



ECOSYSTEM RESOURCES INVENTORY

EASTSIDE RAIL CORRIDOR REGIONAL TRAIL MASTER PLAN PROJECT

2015-05-12

The Eastside Rail Corridor Regional Trail Master Plan Project develops a baseline inventory and planning guidelines for portions of the Eastside Rail Corridor owned by King County and Sound Transit.

A variety of uses is possible for the corridor in the future, and various agencies and jurisdictions have ownership interests in the corridor. This document is an internal work product supporting a study for future development of a shared use trail in the corridor.

For more information please visit: Kingcounty.gov/parks/eastsiderailcorridor

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WETLAND AND STREAM ATLAS

RENTON

KING COUNTY

BELLEVUE

KIRKLAND

WOODINVILLE

JURISDICTIONAL DITCH ATLAS



ECOSYSTEM RESOURCES INVENTORY

1. INTRODUCTION

1.1 OVERVIEW

“Our Puget Sound region is blessed with dramatic topography, majestic natural features, and large, picturesque water bodies. While adding immensely to the beauty and quality of life in our region, those same features also create challenges when developing transportation, recreation and utility connections. The Eastside Rail Corridor (ERC) provides a rare and unique chance to develop a major north-south corridor for a variety of important purposes: mobility, utility infrastructure, and recreation.”

-Excerpt from the Eastside Rail Corridor Regional Advisory Council report

The Eastside Rail Corridor (ERC) connects some of King County’s largest and fastest-growing communities. As part of the Woodinville Subdivision, a 42-mile rail corridor that stretches from Renton to Snohomish, the ERC passes through Renton, Bellevue, Kirkland, Woodinville, Redmond, and portions of unincorporated King and

Snohomish counties. Originally a rail line, known as the Lake Washington Belt Line, that supported development along the eastern shore of Lake Washington, the corridor has been brought into public ownership to provide a potential route for trail, transit, and utilities. The ERC Regional Trail Master Plan (Master Plan) will develop a strategy to build a non-motorized trail in the corridor without precluding potential future use for transit and utilities. Any future transit or utility uses of the corridor would be considered in separate planning processes.

The ERC includes approximately 42 miles of right-of-way. Currently, only a portion of the ERC is being planned for potential trail use—a segment of the former railroad main line between Renton and Woodinville and a spur line connecting Woodinville and Redmond. The cities of Kirkland and Redmond have completed their planning for a trail in the corridor. The Master Plan includes the segments of the ERC between Renton and Kirkland, between Kirkland and Woodinville, and along the spur from

Woodinville to Redmond. Throughout the Master Plan, the line between Renton and Woodinville is referred to as the “main line,” and the line between Woodinville and Redmond is referred to as the “spur.” See Figure 1 for an understanding of the ERC ownership interests considered in the Master Plan.

As part of the baseline inventory for the Master Plan, this study documents the natural ecosystem values within the King County-owned and Sound Transit-owned segments, with a focus on wetlands and streams.

1.2 A STRATEGIC CORRIDOR FOR THE EAST SIDE'S FUTURE

After nearly a century of rail use, in 2003 Burlington Northern Sante Fe (BNSF) began conversations with local jurisdictions about abandoning the rail line. In 2009 a group of public partners, including King County and the Port of Seattle, signed a Memorandum of Understanding that envisioned a regional approach to preserve the corridor for multiple uses. Although no specific projects were in development at that time, the partners recognized the potential value of a continuous corridor linking the east side from north to south as the region continues to develop. To begin that regional effort, the Port of Seattle purchased the 42-mile corridor between Renton and Snohomish. The southern portion of the line between Woodinville and Renton was railbanked, a legal designation that allows certain uses of the corridor while preserving it for potential reinstatement of freight rail. The northern portion, between Woodinville and Snohomish, remained an active freight area.

The jurisdictions and public agencies involved in the acquisition of the corridor envisioned potential future needs for a non-motorized trail, water distribution, sewer, power transmission, and transit in the corridor. Between 2010 and 2013

ownership interests were purchased from the Port of Seattle by the City of Redmond, Puget Sound Energy (utility easement), the City of Kirkland, Sound Transit (primarily transportation-related easements), and King County (see Figure 1). These five entities are now the owners of the corridor between Renton and Woodinville.

1.3 THE ERC REGIONAL ADVISORY COUNCIL—A COLLABORATIVE VISION FOR THE FUTURE OF THE ERC

Recognizing the value of collaboration for future development of the ERC, the owners of the corridor formed a Regional Advisory Council (RAC) as a forum to coordinate planning for the ERC. The RAC summarized the findings of their initial planning effort in the report entitled *Creating Connections – Recommendations on the Eastside Rail Corridor*, which provides a guide for the next steps in collaboratively planning, developing and using the ERC. The RAC vision for the corridor emphasizes its long-term value for the development of transit, utilities, and a trail:

“Development of the corridor will enhance the mobility of our region by creating a critical north-south transportation corridor that will allow for multimodal connections, including high-capacity transit (e.g. heavy rail, light rail, or other forms of fixed guideway transportation) and nonmotorized trail use. The corridor will help us integrate the pieces of our larger transportation networks. The corridor will enable key utility improvements to help meet the demands of a growing population. The corridor will expand the recreation network, creating equitable access for all residents, and benefiting generations of Puget Sound residents.”



FIGURE 1. EASTSIDE RAIL CORRIDOR (ERC) OWNERSHIP

1.4 PLANNING FOR A TRAIL ALONG THE EASTSIDE RAIL CORRIDOR

The Master Plan is focused on implementing the RAC vision for a non-motorized trail in the ERC. The ERC represents a critical link in King County's Regional Trail System, which includes a network of shared-use trails connecting county communities. King County is currently responsible for over 175 miles of regional trails throughout the county. These trails include both paved and soft-surface trails; however, they all share common features of providing a safe and enjoyable trail experience for a variety of users. The ERC provides a rare and unique opportunity to establish a major new component of the county's regional trail system—a component that provides a significant new north-south trail corridor, as well as creating the opportunity to introduce critical connectivity within the county's existing regional trail system and trail systems managed by neighboring communities.

A regional trail is a shared use path that serves as a component of an extensive network of off-road, non-motorized routes connecting all parts of King County. A regional trail accommodates a wider variety and higher volumes of trail users than local trails typically do. Regional trail design aims to safely accommodate non-motorized activities including walking, jogging, bicycling, rollerblading, skateboarding, and other uses.

The Master Plan will further several important goals from the RAC recommendations for the ERC and the county's vision for the regional trail system:

- Advance the understanding of opportunities and constraints for development in the corridor

- Engage jurisdictions, agencies, and the public in a planning process to implement a trail as part of the corridor's multi-use vision
- Connect communities and existing trails to expand access and connectivity to King County's Regional Trail System

Rail corridors are generally heavily modified landscapes, including extensive embankments, engineered drainage features, and managed vegetation. Typically, natural resource features within rail corridors have also been modified. Small streams have often been channelized and culverted, wet areas filled, extensive drainage ditches installed, and vegetated habitats cleared and managed. However, these features often still provide valuable habitat functions, especially in an urban context. This study documents the ecological features in the corridor to provide a basis for the overall planning process.

2. PLANNING FOR ECOSYSTEM RESOURCES WITHIN THE CORRIDOR

2.1 INTRODUCTION

As part of the baseline inventory for the Master Plan, this study documents the natural ecosystem values in the corridor, with a focus on wetlands and streams. An ecosystem is defined by the interaction between plants, animals, microorganisms, and the physical environment in which they live. Ecosystems consist of living organisms, including humans, and the environment they inhabit. Understanding this relationship is basic to the environmental review process and the assessment of impacts on ecosystems. This study addresses the ecosystem components—wetlands, streams, other potentially regulated water bodies (i.e. jurisdictional ditches), and fish and wildlife listed as threatened or endangered under the Endangered Species Act (ESA) or by the State of Washington.

This study describes the methods and existing conditions of the ecosystem resources inventory,

and provides a summary of priority areas for conservation and restoration or sites that may be candidates for compensatory mitigation (if mitigation is needed) within the ERC vicinity. This is a planning-level study, which means that ecological features were documented through on-site reviews and mapping in addition to using existing inventory information from other sources. However, as a planning-level study, individual features were not delineated (which would formally define the extents of regulated wetland, stream, and ditch (jurisdictional ditch) features within the study area), and no systematic evaluation of ecological functions and values was completed. Those more intensive studies would typically be completed to support more detailed design-level work for projects that will follow after the completion of the Master Plan. These features have not been verified or reviewed by regulatory agencies.

Mapping, photos, and descriptions of natural features in the corridor are presented in an atlas attached to this document. Because critical areas definitions and regulations vary by local jurisdiction, the atlas generally is organized by segments within jurisdiction boundaries. The major features included in the documentation are wetlands, streams, and jurisdictional ditches. Many jurisdictional ditches in the ERC corridor are features that have been modified to provide drainage for the original rail line. In some ways they are “in-between” features that are man-made and may have little habitat value in themselves, but play a role in maintaining the hydrology of the feature they connect to. Drainage ditches that do not connect to regulated streams or wetlands are not regulated, however jurisdictional ditches are because modifications to these ditches could have impacts on their connected streams or wetlands. The jurisdictional ditches identified within the corridor that

likely have a hydrologic connection to a regulated waterbody are shown on the maps following each jurisdiction and listed in the Jurisdictional Ditch Atlas.

2.2 STUDY AREA

The ERC extends from Renton (mile post [MP] 5) north to Snohomish (MP 38.25) with a spur off the main line in Woodinville and Kirkland. The study area for the Ecosystem Resources Inventory includes 15.6 miles of the ERC right-of-way owned by King County and Sound Transit. Beginning from the south, this includes the jurisdictions of Renton, unincorporated King County, Bellevue, Kirkland, and Woodinville. To evaluate fish, wildlife, and plant species listed as threatened or endangered that are potentially affected by project-related noise and human activity, the project biologists also reviewed documented occurrences of these species within 0.5 mile of the corridor.

2.3 METHODS

This inventory included a review of existing information (literature and data sources) and a field inventory. Biologists reviewed King County Geographic Information Systems (GIS) data, Washington Department of Fish and Wildlife (WDFW) Priority Habitats and Species (PHS) data, U.S. Fish and Wildlife Service National Wetland Inventory (NWI) data, and other existing maps and reports that encompass ecosystem resources in the study area. General habitat, presence of salmonids, barriers to salmonid passage, water quality, and hydrology for streams in the corridor were documented as available from existing reports and data, such as locally available basin plans. A review of priority areas for conservation, restoration, or potential mitigation (if needed) within the watershed was conducted based on regional conservation priorities, local basin plans, and mitigation policies both per King County and local jurisdictions.

Biologists performed the field inventory during May through September, 2014 to identify and inventory wetlands, streams, and jurisdictional ditches by walking the entire study area. Features observed in the field were located at a reconnaissance level using GPS and hand annotating the GIS base map. Observations were based on the county-owned and Sound Transit-owned right-of-way and an area within 100 feet of the right-of-way, where not obscured by vegetation, fencing, or other obstructions. Readily visible characteristics of wetlands and stream systems within the corridor were documented. Observations estimating wetland and stream area, condition, and general vegetative cover were recorded, and documented on the GIS base map, data sheets, and field notebook. Photos of wetlands, streams, and jurisdictional ditches were taken. Mapped wetland areas, streams, and rivers are approximate; wetlands were not delineated or rated for this level of analysis. For example, soils were not analyzed for hydric soil indicators or subsurface hydrology. Because wetlands were not delineated or rated, the corresponding buffer widths are not known. Similarly, the ordinary high water mark (OHWM) for most streams and water types were not identified for all streams, therefore corresponding buffer widths are not known. The range of standard buffers based on critical areas ordinances for streams and wetlands by jurisdiction are shown in Table 1. Local jurisdictions may increase or decrease buffer widths depending on site conditions and project elements. Buffer widths may also differ if the wetland or stream is within a Shoreline Management Area subject to the regulations in the local Shoreline Master Program.

2.4 EXISTING CONDITIONS

The following sections summarize the conditions for streams, wetlands, and fish, and wildlife, and plant species in the study area. Individual atlas sheets with more specific data for each of the streams and wetlands are provided. Atlas sheets were not created for wetlands and streams mapped by King County or other local jurisdictions that were not observed in the field, and wetlands identified outside of the right-of-way where little to no field data could be collected. However, these features are displayed on the maps following each jurisdiction in addition to those features where field data was obtained.

2.4.1 Streams

Surface water in the study area discharges to the following urban stream basins, all of which are located in Water Resource Inventory Area (WRIA) 8 (Lake Washington/Cedar/Sammamish Watershed).

- East Lake Washington (Renton and Bellevue South)
- May Creek
- Coal Creek
- Mercer Slough
- Sammamish River
- Little Bear Creek

The streams in the study area are generally affected by the surrounding urban environment, with all having reaches that are channelized (i.e. revetments, levees) and/or have been piped (i.e. corrugated pipes, culverts). In total, 45 rivers and streams were encountered

TABLE 1 STANDARD WETLAND AND STREAM BUFFERS BY JURISDICTION

Jurisdiction (code citation)	Stream	Wetland
Renton Municipal Code (RMC 4.3.050)	35 to 100 feet	25-100 feet
Bellevue Municipal Code (BMC 20.25H)	25 -100 feet	40-225 feet (wetlands greater than 2,500 square feet)
King County Code (KCC 21A.24)	25-115 feet	50-275 feet
Kirkland Zoning Code (KZC Chapter 90)	25- 75 feet	25-100 feet
Woodinville Municipal Code (WMC 21.24)	50-150 feet	50-150 feet

during the field inventory as shown on the maps that accompany the stream write-ups. Streams occur in all local jurisdictions—8 in Renton, 2 in unincorporated King County, 11 in Bellevue, 7 in Kirkland, and 17 in Woodinville. King County watercourse data is also displayed on the maps, in the event that these features were not ground-truthed during the field inventory (i.e. feature completely piped within right-of-way). Waterbodies in the corridor listed in Washington State Department of Ecology (Ecology's) Water Quality Assessment 303(d) list include May Creek for bacteria; and Coal Creek, Kelsey Creek, and the Sammamish River—listed for bacteria and dissolved oxygen.

2.4.2 Wetlands

A total of 83 wetlands were encountered during the field inventory (performed May through September, 2014), ranging in size from less than 0.1 acre to over 7 acres. Wetlands occur in all local jurisdictions—11 in Renton, 3 in unincorporated King County, 26 in Bellevue, 13 in Kirkland, and 30 in Woodinville. The wetlands in the study area

are generally narrow and run parallel to the rail corridor in an adjacent ditch—relics of dredging along railbed and the manmade barrier of the rail prism. Several wetlands are associated with slopes adjacent to the rail where small drainages or seeps occur, including a long stretch in Kirkland and Woodinville between the vicinity of 139th Avenue NE/Willows Road NE and the vicinity of 128th Place NE. Some of these wetlands extend outside of the right-of-way where the boundary was estimated using aerial imagery. Many wetlands have been partially filled or modified in some manner, and contain non-native or invasive species but may provide habitat to urbanized wildlife.

2.4.3 Fish, Wildlife, and Plant Species

Fish Species. Salmonid species have been documented or modeled for eight of the project area streams through review of SalmonScape, WDFW's interactive, computer mapping system (WDFW 2014), and the City of Bellevue's individual fish use descriptions for Coal Creek, Kelsey Creek, and Sturtevant Creek (City of Bellevue 2009). Table 2 describes the potential salmonid species

TABLE 2. POTENTIAL SALMONID SPECIES IN THE RAIL CORRIDOR

Stream Name	Local Jurisdiction	Drainage Basin	Potential Salmonid Species in the Rail Corridor
May Creek	Renton	May Creek	Sockeye salmon, Chinook salmon steelhead trout, coho salmon
Coal Creek	Bellevue	Coal Creek (Cedar)	Cutthroat trout, sockeye salmon, Chinook salmon, steelhead trout, coho salmon
Kelsey Creek	Bellevue	Mercer Slough	Cutthroat trout, sockeye salmon, Chinook salmon, steelhead trout, coho salmon
Sturtevant Creek	Bellevue	Mercer Slough	Sockeye salmon*, Chinook salmon*, steelhead trout*, coho salmon*
SW15	Kirkland	Sammamish River	Sockeye salmon, Chinook salmon*, steelhead trout, coho salmon*
SW16	Kirkland	Sammamish River	Sockeye salmon, Chinook salmon*, steelhead trout, coho salmon*
SW17	Kirkland	Sammamish River	Sockeye salmon*, Chinook salmon*, steelhead trout*, coho salmon*
Sammamish River	Woodinville	Sammamish River	Sockeye salmon, Chinook salmon, steelhead trout, coho salmon, bull trout, kokanee

**Modeled presence only. WDFW defines "modeled presence" as "habitat upstream of known species presence, but downstream of any known natural barrier. The modeled category does not factor habitat quality, flow or any other natural or human-caused condition that would otherwise prevent habitat use."*

that could occur within the rail corridor by jurisdiction.

