setting and information on the existing conditions for each resource of concern. For each resource, we have provided a definition of the element in the context of a NEPA environmental review and a discussion of the relevant federal laws or Executive Orders that pertain to that element.

4.1 Land Use and Zoning

Land Use is the current and planned use of a subject property as determined by the governing authorities. The policies and regulations affecting the area include comprehensive land use plans, zoning, and other relevant development ordinances. The state of Washington requires that local comprehensive plans be consistent with the goals of the State's Growth Management Act (RCW 36.70A).

This section describes existing land use plans, policies, and regulations applicable to the alternatives presented. Existing land uses in the vicinity are also described. Both Conversion Areas and Replacement Property lie within the urban growth area of the City of Vancouver. Figure 7 shows the General Comprehensive Land Use designations for Clark County in the vicinity of the Conversion Areas and Replacement Property.

4.1.1 Salmon Creek Conversion Areas

The Conversion Areas are located within the City of Vancouver Urban Growth Area. The zoning designation is Parks/WL (Wildlife District). In the first half of the twentieth century, much of the greenway and the vicinity were old pasture land with scattered patches of shrubs and trees and meandering streams with associated wetlands (Appendix B). The land in the area of Salmon Creek Greenway has been historically manipulated. Photographs dating back to the 1930s show that the east end of the developed park areas were heavily affected by gravel mining, which continued up until the early 1970s (Appendix B). Klineline Pond and many of the other ponds in the areas are remnants of the historical gravel mining. The ball fields were constructed sometime between 1977 and 1981. The greenway was officially opened to the public in 1996.

Land use in the general Salmon Creek area was primarily agricultural up until the mid-1900s, with a steady increase in residential occupation from the 1970s to the present (Appendix B). The adjacent properties currently include a mix of rural residential, pasture, and single family residential. In the recent past, the Conversion Areas were used for passive recreation and park users had open access to the undeveloped area.

To the south of the Conversion Areas, the land is developed primarily as single-family residences. To the north is Salmon Creek Regional Park, which includes Klineline Pond and Salmon Creek Community Park, which includes the softball sports complex. To the east are a combination of commercial uses, industrial uses, and residences (to the southeast). I-5 is approximately one half mile east of the Conversion Areas. Immediately west of Area B are single-family residences,

which border NE Bassel Road. The large open expanse of the greenway lies behind the homes and extends further to the west. The current comprehensive plan, land use, and zoning designations are presented in Table 1.

Table 1: Land Use and Zoning at the Conversion Areas

LOCATION	COMPREHENSIVE PLAN[1]	ZONING[2]	CURRENT LAND USE	PREVIOUS LAND USE
Conversion Areas	UL with Parks/Wildlife Overlay	P/WL	Area A (Sewer Pump Station) and Area B (Private landscaped property)	Undeveloped recreational space in public park
North of Areas A & B	P/OS	P/WL	Public park and greenway, ball fields	Public park and greenway, ball fields.
South of Areas A & B	MU	R1-6 and R-43	Residential	Residential
East of Areas A & B	GC and UH	C-3 and R-43	Stormwater detention wetlands (east of Area A only), Public Park/ Residential	Combination of commercial and industrial uses directly east and residential to the southeast
West of Areas A & B	UL with Parks/Wildlife overlay	R1-6	Stormwater detention wetlands (west of Area A only), extension of greenway, open recreational space, residences	Parks, trails, and ball fields, residential

[1] UL=Urban Low Density Residential, P/OS=Parks/ Open Space, GC=General Commercial, UH=Urban High Density, Residential, MU=Mixed Use

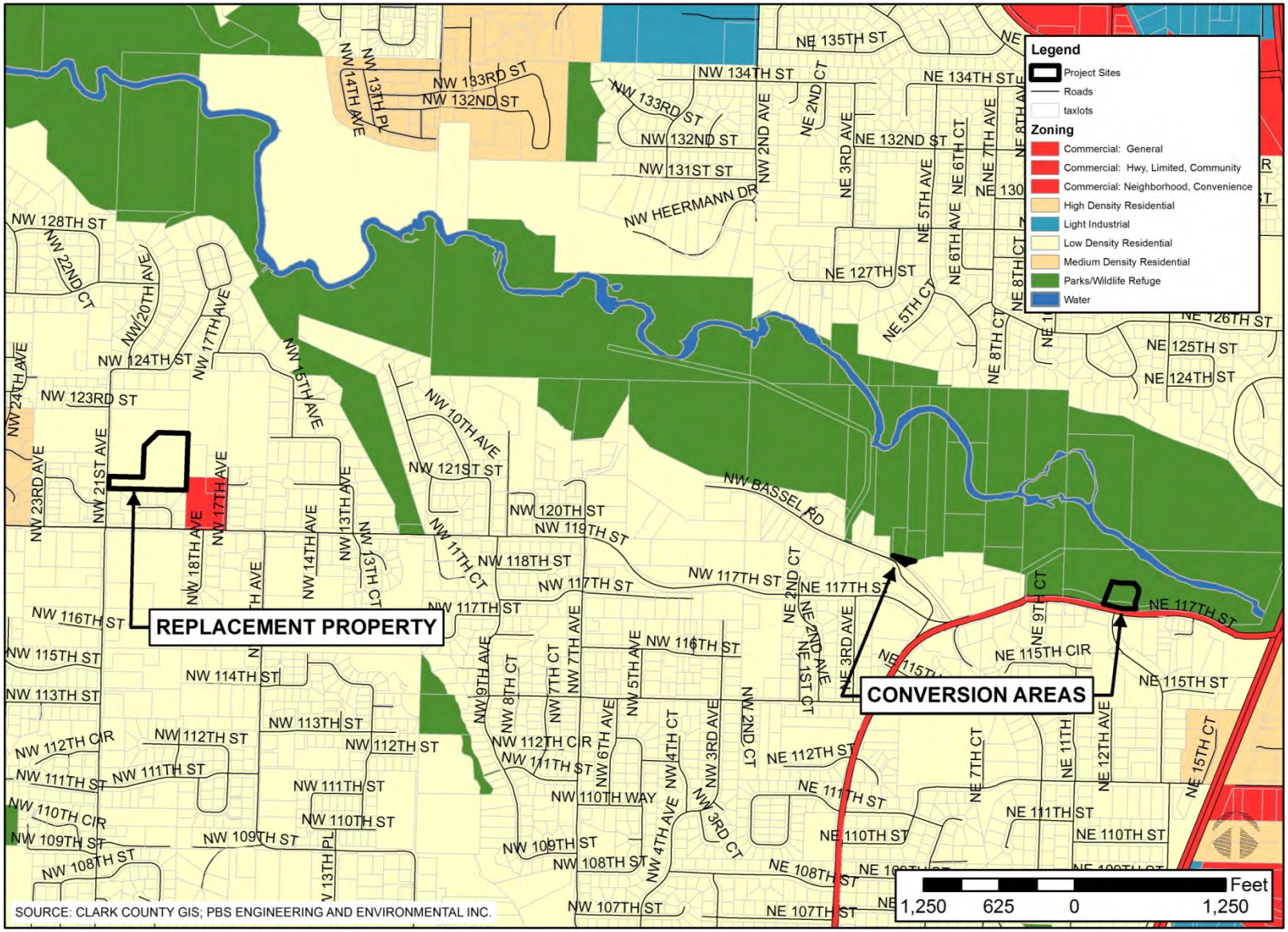
[2] P/WL= Parks/Wildlife Refuge, R1-6= Single-family Residential, R-43= Residential, C-3= Community Commercial

4.1.2 Foley Neighborhood Park Property

The Replacement Property is located in a single-family residential district (R1-10). The Comprehensive Plan designation is Urban Low Intensity Residential within the City of Vancouver Urban Growth Area. There are single-family residences around the Replacement Property, some with accompanying farmland or orchard (Appendix C).

Since its purchase by the County in 2006, Foley Neighborhood Park has served as urban open space. The entry to the park is on NW 21st Avenue to the west of the park, which opens into a grass lawn often used for informal soccer or football games by youth. The lawn leads to the community orchard, consisting of about 150 fruit trees, and has informal dog-walking trails.

Figure 7: Zoning



4.2 Geology, Seismicity, and Soils

Geology and soils refers to the potential for loss of soils and changes in geological conditions due to rock excavation, soil erosion, soil compaction, soil horizon removal, grading, and cutting and filling operations. Seismicity refers to the frequency or magnitude of earthquake activity in an area. Provisions of Clark County's Geologic Hazard Areas ordinance (CCC40.430) apply. This section provides an overview of the geologic setting including topography and soils.

4.2.1 Salmon Creek Conversion Areas

The elevation of the Conversion Areas ranges from 51 to 80 feet above mean sea level. Area A is generally flat, but gradually slopes steeply up to NE 117th Street to the south and gradually down towards Salmon Creek to the north. Area B slopes down from NE Bassel Road to the northeast and northwest.

Two near-surface geologic units are potentially present in the vicinity of the Conversion Areas: Quaternary Lacustrine Deposits and Troutdale Formation (Ash Creek Associates, Inc. 2005). The Quaternary Lacustrine Deposits are encountered as layered silts and sands. Near the surface, the Pliocene-aged Troutdale Formation consists of dense cobbles and gravels with boulders. Sandstone, conglomerate, and lesser amounts of volcanic rocks also occur within the Troutdale Formation, which underlies the Quaternary Lacustrine Deposits.

Much of Area A is mapped as fill material on the soil survey for Clark County (USDA, 2012b). The entire area between the Conversion Areas and the creek has been filled in the past and much of the area north of the creek has also been filled. These areas are identified on the soil survey as Fill Land. Fill Land is characterized as having been artificially filled with earth, clay, silt, or trash and has been smoothed over. This soil does not have any clearly defined soil characteristics and is used for urban development. The fill material present near Area A is primarily a result of the historical mining that occurred in the area from the early 1940s until the 1970s. Ash Creek Associates, Inc. (2005) found 4 to 8 feet of fill at the pump station location. This fill consisted of gravel with occasional pieces of asphalt and wood debris. Soils in the southern half of Areas A and B are mapped as Lauren gravelly loam, cemented substrate, 20 to 55 percent slopes. This soil is formed in old alluvium and volcanic ash loess on terraces and terrace fronts. A restrictive layer is found at 20 to 40 inches in the profile. The soil is moderately well drained, and fertility is low.

Clark County GIS data indicate severe erosion risk on portions of the south hillslope at Area A and just north of Area B. The northernmost portion of Area A is in an area of moderate to high liquefaction as is the area just north of Area B. Both Conversion Areas are in an area of moderate to moderately high earthquake hazard (Zones B and C) (Mabey, et al., 1994). Conclusions reached by Ash Creek Associates, Inc. (2005), which prepared a geotechnical report for

the pump station, came to different conclusions than presented in the County's GIS data. The company found no mapped landslides at the pump station or evidence of past major landslides within the project vicinity. It also determined that some limited sloughing of surface gravels may occur on the steep slope in the southern portion of Area A, but that the potential for widespread slope movement was remote. In addition, it determined that there was no liquefaction hazard at the pump station.

4.2.2 Foley Neighborhood Park Property

The elevation of the Replacement Property ranges from 212 feet to 226 feet above mean sea level. The portion of the property nearest NW 21st Avenue is generally flat and level, but the eastern portion of the property slopes downward toward to the north.

Soils at the Replacement Property include Hillsboro Silt loam 3 to 8 percent slopes (HoB) and Hillsboro Silt loam 8 to 15 percent slopes (HoC). These soils are deep, well-drained, alluvial soils, and have typically been cleared to be used for orchard, berries, nurseries, vegetables, small grain, hay, and pasture, as is the case with the Foley property.

There are no geologic or erosion hazards associated with the site. The property is not in a severe erosion hazard area, has low to very low potential for liquefaction, and has no identified landslide hazard. However, the Replacement Property is found in an area of moderately high earthquake hazard (Zone B) (Mabey, et al. 1994).

4.3 Air Quality and Climate Change

Air quality refers to the concentration of air contaminants in a specific location. Air quality is determined by the type and amount of pollutants emitted into the atmosphere, the size and topography of the air basin, and prevailing meteorological conditions. The Clean Air Act, as amended in 1990, requires the U.S. Environmental Protection Agency (EPA) to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. The NAAQS have been set for six principal pollutants: carbon monoxide, lead, nitrogen dioxide, particulate matter less than 10 microns or 2.5 microns in diameter (PM10 and PM2.5), ozone, and sulfur dioxides.

The Clean Air Act established two types of NAAQS: primary standards set limits to protect public health including "sensitive" populations (e.g., asthmatics, children, the elderly), and secondary standards set limits to protect public welfare. Any areas with pollutant levels meeting NAAQS are referred to as "attainment areas." These areas are monitored regularly for compliance. Any areas that do not meet NAAQS are called "non-attainment areas." Those areas that were previously non-attainment areas, but are now meeting NAAQS, are referred to as "maintenance areas." The General Conformity Rule, established under the Clean Air Act (Section 176(c)(4)), requires federal agencies to work with state, tribal, and local governments in a non-attainment or maintenance area

to ensure that federal actions conform to air quality plans established in the applicable state or tribal implementation plan. If the proposed action is determined to be "de minimis" with regard to air pollution, it is exempt from further action under the General Conformity Rule. The Southwest Clean Air Agency has authority over Clark County, and is responsible for enforcing federal, state, and local outdoor air quality standards in Clark County.

The urban growth area of Vancouver that includes the Conversion Areas and Replacement Property historically violated national air quality standards for carbon monoxide and ozone. Currently, however, the area meets national standards and has been designated a maintenance area for those pollutants.

In 2010, the Council on Environmental Quality (CEQ) released draft guidance on how federal agencies should consider climate change in their action decision-making. The suggested threshold whereby quantitative analysis should be done in NEPA documents is for actions releasing over 25,000 metric tons of greenhouse gases per year (CEQ, 2010). Washington State Executive Order (EO) 07-02 established goals for reducing greenhouse gas emissions, and EO 09-05 requires the state to develop emission reduction strategies to help meet the State's statutory greenhouse gas reduction limits and develop industry emission benchmarks.

Climate change can impact existing climatic conditions in the state of Washington by a rise in average temperatures and shifting weather patterns. These alterations can affect local communities by causing droughts in some areas and more rain and flooding in others. Washington State is particularly vulnerable to a warming climate, especially the snow-fed water supplies that provide drinking water, irrigation for agriculture, and nearly 75 percent of the electrical power produced in the state.

4.3.1 Salmon Creek Conversion Areas

Prior to the current use, the land at the Conversion Areas was primarily open space with a mix of grass and native vegetation. The principal sources of airborne emissions were related to motor vehicles, nearby urban and industrial centers, residential heating systems, and other gasoline and diesel-powered equipment commonly used in urban settings. The sites are adjacent to the I-5 corridor, NE Bassel Road, and NE 117th Street, and only a few miles north of Vancouver and Portland. The Conversion Areas also border a growing residential area.

4.3.2 Foley Neighborhood Park Property

The Affected Environment for the Replacement Property is similar to the Conversion Areas; however, the Replacement Property is farther from I-5 and is an area with a higher density of housing.

4.4 Water Resources

4.4.1 Salmon Creek Conversion Areas

4.4.1.1 Surface Waters

The nearest surface water to the pump station is Salmon Creek, a Type S or a shoreline of the state (Figure 8). Salmon Creek flows generally east to west approximately 150 and 350 feet to the north of the pump station. Salmon Creek is approximately 500 feet north of Area B. Suds Creek, a tributary to Salmon Creek is the nearest surface water to Area B. The stream is approximately 150 feet north of Area B at the bottom of a steep slope.

4.4.1.2 Floodplains

The Federal Emergency Management Agency (FEMA) uses Flood Insurance Rate Maps (FIRMs) to identify the 100-year floodplain for the National Flood Insurance Program. Both Areas A and B are outside of the 100-year floodplain for Salmon Creek (Figure 9).

4.4.1.3 Wetlands

The Resource Company, Inc. (Berger, 2003) delineated wetlands and waters in the vicinity of Area B in 2002 in support of the road widening project along NE 117th and NE 119th Streets. Five wetlands were identified along Suds Creek in the vicinity of Area B (Figure 10). These wetlands are part of the larger complex of wetlands along Salmon Creek (Figure 11). The nearest wetland to Area B is a small palustrine emergent wetland (Wetland B) located approximately 100 feet east of the Area B along NW Bassel Road. No wetlands were present at the pump station immediately prior to conversion activities. The nearest wetlands to Area A are along Salmon Creek to the north.

4.4.1.4 Groundwater

Groundwater in the vicinity of the pump station is mapped on the Clark County GIS at approximately 10 feet below the surface. Ground water levels would be further from the surface at Area B because it is located at the top of a steep slope. Areas A and B are located in a Category I Critical Aquifer Recharge Area (CARA), which is the highest priority CARA denoting a one-year travel time to Group A public water wells (i.e., those with more than 14 service connections and serving more than 25 people throughout the year).There are several prohibited activities in Category I CARAs. The site is also within the 1-year wellhead protection zone.

4.4.1.5 Stormwater & Water Quality

Prior to development, the Conversion Areas would have received stormwater inputs from the roads, hillslopes, surrounding park land, and other impervious areas. Both properties are down gradient from the roads

to the south. There was no treatment of runoff from the nearby road surfaces prior to the conversion activities. The reach of Salmon Creek near the Conversion Areas is on the State 303(d) list of impaired waterbodies for fecal coliform. Downstream of the Conversion Areas, Salmon Creek is listed as impaired for temperature, turbidity, and fecal coliform. Total maximum daily loads have been established for all three water quality constituents (Howard 2005, Stohr et al. 2011).

4.4.2 Foley Neighborhood Park Property

4.4.2.1 Surface Waters

There are no surface waters at the Foley Park Replacement Property (Figure 8). The nearest surface water to the Replacement Property is a small unnamed tributary to Salmon Creek, located about 625 feet northwest of the property. Cougar Creek, a larger tributary to Salmon Creek is located approximately 1,200 feet to the northeast. Most of the property would drain north to the smaller tributary, but the southeast portion of the site would drain toward Cougar Creek.

4.4.2.2 Floodplains

The Replacement Property is outside of the 100-year floodplain for Salmon Creek (Figure 9). There are no mapped floodplains for the tributary streams.

4.4.2.3 Wetlands

There are no wetlands on the Replacement Property. The wetland inventory for Clark County shows the nearest wetland approximately 400 feet southeast of the Replacement Property (Figure 10). Numerous scattered wetlands are also present over 650 feet from the site to the south and southeast. Even farther from the site, wetlands are present along Cougar Creek and Salmon Creek. The National Wetland Inventory only identifies wetlands along Salmon Creek.

4.4.2.4 Groundwater

The Replacement Property sits on top of a hill. Groundwater is mapped at approximately 40 feet below the surface on the Clark County GIS. The Replacement Property lies within a Category II CARA, which is a primary CARA, denoting a 5 to 10-year time of travel to Group A public water wells. This area consists of unconsolidated sedimentary aquifer and the Troutdale gravel aquifer. There are no prohibited activities in Category II CARA areas, but there may be other limitations as identified in the County code.