Terrestrial Wildlife Species. No terrestrial ESA-listed species or state-listed threatened or endangered terrestrial species are known or expected to occur in the study area.

Within 0.5 mile of the project corridor, the WDFW Priority Habitat program identifies the occurrence of a purple martin (*Progne subis*) breeding area west of the rail in the vicinity of the confluence of May Creek and Lake Washington. Purple martins are a state candidate species. Although not mapped within 0.5 mile of the corridor, several other state-listed sensitive species and candidate species may use habitats in the project area. State listed sensitive species that could be in the project corridor include the bald eagle (*Haliaeetus leucocephalus*) and peregrine falcon (*Falco peregrinus*). Candidate species that could be in the project corridor include the Townsend's big eared bat (*Corynorhinus townsendii*), western toad (*Anaxyrus boreas*), pileated woodpecker (*Dryocopus pileatus*), vaux swift (*Chaetura vauxi*), and purple martin. – The recently listed Oregon spotted frog (*Rana pretiosa*) is known to occur in Washington only at large wetland complexes in Klickitat, Skamania, Thurston, Skagit, and Whatcom counties. Oregon spotted frogs depend on relatively large areas with perennial bodies of water and associated wetlands. No such habitat is present in the action area. The nearest location where Oregon spotted frog critical habitat has been proposed for designation is greater than 50 miles from the project corridor.

2.4.4 Jurisdictional Ditches

A total of 29 jurisdictional ditches were identified in the ERC right-of-way. Most of these ditches run parallel to the rail and connect to either a stream or wetland. Potential jurisdictional ditches are shown on the aerial maps following each jurisdiction, and a table listing potential connectivity with regulated

wetlands or waterbodies is in the Jurisdictional Ditch Atlas.

2.5 PRIORITY AREAS FOR CONSERVATION, RESTORATION, AND MITIGATION

Priority areas for conservation and restoration were identified within the watershed based on a review of regional conservation priorities and local basin plans. Candidate sites for potential mitigation (if needed) were also identified considering mitigation policies both per King County and local jurisdictions.

When permitted projects create unavoidable impacts to the environment, project sponsors must offset, or “mitigate” the environmental impacts associated with the project. The mitigation process includes avoiding and minimizing impacts as much as possible, and then making up for any unavoidable impacts through compensatory mitigation. Compensatory mitigation can occur on-site (at or near the place where the impact project occurs) or off-site. The mitigation sequencing requirements are established by National Environmental Policy Act (NEPA), the Clean Water Act (CWA), and local critical areas ordinances. According to NEPA (40 Code of Federal Regulations [CFR] paragraphs 1508.20), the sequence of mitigation is as follows:

- Avoiding the impact altogether by not taking a certain action or parts of an action
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation
- Rectifying the impact by repairing, rehabilitating, or restoring the affected environment
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action
- Compensating for the impact by replacing or providing substitute resources or environments

If compensatory mitigation is needed for the ERC, it would be implemented in accordance with applicable federal, state, and local requirements and guidelines. Where feasible, potential project-specific conservation and compensatory mitigation sites would be selected according to the federal Final Compensatory Mitigation Rule issued in April 2008 by the U.S. Army Corps of Engineers (Corps) and U.S. Environmental Protection Agency (EPA) (40 CFR Part 230). According to the Final Compensatory Mitigation Rule, the federal hierarchy for wetland mitigation options generally provides a preference for mitigation bank credits, when the permitted activity is in the service area of an approved bank with the appropriate types of credits available. In the absence of an approved bank, in-lieu fee programs are preferred over permittee-responsible mitigation (i.e., project-specific mitigation developed by King County).

If project-specific wetland mitigation were developed by King County for the ERC, then site selection would follow local jurisdiction critical area ordinances, the joint guidance developed by Ecology, the Corps, and the EPA (Hruby et al. 2009), which discusses the implementation of a watershed approach to selecting mitigation sites, and appropriate current available agency regulations. Using a watershed approach allows for a greater degree of flexibility in selecting mitigation sites and potentially greater value created for the watershed than the previous regulatory focus on on-site mitigation.

The following section describes sites to consider as priority areas for conservation or potential mitigation based on a review of regional conservation priorities, local basin plans, and mitigation policies both per King County and local jurisdictions, and the relationship of the rail corridor's position in the watershed.

2.5.1 Streams

The primary focus for stream conservation, restoration, and potential mitigation should be

on those streams with documented fish use and those with potential fish habitat. Upon review of existing documents that specify restoration and enhancement opportunities (e.g., basin plans and shoreline master programs), three streams emerged at the top for consideration.

May Creek. There is the potential to apply prescribed enhancement and restoration identified in the 2001 May Creek Basin Action Plan (King County and City of Renton 2001), including stabilizing slopes prone to erosion, placement of large woody debris (LWD), and enhancing riparian vegetation by planting conifers in the project vicinity. There may also be opportunities to create floodplain wetlands and increase connectivity to wetlands in the vicinity.

Kelsey Creek. Actions in the project area could include riparian vegetation enhancement and stream channel restoration including removal of pilings from OHWM, if trestle replacement or removal occurs. Other potential actions in the project vicinity could include those identified by the *Final Lake Washington/Cedar/Sammamish Watershed (WRIA 8) Chinook Salmon Conservation Plan* (WRIA 8 Steering Committee and Forum 2005) such as improving connections to nearby wetlands and cold water seeps, restoring channel (e.g., remove riprap and install LWD), enhancing riparian vegetation, and modifying existing culverts that are partial barriers.

Sammamish River. Actions in the project area could include riparian vegetation enhancement and stream channel restoration such as removal of pilings from OHWM, if trestle replacement or removal occurs. Other potential actions in the project vicinity could include those identified by the *Final WRIA 8 Chinook Salmon Conservation Plan* (WRIA 8 Steering Committee and Forum 2005) such as restoring the floodplain and re-grading channel to increase meanders.

Many of the smaller stream crossings under the rail, especially those with potential fish habitat, could be replaced to establish better connectivity and reduce velocity. Additionally, most project area stream buffers would benefit from enhancement.

Lake Washington is also in the project vicinity in the Renton segment. The restoration plan in the Renton Shoreline Master Program suggests some opportunities may be present on short sections of shoreline along the railroad right-of-way. Although most of the lakeshore is densely developed with residences, some opportunities could include enhancing the shoreline at WR2, at Kennydale Park, or the May Creek delta.

2.5.2 Wetlands

Many of the project area wetlands and associated buffers are disturbed or vegetated with invasive species and would benefit from enhancement. However, three wetland areas were identified as top candidates for conservation, restoration, and potential mitigation.

WB21. Because of the importance of this wetland as a headwater of the west tributary of Kelsey Creek, there is opportunity for wetland restoration and enhancement and buffer enhancement.

WB25/WB26. Because the wetlands are adjacent to Kelsey Creek and are in a degraded condition with invasive species cover, the wetlands are good candidates for wetland restoration and enhancement and buffer enhancement. The Final WRIA 8 Chinook Salmon Conservation Plan (WRIA 8 Steering Committee and Forum 2005) identifies improving connections to nearby wetlands and enhancing riparian vegetation in the project vicinity.

WW18. There is an opportunity for wetland creation and enhancement. A berm could be removed to create additional wetland and other portions of the wetland and buffer could be enhanced. This wetland is in the Little Bear Creek Watershed, which has restoration projects identified in the Final WRIA 8 Chinook Salmon Conservation Plan (WRIA 8 Steering Committee and Forum 2005). Although this wetland is outside of the area currently railbanked for trail development, it may be an appropriate location to consider for potential mitigation of impacts

associated with the project.

2.5.3 Buffers

Buffers are important for protecting wetlands from indirect impacts because many aquatic resources and ecological functions are sensitive to disturbances (changes) in adjacent upland areas that result in changes to the biological, chemical, and hydrological properties of the wetland (Castelle et al. 1994). Riparian buffers are important to the health of streams and the fish that inhabit the streams. Properly functioning riparian buffers provide stream shading and a source of LWD, contribute organic debris to the stream, stabilize stream banks, reduce fine sediment input into streams, filter nutrients and pollutants, and reduce and detain flood waters. Land use affects all buffer functions and effectiveness directly and indirectly. Since many wetlands and streams are situated near developed areas, it is important to preserve remaining buffers and employ enhancement measures where feasible. Most wetland buffers and stream buffers in the project area would result in functional lift if enhancement were implemented. Generally, enhancement could include planting native trees, shrubs, and/or emergent species to increase vegetation structure and diversity.

2.5.4 Habitat Connectivity for Wildlife

Connectivity of aquatic areas (wetlands, streams, and lakes) to uplands and other aquatic areas is important for the movement of wildlife from one habitat to another. Habitat connectivity depends greatly on the adjacent land use and amount of development. An ERC right-of-way containing an undeveloped buffer or edge running parallel to the trail can help maintain a vital habitat corridor in this urbanized area, if it is well-vegetated with native species and has minimal disturbance.

2.6 REFERENCES

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- King County and City of Renton. 2001. Final Adopted May Creek Basin Action Plan, April 2001.
- WDFW (Washington Department of Fish and Wildlife). 2014. Washington Department of Fish and Wildlife's SalmonScape queried in October 2014 at the following website: <http://apps.wdfw.wa.gov/salmonscape/>
- WRIA 8 Steering Committee and Forum. 2005. Final Lake Washington/Cedar/Sammamish Watershed (WRIA 8) Chinook Salmon Conservation Plan, July 2005.

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WETLAND AND STREAM ATLAS

A detailed atlas of wetland, and streams in the corridor right-of-way is included on the following sheets. The atlas includes wetland and stream descriptions, photographs, followed by aerial maps showing the estimated wetland and stream extents inside and near the corridor right-of-way. The first page of this section is a sheet index for all jurisdictions the corridor crosses. Individual sheet indexes are also provided by jurisdiction followed by detailed wetland and stream descriptions and the aerial maps.

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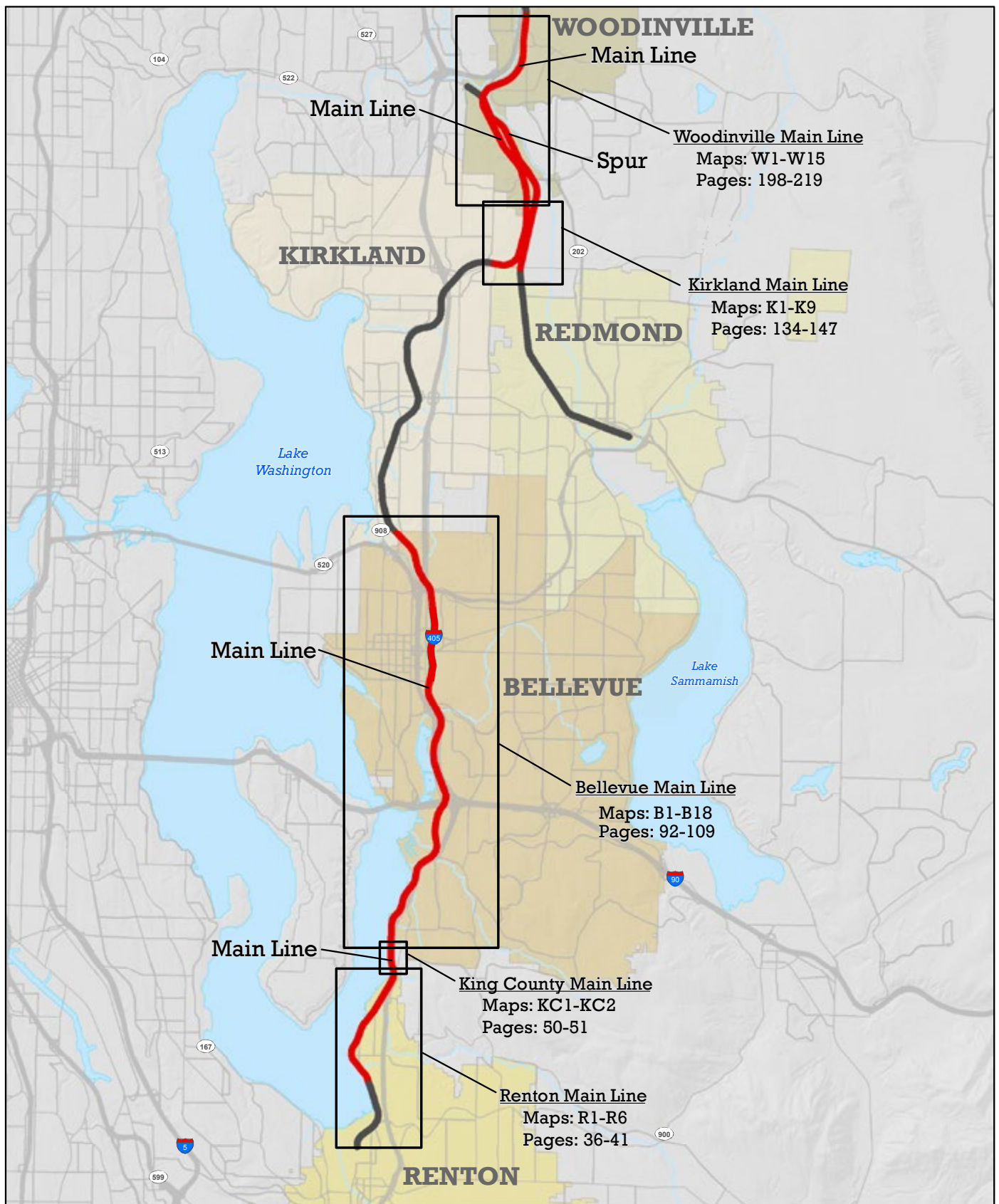
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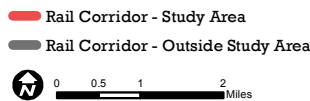
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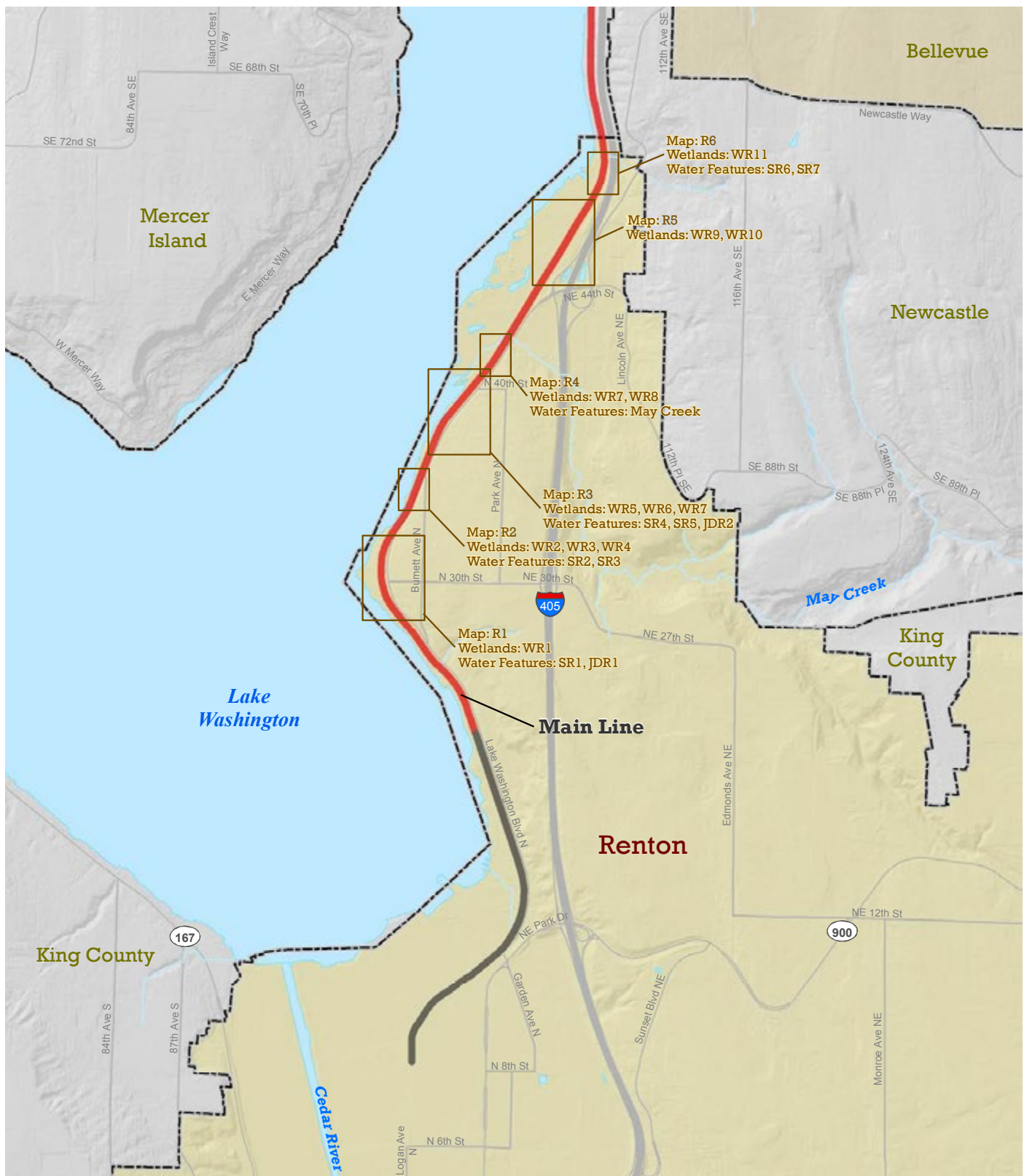
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Parametrix



RENTON



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* King County Hydrographic Data

Parametrix

Renton Main Line

WETLAND NAME: WR1

Segment: Main Line

Jurisdiction: Renton

Map Number: R1



WR1—SOUTH END LOOKING SOUTHEAST



WR1—LOOKING NORTH, NEAR MOUNTAIN VIEW
AVENUE CROSSING

DATE OF SITE VISIT: 05/22/2014

DRAINAGE BASIN: EAST LAKE WASHINGTON—RENTON

USFWS CLASS: PSS/PEM

HGM CLASS: SLOPE/DEPRESSIONAL/RIVERINE

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 1.0 / 1.0

DESCRIPTION: WR1 is a large, linear wetland associated with a stream (SR1) that extends along the western perimeter of the wetland, east of the railbed. Hydrologic sources supporting WR1 include surface water as well as groundwater and seeps expressed off an adjacent slope. Stream SR1 flows in a ditch through the wetland. SR1 serves as an unconstrained inlet and outlet to the wetland and, although not detected, there is likely an underground pipe associated with Lake Washington Boulevard North that serves as an additional inlet. Observed indicators of hydrology included inundation, saturation, drainage patterns, water-stained leaves, and algae. The shrub community is dominated by salmonberry (*Rubus spectabilis*), Pacific ninebark (*Physocarpus capitatus*), and climbing nightshade (*Solanum dulcamara*). The emergent community is dominated by reed canarygrass (*Phalaris arundinacea*) and giant horsetail (*Equisetum telmateia*) with watercress (*Nasturtium officinale*) and common duckweed (*Lemna minor*) growing within the stream. The buffer consists of a deciduous forest to the north, a row of conifers to the west, quarry spalls, and a wall interspersed with Himalayan blackberry (*Rubus armeniacus*) to the south, and a roadway to the east.