Figure 8: Surface Water Bodies

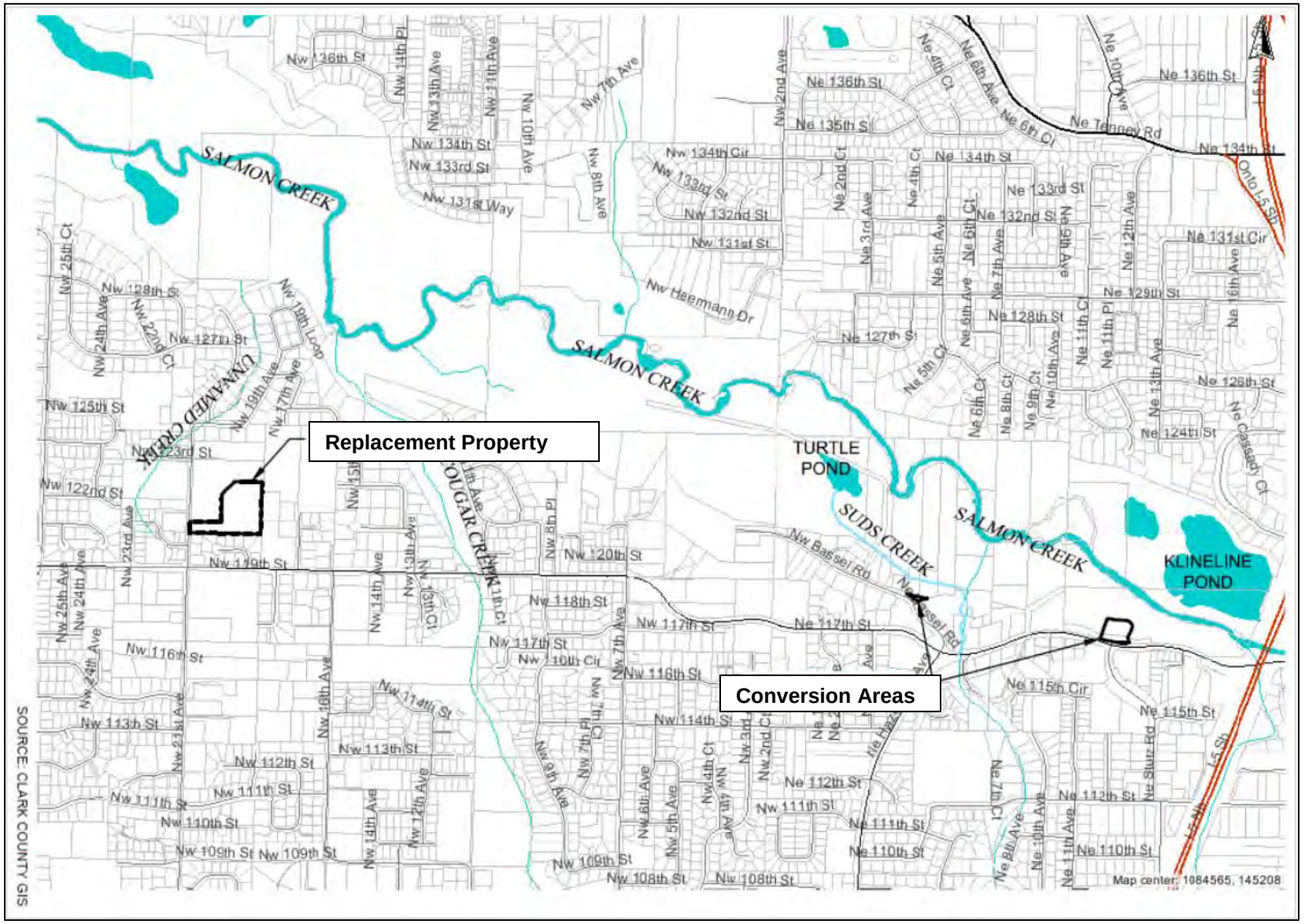


Figure 9: Floodplains

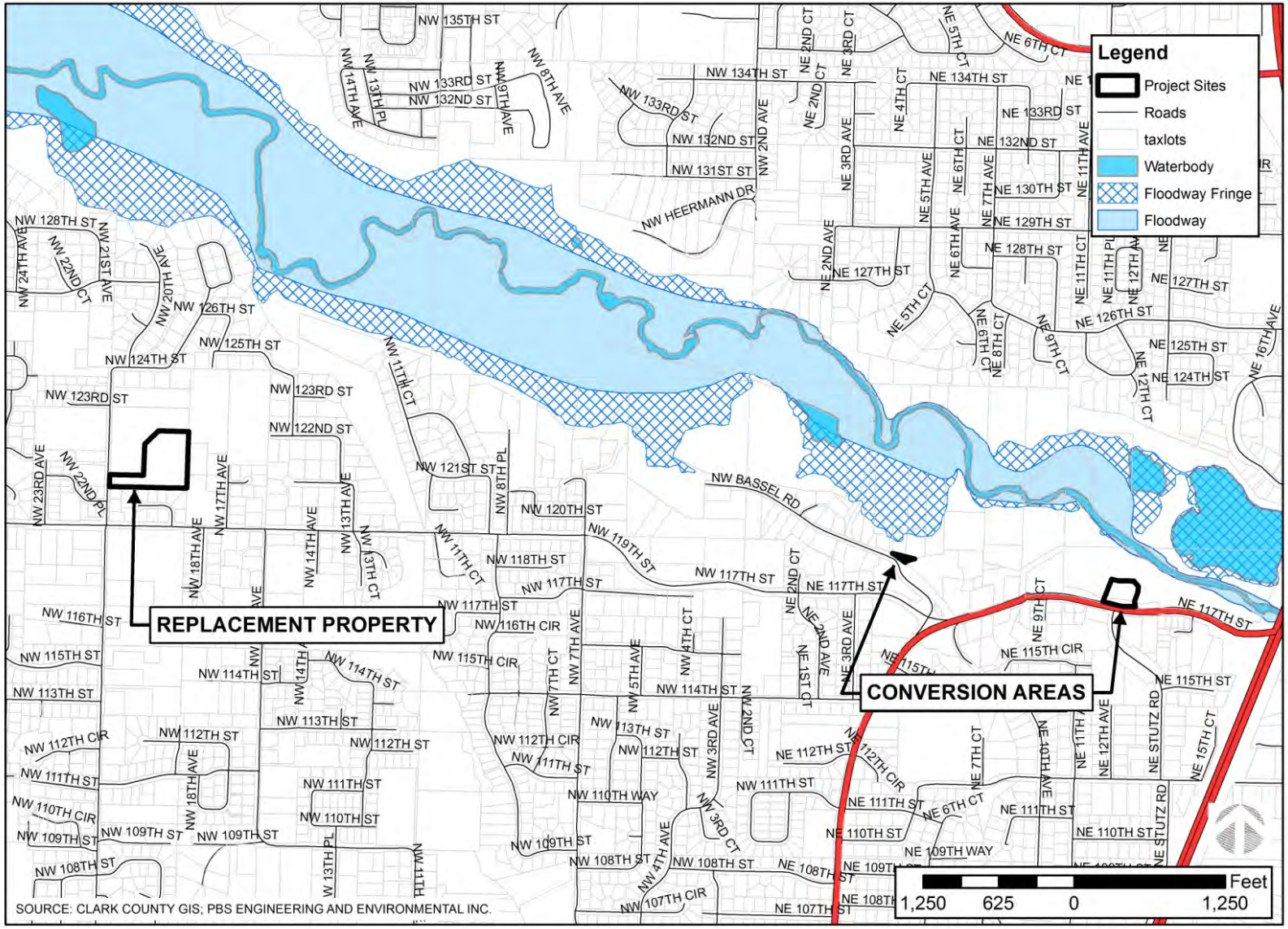


Figure 10: Mapped Waters/Wetlands in the Vicinity of Area B

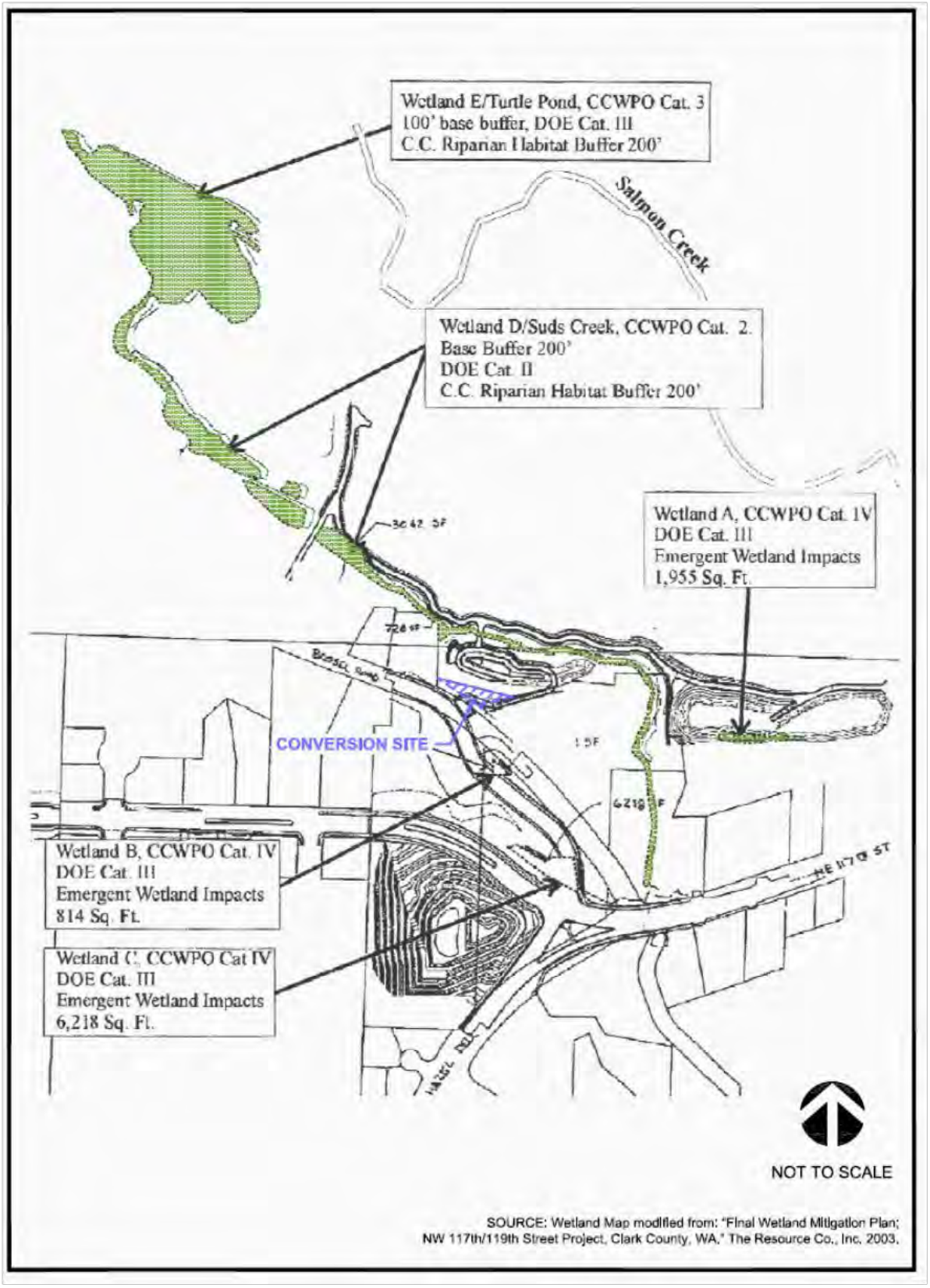
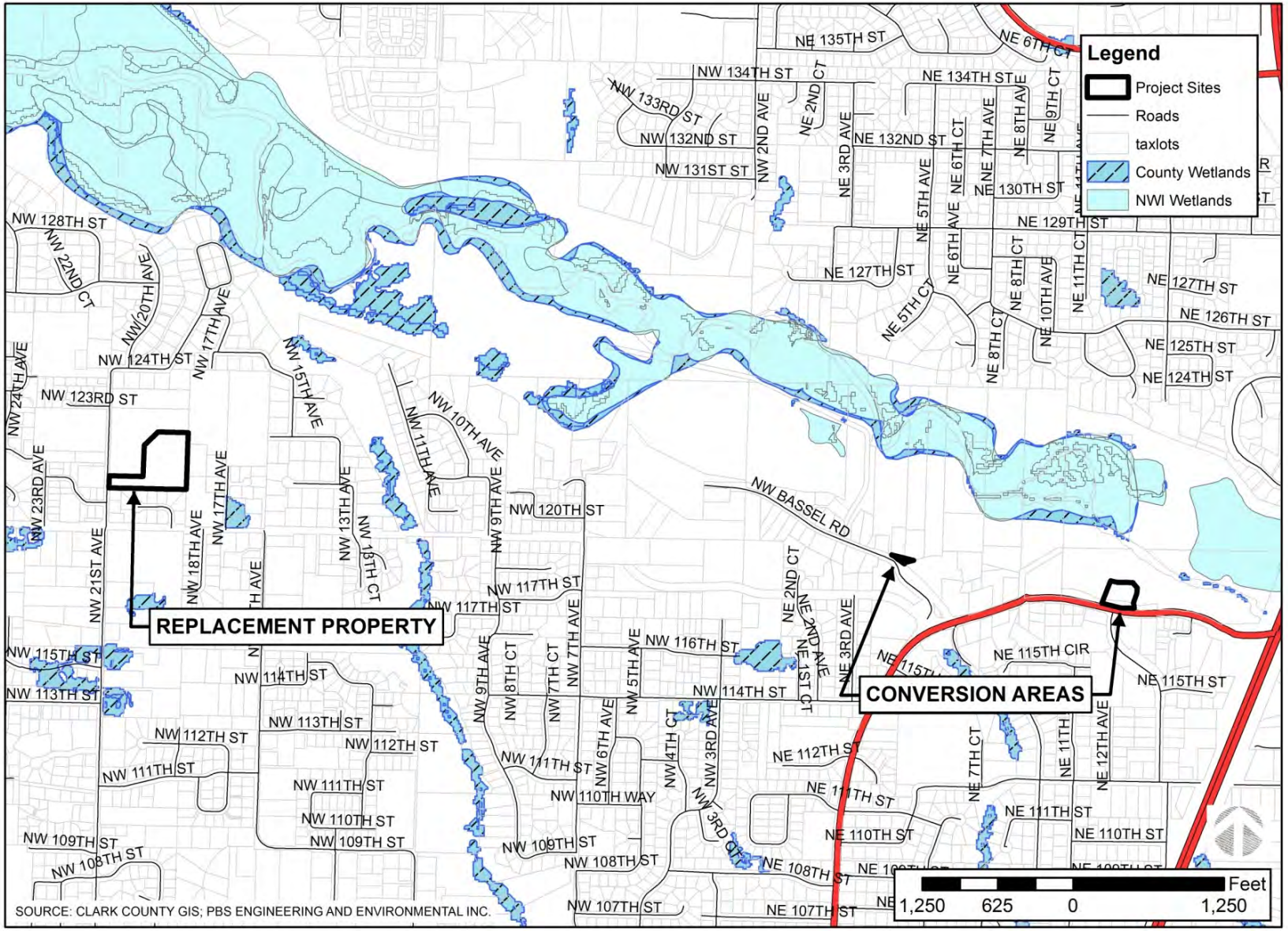


Figure 11: National Wetland Inventory and County Mapped Wetlands



4.4.2.5 Stormwater & Water Quality

Slopes at the Replacement Property are generally less than 10 percent. There is no existing impervious surface at the site. It is unlikely that stormwater would either enter or exit the property under the existing condition. The majority of the precipitation falling on the site currently infiltrates into the ground.

4.5 Biological Resources

Biological resources include the plants and animals with a permanent or transient presence in the Conversion Areas and Replacement Property. Several federal directives and laws pertain to plants and animals potentially affected by a project with a federal nexus. The Endangered Species Act (ESA) establishes a program to conserve, protect, and restore threatened and endangered plant and animal species and their habitats. Section 7 of the ESA (50 CFR 402) requires federal agencies to ensure that actions they authorize, fund, or carry out do not jeopardize the continued existence of listed plant and animal species and do not result in adverse impacts to designated critical habitat. Analysis is completed through a biological evaluation of the sites and alternative actions. The U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) share regulatory responsibility for the protection of special-status plant and animal species, which are designated for protection, because they are rare and/or subject to population or habitat declines. The State Washington Department of Fish and Wildlife (WDFW) also has responsibility for managing state-identified Priority Habitat and Species and state-listed species.

Information on sensitive species was obtained from National Marine Fisheries, the U.S. Fish and Wildlife Service, and Washington Department of Fish and Wildlife (NMFS, 2012; USFWS, 2012; WDFW, 2012).

Eleven sensitive species of plants, fish, and wildlife could be potentially found in the general vicinity of the Conversion Areas and Replacement Property (Table 2). Only four of the species have a confirmed presence in the area. The other species may be present or were historically present. Bull trout and northern spotted owl are absent from the project vicinity, because the area lacks suitable habitat.

The Brush Prairie pocket gopher is found in the watershed, but suitable habitat is not available in the project area. The USFWS has also proposed removing the pocket gopher from the candidate species list.

Table 2: Sensitive Plants, Fish, and Wildlife Species Identified by the USFWS and NMFS as Occurring in Clark County

SPECIES COMMON NAME (*SCIENTIFIC NAME*)	FEDERAL STATUS[2]	STATE STATUS[2]	DESIGNATED CRITICAL HABITAT	SPECIES PRESENCE IN PROJECT VICINITY
Plants				
Water howellia (*Howellia aquatilis*)	T	T	No	No suitable habitat prior to conversion
Bradshaw's lomatium (*Lomatium bradshawii*)	E	E	No	No suitable habitat
Fish				
Bull trout (*Salvelinus confluentus*) Columbia River DPS[1]	T	C	Yes	Present in Lewis River but no known presence in Salmon Creek. No critical habitat in Salmon Creek.
Chinook salmon (*Oncorhynchus tshawytscha*) Lower Columbia River ESU[1]	T	C	Yes	Possible presence in Salmon Creek; although abundance unknown. No Chinook salmon were observed in monitoring of adults from 2008 to 2010 at Klineline Bridge upstream. No critical habitat in Salmon Creek.
Coho salmon (*Oncorhynchus kisutch*) Lower Columbia River ESU	T	—	Under Development	Present in Salmon Creek, presumed presence in Cougar Creek.
Steelhead (*Oncorhynchus mykiss*) Lower Columbia River ESU	T	C	Yes	Present in Salmon Creek (breeding) and Cougar Creek. No critical habitat in Salmon Creek.
Chum salmon (*Oncorhynchus keta*) Columbia River ESU	T	C	Yes	Presumed presence in Salmon Creek
Cutthroat trout (*Oncorhynchus clarki*)	C		N/A	Present in Salmon Creek and Cougar Creek
Mammals				
Brush Prairie pocket gopher (*Thomomys mazama* ssp. *douglasii*)	C	—	N/A	The project areas are miles from any known habitat, and there is no suitable habitat at project areas. USFWS has proposed removing the Brush Prairie pocket gopher from candidate species list, because current evidence does not indicate it as a member of *T. mazama* (77FR73770).
Birds				
Bald eagle (*Haliaeetus leucocephalus*)	SC	S	N/A	Conversion Areas: nest Approx.3,300 feet from pump house and 2,000 feet from Area B. Foley Park: communal roost Approx. 1,000 feet.
Northern spotted owl (*Strix occidentalis caurina*)	T	E	Yes	No suitable habitat in vicinity

[1] DPS=Distinct Population Segment; ESU=Evolutionarily Significant Unit
[2] E=Endangered, T=Threatened, C=Candidate, SC=Species of Concern

The two listed plant species historically known to occur in Clark County, water howellia and Bradshaw's lomatium, have very different habitat requirements. Water howellia grows in areas that were once associated with glacial potholes and former river oxbows that flood in the spring, but usually dry at least partially by late summer. It is often found in shallow water (i.e., 3 to 6 feet deep) and on the edges of deep ponds that are partially surrounded by deciduous trees, such as black cottonwood. Bradshaw's lomatium is found in wet prairie habitat on sites that have heavy clay soils or a dense clay layer below the surface that results in seasonal hydric soils. The majority of populations occur on seasonally saturated or flooded prairies adjacent to creeks and small rivers.

Executive Order 13112 (Invasive Species) requires federal agencies to avoid activities that are likely to cause or promote the introduction or spread of invasive species. The Washington State Noxious Weed Control Board is responsible for maintaining the state's official list of noxious weeds that landowners may be required to control. Clark County Vegetation Management is responsible for controlling noxious weeds in the county. The mission of the program is to prevent and limit the spread and impact of invasive exotic plant species (noxious weeds). Class A weeds have a limited distribution in the state and state law requires that they be eradicated. Class B weeds are regionally abundant, but may have limited distribution in some counties. The goal is to contain the distribution of the Class B weeds to prevent their spread into new areas. Class C weeds are already widespread in the state, so control is optional.

The Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) requires federal agencies to consult with the NMFS on any activities or proposed activities authorized, funded, or undertaken by the agency that have the potential to adversely affect essential fish habitat (EFH).

The Migratory Bird Treaty Act (MBTA) provides that it is unlawful for anyone to kill, capture, collect, possess, buy, sell, trade, ship, import or export, any migratory bird, or part, or nest or egg thereof, unless a federal permit is first obtained authorizing such actions pursuant to the MBTA regulations. This prohibition includes both direct and indirect acts, with the exception of habitat modification and harassment, unless they result in the direct loss of birds, nests, or eggs. The current list of species protected by the MBTA essentially includes all native species in the state of Washington. The Bald and Golden Eagle Protection Act of 1940 prohibits the taking, possession, or commerce of both bald and golden eagles.

4.5.1 Salmon Creek Conversion Areas

The Conversion Areas are located in an urbanizing area just north of the City of Vancouver, near the I-5 corridor. The riparian corridor of Salmon Creek supports native plant communities and provides habitat for wildlife. While the Conversion Areas are located close to this riparian corridor, they are separated from the creek and associated natural areas by parking lots and ball fields. The Conversion Areas are located at the southern edge of the park bordering roads and residential development to the south.

4.5.1.1 Vegetation

Both of the Conversion Areas had been disturbed in some manner for at least 10 years prior to conversion activities, sometimes for a significantly longer period. Historical aerial photographs show disturbance of Area A dating back to the 1940s. The southern portion of Area A is less disturbed and slopes up to NE 117th Street. This slope is mostly forested with a mix of native and non-native species. Area B appears to have been cleared for agriculture early in the 1900s. Prior to conversion, the area supported grasses and some native trees. A portion of the property was cleared in 2005 to provide access to the stormwater wetland pond to the north. No appropriate habitat would have existed at the Conversion Areas for either of the two listed plant species prior to conversion activities.

4.5.2 Salmon Creek Conversion Areas

The Conversion Areas are located in an urbanizing area just north of the City of Vancouver, near the I-5 corridor. The riparian corridor of Salmon Creek supports native plant communities and provides habitat for wildlife. While the Conversion Areas are located close to this riparian corridor, they are separated from the creek and associated natural areas by parking lots and ball fields. The Conversion Areas are located at the southern edge of the park bordering roads and residential development to the south.

4.5.2.1 Vegetation

Both of the Conversion Areas had been disturbed in some manner for at least 10 years prior to conversion activities, sometimes for a significantly longer period. Historical aerial photographs show disturbance of Area A dating back to the 1940s. The southern portion of Area A is less disturbed and slopes up to NE 117th Street. This slope is mostly forested with a mix of native and non-native species. Area B appears to have been cleared for agriculture early in the 1900s. Prior to conversion, the area supported grasses and some native trees. A portion of the property was cleared in 2005 to provide access to the stormwater wetland pond to the north. No appropriate habitat would have existed at the Conversion Areas for either of the two listed plant species prior to conversion activities.

4.5.2.2 Fish and Wildlife

Fish are present in Salmon Creek and Suds Creek. Salmon Creek supports runs of coho salmon and steelhead (Table 2). Both species have been observed at Klineline Bridge (NE Highway 99) and farther upstream. Chum and Chinook salmon, if present in Salmon Creek, would be found in low numbers and then likely downstream of the Conversion Areas. Resident cutthroat trout, another priority fish species, is found in both streams. Portions of Area A fall within the riparian habitat conservation area for Salmon Creek. Suds Creek does not support any listed fish

species, but is identified by WDFW as part of the Lower Salmon Creek Tributaries biodiversity area.

Many species of wildlife are found in the greenway. Mammals present in the area likely include black-tailed deer, rabbits, raccoons, opossums, beavers, nutria, and many smaller mammalian species. Bald eagles currently nest and roost within a mile of the Conversion Areas and have likely done so in the past (Table 2). Migratory songbirds (i.e., passerines) probably utilized the riparian areas and the nearby trees and landscaping for perching, feeding, and nesting. Waterfowl would have been present in Klineline Pond, Salmon Creek and other ponds, and they might have used some of the open grass fields for feeding. The habitat present prior to conversion at the pump station (i.e., mostly mown grass and shrubs) would have provided limited habitat value for most wildlife, because cover was limited, structural diversity was low, and food sources were limited. The slope in the southern portion of the pump station supports native trees, but would have low habitat value due to its proximity to roads and developed areas. Habitat might have been suitable to support populations of small mammals, such as voles, mice, rats, moles, and rabbits. If so, hawks, owls and other avian predators would have benefited. The proximity to developed areas and lack of a direct connection to the Salmon Creek riparian zone would have further limited the habitat value of the Conversion Areas.

4.5.3 Foley Neighborhood Park Property

The Foley Neighborhood Park Replacement Property is located in an area of residential and rural residential properties. The property is more than a quarter mile from both Cougar Creek and Salmon Creek. The riparian zones along these creeks represent the only significant native vegetation or habitat in the vicinity of the Replacement Property. The Cougar Creek riparian zone is rather narrow, but there is a much larger undeveloped area bordering Salmon Creek that provides habitat for native species. The land surrounding the Foley Neighborhood Park Replacement Property has undergone a transition from rural agricultural land to residential development over the last 50 years.

4.5.3.1 Vegetation

The Foley Neighborhood Park Property currently supports a fruit and nut orchard, old garden areas, naturalized forest, and mown grass fields. There are a few native Douglas-fir and black cottonwood trees, but native tree species are limited. Weed species currently present include English ivy, English hawthorn, Himalayan blackberry, evergreen blackberry, English holly, and Canada thistle. All but the English hawthorn and English holly are designated Class C noxious weeds. Some of these species (i.e., Himalayan blackberry and English ivy) are well established, but not so widespread that the species are unmanageable. No

appropriate habitat exists for either of the two Clark County listed plant species (Table 2).

Invasive English hawthorn and English ivy at Foley Park

4.5.3.2 Fish and Wildlife

The Replacement Property provides no habitat for fish but does provide some, mostly low quality, habitat for wildlife. There are no streams on the property and the site is not adjacent to any riparian areas. Stormwater runoff is unlikely given the lack of impervious surface, so potential stormwater effects on fish are unlikely. There is an identified eagle communal roost area approximately 1,200 feet north of the Replacement Property. The grass fields, orchard, and naturalized forest might provide some habitat for deer, small mammals, and passerine birds. The orchard and naturalized forest likely attract some wildlife, but habitat value would be limited, because of the proximity to developed areas and lack of native species, and direct connection to any other habitat areas. The property has no suitable habitat for listed fish and wildlife species (Table 2).

4.6 Recreation

Portions of Salmon Creek Greenway were purchased under the Land and Water Conservation Fund Act of 1965. The Act assists the states and local governments in preserving and developing recreational properties that will assure all citizens accessibility to quality outdoor recreation resources. As mentioned earlier, Section 6(f)(3) specifically states that no property acquired or developed under this section shall, without the approval of the Secretary, be converted to other than public outdoor recreation uses. The Conversion Areas were part of the property acquired under the Act. The Project Agreement for the land acquisition requires the County to operate and maintain the acquired land, including the Conversion Areas, as follows:

a. The property or facilities shall be maintained so as to appear attractive and inviting to the public.

b. All facilities shall be built and maintained in accordance with applicable state and local public health standards and building codes.

c. The property or facilities shall be kept reasonably safe for public use.

d. Buildings, roads, trails and other structures and improvements shall be kept in reasonable repair throughout their estimated lifetime, so as to prevent undue deterioration that would discourage or prevent public use.

e. The facility shall be kept open for public use at reasonable hours and times of the year, according to the type of area or facility.

f. The property or facility shall be open to everyone without restriction because of race, creed, color, sex, religion, national origin, handicap, or residence of the user.

g. The Public Agency agrees to operate and maintain the facility in accordance with all applicable federal, state, and local laws and regulations.

A central question of this EA is whether the proposed replacement will adequately compensate for the loss of recreational resources associated with development and sale of the Conversion Areas. The recreational resources at both Areas A and B have been removed in perpetuity and are no longer available for recreational use.

The State Comprehensive Outdoor Recreation Planning (SCORP) document defines principles and policies set forth by the RCO to help the state of Washington achieve success in providing outdoor recreation and protect the resources on which recreation depends. Statewide surveys (SCORP 2002 and RCO 2007) identified walking and hiking as the most popular recreational activity among the surveyed population. Nature-related activities such as photography and observing nature also fared as popular recreational activities among a third of the survey participants. Some of the other popular activities included team/individual sports, picnicking, water activities, indoor community facility activities, and bicycle riding.

Mitigation for the loss of park land and passive recreational uses will be provided by recreational resources at the Foley Neighborhood Park Replacement Property.

4.6.1 Salmon Creek Conversion Areas

The land associated with the pump station was acquired to expand the Salmon Creek Greenway using RCO Grant #76-023A. The land would add to existing County ownership in the Salmon Creek Greenway. Figure 2 shows the Salmon Creek Greenway.

Historical aerial photographs dating back to the 1930s shows Salmon Creek meandering through the valley bottom and floodplain wetlands with permanent and seasonal connections with the creek (Appendix C). Extensive gravel mining took place until the early 1970s along portions of Salmon Creek, which included the vicinity of the Conversion Areas. Efforts have been undertaken since then to redevelop the area for recreational use. Ball fields and the Klineline Pond were

constructed in late 1970s. The greenway was officially opened for public use in 1996.

Salmon Creek Regional Park features approximately 35 acres of developed parkland within the 600-plus acre Salmon Creek Greenway. Salmon Creek Regional Park is the eastern trailhead for the Salmon Creek Greenway Trail and backs up to the Salmon Creek Community Park Sports Complex. The park provides a children's play area and opportunities for picnicking, fishing, and swimming. The Salmon Creek Greenway Trail begins in the park and winds three miles to the west. This is a multi-use trail for biking, hiking, jogging, and horseback riding. The trail route is identified in Figure 2. Most visits to the park are associated with the trail system and the area in and around the Klineline Pond swimming area. Klineline Pond is located to the northeast of the Conversion Areas. It is a very popular place to swim during the summer months with a sandy beach, bathhouse, roped swimming areas, and concessions. Annual trail use in 2010 was estimated at 612,000 users.

Although the Conversion Areas were accessible to park users, no trails or other facilities were present to enhance the user experience. Both Areas A and B are located on the outer edge of the developed park improvements near NE 117th Street and NE Bassel Road. Prior to conversion, Area A was mostly undeveloped land with an old storage building and the old park watchperson residence. It was used for a variety of storage and stockpiling uses. Prior to selling the 0.11 acres to the Jeffries, Area B was undeveloped land with grasses and some native vegetation that served as a resource for passive recreation and could be freely accessed by park users.

4.6.2 Foley Neighborhood Park Property

Currently, the 4.4-acre property, known as Foley Neighborhood Park, is owned by the VCPRD. The entry to the park is on NW 21st Avenue to the west. The portion of the park adjoining NW 21st Avenue is a grass field. This open field is currently used by neighborhood youth for informal pick-up sports, such as football or soccer. Towards the far end of the field, on the east side of the park, is an orchard and naturalized forest area. There are also informal dog-walking trails within the park. The aging orchard is currently maintained as a community orchard as an interim use until a master plan is completed with community involvement. The property offers an impressive view of Mount St. Helens and the southern Washington Cascade Range.

The Replacement Property is located roughly one-half mile from the Cougar Creek Trail and within close proximity to other recreational amenities in the Salmon Creek Greenway.

The Foley property is eligible to be used as replacement property as NPS allowed the county to purchase the property for the conversion replacement prior

to a final NPS decision. The county's purchase of the property was at the county's sole discretion and did not predetermine NPS' decision to accept the property as suitable replacement property for the conversion.