WETLAND NAME: WR2

Segment: Main Line

Jurisdiction: Renton

Map Number: R2



WR2—FACING WEST OUT OF STUDY AREA



WR2—FACING NORTHWEST OUT OF STUDY AREA

DATE OF SITE VISIT: 05/22/2014

DRAINAGE BASIN: EAST LAKE WASHINGTON—RENTON

USFWS CLASS: PSS/PEM

HGM CLASS: SLOPE/LACUSTRINE

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.1 / 0.1

DESCRIPTION: WR2 is a small, lacustrine/slope wetland directly adjacent to Lake Washington. Hydrologic sources supporting WR2 include Lake Washington and a pipe under the railroad and roadway (Lake Washington Boulevard North). The hydrologic outlet is Lake Washington. Observed indicators of hydrology include hydrophytic vegetation and the resonance of water entering the wetland area through a pipe. The scrub-shrub community is dominated by Himalayan blackberry (*Rubus armeniacus*) and Pacific ninebark (*Physocarpus capitatus*), and the emergent community is dominated by giant horsetail (*Equisetum telmateia*) and creeping buttercup (*Ranunculus repens*). The buffer consists of a yard with deciduous trees to the north, a yard with deciduous trees to the south, a shrub community dominated by Himalayan blackberry on a slope as a buffer to the railbed to the east, and Lake Washington to the west.

WETLAND NAME: WR3

Segment: Main Line

Jurisdiction: Renton

Map Number: R2



WR3—SOUTH END FACING NORTH



WR3—NORTH END FACING SOUTH

DATE OF SITE VISIT: 05/23/2014

DRAINAGE BASIN: EAST LAKE WASHINGTON—RENTON

USFWS CLASS: PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): <0.1 / <0.1

DESCRIPTION: WR3 is a small, linear depression located east of the railbed associated with a maintained railside ditch. The primary hydrologic sources supporting WR3 include groundwater and precipitation. WR3 does not have a visible inlet or outlet. Observed indicators of hydrology include water-stained leaves, cracked soils, and hydrophytic vegetation. The emergent community is dominated by unidentified grasses, common rush (*Juncus effusus*), and giant horsetail (*Equisetum telmateia*) with the majority of the wetland area consisting of bare ground. To the north, south, and east, the buffer primarily consists of several deciduous trees (bigleaf maple [*Acer macrophyllum*]), shrubs (beaked hazelnut [*Corylus cornuta*]), Himalayan blackberry (*Rubus armeniacus*), and salal (*Gaultheria shallon*), grasses, and forbs. The buffer to the east also includes Lake Washington Boulevard North. To the west, the buffer consists of the railbed followed by a narrow corridor of black cottonwood (*Populus balsamifera*), bigleaf maple, butterfly bush (*Buddleia davidii*), and Himalayan blackberry with some Scotch broom (*Cytisus scoparius*) and English holly (*Ilex aquifolium*). A house, yard, and Kennydale Beach Park are situated farther west from the narrow forested corridor.

WETLAND NAME: WR4

Segment: Main Line

Jurisdiction: Renton

Map Number: R2



WR4—SOUTH END FACING NORTH



WR4—NORTH END FACING SOUTH

DATE OF SITE VISIT: 05/23/2014

DRAINAGE BASIN: EAST LAKE WASHINGTON—RENTON

USFWS CLASS: PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): <0.1 / <0.1

DESCRIPTION: WR4 is a linear, depression located east of the railbed, west of the intersection of N 36th Street, Burnett Avenue N, and Lake Washington Boulevard North. The wetland is associated with a railside ditch. The primary hydrologic sources supporting WR4 are groundwater and precipitation. No inlet was detected. The outlet is located at the north end of the wetland where it naturally connects to Stream SR3. Observed indicators of hydrology include small areas of inundation, saturated soil, and exposed and cracked soils. The emergent community is dominated by an unidentified grass and giant horsetail (*Equisetum telmateia*) with some creeping bentgrass (*Agrostis stolonifera*) and common velvet grass (*Holcus lanatus*). To the north the buffer consists of a stream (SR3) and Himalayan blackberry (*Rubus armeniacus*), and to the south, the buffer consists of quarry spall, grasses, and steps to Kenndale Beach Park. To the east, the buffer consists of grasses and forbs and Lake Washington Boulevard North; to the west is the railbed (no vegetation between wetland and the railbed), the park, and residential development.

WETLAND NAME: WR5

Segment: Main Line

Jurisdiction: Renton

Map Number: R3



WR5—SOUTHERN 1/4 SECTION FACING NORTH



WR5—NORTHERN 1/4 SECTION FACING NORTHEAST

DATE OF SITE VISIT: 05/23/2014

DRAINAGE BASIN: EAST LAKE WASHINGTON—RENTON

USFWS CLASS: PEM/PFO/PSS

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.2 / 0.2

DESCRIPTION: WR5 is a long, linear depression located east of the railbed south of N 40th Street. The wetland is associated with a railside ditch. The primary hydrologic sources supporting WR5 include groundwater, precipitation, and local surface water runoff. No inlets were observed. The outlet consists of a pipe (and catch basin) that flows under the railbed. Observed indicators of hydrology include small areas of inundation, saturated soil, drainage patterns in the wetland, water-stained leaves, and algae. The forested community is dominated by black cottonwood (*Populus balsamifera*). The shrub community is dominated by birch (*Betula* sp.), red alder (*Alnus rubra*), common rush (*Juncus effusus*), and broad-leaf cattail (*Typha latifolia*) with overhanging Himalayan blackberry (*Rubus armeniacus*). The emergent community is dominated by common rush and broad-leaf cattail. To the north, south, and east the buffer is dominated by Himalayan blackberry with some trees including bigleaf maple (*Acer macrophyllum*), Scouler's willow (*Salix scouleriana*), and red alder. To the west the buffer includes the railbed and landscaped areas with a mix of shrubs and trees.

WETLAND NAME: WR6

Segment: Main Line

Jurisdiction: Renton

Map Number: R3



WR6—SOUTH END FACING NORTH



WR6—NORTH END FACING SOUTH

DATE OF SITE VISIT: 05/23/2014

DRAINAGE BASIN: MAY CREEK

USFWS CLASS: PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): <0.1 / <0.1

DESCRIPTION: WR6 is a small depressional wetland in maintained lawn located west of the railbed and the intersection of Lake Washington Boulevard and N 40th Street. Hydrologic sources supporting WR6 include groundwater and occasional surface water from an adjacent stream (SR5) that is piped under the railbed and daylights south of the wetland. The outlet for the wetland is SR5 and there is no evidence of an inlet. Observed indicators of hydrology include small pockets of inundation and saturation within the upper 12 inches of soil. The emergent community is dominated by lawn and creeping buttercup (*Ranunculus repens*) with the common occurrence of bird's foot trefoil (*Lotus corniculatus*), some sawbeak sedge (*Carex stipata*), and small-fruited bulrush (*Scirpus microcarpus*). Two patches of yellow flag iris (*Iris pseudacorus*) were observed in two patches. The buffer consists primarily of landscaped lawn, paved areas, and the railbed (to the east) with a row of western red cedar (*Thuja plicata*) to the northeast and a row of deciduous trees to the south.

WETLAND NAME: WR7

Segment: Main Line

Jurisdiction: Renton

Map Number: R3



WR7—NORTH END FACING SOUTH



WR7—SOUTH END FACING NORTH

DATE OF SITE VISIT: 05/23/2014

DRAINAGE BASIN: MAY CREEK

USFWS CLASS: PFO/PSS

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.2 / 0.2

DESCRIPTION: WR7 is a small, depressional wetland in a vegetated strip between Wells Avenue N and Lake Washington Boulevard North. The primary hydrologic source supporting WR7 is groundwater. No inlet was observed. The outlet is a pipe in the northwest corner of the wetland that extends under Wells Avenue N and likely under N 41st Street Place. Water from the wetland was observed flowing north in a drainage path into the pipe at the time of the field visit. Indicators of hydrology include inundation and saturation within the upper 12 inches of soil. Snags were observed in the wetland. The forested community is dominated by red alder (*Alnus rubra*) and reed canarygrass (*Phalaris arundinacea*). The shrub community is dominated by red alder (saplings) and reed canarygrass. Himalayan blackberry (*Rubus armeniacus*) was common throughout. Common duckweed (*Lemna minor*) was present in the drainage path along the west side of the wetland. The buffer includes roadways to the north and west, the railroad to the east, and a disturbed area to the south with a narrow strip of vegetated buffer consisting of red alder, Himalayan blackberry (*Rubus armeniacus*), and reed canarygrass. A mix of more desirable native vegetation including black cottonwood (*Populus balsamifera*), Pacific madrone (*Arbutus menziesii*), and Douglas-fir (*Pseudotsuga menziesii*) with an understory of invasive shrubs are located east of the railroad.

WETLAND NAME: WR8

Segment: Main Line

Jurisdiction: Renton

Map Number: R3



WR8—SOUTH END FACING NORTH



WR8—NORTH END LOOKING SOUTH

DATE OF SITE VISIT: 05/23/2014

DRAINAGE BASIN: MAY CREEK

USFWS CLASS: PFO/PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): <0.1 / <0.1

DESCRIPTION: WR8 is a small, depressional wetland east of the railbed, north of Wells Avenue N and N 41st Street, and south of May Creek. Hydrologic sources supporting WR8 include groundwater, precipitation, and local runoff. No inlets or outlets were detected. Observed indicators of hydrology included drainage patterns, water-stained leaves, and cracked soil in the wetland. The forested community is dominated by black cottonwood (*Populus balsamifera*) with a sparse understory of mostly bare ground and some common rush (*Juncus effusus*). The emergent class consists primarily of reed canarygrass (*Phalaris arundinacea*) and common rush. The buffer is minimal and includes maintained vegetation, roadway, and railbed. Just to the north of the wetland is a patch of Japanese knotweed (*Polygonum cuspidatum*).

WETLAND NAME: WR9

Segment: Main Line

Jurisdiction: Renton

Map Number: R5



WR9—SOUTH END FACING NORTH FROM THE RAIL



WR9—CULVERTS AT NORTH END FACING SOUTH

DATE OF SITE VISIT: 05/23/2014

DRAINAGE BASIN: EAST LAKE WASHINGTON—BELLEVUE SOUTH

USFWS CLASS: PFO/PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.2 / 0.2

DESCRIPTION: WR9 is a long, linear depressional wetland associated with the railside ditch. It is located on the west side of the railbed, east of the Virginia Mason Athletic Center (VMAC), and south of Seahawks Way. Hydrologic sources supporting WR9 include groundwater, surface water, precipitation, and local runoff. A constrained inlet (pipe) was observed under the railbed near the south end of the VMAC building. A pipe under Seahawks Way conveys water from Wetland WR10. A constrained outlet (pipe) was observed in the northwest corner at the south end of the VMAC. Observed indicators of hydrology in the wetland include inundation, saturation, drainage patterns, and slight buttressing of trees. The forested community is dominated by black cottonwood (*Populus balsamifera*) with a sparse understory consisting mostly of bare ground. The emergent community is primarily reed canarygrass (*Phalaris arundinacea*) and giant horsetail (*Equisetum telmateia*). The buffer is minimal and disturbed. It includes disturbed vegetation to the north, the railbed to the east, the maintenance facility to the west, and a gravel road to the south (associated with the Seahawks facility).

WETLAND NAME: WR10

Segment: Main Line

Jurisdiction: Renton

Map Number: R5



WR10—SOUTH END FACING NORTH



WR10—NORTH END FACING SOUTH

DATE OF SITE VISIT: 06/10/2014

DRAINAGE BASIN: EAST LAKE WASHINGTON—BELLEVUE SOUTH

USFWS CLASS: PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): <0.1 / <0.1

DESCRIPTION: WR10 is a small, linear depressional wetland associated with the railside ditch. It is located west of the railbed and adjacent to Virginia Mason Athletic Center (VMAC), northwest of Hazelwood Lane, and north of Seahawks Way. Hydrologic sources supporting WR10 include groundwater and local surface water runoff. The outlet is a pipe at the southwest end of the wetland, which extends under Seahawks Way to WR9. No inlets were detected. Observed indicators of hydrology include hydrophytic vegetation and water-stained leaves. The dominant emergent community is broad-leaf cattail (*Typha latifolia*) with some common rush (*Juncus effusus*). The existing vegetated buffer includes a narrow landscaped area (mulched, minimal trees and shrubs) between the wetland and a paved parking lot to the west, and an area of giant horsetail (*Equisetum telmateia*) growing in quarry spalls between the railroad and the wetland to the east. Seahawks Way, the railroad, and Hazelwood Way comprise the rest of the buffer.

WETLAND NAME: WR11

Segment: Main Line

Jurisdiction: Renton

Map Number: R6



WR11—SOUTH END FACING NORTH



WR11—VIEW TO THE SOUTH UNDER TRESTLE

DATE OF SITE VISIT: 06/10/2014

DRAINAGE BASIN: EAST LAKE WASHINGTON—BELLEVUE SOUTH

USFWS CLASS: PFO

HGM CLASS: DEPRESSIONAL/RIVERINE

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.2 / 0.2

DESCRIPTION: WR11 is a linear depressional/riverine wetland located on both sides of the railbed with a trestle crossing over it, north of the Virginia Mason Athletic Center (VMAC). Hydrologic sources supporting WR11 includes groundwater and surface water runoff from adjacent streams (SR6 and SR7). Streams SR6 and SR7 function as both inlets and outlets to the wetland. Observed indicators of hydrology include small pockets of inundation, saturation, and stream flow. The dominant forested community is red alder (*Alnus rubra*), reed canarygrass (*Phalaris arundinacea*), and giant horsetail (*Equisetum telmateia*). The buffer consists of the railbed, residential development, and landscaping to the west; a roadway to the east and to the north; and a parking area to the south. Immediately adjacent to the wetland is a thin strip of vegetation consisting of Himalayan blackberry (*Rubus armeniacus*), giant horsetail, black cottonwood (*Populus balsamifera*), and landscaped plants.

STREAM NAME: May Creek

Segment: Main Line
Jurisdiction: Renton
Map Number: R4



**MAY CREEK—EAST OF RAIL BRIDGE, LOOKING UP-
STREAM AT ROAD BRIDGE**



**MAY CREEK—EAST OF RAIL BRIDGE LOOKING
DOWNSTREAM FROM UNDER ROAD BRIDGE**

DATE OF SITE VISIT: 05/23/2014

DRAINAGE BASIN: MAY CREEK

DESCRIPTION: May Creek intersects the rail north of the intersection of Wells Avenue N and Lake Washington Boulevard North. May Creek, a tributary to Lake Washington, drains the area north of the Cedar River and west of Issaquah Creek. Within the rail right-of-way, the rail extends over the stream on a bridge. Bridge footings were observed below the ordinary high water mark (OHWM). The OHWM was determined at the time of the site visit and is shown on Map R4. Additional stream crossings near the rail include Lake Washington Boulevard North and a sewer main between Lake Washington Boulevard North and the rail. In-stream features include a concrete weir, large woody debris, and gravel and cobble substrate. Riparian vegetation in the right-of-way includes sparse red alder (*Alnus rubra*), Himalayan blackberry (*Rubus armeniacus*), giant horsetail (*Equisetum telmateia*), Japanese knotweed (*Polygonum cuspidatum*) and a variety of grasses. A snag was also observed in the buffer.