4.7 Cultural Resources

Cultural resources include both archeologically significant elements and historic elements. Federal, state, and local governments have developed laws and regulations designed to protect significant cultural resources that may be affected by actions that they undertake or regulate. The National Historic Preservation Act (NHPA) of 1966, as amended, requires that federal agencies consider the effects of their actions on such properties. Clark County requires an archaeological predetermination on all development applications that are subject to the State Environmental Protection Act (SEPA) review. The predetermination is a tool used to determine whether cultural resources exist on a particular site without the cost or time expenditure of a full archaeological survey. The Washington State Department of Archaeology & Historic Preservation (DAHP) has the technical expertise and regulatory authority to review archaeological predeterminations and surveys completed within the county. DAHP reviews these reports to ensure they meet technical and regulatory standards. When finished, DAHP will document the completion of the review and in some cases outline necessary steps that need to be taken prior to completion of the project.

4.7.1 Salmon Creek Conversion Areas

The Conversion Areas are located on the historical floodplain of Salmon Creek in an area identified as having high archaeological probability (80 to 100 percent) (Figure 12). The Vancouver area had been home to native peoples, most recently of the Chinook Tribe, for thousands of years prior to European settlement. Because of the long history in the region, the Chinook Tribe may have used the Conversion Areas and surrounding area at some time. However, the probability that any archeological evidence remained intact at the Conversion Areas prior to construction was very low given the long history of disturbance, which included agriculture, mining, and grading associated with park development. Archeological predeterminations were conducted for Area A in 2005. No culturally significant material was found during examination of either area for the predeterminations. No historic properties or landmarks were present at Area A.

Cultural resource investigations were not required for Area B as the sale of the property was a county decision that was not subject to review under the National Historic Preservation Act.

SHPO concurred with the area of potential effect on October 18, 2012.

4.7.2 Foley Neighborhood Park Property

Most of the Replacement Property is in an area of low (0 to 20 percent) archaeological probability, with a small portion located in area of moderately high

archaeological probability (60 to 80 percent) (Figure 12). A cultural resources survey for the Replacement Property was conducted by Archeological Services, LLC in April 2013 (Gall & Holschuh, 2013). No cultural resources were identified in that survey. SHPO concurred with a determination of no historic properties on July 9, 2013.

The Foley farm was an important neighborhood gathering place for many years. There were pumpkin patches that supplied complementary pumpkins to local children every Halloween. Children also picked raspberries, blackberries, pears, and walnuts at the farm. Many vegetables were canned on-site and distributed among neighbors or donated to immigrant families that were supported by the church. The Foley's also allowed their farm to be used as an observation station for the U.S. Geological Survey during the Mt. St. Helens eruption in 1980.

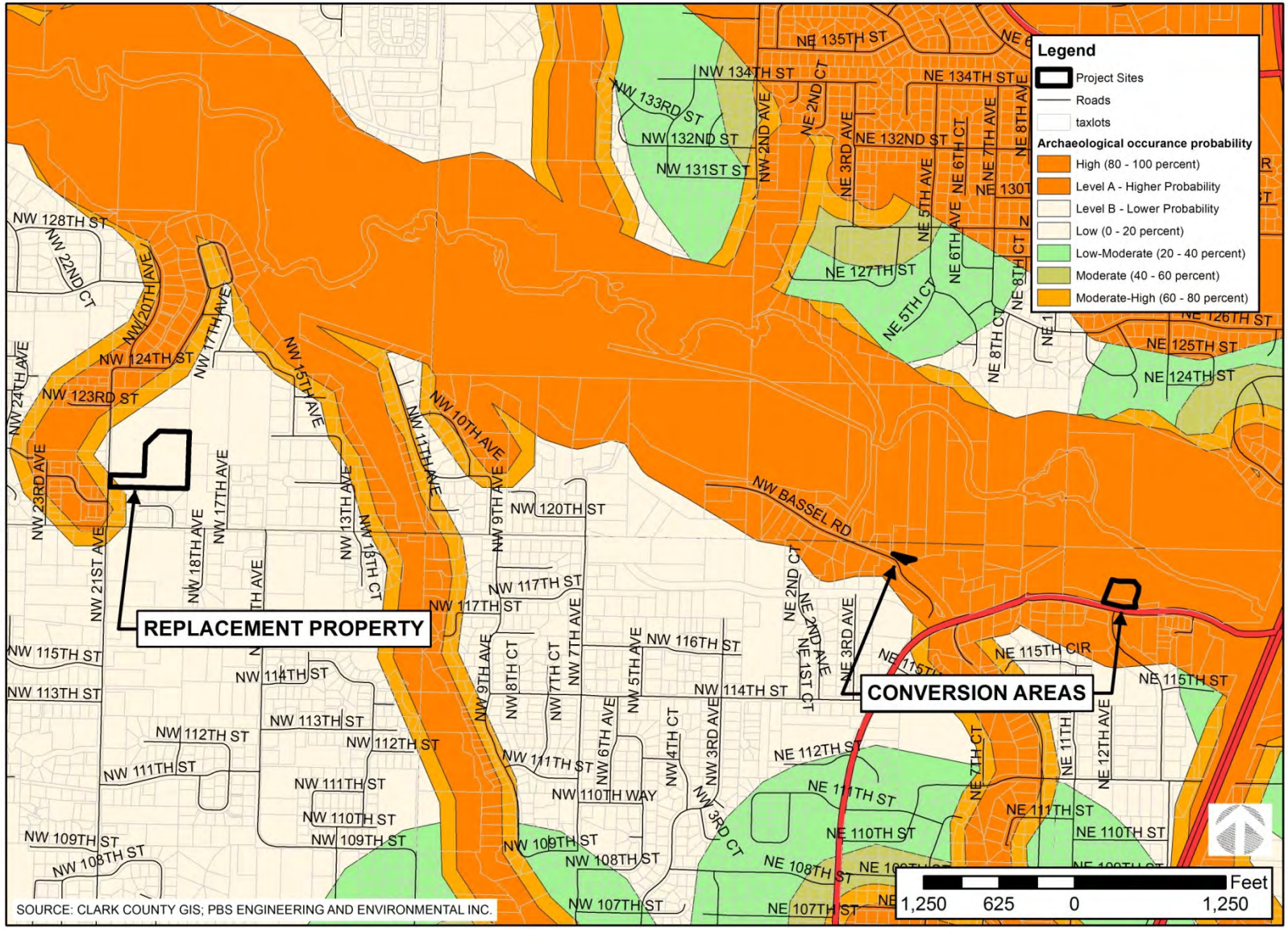
4.8 Noise, Public Health and Safety, and Hazardous Materials

Noise is generally defined as an unwanted sound. Sound is most commonly measured in decibels (dB). Federal agencies, such as the Department of Housing and Urban Development, and the Federal Highway Administration (FHWA) have developed limits above which noise levels must be abated for projects within their jurisdiction. In addition, under the authority of the Noise Control Act of 1972 (NCA), the EPA has provided guidelines for acceptable ambient noise levels, which are considered normally unacceptable for noise-sensitive land uses such as residences, schools, or hospitals.

There are a number of federal laws and regulations governing hazardous materials, including the Comprehensive Environmental Response, Compensation and Liability Act (42 USC 103), the National Emission Standard Hazardous Air Pollutants (40 CFR 61); the Resource Conservation and Recovery Act (40 CFR 261), and the Toxic Substance Control Act (40 CFR 763). Executive Order 13045 (Protection of Children from Environmental Health Risks and Safety Risks) requires federal agencies to identify and assess health and safety risks that may disproportionately affect children. In addition, the Washington Administrative Code (WAC) provides regulations for hazardous substances including Sediment Management Standards (173-204 WAC), Dangerous Waste Regulations (173-303 WAC), Model Toxics Control Act (MTCA) Cleanup Regulation (173-340 WAC), and Underground Storage Tank Regulations (173-360 WAC).

The American Society for Testing and Materials (ASTM) has developed standards for the completion of Environmental Site Assessments (ASTM standard E1527-05). In general, a Phase I Environmental Site Assessment (Phase I ESA) compiles information from a site reconnaissance, historical inquiries, regulatory records review, environmental interviews/questionnaires, and other available data sources to evaluate the environmental conditions at a site. A Phase II Environmental Site Assessment (Phase II ESA) is conducted if environmental conditions identified in the Phase I ESA indicate that further investigation is warranted. A Phase II ESA typically involves surface water, groundwater, soil, soil gas, or indoor air sampling to characterize the degree and extent of contamination at the site.

Figure 12: Archeological Probability



Protecting public health and safety are overriding goals of the NEPA process. This section focuses more narrowly on noise, hazardous materials and potential safety issues associated with the project.

4.9 Noise, Public Health and Safety, and Hazardous Materials

Noise is generally defined as an unwanted sound. Sound is most commonly measured in decibels (dB). Federal agencies, such as the Department of Housing and Urban Development, and the Federal Highway Administration (FHWA) have developed limits above which noise levels must be abated for projects within their jurisdiction. In addition, under the authority of the Noise Control Act of 1972 (NCA), the EPA has provided guidelines for acceptable ambient noise levels, which are considered normally unacceptable for noise-sensitive land uses such as residences, schools, or hospitals.

There are a number of federal laws and regulations governing hazardous materials, including the Comprehensive Environmental Response, Compensation and Liability Act (42 USC 103), the National Emission Standard Hazardous Air Pollutants (40 CFR 61); the Resource Conservation and Recovery Act (40 CFR 261), and the Toxic Substance Control Act (40 CFR 763). Executive Order 13045 (Protection of Children from Environmental Health Risks and Safety Risks) requires federal agencies to identify and assess health and safety risks that may disproportionately affect children. In addition, the Washington Administrative Code (WAC) provides regulations for hazardous substances including Sediment Management Standards (173-204 WAC), Dangerous Waste Regulations (173-303 WAC), Model Toxics Control Act (MTCA) Cleanup Regulation (173-340 WAC), and Underground Storage Tank Regulations (173-360 WAC).

The American Society for Testing and Materials (ASTM) has developed standards for the completion of Environmental Site Assessments (ASTM standard E1527-05). In general, a Phase I Environmental Site Assessment (Phase I ESA) compiles information from a site reconnaissance, historical inquiries, regulatory records review, environmental interviews/questionnaires, and other available data sources to evaluate the environmental conditions at a site. A Phase II Environmental Site Assessment (Phase II ESA) is conducted if environmental conditions identified in the Phase I ESA indicate that further investigation is warranted. A Phase II ESA typically involves surface water, groundwater, soil, soil gas, or indoor air sampling to characterize the degree and extent of contamination at the site.

Protecting public health and safety are overriding goals of the NEPA process. This section focuses more narrowly on noise, hazardous materials and potential safety issues associated with the project.

4.9.1 Salmon Creek Conversion Areas

A variety of noise sources are present at the Conversion Areas. Area A is located near I-5 and adjacent to NE 117th Street. Noise sources also include the recreational facilities at Klineline Pond and the girls' softball complex to the west. Area B is located adjacent to NE Bassel Road. Both sites would be subject to

background traffic noise, particularly from the freeway and adjacent streets. Despite these noise sources, existing noise levels would tend to be low to moderate at the Conversion Areas. Prior to conversion, little to no noise would have been produced at Area B, and the only noise produced at Area A would have been associated with scheduled maintenance activities or movement of materials in or out of storage.

No known hazardous materials, underground storage tanks, or public safety issues existed at either of the Conversion Areas. Two buildings were present in the vicinity of the pump station, an old storage building and the old park watchperson residence, both of which were removed prior to construction of the pump station. There was no evidence or history of contamination associated with either structure. No buildings were present on the property sold to the Jeffries.

4.9.2 Foley Neighborhood Park Property

The Foley Neighborhood Park Replacement Property has been an orchard and garden site for several decades. It is located in a rapidly developing residential area of single-family homes. The primary sources of noise in the immediate area would be leaf blowers, lawnmowers and other similar power equipment. Maintenance of the existing grass fields at the site would produce similar noise. Generally, existing noise levels would be expected to be relatively low.

No contamination or hazardous materials were observed during a reconnaissance of the site by VCPRD staff, and none are suspected based on interviews with members of the Foley family. Pesticide use likely occurred on the site in conjunction with the orchard and gardening. There are no other known public health or safety issues associated with the property.

4.10 Socioeconomics and Environmental Justice

Socioeconomics refers to the effect that the proposed action would have on the social or economic conditions in the surrounding area. Executive Order 12898 (Environmental Justice in Minority Populations and Low Income Populations) directs federal agencies to consider any potentially disproportionate human health or environmental risks federal agency activities, policies, or programs may pose to minority and/or low-income populations. Low-income populations are a group of individuals living in geographic proximity with household incomes at or below the poverty level, as identified by the U.S. Census Bureau. The guidance document defines a “minority” as individuals who are American Indian, Alaskan Native, Asian or Pacific Islander, Black, or Hispanic. A low-income or minority population is present when “the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographical analysis” (CEQ 1997).

4.10.1 Salmon Creek Conversion Areas & Foley Neighborhood Park Replacement Property

Both the Salmon Creek Conversion Areas and the Foley Neighborhood Park Replacement Property are in the same demographic area and census tract. Table 3 shows the demographic data from the 2010 census for both the City of Vancouver and the much smaller census tract 40904 that includes both the Conversion Areas and Replacement Property. From the data in Table 3, it is apparent that neither low income populations nor minority populations are present in sufficient numbers to be disproportionately affected by the proposed action.