The City of Renton classifies the water type of May Creek as Shoreline (Class 1). The Washington Department of Fish and Wildlife's SalmonScape (queried October 2014) indicates the "documented" presence of sockeye salmon (*O. nerka*), Chinook salmon (*O. tshawytscha*) (fall Chinook), steelhead trout (*O. mykiss*) (winter run), and coho salmon (*O. kisutch*). King County adopted a basin action plan in 2001 to reduce flooding, stabilize stream banks, reduce erosion, protect and enhance fish and wildlife habitat, and improve water quality. The action plan and other studies performed since that time are located on the County website: <http://www.kingcounty.gov/environment/watersheds/cedar-river-lake-wa/may-creek.aspx>.

There is the potential to apply prescribed enhancement and restoration identified in the 2001 May Creek Basin Action Plan including stabilizing slopes prone to erosion, placement of large woody debris (LWD), and enhancing riparian vegetation by planting conifers in the project vicinity. There may also be opportunities to create floodplain wetlands and increase connectivity to wetlands in the vicinity.

STREAM NAME: SR1

Segment: Main Line

Jurisdiction: Renton

Map Number: R1



SR1—WEST SIDE, LOOKING UPSTREAM TOWARDS MT. VIEW AVENUE



SR1—EAST SIDE, LOOKING UPSTREAM (NORTH) FROM CULVERT UNDER RAILBED

DATE OF SITE VISIT: 05/22/2014

DRAINAGE BASIN: EAST LAKE WASHINGTON - RENTON

DESCRIPTION: Stream SR1 enters the corridor in the vicinity of the Mountain View Avenue N/N 33rd Street intersection, then flows south along the east side of the railbed with Wetland WR1 for approximately 0.26 mile before entering a pipe that crosses under the railbed. A jurisdictional ditch flows (JDR1) flows north into Stream SR1 in the pipe on the east side prior to flowing under the railbed. It then discharges over an engineered erosion control feature (terraced quarry spalls) before it flows west under Mountain View Avenue N. Stream SR1 is considered a primary source of hydrology to Wetland WR1. During the site visit, flow was visible in the lower segment until just north of Wetland WR1, where the stream transitioned to intermittent. The bankfull width is approximately 4 to 5 feet east of the railbed. The stream has in-stream vegetation in portions including watercress (*Nasturtium officinale*) and common duckweed (*Lemna minor*). Riparian vegetation is narrow consisting of deciduous forest to the north, a row of conifers and English ivy (*Hedera helix*) to the west, Himalayan blackberry (*Rubus armeniacus*), interspersed with quarry spalls, and a wall to the south. Developed areas in the buffer include the railbed, roadways, and residences.

STREAM NAME: SR2

Segment: Main Line

Jurisdiction: Renton

Map Number: R2



SR2—LOOKING EAST AT CULVERT



SR2—LOOKING NORTH FROM SOUTH END

DATE OF SITE VISIT: 05/23/2014

DRAINAGE BASIN: EAST LAKE WASHINGTON - RENTON

DESCRIPTION: Stream SR2 is located in the vicinity of Kennydale Beach Park, emerging from a pipe under Lake Washington Boulevard North approximately 75 feet south of the intersection of Lake Washington Boulevard North, Burnett Avenue N, and N 36th Street. The stream flows north along the east side of the railbed, then turns west through the pipe under the railbed. The pipe extending under the rail is broken as evidenced by water flowing under the pipe at the outlet, rather than in it. On the west side of the rail, Stream SR2 briefly daylights in a broken concrete-lined ditch before entering another pipe that extends under concrete and sand in Kennydale Beach Park then discharging to Lake Washington. Stream SR2 was flowing at the time of the field investigation. The stream width is approximately 4 feet and has a variable substrate with gravel, sand, and silt. Vegetation in the channel and banks includes watercress (*Nasturtium officinale*), common rush (*Juncus effusus*), giant horsetail (*Equisetum telmateia*), American speedwell (*Veronica americana*), and a variety of grasses. Riparian vegetation is limited to giant horsetail, Himalayan blackberry (*Rubus armeniacus*), and maintained disturbance-tolerant herbaceous species. Developed areas in the buffer include the railbed, roadways, and residences.

STREAM NAME: SR3

Segment: Main Line

Jurisdiction: Renton

Map Number: R2



**SR3—LOOKING EAST AT DAYLIGHTED SEGMENT AND
PIPE UNDER LAKE WASHINGTON BOULEVARD NORTH**

DATE OF SITE VISIT: 05/23/2014

DRAINAGE BASIN: EAST LAKE WASHINGTON - RENTON

DESCRIPTION: Stream SR3 is located in the vicinity of Kenndale Beach Park, emerging from a pipe under Lake Washington Boulevard North, approximately 50 feet north of the intersection of Lake Washington Boulevard North, Burnett Avenue N, and N 36th Street. The stream briefly daylight for several feet on the east side of the railbed where water from Wetland WR4 flows into Stream SR3. The stream then flows through a pipe under the railbed and the rest of the right-of-way. Although not field verified, it is assumed it ultimately discharges to Lake Washington. Stream SR3 was flowing at the time of the site visit. The stream is lined with quarry spalls. Vegetation in the riparian buffer includes Himalayan blackberry (*Rubus armeniacus*), giant horsetail (*Equisetum telmateia*), and other disturbance-tolerant herbaceous vegetation.

STREAM NAME: SR4

Segment: Main Line

Jurisdiction: Renton

Map Number: R3



SR4—FROM PIPE UNDER RAILBED, LOOKING NORTH-EAST (UPSTREAM)



SR4—LOOKING AT SCOUR POOL BY ROADWAY PIPE OUTLET

DATE OF SITE VISIT: 05/23/2014

DRAINAGE BASIN: EAST LAKE WASHINGTON - RENTON

DESCRIPTION: Approximately 60 feet south of N 38th Street, Stream SR4 emerges from a pipe under Lake Washington Boulevard North flowing west, and enters a pipe that extends under the railbed where it likely continues as a piped system that ultimately discharges to Lake Washington. The grade of the daylighted portion of the stream east of the rail is approximately 10 percent. In addition to a substrate consisting of cobble, gravel, and sand, broken pieces of concrete and pipe were in the channel. Erosion and scour were observed at the outlet of the Lake Washington Boulevard North pipe. Stream SR4 was flowing at the time of the site visit. Vegetation in the riparian buffer includes Himalayan blackberry (*Rubus armeniacus*), giant horsetail (*Equisetum telmateia*), butterfly bush (*Buddleia davidii*), climbing nightshade (*Solanum dulcamara*), and other invasive and disturbance-tolerant vegetation.

STREAM NAME: SR5

Segment: Main Line

Jurisdiction: Renton

Map Number: R3



SR5—LOOKING WEST

DATE OF SITE VISIT: 05/23/2014

DRAINAGE BASIN: MAY CREEK

DESCRIPTION: In the railbed right-of-way, Stream SR5 is piped east of, and under, the railbed with daylighted channel west of the railbed just north of the intersection of Lake Washington Boulevard North and N 40th Street. It is associated with Wetland WR6. A catch basin and associated pipes east of the rail (near the northern extent of Wetland WR5) likely provide the hydrology to both the Stream SR 5 and Wetland WR6. Stream SR5 leaves the right-of-way in a pipe that extends under Wells Avenue N. It is assumed that it eventually drains to Lake Washington. The low-gradient, narrow (approximately 18 inches in width) channel was flowing at the time of the site visit. The stream flows through a landscaped/maintained area with buffer vegetation of maintained lawn, creeping buttercup (*Ranunculus repens*), reed canarygrass (*Phalaris arundinacea*), installed trees, and a garden.

STREAM NAME: SR6

Segment: Main Line

Jurisdiction: Renton

Map Number: R6



SR6—LOOKING NORTH (PRIMARY CHANNEL)



SR6/WR11—BRAIDED SECONDARY CHANNELS

DATE OF SITE VISIT: 06/10/2014

DRAINAGE BASIN: EAST LAKE WASHINGTON - BELLEVUE SOUTH

DESCRIPTION: Stream SR6 flows north along the east side of Seahawks Way/Ripley Lane N and extends under Ripley Lane N, north of the Seahawk Training Facility (Virginia Mason Athletic Center) north entrance. It continues to flow north on the east side of the railbed through and adjacent to Wetland WR11 into Stream SR7, immediately south of the Ripley Lane N crossing (trestle). Stream SR6 was flowing at the time of the visit. The width varies between 4 feet (downstream) and 8 feet (upstream), becoming more incised at the north end. The segment of Stream SR6 that flows under the rail trestle through Wetland WR11 is braided. Vegetation in the riparian buffer includes red alder (*Alnus rubra*), black cottonwood (*Populus balsamifera*), reed canarygrass (*Phalaris arundinacea*), giant horsetail (*Equisetum telmateia*), Himalayan blackberry (*Rubus armeniacus*), and landscaped plants. The developed portion of the buffer consists of the railbed, residential development, roadways, and a parking area.

STREAM NAME: SR7

Segment: Main Line

Jurisdiction: Renton

Map Number: R6



SR7—LOOKING UPSTREAM (EAST) AT CULVERT UNDER RIPLEY LANE



SR7 (AND SR6)—CROSSING AND CONFLUENCE UNDER TRESTLE, LOOKING WEST (DOWNSTREAM) WITH SR6 JOINING SR7 FROM LEFT SIDE

DATE OF SITE VISIT: 06/10/2014

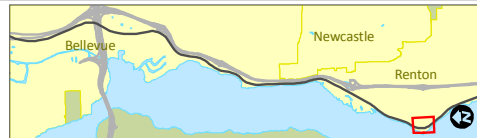
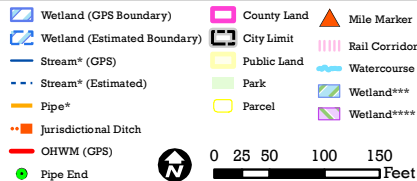
DRAINAGE BASIN: EAST LAKE WASHINGTON - BELLEVUE SOUTH

DESCRIPTION: Stream SR7 emerges from a culvert that extends under Ripley Lane N near the north end of Wetland WR11 and the Ripley Lane N crossing (trestle). It flows west under the rail trestle, extends under a private drive, and daylights again for approximately 100 feet before discharging to Lake Washington. West of the rail trestle, Stream SR6 discharges to Stream SR7. At the time of the visit, Stream SR7 was flowing. The stream width varies between 3 and 4 feet. Vegetation in the riparian buffer includes red alder (*Alnus rubra*), black cottonwood (*Populus balsamifera*), reed canarygrass (*Phalaris arundinacea*), giant horsetail (*Equisetum telmateia*), Himalayan blackberry (*Rubus armeniacus*), and landscaped plants. The developed portion of the buffer consists of the railbed, residential development, roadways, and a parking area.



Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

Renton Main Line
Map R1
 Wetland Feature(s): WR1
 Water Feature(s): SR1, JDR1



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory **** City of Renton Wetlands Inventory

Parametrix

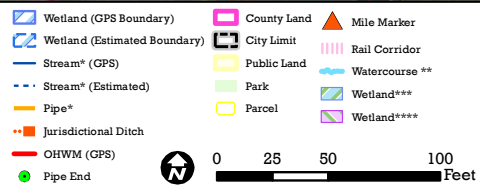


Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

Renton Main Line

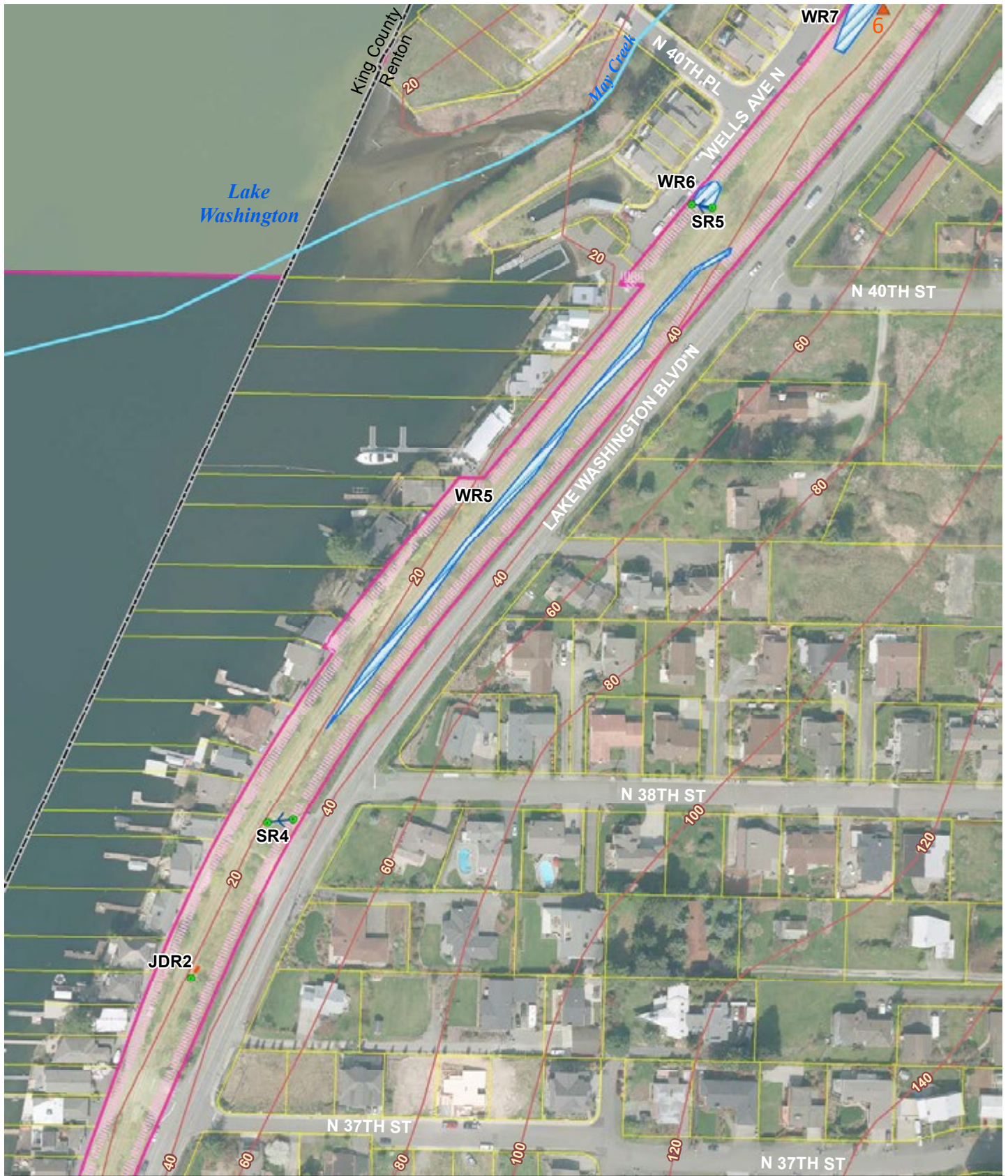
Map R2

Wetland Feature(s): WR2, WR3, WR4
 Water Feature(s): SR2, SR3



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory **** City of Renton Wetlands Inventory

Parametrix



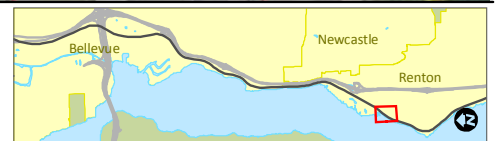
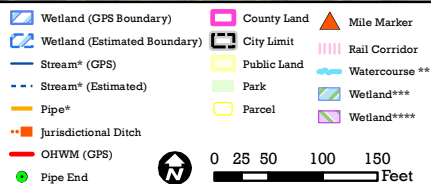
Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

Renton Main Line

Map R3

Wetland Feature(s): WR5, WR6, WR7

Water Feature(s): SR4, SR5, JDR2



* Arrow indicates flow direction
 ** King County Hydrographic Data
 *** National Wetlands Inventory
 **** City of Renton Wetlands Inventory

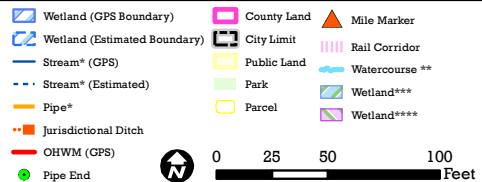
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Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