Table 3: Demographic Data from the 2010 Census on Minority and Low-Income Populations in the City of Vancouver, Washington and Census Tract 40904

2010 Census Data	Vancouver, WA		Census Tract 40904	
Population	161,791		5,797	
Per Capita Income	$24,988.00		$23,646.00	
Race	Number	Percent	Number	Percent
▪ Caucasian	130,960	81	5,034	87
▪ Black/African American	4,763	3	100	2
▪ American Indian/Alaska Native	1,629	1	61	1
▪ Asian	8,146	5	157	3
▪ Native Hawaiian/Pacific Islander	1,589	1	10	0
▪ Hispanic/Latino	16,756	10	459	8
▪ Some Other Race	6,944	4	173	3
▪ Two or more races	7,760	5	262	4.5
Total Minority Population	24,737	15	630	11
Families Below Poverty Level		15.7		8.6
Individuals Below Poverty Level		18.1		10.7

4.11 Transportation and Traffic

An assessment of transportation issues looks at existing vehicular traffic conditions on the property as well as surrounding traffic patterns and how these might be impacted by the project. Existing parking demand and capacity are compared with projected parking demands and capacity under the identified alternatives. Other forms of transportation are evaluated if relevant.

4.11.1 Salmon Creek Conversion Areas

The Salmon Creek Conversion Areas are located within Salmon Creek Community Park and Salmon Creek Regional Park south of the parking lots and ball fields just west of I-5. There was no paved vehicular access to Area A prior to development. Some dirt tracks were present leading to this area. There are two large parking lots adjacent to the Conversion Areas that serve recreational users of the ball fields, Klineline Pond, and the trails. Area B borders NE Bassel Road.

4.11.2 Foley Neighborhood Park Property

The Foley Neighborhood Park Replacement Property is located off of NW 21st Avenue just north of the intersection with NW 119th Street. NW 21st Avenue is a two-lane residential street with a 25 mph speed limit. Sidewalks are present to the south of the property entrance, but not to the north. Northwest 119th Street is a two-lane minor arterial with a bike lane on the north side. There is bicycle access to the property from the Salmon Creek Greenway Trail via the Cougar Creek Trail and the bike lane along NW 119th Street. There is no bike lane along NW 21st Avenue. Parking at the property currently consists of a small gravel pad that could accommodate up to two cars. Limited street shoulder parking may be possible near the entrance for an additional two to three cars. Future development will include frontage improvements, but no on-site parking will be provided. The Foley Neighborhood Park Replacement Property is served by the C-TRAN #9 Felida bus, which has a stop near the intersection of NW 21st Avenue and NW 119th Street.

4.12 Public Services, Utilities, and Energy Resources

Services provided by surrounding community, such as police, fire, ambulance and emergency services, are considered public services. Both the Conversion Areas and Replacement Property lie within Fire District 6 of Clark County. The Clark County Sheriff provides police services. Utilities refer to changes in the use of public utilities at the property. The Conversion Areas and Replacement Property are also serviced by Clark Regional Wastewater District (sewer services), and Clark Public Utilities (water services, electricity).

4.12.1 Salmon Creek Conversion Areas

The Conversion Areas were mostly undeveloped prior to conversion activities. There was no specific energy consumption except for occasional mowing. The County had identified a need for additional sewage handling capacity in the area to keep up with present and projected growth. Stormwater runoff from existing impervious surfaces in the vicinity flowed undetained and untreated to Salmon and Suds Creeks. Most utilities were present in the vicinity of the Conversion Areas due to the proximity to the watchperson's residence, park infrastructure, and nearby residential development.

4.12.2 Foley Neighborhood Park Property

Replacement Property itself has no utilities, but all utilities are currently found under or along the NW 21st Avenue. The current use of the site is not consumptive of any energy resources. No lights or restroom facilities have been added to the existing park or are planned.

4.13 Aesthetics

Aesthetics refers to the interaction between an individual and the environment with regard to perceptions of beauty. Visual resources may consist of natural landscapes and views or man-made features. Rare or unique natural settings or historic properties are

considered to have a high sensitivity to impacts. Landscapes that are not unique or have been altered through modern development tend to have lesser sensitivity.

4.13.1 Salmon Creek Conversion Areas

Area A is located just north of NE 117th Street and includes the hillslope below the road and the flat area that now contains the pump station. Aesthetic value would have been in open space. Area B borders NE Bassel Road near the top of the slope. Again, any aesthetic value would have been in open space. No unique or special landscape features were present in either area.

4.13.2 Foley Neighborhood Park Property

The Foley Neighborhood Park Replacement Property currently consists of mown grass fields, naturalized forest area, and orchard. There are territorial views from the property of Mt. St. Helens and the southern Washington Cascade Range. The property provides open space and naturalized forest area. The property has aesthetic appeal in its rural agricultural feel. It is a remnant of the type of farm that once was prevalent in this area and is now being replaced by residential development.

5 ENVIRONMENTAL CONSEQUENCES

The Environmental Consequences section provides an evaluation of any short- or long-term impacts on the resource of concern. When possible, quantitative information is provided in each section to support the impact determination. A detailed account of the relevant regulations has been presented in Chapter 4, the Affected Environment.

Qualitatively, impacts were measured as follows:

None/Negligible: The resource would not be affected, or changes would be either non-detectable, or if detected, would have effects that would be slight and local. Impacts would be well below regulatory standards, as applicable.

Minor: Changes to the resource would be measurable, although the changes would be small and localized. Impacts would be within or below regulatory standards, as applicable. Mitigation measures would reduce any potential adverse effects.

Moderate: Changes to the resource would be measurable and have both localized and regional scale impacts. Impacts would be within or below regulatory standards, but historical conditions are being altered on a short-term basis. Mitigation measures would be necessary and the measures would reduce any potential adverse effects.

5.1 Land Use and Zoning

5.1.1 Salmon Creek Conversion Areas

Between 2005 and 2008 Clark County constructed sanitary sewer and stormwater facilities on approximately 4.5 acres of natural open space in Salmon Creek Community Park and Salmon Creek Regional Park. The improvements included the sanitary sewer pump station at Area A and a series of constructed

stormwater wetlands west of the pump station at the base of the slope. The County permitted the pump station as a conditional use within the shoreline jurisdiction of Salmon Creek (SHL2006-00005). The Jeffries land exchange that resulted in the sale of Area B included the purchase of approximately one acre of land, which was converted from residential use to park use.

The land use at both Conversion Areas has been permanently affected by the construction of the pump station and the sale of the land for residential use. Both Conversion Areas consisted of undeveloped land with undefined recreational uses that could be freely accessed by park users. The areas served as part of the collective resource of the greenway for passive recreation. Both Areas A and B are no longer accessible to park users. However, the land that was purchased from the Jeffries has been converted from private residential use to park use.

In summary, there has been a minor shift in land use within Salmon Creek Greenway with construction of the pump station and the land exchange.

5.1.2 Foley Neighborhood Park Property

Use of the Foley Neighborhood Park as a replacement property would maintain the existing park and open space land use. The historical agricultural land use would no longer be the primary use, but the land has not been actively farmed in years and the remaining 150 fruit trees are in poor condition due to their age and limited maintenance. Appendix C includes photographs of the existing conditions.

Development of the Foley property into a public park would be compatible with the Comprehensive Plan designation and zoning classification for the site (Clark County Code 40.220.010). Foley Park would add new park space to a neighborhood currently un-served. As the park is intended to serve as a neighborhood park, it will service an area within one-half mile; hence, no restroom facilities or parking spaces are proposed as part of the future conceptual development plan.

Following planned park improvements, activity levels on the site may increase compared to the existing undeveloped condition of the site. However, given that the park will have no parking area and primarily serve the immediate neighborhood, any increase in use is expected to be small and not expected to have an adverse effect on adjoining properties. The proposed park uses would be consistent with the adjacent residential and recreation uses; no adverse land use impacts are anticipated. If not developed as a park, the site could have been developed into residential housing, which has been occurring rapidly in the surrounding area and would have had significantly more impact on the adjoining properties and surrounding neighborhood.

5.2 Geology, Seismicity, and Soils

5.2.1 Salmon Creek Conversion Areas

Geology and soils at the Conversion Areas were not substantially affected by construction of the pump station and the transfer of the Jeffries property. Some grading work was required to construct the subsurface portion of the pump station. However, the area where the pump station facilities are located was significantly disturbed by previous farming and gravel-mining operations. The County Operations Department also used the area for a variety of storage and stockpiling use. The pump station was built to current seismic safety standards. There was some minor grading at the Jeffries Conversion Areas (Area B) for construction of the driveway.

5.2.2 Foley Neighborhood Park Property

No major earth work is anticipated for development of the Replacement Property as a neighborhood park; hence, geological resources and soils will remain unaffected. Currently, the property is used as a neighborhood park with no formal structures or improvements. Inclusion of park features such as formal trails, play structures, picnic areas and other features may require minor grading to provide finished grade. Proposed improvements are not likely to require any special seismic considerations, but will be designed according to current building codes.

5.3 Air Quality and Climate Change

5.3.1 Salmon Creek Conversion Areas

The pump station may have a minor effect on air quality. Emergency power supply generators will create exhaust fumes when in use. The generators will be tested periodically and will be utilized only in case of a power failure. Odors and fumes are likely to be intermittent, and they will be diluted at increasing distances from the pump station. The pump station is located at the base of a vegetated slope along the southern boundary of the park, which is a little used portion of the park. However, it is immediately proximate to the parking lot at the east entrance to the park, which gets considerable use. During normal operations, the pump station would have a negligible impact on air quality. During emergency generator use, there may be a slight degradation of air quality in the immediate vicinity, which would include portions of the parking lot.

Conversion of the Jeffries property is not expected to have an adverse effect on air quality. The conversion to lawn and landscaping will require some additional maintenance, which could include operation of various landscape equipment powered by internal combustion engines. Overall, however, the effect is likely to result in no net change to air quality.

Temporary impacts during construction included increased dust, other particulate matter, and hydrocarbons caused by increased truck and heavy machinery traffic, removal and/or replacement of materials, and paving operations. The potential for an adverse effect would have been reduced by implementing best

management practices for dust control and using vehicles and equipment meeting state and federal exhaust emission standards.

Conversion of Areas A and B from park use to the pump station and residential use likely had a negligible effect on climate change. Greenhouse gas emissions from operation of the pump station are slight and within applicable regulatory standards. The Jeffries property conversion is unlikely to have any additional adverse effect.

5.3.2 Foley Neighborhood Park Property

Development of a neighborhood park at the Replacement Property will have no impact on air quality or climate change. Some orchard trees may be removed, but they will be replaced with native vegetation. Construction activities during development of the park may cause a temporary, short-term degradation of air quality related to exhaust emissions from construction vehicles, equipment, and dust. Long term, any degradation in air quality from regular maintenance activities would not be expected to be significantly different from historical practices at the site and would be less than expected if the site was developed with single-family residences. All equipment used for construction and landscape maintenance would be required to meet state and federal standards for exhaust emissions.

5.4 Water Resources

5.4.1 Salmon Creek Conversion Areas

5.4.1.1 Surface Waters

Since Area A is some distance from Salmon and Suds creeks, no adverse effect to surface waters likely occurred during construction or is anticipated in the future. Stormwater runoff from new impervious surfaces at the pump station flows through a treatment wetland before discharging to surface waters. Runoff from the new driveway on Area B would flow generally north towards Suds Creek, though it likely infiltrates before reaching the creek.

5.4.1.2 Floodplains

The Conversion Areas are outside the 100-year floodplain of Salmon Creek, and no impacts to floodplains occurred as a result of construction of the pump station or sale of the property to the Jeffries. Any increase in runoff from the pump station would be mitigated by the stormwater wetland constructed in conjunction with the pump station.

5.4.1.3 Wetlands

No wetlands were impacted by construction of the pump station on Area A or sale of Area B to the Jeffries.

5.4.1.4 Groundwater

A study was done prior to construction of the pump station to evaluate the impacts of the pump station on the critical aquifer recharge area. Several measures were incorporated into the pump station design to prevent accidental spillage or leakage of sewage from entering the groundwater. Water flowing off the impervious surfaces at the pump station is directed to a stormwater wetland. The stormwater wetland is designed for both detention and water quality treatment. Some of the stormwater runoff captured in the wetland will infiltrate into the soil to recharge groundwater. Contamination of groundwater from stormwater wetlands is typically not a concern unless the wetlands receive highly contaminated runoff (USEPA, 2013). Washington Department of Ecology has identified stormwater wetlands as a good best management practice for water quality treatment in areas with high winter groundwater levels (WSDOE, 2012d). Unless contamination coming into the wetlands is very high, most contaminants are removed through filtration, sedimentation, and detrital activity. The pump station would have a negligible impact on groundwater levels or groundwater quality.

5.4.1.5 Stormwater and Water Quality

Runoff from impervious surfaces associated with the new pump station is treated in a stormwater wetland. The stormwater wetland was designed to meet or exceed state stormwater treatment standards prior to discharge to surface waters. Overall, there should be a net improvement in water quality and stormwater management as a result of the project, because runoff that historically flowed to Salmon Creek undetained and untreated will now be detained in a stormwater wetland and treated before being discharged. Construction of the driveway on Area B likely has a negligent impact on stormwater quantity or quality. Stormwater from the new driveway will likely infiltrate or be collected in the stormwater wetland just north of Area B. No runoff will reach Suds Creek or associated wetlands.