Renton Main Line
Map R4

Wetland Feature(s): WR7, WR8
 Water Feature(s): May Creek



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory **** City of Renton Wetlands Inventory

Parametrix

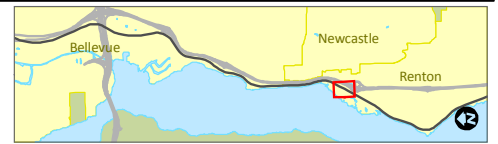
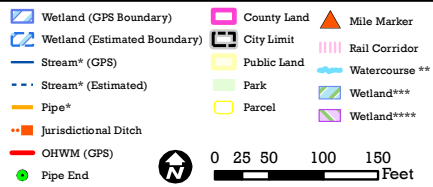


Inventoried Waters and Wetlands
Eastside Rail Corridor
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Renton Main Line

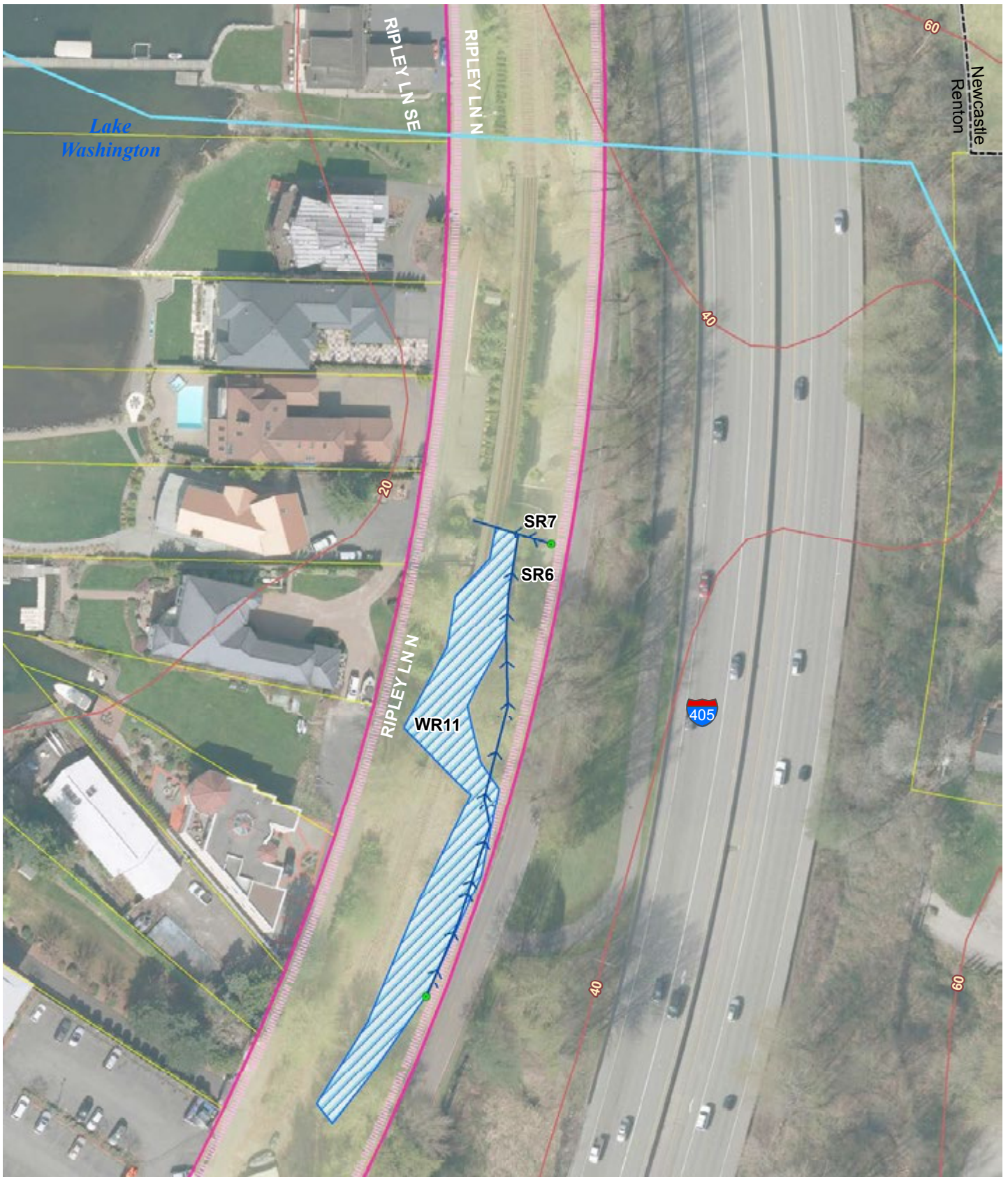
Map R5

Wetland Feature(s): WR9, WR10
 Water Feature(s):



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory **** City of Renton Wetlands Inventory

Parametrix

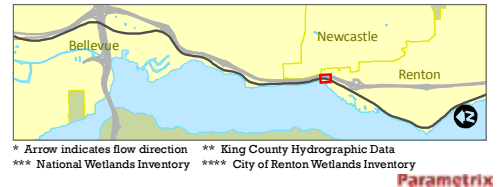
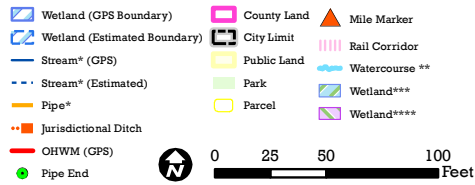


Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

Renton Main Line

Map R6

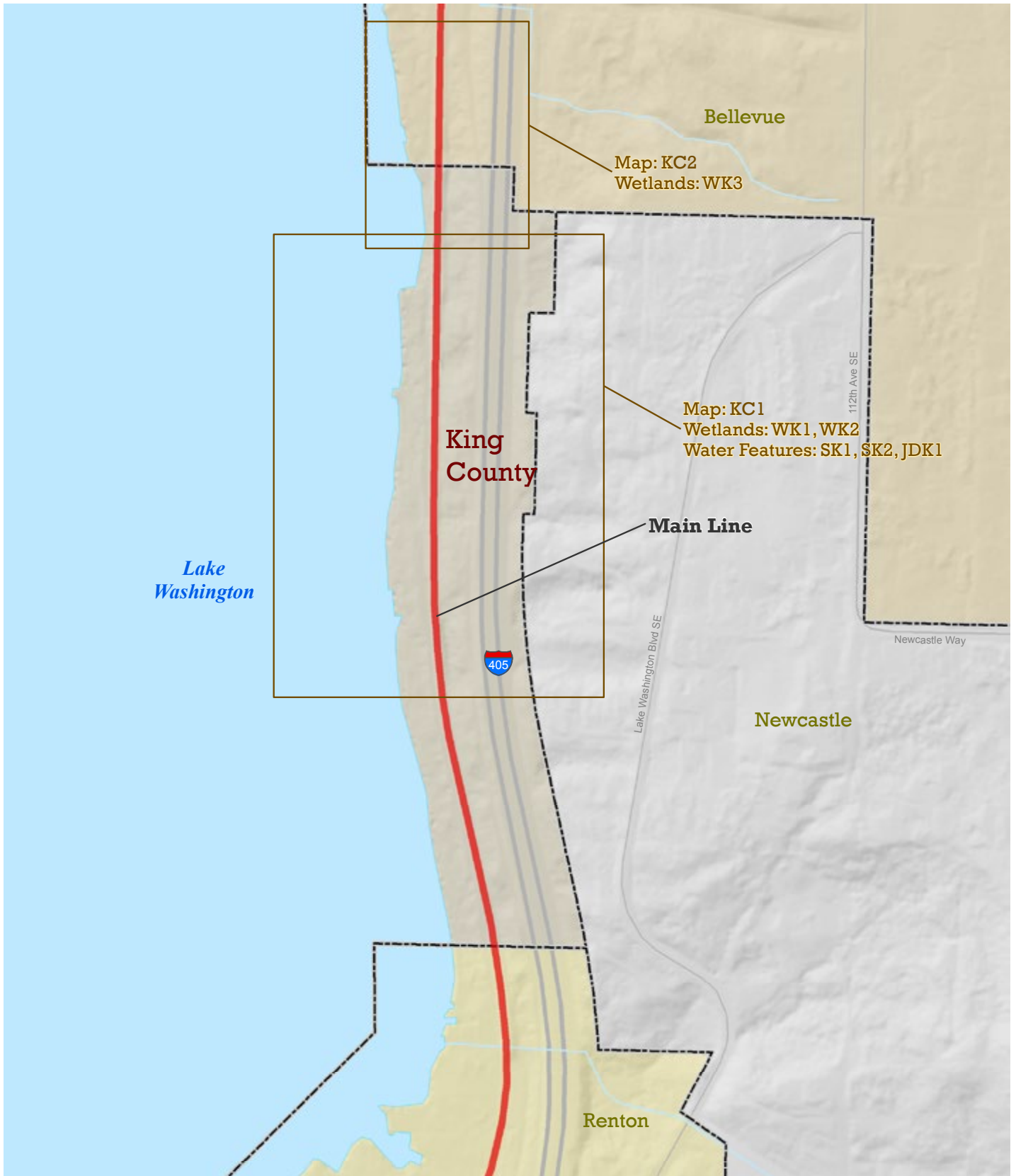
Wetland Feature(s): WR11
 Water Feature(s): SR6, SR7



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KING COUNTY





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- ~ Watercourse *
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King County Main Line



Parametrix

WETLAND NAME: WK1

Segment: Main Line

Jurisdiction: King County

Map Number: KC1



WK1—VIEW TO NORTH FROM SOUTH



WK1—OUTLET PIPE UNDER RAILBED FOR WK1 AND SK1

DATE OF SITE VISIT: 06/10/2014

DRAINAGE BASIN: EAST LAKE WASHINGTON - BELLEVUE SOUTH

USFWS CLASS: PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): <0.1 / <0.1

DESCRIPTION: WK1 is a linear depression located east of the railbed, in the vicinity of railroad mile marker 7, and south of Stream SK1. The hydrologic source supporting WK1 is groundwater. Water from this wetland flows north to SK1 as well as into a pipe under the railbed that appears to discharge directly into Lake Washington. No inlets were observed. Wetland hydrology indicators observed in the field include soil saturation in the upper 12 inches and geomorphic position in the railside ditch. Dominant vegetation includes water parsley (*Oenanthe sarmentosa*), climbing nightshade (*Solanum dulcamara*), reed canarygrass (*Phalaris arundinacea*), and a patch of Japanese knotweed (*Polygonum cuspidatum*) that extends into the buffer. The buffer consists of the railbed to the west, and deciduous forest with an overstory of bigleaf maple (*Acer macrophyllum*) and an understory of Himalayan blackberry (*Rubus armeniacus*) to the north, east, and south. North of the wetland, in the vicinity of SK1, there is a prominent patch of poison hemlock (*Conium maculatum*).

WETLAND NAME: WK2

Segment: Main Line

Jurisdiction: King County

Map Number: KC1



WK2—VIEW FACING NORTH FROM SOUTH END



WK2—VIEW FACING SOUTH FROM NORTH END

DATE OF SITE VISIT: 06/10/2014

DRAINAGE BASIN: EAST LAKE WASHINGTON - BELLEVUE SOUTH

USFWS CLASS: PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): <0.1 / <0.1

DESCRIPTION: WK2 is a small, linear depression located east of the railbed approximately 0.16 mile south of 106th Avenue SE. The hydrologic source supporting WK2 is likely groundwater. The outlet from the wetland is a culvert near the southern end of the wetland that conveys water west under the railbed to Lake Washington. No inlets were observed. Wetland hydrology indicators observed in the field include water-stained leaves and hydrophytic vegetation. Dominant vegetation includes reed canarygrass (*Phalaris arundinacea*) and giant horsetail (*Equisetum telmateia*). The buffer consists of the railbed to the west, deciduous forest vegetated with bigleaf maple (*Acer macrophyllum*) and black cottonwood (*Populus balsamifera*) in the overstory, and upland shrubs and western swordfern (*Polystichum munitum*) in the understory to the north, south, and east.

WETLAND NAME: WK3

Segment: Main Line

Jurisdiction: King County / Bellevue

Map Number: KC2



WK3—VIEW FACING NORTH FROM SOUTH END



WK3—VIEW FACING SOUTH FROM NORTH END

DATE OF SITE VISIT: 06/10/2014

DRAINAGE BASIN: EAST LAKE WASHINGTON - BELLEVUE SOUTH

USFWS CLASS: PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.1 / 0.1

DESCRIPTION: WK3 is a small, linear depression located east of the railbed approximately 0.04 mile south of 106th Avenue SE. The north end of the wetland is wider and inundated while the rest of the wetland is generally confined to a ditch. The hydrologic source supporting WK3 is surface water from local area runoff, conveyed from a culvert at the north end of the wetland. A culvert under the railbed at the south end of the wetland provides the outlet. Wetland hydrology indicators observed in the field include inundation and drainage patterns within the wetland. The dominant vegetation is giant horsetail (*Equisetum telmateia*) with locally dominant patches of reed canarygrass (*Phalaris arundinacea*), common duckweed (*Lemna minor*), and climbing nightshade (*Solanum dulcamara*). The buffer consists of the railbed to the west, deciduous forest vegetated with an overstory of bigleaf maple (*Acer macrophyllum*) and black cottonwood (*Populus balsamifera*), and an understory of Himalayan blackberry (*Rubus armeniacus*) to the north, south, and east. Poison hemlock (*Conium maculatum*) were observed in patches north of the wetland.

STREAM NAME: SK1

Segment: Main Line

Jurisdiction: King County

Map Number: KC1



**SK1—LOOKING UPSTREAM (NORTHEAST) FROM
RAILBED**

DATE OF SITE VISIT: 06/10/2014

DRAINAGE BASIN: EAST LAKE WASHINGTON - BELLEVUE SOUTH

DESCRIPTION: Stream SK1 is located east of the railbed in the vicinity of mile marker 7, north of Wetland WK1. Stream SK1 enters the right-of-way from under Interstate-405 (I-405), perpendicular to the railbed, and then flows south along the east side of the railbed where it enters a culvert at the north end of Wetland WK1. The culvert under I-405, from which it discharges, is perched. Stream SK1 serves as an outlet to Wetland WK1. Water was flowing at the time of the site visit. The stream is 4 feet to 5 feet wide. The vegetated buffer is limited by the railbed to the west and the Lake Washington Bike Trail and I-405 to the east. Vegetation in the riparian buffer consists of deciduous forest dominated by bigleaf maple (*Acer macrophyllum*) and Himalayan blackberry (*Rubus armeniacus*). A patch of poison hemlock (*Conium maculatum*) is adjacent to the Stream SK1.

STREAM NAME: SK2

Segment: Main Line

Jurisdiction: King County

Map Number: KC1



SK2—FACING EAST, WEST OF RAILBED FROM RIPLEY LANE



SK2—FACING EAST FROM RAILBED

DATE OF SITE VISIT: 06/10/2014

DRAINAGE BASIN: EAST LAKE WASHINGTON - BELLEVUE SOUTH

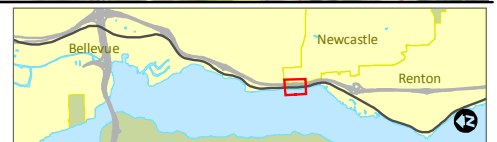
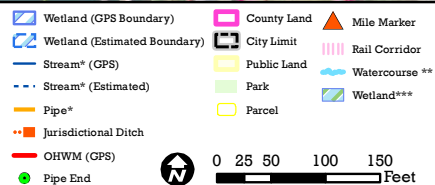
DESCRIPTION: Stream SK2 is located approximately 375 feet north of Stream SK1. Stream SK2 drains east from the vicinity of the Lake Washington Bike Trail and Interstate 405 (I-405) to a culvert that extends under the rail, daylights for a short distance on the west side, and then extends farther west outside the right-of-way, likely draining to Lake Washington. A jurisdictional ditch (JDK1) located immediately to the north, flows south into Stream SK2 at the pipe inlet before crossing the rail. The stream was low flowing at the time of the site visit. The vegetated buffer is limited by the railbed, the Lake Washington Bike Trail, I-405, and residential development. Vegetation in the riparian buffer consists of deciduous forest dominated by bigleaf maple (*Acer macrophyllum*) and Himalayan blackberry (*Rubus armeniacus*).



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Eastside Rail Corridor
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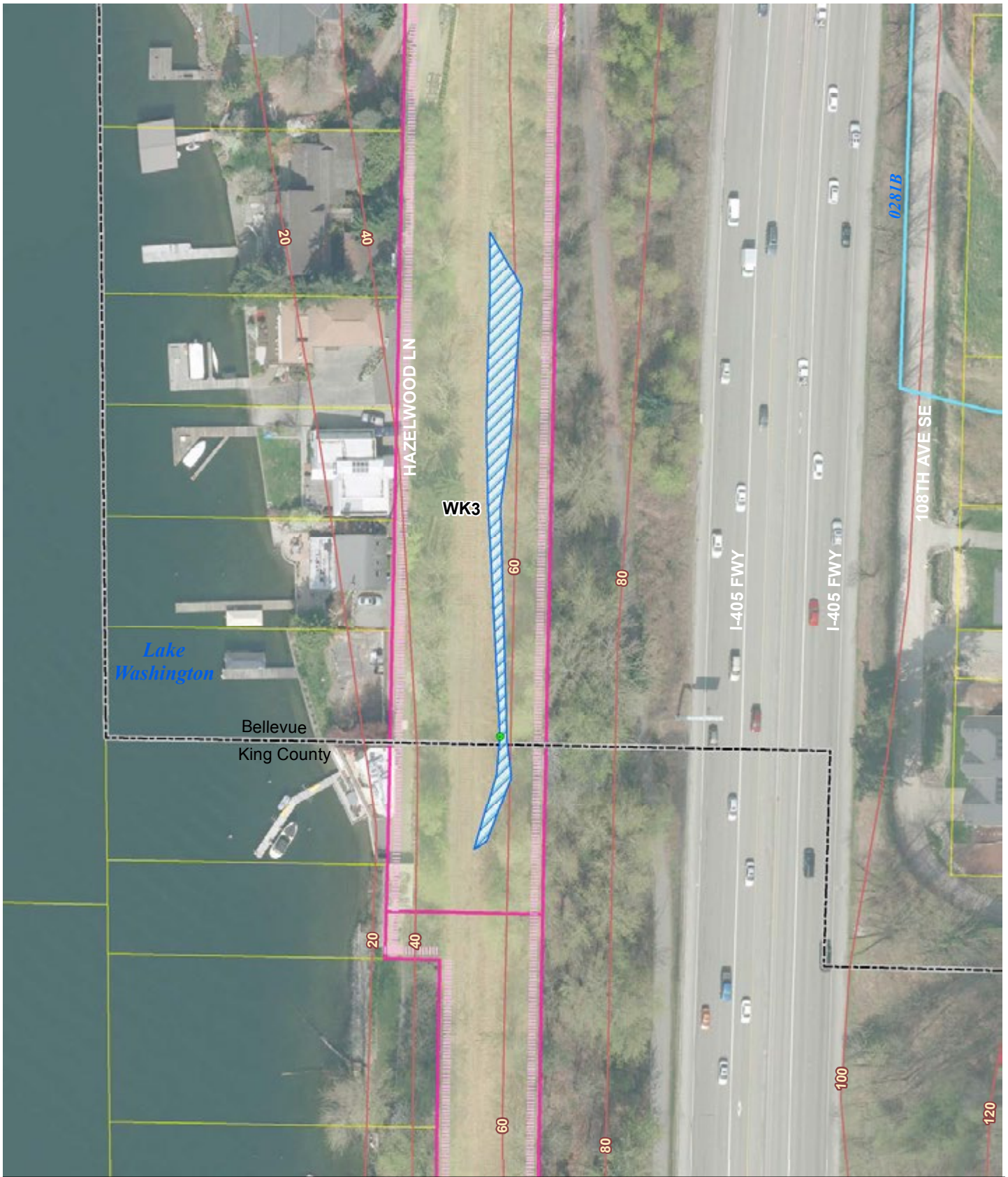
King County Main Line
Map KC1

Wetland Feature(s): WK1, WK2
 Water Feature(s): SK1, SK2, JDK1



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory Data

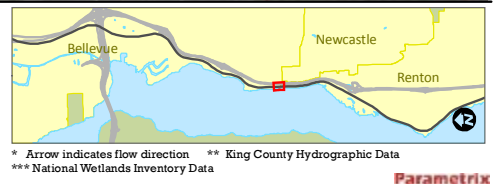
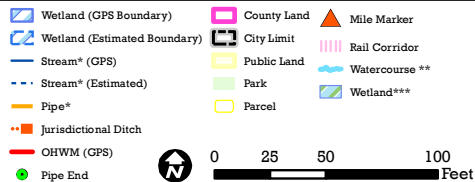
Parametrix



Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

King County Main Line

Map KC2
Wetland Feature(s): WK3
Water Feature(s):

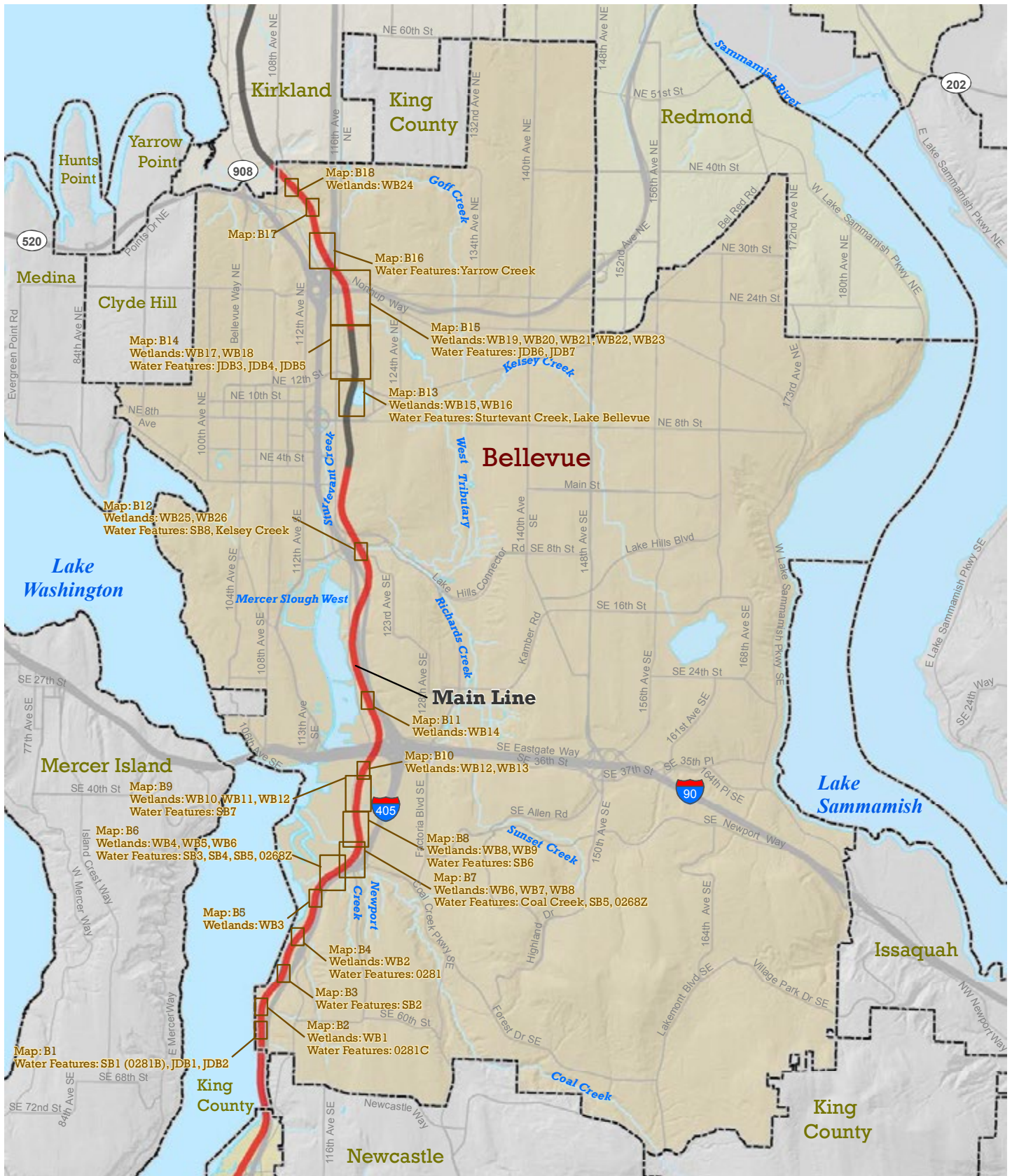


Parametrix

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BELLEVUE



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* King County Hydrographic Data

Parametri

Bellevue Main Line

WETLAND NAME: WB1

Segment: Main Line

Jurisdiction: Bellevue

Map Number: B2



WB1—SOUTH END OF WETLAND LOOKING NORTH



WB1—NORTH END OF WETLAND LOOKING SOUTH

DATE OF SITE VISIT: 06/10/2014

DRAINAGE BASIN: EAST LAKE WASHINGTON - BELLEVUE SOUTH

USFWS CLASS: PFO/PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.3 / 0.3

DESCRIPTION: WB1 is a long linear depressional wetland located east of the railbed, between Pleasure Point Lane SE and 106th Avenue SE. Groundwater and a pipe conveying surface water from the east are the hydrologic sources supporting WB1. The surface water associated with this pipe is mapped as a stream in the King County database, although no stream was observed at the time of the field visit. The outlet is a culvert near the south end of the wetland. Observed indicators of hydrology include saturation and approximately 1 inch of inundation at the north end of the wetland. Vegetation is dominated by common rush (*Juncus effusus*), reed canarygrass (*Phalaris arundinacea*), giant horsetail (*Equisetum telmateia*), some creeping nightshade (*Solanum dulcamara*), with a few scattered Oregon ash (*Fraxinus latifolia*) and Pacific willow (*Salix lasiandra*). The buffer consists of the railbed to the west and a deciduous forest with an overstory of bigleaf maple (*Acer macrophyllum*) and black cottonwood (*Populus balsamifera*) with an understory of Himalayan blackberry (*Rubus armeniacus*) to the north, south, and east.

WETLAND NAME: WB2

Segment: Main Line

Jurisdiction: Bellevue

Map Number: B4



WB2 FROM SOUTH FACING NORTH



WB2 FROM NORTH FACING SOUTH

DATE OF SITE VISIT: 06/17/2014

DRAINAGE BASIN: EAST LAKE WASHINGTON - BELLEVUE SOUTH

USFWS CLASS: PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): <0.1 / <0.1

DESCRIPTION: WB2 is a small depression associated with a railside ditch, located east of the railbed and south of SE 50th Place. The hydrologic source supporting the wetland is groundwater. A ditch to the south that ultimately flows through a culvert under the railbed provides an outlet. No inlets were detected. Observed indicators of hydrology include the topographic position and hydrophytic vegetation. The dominant plant species are small-fruited bulrush (*Scirpus microcarpus*), unidentified grass, and giant horsetail (*Equisetum telmateia*) with a few common ladyfern (*Athyrium filix-femina*). The buffer is dominated by a mixed deciduous-coniferous forest including bigleaf maple (*Acer macrophyllum*), Oregon ash (*Fraxinus latifolia*), western red cedar (*Thuja plicata*), and Douglas-fir (*Pseudotsuga menziesii*), with a mostly native shrub understory to the north, south, and east. The part of the buffer to the west is primarily the railbed.

WETLAND NAME: WB3

Segment: Main Line

Jurisdiction: Bellevue

Map Number: B5



WB3—SOUTH END OF WETLAND FACING NORTH



WB3—FROM RAIL (NEAR NORTH END) FACING EAST

DATE OF SITE VISIT: 06/17/2014

DRAINAGE BASIN: EAST LAKE WASHINGTON - BELLEVUE SOUTH

USFWS CLASS: PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.1 / 0.1

DESCRIPTION: WB3 is a linear depression located east of the rail just south of the intersection with Lake Washington Boulevard SE/106th Avenue SE, and the entrance to Newcastle Beach Park. Hydrologic sources likely supporting WB3 include groundwater and local surface water runoff. There is an inlet (pipe) at the south end of the wetland that appears to originate from under Lake Washington Boulevard SE/106th Avenue SE. The outlet is a pipe in the north end of the wetland at the intersection/park entrance. Observed indicators of hydrology include inundation, soil saturation in the upper 12 inches, water-stained leaves, and cracked soil. The dominant vegetation is Kentucky bluegrass (*Poa pratensis*), giant horsetail (*Equisetum telmateia*), colonial bentgrass (*Agrostis capillaris*), and locally dominant small-fruited bulrush (*Scirpus microcarpus*). The buffer consists of the railbed to the west with a forested area of bigleaf maple (*Acer macrophyllum*) and black cottonwood (*Populus balsamifera*) west of the railbed. To the north, south, and east the buffer consists of a mixed deciduous-coniferous forest dominated by bigleaf maple, but also with western red cedar (*Thuja plicata*) and Scouler's willow (*Salix scouleriana*) with an understory of salal (*Gaultheria shallon*) and Himalayan blackberry (*Rubus armeniacus*).

WETLAND NAME: WB4

Segment: Main Line

Jurisdiction: Bellevue

Map Number: B6



WB4—SOUTH END OF WETLAND FACING NORTH



WB4—NORTH END OF WETLAND FACING SOUTH

DATE OF SITE VISIT: 06/17/2014

DRAINAGE BASIN: EAST LAKE WASHINGTON - BELLEVUE SOUTH

USFWS CLASS: PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.1 / 0.1

DESCRIPTION: WB4 is a long linear depressional wetland located east of the railbed north of the intersection with Lake Washington Boulevard SE/106th Avenue SE, and the Newcastle Beach Park entrance. Hydrologic sources likely are from groundwater, surface water (from the east), and seeps (from cut slope). There are likely multiple inlets (pipes) from the east; two outlets exit the wetland through pipes under the railbed (one to the south and one in the middle of WB4) and discharge to Wetland WB5 to the west. Observed indicators of hydrology include inundation, soil saturation in the upper 12 inches, water-stained leaves, and algal mats. Common duckweed (*Lemna minor*) with watercress (*Nasturtium officinale*) and algae occur in standing water. Giant horsetail (*Equisetum telmateia*), common ladyfern (*Athyrium filix-femina*), and reed canarygrass (*Phalaris arundinacea*) are located in areas outside of standing water. Some portions of the wetland are devoid of vegetation. The buffer is confined by I-405 and the Lake Washington Trail to the east and the railbed to the west. Vegetated upland areas are dominated by bigleaf maple (*Acer macrophyllum*) and Himalayan blackberry (*Rubus armeniacus*). Red alder (*Alnus rubra*), Douglas-fir (*Pseudotsuga menziesii*), western red cedar (*Thuja plicata*), Indian plum (*Oemleria cerasiformis*), beaked hazelnut (*Corylus cornuta*), and oceanspray (*Holodiscus discolor*) were also observed.

WETLAND NAME: WB5

Segment: Main Line

Jurisdiction: Bellevue

Map Number: B6



WB5—SOUTH END OF WETLAND FACING NORTH



WB5—NORTH END OF WETLAND FACING SOUTH

DATE OF SITE VISIT: 06/17/2014

DRAINAGE BASIN: EAST LAKE WASHINGTON - BELLEVUE SOUTH

USFWS CLASS: PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 4.3 / 0.4

DESCRIPTION: WB5 is located west of the railbed, north of the Newcastle Beach Park entrance, and extends outside the right-of-way onto the Newcastle Beach Park property to the west. It is a long linear depressional wetland adjacent to the railbed, then continues downslope to the Newcastle Beach Park property where it transitions to a wider riverine/depressional system. Groundwater and surface water piped under the railbed from WB4 and other local area runoff sources to the east are the primary sources of hydrology. The surface water inlets (pipes) that extend under the railbed from WB4 are located at the south end and middle of the wetland. Two streams have formed from surface water conveyed to WB5: SB3, located in the southern portion, and SB4, located in the middle portion. Observed indicators of hydrology include inundation, soil saturation in the upper 12 inches, and water-stained leaves. The dominant emergent communities are separated by those within standing water and those outside standing water. Common duckweed (*Lemna minor*) is dominant in standing water with watercress (*Nasturtium officinale*) and American speedwell (*Veronica americana*), whereas giant horsetail (*Equisetum telmateia*) is dominant outside standing water that include reed canarygrass (*Phalaris arundinacea*), common velvetgrass (*Holcus lanatus*), common rush (*Juncus effusus*), and fowl mannagrass (*Glyceria striata*). The dominant shrub community is red-osier dogwood (*Cornus sericea*) with Himalayan blackberry (*Rubus armeniacus*). The forested community is dominated by black cottonwood (*Populus balsamifera*) and red alder (*Alnus rubra*). The buffer to the east comprises the railbed and a forested area, including a large snag northwest of the wetland.

WETLAND NAME: WB6

Segment: Main Line

Jurisdiction: Bellevue

Map Number: B7



WB6 AND SB5—LOOKING NORTH FROM SOUTH END OF WB6



WB6 AND SB5—LOOKING NORTH

DATE OF SITE VISIT: 06/17/2014

DRAINAGE BASIN: COAL CREEK

USFWS CLASS: PFO

HGM CLASS: RIVERINE

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.4 / 0.1

DESCRIPTION: WB6 is a riverine wetland located southeast of the railbed and west of the Coal Creek Parkway southbound I-405 on-ramp. The wetland is hydrologically connected with Stream SB5 (inlet) and Coal Creek (outlet) to the north. Observed indicators of hydrology include inundation, soil saturation in the upper 12 inches, and the stream within and adjacent to the wetland. The dominant forested community is bigleaf maple (*Acer macrophyllum*) along the perimeter of the wetland, and locally dominant black cottonwood (*Populus balsamifera*). Giant horsetail (*Equisetum telmateia*) is dominant in the understory with dense patches of reed canarygrass (*Phalaris arundinacea*). The vegetated buffer is forest with a predominance of bigleaf maple and Himalayan blackberry (*Rubus armeniacus*). The railbed and associated fill slope are to the northwest. The slope to the wetland from the railbed is steep.