5.4.2 Foley Neighborhood Park Property

No impacts to surface waters, floodplains, wetlands, or groundwater are anticipated as a result of development of the Foley Neighborhood Park Replacement Property. Runoff from any impervious surfaces created during park development will be directed to vegetated areas within the park to allow for infiltration and treatment of runoff. No stormwater runoff is expected to leave the property.

5.5 Biological Resources

5.5.1 Salmon Creek Conversion Areas

5.5.1.1 Vegetation

Existing vegetation was removed to build the pump station and Jeffries driveway. No sensitive plant species were affected. At the pump station,

removal of native trees and shrubs was limited to the extent practicable by controlling construction access to work areas. Following construction, native vegetation was planted around the pump station. Native and non-native vegetation was removed at the property sold to the Jeffries and replaced with a driveway, mown lawn, and some ornamental plantings.

5.5.1.2 Fish and Wildlife

The construction of the pump station and the sale of the Jeffries property have had a negligible effect on fish and wildlife. Best management practices were implemented during construction of the pump station to minimize any potential adverse effect to listed species or their critical habitat. Some poor quality wildlife habitat was eliminated at both sites, and impervious surface increased at both sites. The addition of water quality stormwater wetlands associated with the pump station and road improvements near Area B have mitigated for the increased impervious surface and likely resulted in an improvement from the pre-existing condition. Wildlife at the Conversion Areas would have been displaced at both sites. Operation of the pump station will produce some noise, but in the context of the project location, this is unlikely to have much effect on wildlife in the vicinity.

5.5.2 Foley Neighborhood Park Property

5.5.2.1 Vegetation

Development of the Foley Neighborhood Park Replacement Property as a park will likely result in the conversion of some currently vegetated areas to impervious surface, the removal of some of the orchard trees, the removal of invasive species, and the planting of native tree and shrub species. There will be no impacts to listed plant species and while there might be a slight loss of vegetated area, the resulting vegetation will likely be more diverse and contain more native species than what currently exists.

5.5.2.2 Fish and Wildlife

The development of the Replacement Property will have no impact to any sensitive species or their critical habitat (Table 2). Development of the park will also not result in the degradation of surface waters that support listed fish species. The proposed park development will create a small amount of impervious surface. Stormwater runoff from this impervious surface will sheet flow to adjacent vegetated areas, so no runoff from the site will occur. Therefore, no adverse effect to fish will occur in either Cougar Creek or Salmon Creek from stormwater runoff. Wildlife habitat at the Replacement Property will continue to be limited given the lack of connection to other habitats and the surrounding development. Planting of more native species might improve habitat value for some species, but higher human use may deter these and other species.

5.6 Recreation

5.6.1 Salmon Creek Conversion Areas and Foley Neighborhood Park Property

Mitigation for the loss of park land and passive recreational uses at the Conversion Areas will be provided by the existing passive recreational resources at the Foley Neighborhood Park Replacement Property.

The Foley property is eligible to be used as replacement property as NPS allowed the county to purchase the property for the conversion replacement prior to a final NPS decision. The county's purchase of the property was at the county's sole discretion and did not predetermine NPS' decision to accept the property as suitable replacement property for the conversion.

Adopted VCPRD park standards call for a neighborhood park to be located within approximately a one-half mile of all underserved neighborhoods. There was a need to acquire an additional neighborhood Park Property in the service area bounded by NW 36th Avenue on the west, NW 119th Street on the south, NW 7th Avenue on the east, and Salmon Creek on the north. The closest developed park is Felida Community Park, approximately one mile to the west. The closest neighborhood park is Sorensen Park (undeveloped) about three-quarters of a mile south across NW 119th Avenue just outside the service area. Foley Neighborhood Park Replacement Property will meet the identified need to serve this neighborhood.

The park currently has fencing and two parking stalls along the side of the road. If approved as replacement property, the park would remain passive use open space until a community design process is completed and future funding for development is available.

The potential conceptual plan for the park (Figure 6) would develop the site in the future to serve as a neighborhood walk-to and bike-to facility serving people living within one-half mile of the park. Potential future improvements include a play area, benches, picnic tables, and walking trails. A community garden may also be developed. Plans currently call for leaving much of the orchard intact. An Orchard Interpretive Node could include historical information relating to the history of the site. Other portions of the park could be maintained as open grass or native forest with walking trails.

SCORP recognizes the importance of outdoor recreational sites and facilities as vital elements of public infrastructure, essential to the health and well-being of citizens, and important to visitors. The state prioritizes close-to-home recreational opportunities, public health supported by facilities that encourage physical activity, especially shared-use trails, and fields and courts for individual and team sports. All of these supported activities are included in the conceptual plans that have been developed for the Replacement Property.

5.7 Cultural Resources

5.7.1 Salmon Creek Conversion Areas

No historic or archeological materials were discovered during the conversion activities (AINW, 2005).

5.7.2 Foley Neighborhood Park Property

A recent archaeological predetermination study concluded that there are no artifacts of cultural significance located at the Replacement Property (Archaeological Services, LLC, April 2013).

5.8 Noise, Public Health and Safety, and Hazardous Materials

5.8.1 Salmon Creek Conversion Areas

The new pump station at Area A generates some noise as part of everyday operation, which is relatively minor during normal operations. During a power failure, the back-up generators will be activated, and the noise from the generators can be relatively loud (80 to 100 dB). A noise study was conducted for the facility, and noise levels were found to meet regulatory standards, even during emergency generator operation. The pump station is located at least 150 feet away from the nearest residences and in a portion of the park that is not heavily used. The pump station addresses a public health need by improving sewage handling in the vicinity. The presence of the pump station does not pose any public health or safety issues. Access by the public is restricted by a fence.

There was a temporary noise impact at Area B associated clearing and grading for the new driveway. There has also likely been a slight increase in noise with use of the new driveway, though this would be negligible. No public health or safety issue is posed by the conversion of Area B.

5.8.2 Foley Neighborhood Park Property

A small increase in noise levels may occur following development of recreational facilities at Foley Neighborhood Park above what would have been present before the park was established. Maintenance of the grass fields, orchard, and garden likely required power equipment, similar to what is required now with the park. Use of the park is likely to increase once the park is fully developed. This added use may increase noise within the park, but this noise will be limited to people talking or yelling, dog barking, children playing, and other noises commonly associated with the recreational activities proposed at the park. These noises would occur during the daytime when ambient noise levels would be highest, so the potential for adverse effects to surrounding homes is low.

Development of the park will not create any public health or safety issues.

5.9 Socioeconomics and Environmental Justice

There will be no adverse effects on socioeconomics or environmental justice at either the Conversion Areas or Replacement Property. The conversion activities are aligned with projected growth and county planning. They have resulted in no increase or

decrease in employment and will displace no existing housing or have an adverse impact on existing neighborhoods.

5.10 Transportation and Traffic

5.10.1 Salmon Creek Conversion Areas

Access to Area A is available from a driveway off the parking lot near the main park entrance off NE 117th Street near I-5. Access to Area B is from NE Bassel Road. The pump station has parking available for staff and maintenance. Neither the pump station nor the new driveway at the Jeffries property generate any significant traffic, so no impact on existing roadways or parking facilities is expected.

5.10.2 Foley Neighborhood Park Property

Since Foley Neighborhood Park is a small neighborhood park that is designed to be a walk-to and bike-to park, it is not expected to generate much additional traffic. No additional parking will be provided. There should be no impact on existing transportation resources. Park users will be able to access the park by foot, bicycle, public transportation, and car, with most users expected to travel by foot or bicycle. Pedestrian safety could be an issue for people walking to the park where there currently are no sidewalks. Development of the park will likely include a sidewalk connection to the existing sidewalk to the south, but there are currently no sidewalks to the north along NW 21st Avenue.

5.11 Public Services, Utilities, and Energy Resources

Neither the Conversion Areas nor the Replacement Property is in an area that produces energy resources.

5.11.1 Salmon Creek Conversion Areas

Energy resources were required to construct the pump station in the form of fuels used for the operation of construction equipment. New sanitary, electrical, gas, and potable water services were installed at the pump station during construction. The sanitary sewer pump station is powered by electricity, and regular operation will increase electrical use at the site. The pump station has diesel-powered emergency generators in case of electrical failure. While any new building adds incrementally to the local fire protection service, the building was designed to meet current fire codes and comply with additional fire protection requirements.

The Klineline pump station was part of an upgrade to the sanitary sewer system near NE 117th Street, which increased the sanitary sewer capacity to allow for future growth in the region. Runoff from impervious surface at the pump station is routed to a stormwater wetland before being discharged to Salmon Creek. Construction of the Klineline pump station changed utility networks in the area but had no impact on public services.

The sale of Area B had no impact to existing public utilities and should result in no increased demand on public services. Stormwater runoff from the new driveway at Area B will likely infiltrate or be captured by one of the new stormwater wetlands before discharge to waters/wetlands associated with Suds Creek.

5.11.2 .Foley Neighborhood Park Property

Existing utilities in the area would be adequate to service the park, which might need electricity for lighting and water for irrigation. Restrooms are currently not planned, and no stormwater facilities should be required.

The impact on public services should be minimal. A slight increase in police presence might be needed to monitor the park, but police, fire, and other public service needs would be substantially less than would be necessary if the site were developed.

5.12 Aesthetics

5.12.1 Salmon Creek Conversion Areas

The construction of the pump station would likely have a minor impact on the overall aesthetics of the park. The building was designed to be consistent with the architecture of other structures located in the park. Landscape architects were hired to design landscaping that screens most of the facility from park users. Trees screen the pump station from the residences along NE 117th Street and passersby on the street. The building does not block any views. The design utilizes native trees and shrubs that will blend in with the surrounding natural landscape.

5.12.2 Foley Neighborhood Park Property

Aesthetic values in the vicinity of the Replacement Property would not be adversely affected by the proposed activity. There would continue to be open space and trails accessible to users in the community, naturalized forest areas would be maintained, and development of the area would be planned to retain the scenic views currently available at the site.

Development of the park will likely change the aesthetic character from a rural residential/ agricultural aesthetic to a more park-like aesthetic. The County will utilize extensive landscaping, including native trees and shrubs to ensure that the aesthetic character of the site is improved over existing conditions. Views from the property would not be affected.

6 CUMULATIVE EFFECTS

Cumulative effects are defined as the impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or non federal) or person undertakes such

other actions (40 CFR 1508.7). NEPA requires an assessment of cumulative effects during the decision-making process for federal projects.

Clark County has undergone tremendous growth over the last couple of decades. Open areas and agricultural lands are rapidly disappearing. At the same time that open space is disappearing, and the demand for recreational amenities has continued to grow. The VCPRD has been actively pursuing land acquisitions for recreational facilities to keep up with the demand. The Salmon Creek greenway and associated parks represent valuable assets to the community, providing both active and passive recreational opportunities.

6.1 Salmon Creek Conversion

Lower Salmon Creek in the vicinity of the Conversion Areas has been subject to considerable hydrologic and habitat modifications. Removal of the native forest, channelization, gravel mining, loss of floodplain, and a dramatic increase in impervious surface within the watershed have all had impacts on the creek, its floodplain, and the biological resources they support. Increases in impervious surfaces results in higher and flashier peak flows and lower base flows. Water quality has been impacted by pollutants carried by stormwater runoff from developed areas. The construction of the pump station at Area A has resulted in an increase in impervious surface and runoff that is ultimately routed to Salmon Creek. This runoff, however, first enters a stormwater wetland where it is detained and treated before it is discharged, so any adverse effect of the new impervious surface is likely ameliorated by the wetland. Construction of the pump station does contribute to a cumulative loss of open space.

The lands acquired under the Land and Water Conservation Fund program and state grant regulations that are covered under this EA were intended to improve the recreational value of Salmon Creek Greenway. Conversion of Areas A and B has removed portions of these properties from recreational use. The conversion was necessary to meet growing infrastructure demands and the areas selected for the pump station and Jeffries land exchange were little used by park users. The sale of the Jeffries property was offset by the purchase of a much larger parcel from the Jeffries. Because no other non-recreational development is planned or anticipated in the park area, the conversion does not contribute to a gradual loss of park land. Construction of the pump station results in a minor increment in greenhouse gas emissions and a small increase in utility (electricity) demand.

6.2 Foley Neighborhood Park Replacement Property

The Foley property is located in a developed residential neighborhood that has seen a cumulative loss of open space and associated habitat as well as an increase in impervious surface and stormwater runoff. The Foley Neighborhood Park Replacement Property represents one of the few remaining agricultural properties in a several mile radius in what was once a rural agricultural community. The property is valuable as open space because of its location at the headwaters of a small drainage. The neighborhood where the Foley property is located had been identified by the County as a neighborhood that was underserved by recreational amenities. By acquiring the Foley

Neighborhood Park Replacement Property, the County will be protecting it for recreational purposes in perpetuity. The action prevents a potential cumulative loss of open space and agricultural land in this neighborhood, especially given that the construction of a housing subdivision on the acreage would have been a qualified land use. The form of recreation currently at the site will shift from an undeveloped neighborhood park into a developed one at some point in the future. Acquisition of the Foley property as a replacement property preserves a remnant of the agricultural heritage of this area.