WETLAND NAME: WB7

Segment: Main Line

Jurisdiction: Bellevue

Map Number: B7

DATE OF SITE VISIT: 06/17/2014

DRAINAGE BASIN: COAL CREEK

USFWS CLASS: PFO

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.2 / 0.1

DESCRIPTION: WB7 is a depressional wetland located east of the railbed, north of Coal Creek, west of the Coal Creek Parkway southbound I-405 on-ramp, and south of 118th Avenue SE. Hydrologic sources supporting WB7 include groundwater and surface water from local area runoff and possibly Wetland WB8. Inlets include pipes from the north, and the outlet is Coal Creek. Inundation was observed during the field visit. Vegetation consists of a forested community dominated by bigleaf maple (*Acer macrophyllum*) along the perimeter of the wetland, giant horsetail (*Equisetum telmateia*), and small-fruited bulrush (*Scirpus microcarpus*). Reed canarygrass (*Phalaris arundinacea*) and American skunk cabbage (*Lysichiton americanus*) were also observed. The vegetated buffer is a forested community with a predominance of bigleaf maple and English ivy (*Hedera helix*). Indian plum (*Oemleria cerasiformis*), beaked hazelnut (*Corylus cornuta*), and western swordfern (*Polystichum munitum*) were also observed in the upland. The railbed and associated fill slope are to the west. The slope to the wetland from the railbed is steep. The northern portion of this wetland was a mitigation site for the adjacent bikeway/trail.

WETLAND NAME: WB8

Segment: Main Line

Jurisdiction: Bellevue

Map Number: B8



WB8—LOOKING NORTH AT PIPE (DRAINING EAST SIDE)



WB8—FROM NORTH LOOKING SOUTH

DATE OF SITE VISIT: 06/17/2014

DRAINAGE BASIN: COAL CREEK, EAST LAKE WASHINGTON—BELLEVUE MIDDLE

USFWS CLASS: PSS/PEM

HGM CLASS: DEPRESSIONAL/SLOPE

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.3 / 0.3

DESCRIPTION: WB8 is generally a long linear depressional wetland located in a ditch east of the railbed and north of Coal Creek Parkway/118th Avenue SE with some seeps along the cut slope. Hydrologic sources likely are from groundwater including seeps associated with the adjacent cut slope, and some surface water from local area runoff (pipes). Outlets include a catch basin in the Coal Creek Parkway/118th Avenue SE right-of-way that likely flows to WB7, a pipe (Stream SB6) under the railbed that likely connects to the north end of WB9, and a pipe at the north end of the wetland that drains west of the railbed. Observed indicators of hydrology include inundation, soil saturation in the upper 12 inches, and water-stained leaves. The emergent community covers most of the wetland and is vegetated with common duckweed (*Lemna minor*) in areas of standing water and giant horsetail (*Equisetum telmateia*). The scrub-shrub communities are located at the north and south ends of the wetland consisting of red alder (*Alnus rubra*) saplings and Himalayan blackberry (*Rubus armeniacus*). Areas of bare ground were also present. The vegetated portion of the buffer is a forested community dominated with bigleaf maple (*Acer macrophyllum*) and Himalayan blackberry. Common snowberry (*Symphoricarpos albus*) and English ivy (*Hedera helix*) were also observed in the upland. The developed areas of the buffer include Coal Creek Parkway/118th Avenue to the south, residences to the east, and the railbed to the west.

WETLAND NAME: WB9

Segment: Main Line

Jurisdiction: Bellevue

Map Number: B8



WB9—FROM SOUTH FACING NORTH



WB9—FROM NORTH FACING SOUTH

DATE OF SITE VISIT: 06/20/2014

DRAINAGE BASIN: COAL CREEK, EAST LAKE WASHINGTON—BELLEVUE MIDDLE

USFWS CLASS: PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.1 / 0.1

DESCRIPTION: WB9 is a linear depressional wetland located in a ditch west of the railbed and north of Coal Creek Parkway/118th Avenue SE. Groundwater is the hydrologic source supporting WB9. No inlets were observed. A drainage swale was observed at the north end of the wetland, which discharges to a westerly flowing stream (SB6). Observed indicators of hydrology include inundation, soil saturation in the upper 12 inches, and water-stained leaves. The vegetation is dominated by giant horsetail (*Equisetum telmateia*). Unidentified grasses, common ladyfern (*Athyrium filix-femina*), Himalayan blackberry (*Rubus armeniacus*), and common rush (*Juncus effusus*) were also observed. Areas of bare ground were also present. The vegetated portion of the buffer is a forested community dominated with bigleaf maple (*Acer macrophyllum*), English ivy (*Hedera helix*), Himalayan blackberry, and various shrubs. The developed areas of the buffer include Coal Creek Parkway/118th Avenue SE to the south, residences to the west, and the railbed to the east.

WETLAND NAME: WB10

Segment: Main Line

Jurisdiction: Bellevue

Map Number: B9



WB10—FROM SOUTH FACING NORTH



WB10—MIDDLE OF WETLAND FACING EAST, AREA THAT EXTENDS OUTSIDE FOOTPRINT OF DITCH

DATE OF SITE VISIT: 06/20/2014

DRAINAGE BASIN: EAST LAKE WASHINGTON—BELLEVUE MIDDLE

USFWS CLASS: PEM

HGM CLASS: DEPRESSIONAL/SLOPE

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.5 / 0.3

DESCRIPTION: WB10 is a long linear depressional wetland located mostly in a ditch east of the railbed in the long segment between I-90 and 118th Avenue SE, in the vicinity of SE 40th Street. Hydrologic sources supporting WB10 include groundwater, a seep (from adjacent cut slope), and Stream SB7. SB7 was the only observed inlet. Outlets include multiple cross culverts under the railbed, including one at the south end (conveying flow from SB7 to WB11), and two in the northern half of the wetland. Observed indicators of hydrology include inundation and soil saturation in the upper 12 inches. Vegetation is dominated by giant horsetail (*Equisetum telmateia*) and dense patches of small-fruited bulrush (*Scirpus microcarpus*). Common duckweed (*Lemna minor*), watercress (*Nasturtium officinale*), and broadleaf cattail (*Typha latifolia*) were present in areas of standing water. Common rush (*Juncus effusus*), common lady fern (*Athyrium filix-femina*), American skunk cabbage (*Lysichiton americanus*), and fowl mannagrass (*Glyceria striata*) were also observed. The vegetated buffer is a forested community dominated by bigleaf maple (*Acer macrophyllum*) and Himalayan blackberry (*Rubus armeniacus*). Other species observed in the upland include Douglas-fir (*Pseudotsuga menziesii*), bitter cherry (*Prunus emarginata*), beaked hazelnut (*Corylus cornuta*), and Leyland cypress (*Cupressus x leylandii*). Some young red alders (*Alnus rubra*) overhang the north end of the wetland. The developed areas of the buffer include the railbed to the west and residences to the east.

WETLAND NAME: WB11

Segment: Main Line

Jurisdiction: Bellevue

Map Number: B9



WB11—FROM SOUTH FACING NORTH



WB11—FROM NORTH FACING SOUTH

DATE OF SITE VISIT: 06/20/2014

DRAINAGE BASIN: EAST LAKE WASHINGTON—BELLEVUE MIDDLE

USFWS CLASS: PSS

HGM CLASS: DEPRESSIONAL/SLOPE

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.5 / 0.2

DESCRIPTION: WB11 is a depressional/slope wetland located west of the railbed in the long segment between I-90 and 118th Avenue SE, in the vicinity of SE 40th Street. This wetland extends west outside of the right-of-way. Hydrologic sources supporting WB11 are seeps along the slope and surface water from a pipe that extends under the railbed from Wetland WB10 conveying Stream SB7. No outlets were observed but are likely located outside the right-of-way. Observed indicators of hydrology include inundation and soil saturation in the upper 12 inches. Vegetation consists of a shrub community dominated by salmonberry (*Rubus spectabilis*), giant horsetail (*Equisetum telmateia*), common ladyfern (*Athyrium filix-femina*) with some red alder (*Alnus rubra*) saplings, Scouler's willow (*Salix scouleriana*), Pacific willow (*Salix lasiandra*), and small-fruited bulrush (*Scirpus microcarpus*). The vegetated buffer is a forested community dominated by bigleaf maple (*Acer macrophyllum*) and Himalayan blackberry (*Rubus armeniacus*). The developed areas of the buffer include the railbed to the east, several residences to the northwest, and Lake Washington Boulevard to the west.

WETLAND NAME: WB12

Segment: Main Line

Jurisdiction: Bellevue

Map Number: B9



WB12—FROM SOUTH FACING NORTH



WB12—FROM NORTH FACING SOUTH

DATE OF SITE VISIT: 06/20/2014

DRAINAGE BASIN: MERCER SLOUGH

USFWS CLASS: PFO

HGM CLASS: DEPRESSIONAL/SLOPE

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): <0.1 / <0.1

DESCRIPTION: WB12 is a depressional/slope wetland located partially in the railside ditch, east of the railbed, and south of I-90. The northern portion of the wetland extends outside the right-of-way to the east. Hydrologic sources supporting WB12 include groundwater and seeps. The outlet is a pipe that extends under the railbed to the west at the north end of the wetland. No inlets were visible but it is possible there is an inlet located outside the right-of-way. Observed hydrologic indicators include inundation (surface water was observed seeping from the east), soil saturation in the upper 12 inches, and drainage patterns within the wetland. Vegetation consists of a forested community dominated by red alder (*Alnus rubra*), giant horsetail (*Equisetum telmateia*), and reed canarygrass (*Phalaris arundinacea*). The vegetated portion of the buffer is a forested community dominated by bigleaf maple (*Acer macrophyllum*) and Himalayan blackberry (*Rubus armeniacus*), with lesser amounts of Douglas-fir (*Pseudotsuga menziesii*), beaked hazelnut (*Corylus cornuta*), and western swordfern (*Polystichum munitum*). The developed areas of the buffer include residences to the east and the railbed to the west.

WETLAND NAME: WB13

Segment: Main Line

Jurisdiction: Bellevue

Map Number: B10



WB13 FROM SOUTH FACING NORTH.



WB13 FROM NORTH FACING SOUTH

DATE OF SITE VISIT: 06/20/2014

DRAINAGE BASIN: MERCER SLOUGH

USFWS CLASS: PEM

HGM CLASS: DEPRESSIONAL/SLOPE

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): <0.1 / <0.1

DESCRIPTION: WB13 is a depressional/slope wetland located in the ditch east of the railbed and south of I-90.

Hydrologic sources supporting WB13 include groundwater and seeps. The outlet is a pipe that extends under the railbed at the south end of the wetland. No inlets were detected. Observed hydrologic indicators include inundation, soil saturation in the upper 12 inches, and water-stained leaves. Vegetation consists of an emergent community dominated by giant horsetail (*Equisetum telmateia*) and common ladyfern (*Athyrium filix-femina*). Other common emergent vegetation includes common duckweed (*Lemna minor*) in standing water and fringed willowherb (*Epilobium ciliatum*). The vegetated portion of the buffer is a forested community dominated by bigleaf maple (*Acer macrophyllum*) and Himalayan blackberry (*Rubus armeniacus*), but also contains Douglas-fir (*Pseudotsuga menziesii*), beaked hazelnut (*Corylus cornuta*), western swordfern (*Polystichum munitum*), and laurel (*Laurus nobilis*). The developed areas of the buffer include residences to the east and the railbed to the west. Note: A small slide/slough was observed immediately south of the wetland.

WETLAND NAME: WB14

Segment: Main Line

Jurisdiction: Bellevue

Map Number: B11



WB14—FACING WEST FROM RAILBED

DATE OF SITE VISIT: 06/20/2014

DRAINAGE BASIN: MERCER SLOUGH

USFWS CLASS: PFO

HGM CLASS: SLOPE

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 1.0 / <0.1

DESCRIPTION: WB14 is a slope wetland located west of the railbed and north of SE 32nd Street, extending west of the right-of-way. The hydrologic source supporting WB14 is a seep. No inlets or outlets were detected. The observed hydrologic indicator was soil saturation in the upper 12 inches. Vegetation consists of a forested community dominated by western red cedar (*Thuja plicata*), salmonberry (*Rubus spectabilis*), and giant horsetail (*Equisetum telmateia*), with a few vine maples (*Acer circinatum*). The vegetated portion of the buffer is a forested community dominated by bigleaf maple (*Acer macrophyllum*), Douglas-fir (*Pseudotsuga menziesii*), and Himalayan blackberry (*Rubus armeniacus*). Western hemlock (*Tsuga heterophylla*) and beaked hazelnut (*Corylus cornuta*) were also observed. The developed areas of the buffer include multi-family residences to the northwest and the railbed to the east. Note: Patches of poison hemlock (*Conium maculatum*) were observed along the eastern edge of the railbed starting directly across WB14 and extending north approximately 350 feet.

WETLAND NAME: WB15

Segment: Main Line

Jurisdiction: Bellevue

Map Number: B13



WB15—FROM SOUTH FACING NORTH



WB15—FROM NORTH FACING SOUTH

DATE OF SITE VISIT: 06/20/2014

DRAINAGE BASIN: MERCER SLOUGH

USFWS CLASS: PFO

HGM CLASS: LAKE FRINGE (SMALL AREA IS DEPRESSIONAL)

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.4/ 0.2

DESCRIPTION: WB15 is a lake-fringe wetland associated with Lake Bellevue, east of the railbed, between NE 8th Street and NE 12th Street. A building east of the railbed is over the wetland and Lake Bellevue. A small portion of the wetland is depressional at the north end. The primary hydrologic source supporting WB15 is Lake Bellevue. The outlet for WB15 and Lake Bellevue is Sturtevant Creek. The observed hydrologic indicators include inundation, soil saturation in the upper 12 inches, drainage patterns in the wetland, and water-stained leaves. Vegetation in the right-of-way consists of a forested community dominated by black cottonwood (*Populus balsamifera*) with some Sitka willow (*Salix sitchensis*), Scouler's willow (*Salix scouleriana*), Pacific willow (*Salix lasiandra*), reed canarygrass (*Phalaris arundinacea*), common rush (*Juncus effusus*), Douglas spirea (*Spiraea douglasii*), and English ivy (*Hedera helix*) on the edge. The wetland is located in an urban environment with limited to no vegetated buffer. Buffer vegetation that does exist is mostly invasive (Himalayan blackberry [*Rubus armeniacus*]) or disturbance-tolerant species.

WETLAND NAME: WB16

Segment: Main Line

Jurisdiction: Bellevue

Map Number: B13



WB16—FACING NORTH FROM SOUTH



WB16—FACING SOUTH FROM NORTH

DATE OF SITE VISIT: 06/20/2014

DRAINAGE BASIN: MERCER SLOUGH

USFWS CLASS: PSS/PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.2 / 0.2

DESCRIPTION: WB16 is a depressional wetland associated with the wide ditch along the west side of the railbed in the vicinity of Lake Bellevue, between NE 8th Street and NE 12th Street. Hydrologic sources supporting WB16 include groundwater and local area runoff. No Inlets or outlets were detected within the wetland. The observed hydrologic indicators include small areas of inundation, soil saturation in the upper 12 inches, water-stained leaves, and an algal mat. The vegetation consists of a shrub community and an emergent community. The shrub community is dominated by red alder saplings (*Alnus rubra*), patches of broadleaf cattail (*Typha latifolia*), common rush (*Juncus effusus*), and reed canarygrass (*Phalaris arundinacea*). Other plants observed in this community include Sitka willow (*Salix sitchensis*), birch saplings (*Betula* sp.), and unidentified grasses. The emergent community consists of a variety of grasses and common rush. Areas of bare ground were observed within the wetland. The vegetated buffer is mostly narrow. The vegetated portion is dominated by Himalayan blackberry (*Rubus armeniacus*) with some red alder, pine (*Pinus* sp.), black cottonwood (*Populus balsamifera*), and disturbance-tolerant herbaceous species. The northern portion of the buffer is wider with a mix of deciduous and coniferous trees (black locust [*Robinia pseudoacacia*], Douglas-fir [*Pseudotsuga menziesii*], western red cedar [*Thuja plicata*], red alder, and black cottonwood). The developed portion of the buffer consists of the railbed to the east, and retail stores and a parking lot (with rockery wall) to the west.