While the development of the Foley Neighborhood Park Replacement Property may result in a small increase in impervious surface, this increase will not result in runoff from the site into the stormwater system, and the preservation of most of the site as open space will assure that the site does not further contribute to the cumulative impacts of development.

7 MITIGATION MEASURES

The conversion process by its very nature includes mitigation in the form of replacement of recreational lands lost through the conversion process. Approval will only be granted if the National Park Service and state granting agencies determine that the proposed Replacement Property meets the specified criteria for conversion and adequately mitigates for the loss. The County proposes mitigating for the loss of recreational land at the Conversion Areas through acquisition and future development of the Foley Neighborhood Park Replacement Property as a neighborhood park. The park will provide open space, walking trails, and structured recreational resources that can be easily accessed by local residents. The Replacement Property provides higher quality recreational resources than those lost at the Conversion Areas. It also will provide recreational opportunities to a currently unserved area.

The construction of the pump station resulted in impacts to the environment that were identified during the planning and permitting of the project. The project followed all applicable local, state, and federal regulations and land use approvals. Mitigation was provided in several realms to offset impacts. The increase in impervious surface was offset by improvements to stormwater management, including construction of the stormwater wetlands, which provide flow control and water quality functions.

Mitigation for the pump station included ensuring the design was consistent with the architecture of the existing buildings and structures in the park and providing landscaping around the pump station as screening to improve the aesthetics of the structure. The permanent modification in aesthetics due to loss of open space will be mitigated for by open space provided at the Replacement Property.

Conversion of the 0.11 acres of park land in Area B was offset by purchasing 1.0 acres of land from the Jeffries for park use.

In order for the Foley property to meet the mitigation requirements of the conversion process, the County must improve the site to provide comparable recreational resources lost at the

Conversion Areas and at a minimum must develop the site to the level required for it to serve as a viable park. The Foley property currently provides passive recreational uses and future development plans include a play structure, walking trails, an orchard interpretive node, and other improvements. Additional mitigation measures at the Foley property will include removal of weedy or invasive species, planting of native species, and possible preservation of some of the orchard.

8 AGENCY COORDINATION AND PUBLIC INVOLVEMENT

8.1 Agencies and Personnel Consulted

The following agency personnel were consulted during the preparation of this document:

1. Scott Wilson, Clark County Public Works
2. Matt Hall, Clark County Public Works
3. Monica Tubberville, Vancouver-Clark Parks and Recreation Department
4. Lisa Hemesath, Clark County Department of Environmental Services
5. Leslie Ryan-Connelly, Washington State Recreation and Conservation Office

8.2 Public Involvement

The public had an opportunity to provide input on all project elements associated with the pump station. Significant public outreach took place between 1998, when the project was initiated, and 2005, when construction began. Some of the outreach included two public open houses, several project-update mailers, neighborhood meetings, news releases to the local paper, and two public hearings with the County Commissioners held on May 17, 1999 and February 26, 2004. A Community Design Team was also formed to help the County work on project impact issues. Issues related to the roadway impacts accounted for a vast majority of the comments received from the outreach efforts. Only a few comments related to the stormwater facilities were received, and they focused on designing the wetlands to blend into the natural environment.

The development of the Foley property into a neighborhood park was perceived favorably by the neighbors and owners alike as the concept of a neighborhood park at the site was a preferred option over the development of housing subdivisions. Acquisition of the site was reviewed by the Parks and Recreation Advisory Commission and approved in public hearing by the Clark County Board of Commissioners. Further opportunity for public involvement will be available during development of the Foley Neighborhood Park master plan when funding is available for future development.

The NEPA process requires that opportunities be provided for public review and comment. In addition to the opportunities described above, the project will provide formal opportunities for public comment on the draft EA when it is released for a 30-day public comment period after an internal review.

9 REQUIRED PERMITS AND APPROVALS

9.1 Salmon Creek Conversion

The conversion process will not require additional permitting at the Conversion Areas, since the conversion of use has already taken place. The permits and approvals presented in Table 4 applied to the construction of the pump station. The permits and approvals were obtained prior to development.

9.2 Foley Neighborhood Park Replacement Property

The development of the Replacement Property will be in accordance with applicable local, state, and federal regulations. VCPRD will be responsible for acquiring any necessary permits prior to the commencement of construction activities. Table 5 outlines anticipated permits for development.

Table 4: Conversion Areas: Applicable Permits and Approvals

AGENCY	PERMIT/APPROVAL
Area A: Klineline Pump Station	
Clark County	Plan Review
	Habitat Permit
	Critical Aquifer Recharge Area Permit
	Shoreline (Substantial Development, Conditional Use) Permit
	Archaeological Predetermination
	SEPA Determination
	Grading Permit
	Building Permit
Southwest Clean Air Agency	Air Discharge Permit
State of Washington Department of Ecology	NPDES Construction Stormwater General Permit NPDES Water Discharge Permit (Salmon Creek WWTP)
Area B: Property sold to the Jeffries	
Clark County and other Agencies	None for property exchange.

Table 5: Replacement Property: Applicable Permits and Approvals

AGENCY	PERMIT/APPROVAL
Clark County	Plan Review
	Archaeological Predetermination
	SEPA Determination
	Grading Permit
	Building Permit
Washington Department of Ecology	NPDES Construction Stormwater General Permit

10 PREPARERS

List of Preparers

Maitreyee Sinha	-	Environmental Scientist, PBS Engineering and Environmental
Katharine Lee	-	Senior Scientist, PBS Engineering and Environmental
Skip Haak	-	Project Manager, PBS Engineering and Environmental

List of Reviewers

Matt Hall	-	Clark County Public Works
Monica Tubberville	-	Vancouver-Clark Parks and Recreation Department
Lisa Hemesath	-	Clark County Department of Environmental Services
Leslie Ryan-Connelly	-	Washington State Recreation and Conservation Office

11 REFERENCES

Archaeological Investigations Northwest, Inc.(AINW). 2005. Clark County Archaeological Predetermination Report – Foley Neighborhood Park.

Ash Creek Associates, Inc. April 2005. *Geotechnical Engineering Analysis & Report. Klineline Pump Station and Force Main Salmon Creek Phase4 Expansion, Clark County, Washington. Prepared for Brown and Caldwell. 1010-00.*

Brian Berger. 2003. The Resource Co., Inc. Final Wetland Mitigation Plan: NW 117th/119th Street Project, Clark County, Washington.

CEQ (Council on Environmental Quality). 2010. Accessed September 2010 from the Web : http://www.whitehouse.gov/administration/eop/ceq/

CEQ (Council on Environmental Quality). December 10, 1997. Environmental Justice: Guidance Under the National Environmental Policy Act. Washington, DC: Council on Environmental Quality, Executive Office of the President.

Clark County, Washington. Accessed December 2012. http://www.clark.wa.gov/budget/2009-2010/3%20-%20The%20County/09-10%20COUNTY.pdf.

Clark County, Washington. 2004. Environmental Permit Summary: NW 119th Street/NE 117th Street, NW 7th Ave to HWY 99, CRP 381022, CRP 320322. Clark County, Washington.

Clark County Community Planning, Washington. Accessed December 2012. Comprehensive Growth Management Plan. http://www.clark.wa.gov/planning/comp_plan/documents/Vancouver-2010Amendments.pdf.

Clark County GIS. Accessed October 2012. http://gis.clark.wa.gov/gishome/.

Clark County Department of Public Works. April 2005. Klineline Pump Station and Force Main Project: Preliminary Design Report.

Clark County Department of Public Works. April 2005. Klineline Pump Station and Force Main Project: Type II Development Review report and supporting documentation.

The Columbian. (July 4, 2012). Section D.

C Tran. System Maps. Accessed November 2012. http://www.c-tran.com/system-map.html.

FEMA Map Service Center. Accessed October 17, 2012. https://msc.fema.gov/webapp/wcs/stores/servlet/FemaWelcomeView?storeId=10001&catalogId=10001&langId=-1.

Gall, A. and Holschuh, D. Archaeological Services LLC. April 30, 2013.Archaeological Survey of the Foley Property Project Area, Clark County, Washington.

Howard, Dave. March 2005. Washington State Department of Ecology, Water Quality Program, Vancouver, Washington. Salmon Creek Watershed Bacteria and Turbidity Total Maximum Daily Load (Water Cleanup Plan). Detailed Implementation Plan.

Mabey, Matthew, Ian P. Madin, and Stephen P. Palmer. December 1994. *Relative Earthquake Hazard Map for the Vancouver, Washington, Urban Region*. Prepared for Washington Division of Geology and Earth Resources. Geologic Map GM-42.

NOAA National Marine Fisheries Service. Accessed December 2012. Endangered Species Act Status of West Coast Salmon and Steelhead, updated August 11, 2011. http://www.nwr.noaa.gov/ESA-Salmon-Listings/upload/1-pgr-8-11.pdf

NOAA National Marine Fisheries Service. Accessed December 2012. Endangered Species Act listed Marine Mammals. http://www.nwr.noaa.gov/Marine-Mammals/ESA-MM-List.cfm

Potter, Dean. May 7, 1997. Complete Summary Appraisal (Jeffries Property). Dean Potter and Associates, Inc.

Salmon Scape. Accessed November 2012. http://wdfw.wa.gov/mapping/salmonscape/index.html.

SCORP (State Comprehensive Outdoor Recreation Planning). (October 2002).Document 2002-2007. An Assessment of Outdoor Recreation in Washington State. Interagency Committee for Outdoor Recreation.

State of Washington, Department of Ecology (WSDOE). October 2011. *Salmon Creek Temperature Total Maximum Daily Load. Water Quality Improvement Report and Implementation Plan*. Publication Number 11-10-44.

State of Washington, Department of Ecology. Facility/ Database. Accessed November 2012a. http://www.ecy.wa.gov/fs/.

State of Washington, Department of Ecology. Accessed December 2012b. Air Quality of Maintenance Areas. http://www.ecy.wa.gov/programs/air/other/namaps/web_ozone_clark.pdf.

State of Washington, Department of Ecology. Accessed December 2012c. Climate Change. http://www.ecy.wa.gov/climatechange/.

State of Washington, Department of Ecology. August 2012d. Stormwater Management Manual for Western Washington. Publication Number 12-10-030.

State of Washington, Department of Fish and Wildlife (WDFW). Priority Habitat and Species (PHS) Polygon Cross Reference Report in the vicinity of T03R01E Section 27. Published October 02, 2012.

Stohr, Anita, Tonnie Cummings, and Kim McKee. (October 2011). Salmon Creek Temperature Total Maximum Daily Load. Water Quality Improvement Report and Implementation Plan. Publication No. 11-10-044. http://www.ecy.wa.gov/biblio/1110044.html

Streamnet. Fish Data for the Northwest. Accessed November 2012. http://www.streamnet.org/.

U.S. Census Bureau. American Fact Finder. Accessed November 2012. http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_11_1R_DP_03&prodType=table.

U.S. Department of Agriculture (USDA). National Cooperative Soil Survey, USA. Accessed October 2012a. https://soilseries.sc.egov.usda.gov/OSD_Docs/H/HILLSBORO.html.

U.S . Department of Agriculture (USDA). Natural Resources Conservation Service (NRCS). Accessed October 2012b. Web soil survey. http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm.

U.S. Department of Agriculture. Natural Resources Conservation Service. Accessed December 2012c. Soil Survey of Clark County, November 1972. http://soildatamart.nrcs.usda.gov/Manuscripts/WA011/0/wa011_text.pdf.

U.S. Environmental Protection Agency (USEPA). Access January 2013. National Pollution Discharge Elimination System (NPDES), Stormwater Wetland. http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm?action=factsheet_results&view=specific&bmp=74

U.S. Fish and Wildlife Service (USFWS). Accessed December 2012. Listed and Proposed Endangered and Threatened Species and Critical Habitat, Candidate Species and Species of Concern in Clark County as prepared by The US Fish and Wildlife Service, Washington Fish and Wildlife Office, revised November 11, 2012. http://www.fws.gov/wafwo/speciesmap/ClarkCounty121112.pdf

U.S. Geologic Survey Scientific Investigations. Accessed online October 2012. Western Earth Surface Processes. http://pubs.usgs.gov/sim/3017/.

Vancouver-Clark Parks and Recreation. May 2007. Comprehensive Parks, Recreation, and Open Space Plan. Accessed November 2012. http://www.cityofvancouver.us/parks-recreation/parks_trails/planning/pdfs/compplan.pdf.

Vancouver-Clark Parks and Recreation. Accessed October 2012. http://www.cityofvancouver.us/parks-recreation/parks_trails/trails/pdfs/salmonck.pdf.

Washington State Recreation and Conservation Office (RCO). August 1, 2007. 2006 Outdoor Recreation Survey Final Report. Prepared by Clearwater Research, Inc.

Weiss, Lowell. July 14, 1997. Appraisal Summary Review (Jeffries Property), Clark County Real Property Services.