WETLAND NAME: WB17

Segment: Main Line

Jurisdiction: Bellevue

Map Number: B14



WB17—FACING SOUTH FROM NORTH



WB17—FACING WEST, VIEW OF PALUSTRINE FORESTED COMMUNITY

DATE OF SITE VISIT: 06/23/2014

DRAINAGE BASIN: MERCER SLOUGH

USFWS CLASS: PFO/PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 3.8 / 1.6

DESCRIPTION: WB17 is a depressional wetland located west of the railbed, north of NE 12th Street, and south and east of the Bellevue Public Safety Training Center, extending outside the right-of-way to the west. Hydrologic sources supporting WB17 include groundwater and local area runoff. The wetland is associated with a rail-side ditch. A buried pipe at the south end (originating from a jurisdictional ditch [JDB3] on the east side of the railbed) provides seasonal surface water. A pipe under the railbed at the north end of the wetland likely provides an outlet, conveying water to WB18. Observed hydrologic indicators include both inundation and soil saturation in the ditch, water marks, water-stained leaves, cracked soil, and algal mats. Vegetation consists of a forested community and an emergent community. The forested community is dominated by black cottonwood (*Populus balsamifera*), red alder (*Alnus rubra*), Pacific willow (*Salix lasiandra*), Sitka willow (*Salix sitchensis*), and Himalayan blackberry (*Rubus armeniacus*), with daggerleaf rush (*Juncus ensifolius*) and small forget-me-not (*Myosotis laxa*) in the ditch. Scouler's willow (*Salix scouleriana*) and Douglas spirea (*Spiraea douglasii*) were also present. The emergent community has common rush (*Juncus effusus*), with locally dominant patches of reed canarygrass (*Phalaris arundinacea*), unidentified rush (*Juncus* sp.), broadleaf cattail (*Typha latifolia*), and red alder saplings. The buffer is limited, consisting primarily of commercial buildings, the railbed, and associated parking lots. The existing vegetated buffer is dominated by Himalayan blackberry with some trees. An upland berm exists in portions of the wetland, which was likely created from spoils of the excavated ditch. Vegetation on the berm includes weedy oxeye daisy (*Leucanthemum vulgare*) and invasive Scotch broom (*Cytisus scoparius*).

WETLAND NAME: WB18

Segment: Main Line

Jurisdiction: Bellevue

Map Number: B14



WB18—FACING EAST INTO UNDERSTORY

DATE OF SITE VISIT: 06/23/2014

DRAINAGE BASIN: MERCER SLOUGH

USFWS CLASS: PFO

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): <0.1 / <0.1

DESCRIPTION: WB18 is a small depressional wetland located east of the railbed between SR 520 and NE 12th Street, east of the Bellevue Public Safety Training Center. The wetland extends outside the right-of-way to the east. Hydrologic sources supporting WB18 include local area runoff likely from two nearby jurisdictional ditches (JDB4 and JDB5). Two inlets were observed—a pipe at the south side of the wetland, likely directing flow from the jurisdictional ditches, and a pipe from under the railbed, likely directing flow from WB17. No outlets were detected. The observed hydrologic indicator includes inundation (3 inches of standing water). Vegetation consists of a forested community dominated by red alder (*Alnus rubra*), Sitka willow (*Salix sitchensis*), and locally dominant two-headed water-starwort (*Callitriche heterophylla*), which was rooted in areas of standing water. The buffer is limited, consisting primarily of commercial buildings, the railbed, and associated parking lots. The existing vegetated buffer is dominated by Himalayan blackberry with a few trees (red alder).

WETLAND NAME: WB19

Segment: Main Line

Jurisdiction: Bellevue

Map Number: B15



WB19—FACING NORTH FROM SOUTH



WB19—FACING SOUTH FROM NORTH

DATE OF SITE VISIT: 06/26/2014

DRAINAGE BASIN: MERCER SLOUGH

USFWS CLASS: PSS/PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.1 / 0.1

DESCRIPTION: WB19 is a long linear depressional wetland located west of the railbed, north of NE 12th Street, and south of SR 520. The wetland is associated with a rail-side ditch. Hydrologic sources supporting WB19 include groundwater and local area runoff. The outlet is a jurisdictional ditch (JDB6) at the north end of the wetland, which connects downgradient to Wetland WB20. No inlets were detected. Observed indicators of hydrology include inundation, soil saturation in the upper 12 inches, and water-stained leaves. Vegetation consists of a shrub community and an emergent community. The shrub community includes black cottonwood (*Populus balsamifera*) saplings, Pacific willow (*Salix lasiandra*), Sitka willow (*Salix sitchensis*), Scouler's willow (*Salix scouleriana*), red alder (*Alnus rubra*), twinberry (*Lonicera involucrata*), Douglas spirea (*Spiraea douglasii*), Nootka rose (*Rosa nutkana*), and climbing nightshade (*Solanum dulcamara*). Vegetation in the emergent community consists of broadleaf cattail (*Typha latifolia*) and common duckweed (*Lemna minor*) in standing water. Other common emergent vegetation includes common rush (*Juncus effusus*), forget-me-not (*Mysotis* sp.), softstem bulrush (*Schoenoplectus tabernaemontani*), and reed canarygrass (*Phalaris arundinacea*). The buffer is limited, consisting primarily of commercial buildings, the railbed, and associated parking lots. The existing vegetated buffer is dominated by Himalayan blackberry (*Rubus armeniacus*).

WETLAND NAME: WB20

Segment: Main Line

Jurisdiction: Bellevue

Map Number: B15



WB20—FACING NORTH FROM SOUTH



WB20—UNDER SR 520

DATE OF SITE VISIT: 06/26/2014

DRAINAGE BASIN: MERCER SLOUGH

USFWS CLASS: PSS/PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.2 / 0.2

DESCRIPTION: WB20 is a long linear depressional wetland located west of the railbed originating south of SR 520 and extending under SR 520 to just south of Northup Way. The wetland is associated with a rail-side ditch. Hydrologic sources supporting WB20 include groundwater and local area runoff. A jurisdictional ditch (JDB6) at the south end of the wetland is the only inlet detected, which conveys water from Wetland WB19. The outlet is a pipe under the railbed near the southern end of the wetland, which flows west to a headwater wetland (WB21) of West Fork Kelsey Creek. Observed indicators of hydrology include inundation, soil saturation in the upper 12 inches, and water-stained leaves. Vegetation consists of a shrub community and an emergent community. The shrub community includes red alder (*Alnus rubra*) saplings, overhanging Himalayan blackberry (*Rubus armeniacus*), reed canarygrass (*Phalaris arundinacea*), locally dominant giant horsetail (*Equisetum telmateia*), and some seep monkey-flower (*Mimulus guttata*). The emergent community is dominated by reed canarygrass, locally dominant broadleaf cattail (*Typha latifolia*), and common duckweed (*Lemna minor*) in areas of prolonged standing water. The buffer is limited, consisting primarily of the railbed, roadways, commercial buildings, and associated parking lots. The existing vegetated buffer is dominated by Himalayan blackberry with trees buffering some of the wetland. In addition to the predominant Himalayan blackberry, portions of the narrow buffer includes red alder, bigleaf maple (*Acer macrophyllum*), Douglas-fir (*Pseudotsuga menziesii*), western red cedar (*Thuja plicata*), and black cottonwood (*Populus balsamifera*).

WETLAND NAME: WB21

Segment: Main Line

Jurisdiction: Bellevue

Map Number: B15



WB21—FACING EAST TOWARDS THE WETLAND



WB21—FACING NORTH FROM SOUTH END OF WETLAND

DATE OF SITE VISIT: 06/26/2014

DRAINAGE BASIN: KELSEY CREEK

USFWS CLASS: PFO

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 4.8 / <0.1

DESCRIPTION: WB21 is a large depressional wetland that functions as the headwater of the west tributary of Kelsey Creek. It is located east of the railbed, south of SR 520, and extends outside the right-of-way. Hydrologic sources are from groundwater and surface water from Wetland WB20 (located west of the rail). Two inlets were observed—a pipe that extends under the railbed, which directs flow from WB20 at the south end, and a pipe that directs flow from a stormwater pond/vault at the north end. The outlet is West Fork Kelsey Creek. Observed indicators of hydrology include inundation and soil saturation in the upper 12 inches. Vegetation is dominated by Oregon ash (*Fraxinus latifolia*), hardhack (*Spiraea douglasii*) with some occurrences of black cottonwood (*Populus balsamifera*), American skunk cabbage (*Lysichiton americanus*), reed canarygrass (*Phalaris arundinacea*), and Pacific willow (*Salix lasiandra*). The narrow vegetated buffer between the wetland and the railbed is dominated by bigleaf maple (*Acer macrophyllum*) and Himalayan blackberry (*Rubus armeniacus*) with many disturbance-tolerant species. The remainder of the wetland is completely surrounded by commercial buildings and associated parking lots, roadway, and an abandoned spur rail. The extent of vegetated buffer between these developed areas and the wetland was not documented. Because of the importance of this wetland as a headwater of the west tributary of Kelsey Creek, there is opportunity for wetland restoration and enhancement and buffer enhancement.

WETLAND NAME: WB22

Segment: Main Line

Jurisdiction: Bellevue

Map Number: B15



**WB22—(AND BUFFER) LOOKING NORTHEAST FROM
RAILBED**



WB22—IN WETLAND LOOKING EAST

DATE OF SITE VISIT: 06/26/2014

DRAINAGE BASIN: KELSEY CREEK

USFWS CLASS: PFO

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.2 / 0.1

DESCRIPTION: WB22 is a depressional wetland located east of the railbed between SR 520 and Northup Way. The wetland extends outside the right-of-way. Hydrologic sources supporting WB22 include groundwater and stormwater runoff. The inlet is a pipe that discharges stormwater from SR 520 to the south end of the wetland. No outlets were detected. The observed hydrologic indicator was soil saturation in the upper 12 inches. The forested community consists of red alder (*Alnus rubra*), black cottonwood (*Populus balsamifera*), Pacific willow (*Salix lasiandra*), black twinberry (*Lonicera involucrata*), hardhack (*Spiraea douglasii*), salmonberry (*Rubus spectabilis*), common ladyfern (*Athyrium filix-femina*), American skunk cabbage (*Lysichiton americanus*), and giant horsetail (*Equisetum telmateia*). The vegetated buffer is narrow and dominated by Himalayan blackberry (*Rubus armeniacus*). The remainder of the wetland is surrounded by SR 520, Northup Way, and the railbed.

WETLAND NAME: WB23

Segment: Main Line

Jurisdiction: Bellevue

Map Number: B15



WB23—FACING NORTH FROM THE SOUTH



WB23—FACING NORTHEAST FROM RAILBED

DATE OF SITE VISIT: 06/26/2014

DRAINAGE BASIN: MERCER SLOUGH

USFWS CLASS: PFO/PSS/PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 1.1 / 0.1

DESCRIPTION: WB23 is a depressional wetland located northeast of the railbed between Northup Way and I-405, southwest of 116th Avenue NE. The north end of the wetland is associated with a rail-side ditch, with the wetland extending outside the right-of-way to the northeast. The primary hydrologic source supporting WB23 is groundwater. A jurisdictional ditch (JDB7) flows in to WB23 from the south. The outlet is a pipe that flows under the railbed to an unknown discharge location, which had flowing water at the time of the visit. The observed hydrologic indicators include soil saturation in the upper 12 inches and inundation. Vegetation consists of a forested community, shrub community, and emergent community. The forested community consists of red alder (*Alnus rubra*), black twinberry (*Lonicera involucrata*), salmonberry (*Rubus spectabilis*), common ladyfern (*Athyrium filix-femina*), and American skunk cabbage (*Lysichiton americanus*). The shrub community includes willows (*Salix* spp.) and red alder saplings. The emergent community consists of broadleaf cattail (*Typha latifolia*), giant horsetail (*Equisetum telmateia*), and small-fruited bulrush (*Scripus microcarpus*). The vegetated buffer includes a variety of native species including red alder, Douglas-fir (*Pseudotsuga menziesii*), black cottonwood (*Populus balsamifera*), Indian plum (*Oemleria cerasiformis*), and western swordfern (*Polystichum munitum*). However, the understory of the buffer is dominated by the invasive Himalayan blackberry (*Rubus armeniacus*). The remaining buffer includes 116th Avenue NE, Northup Way, and the railbed.

WETLAND NAME: WB24

Segment: Main Line

Jurisdiction: Bellevue

Map Number: B18



WB24—FACING NORTH FROM THE SOUTH



**WB24—LOOKING WEST AT PATCH OF HARDHACK
(SPIRAEA DOUGLASII), NEAR MIDDLE OF WETLAND**

DATE OF SITE VISIT: 06/26/2014

DRAINAGE BASIN: EAST LAKE WASHINGTON—BELLEVUE NORTH

USFWS CLASS: PFO

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 01. / 0.0

DESCRIPTION: WB24 is a depressional wetland located southwest of the railbed and southeast of 108th Avenue NE. It is located at the edge of the right-of-way at the toe of a slope. The primary hydrologic sources supporting WB24 include groundwater and local surface water runoff. No inlets or outlets were detected. The observed hydrologic indicators include bare ground, water-stained leaves, and hydrophytic vegetation. Vegetation consists of red alder (*Alnus rubra*), black twinberry (*Lonicera involucreta*), locally dominant hardhack (*Spiraea douglasii*), and common ladyfern (*Athyrium filix-femina*). The wetland has a limited vegetated buffer. Between the wetland and the railbed there is a narrow strip of red alder, Himalayan blackberry (*Rubus armeniacus*), and grasses (dominated by common velvet grass [*Holcus lanatus*]). Southwest of the wetland is a forested slope dominated by Douglas-fir (*Pseudotsuga menziesii*), bigleaf maple (*Acer macrophyllum*), western red cedar (*Thuja plicata*), beaked hazelnut (*Corylus cornuta*), Indian plum (*Oemleria cerasiformis*), and western swordfern (*Polystichum munitum*). In addition to the railbed to the northeast, the buffer includes several residences and roadways in the surrounding vicinity.

WETLAND NAME: WB25

Segment: Main Line

Jurisdiction: Bellevue

Map Number: B12



WB25—FACING DOWNSLOPE (NORTH) FROM UNDER TRESTLE



WB25—FACING SOUTH FROM THE NORTH, EAST SIDE OF TRESTLE

DATE OF SITE VISIT: 09/12/2014

DRAINAGE BASIN: MERCER SLOUGH

USFWS CLASS: PFO/PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.3 / 0.3

DESCRIPTION: WB25 is a depressional wetland situated under and adjacent to the Wilburton Trestle, which is located east of I-405 and spans both SE 8th Street and SE 9th Street. The primary hydrologic source supporting WB25 is groundwater. No inlets were observed. The outlet is a small stream (SBKC) located at the northeast corner of the wetland, which discharges to Kelsey Creek and associated riverine wetland (WB26). The observed hydrologic indicators include inundation (confined to the area under the trestle) and soil saturation in the upper 12 inches. The dominant forested community consists of red alder (*Alnus rubra*), Oregon ash (*Fraxinus latifolia*), and Pacific willow (*Salix lasiandra*). The shrub community consists of red alder saplings, birch (*Betula* sp.), climbing nightshade (*Solanum dulcamara*), hardhack (*Spiraea douglasii*), red-osier dogwood (*Cornus sericea*), and Pacific ninebark (*Physocarpus capitatus*). The dominant emergent community consists of reed canarygrass (*Phalaris arundinacea*) with small patches of purple loosestrife (*Lythrum salicaria*). To the north, east, and west, the wetland buffer is primarily a deciduous forest dominated by red alder (*Alnus rubra*) and bigleaf maple (*Acer macrophyllum*) with an understory of western swordfern (*Polystichum munitum*), vine maple (*Acer circinatum*), beaked hazelnut (*Corylus cornuta*), and Himalayan blackberry (*Rubus armeniacus*). The buffer to the south is a steep slope (constructed of fill material) that transitions to accommodate SE 9th Street. Farther east, the buffer area of native vegetation transitions to a disturbed area with a trail, invasive vegetation including Scotch broom (*Cytisus scoparius*), and Himalayan blackberry, and landscape improvements.

Because of the wetland's adjacency to Kelsey Creek and degraded condition with invasive species cover, it is a good candidate for buffer enhancement and for wetland restoration and enhancement and buffer enhancement.

WETLAND NAME: WB26

Segment: Main Line

Jurisdiction: Bellevue

Map Number: B12



WB26—FACING EAST UNDER TRESTLE, SOUTH SIDE OF KELSEY CREEK



WB26—FACING WEST UNDER TRESTLE, SOUTH SIDE OF KELSEY CREEK

DATE OF SITE VISIT: 09/12/2014

DRAINAGE BASIN: MERCER SLOUGH

USFWS CLASS: PSS/PEM

HGM CLASS: RIVERINE

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.2 / 0.1

DESCRIPTION: WB26 is a riverine wetland that extends along both sides of Kelsey Creek under and adjacent to the Wilburton Trestle, which is located east of I-405 and spans both SE 8th Street and SE 9th Street. The primary hydrologic source supporting WB26 is surface water from Kelsey Creek and Stream SB8. The outlet is Kelsey Creek. The observed hydrologic indicators include water marks and sedimentation on the footings of the rail trestle. The shrub community consists of red alder (*Alnus rubra*) saplings, salmonberry (*Rubus spectabilis*), Himalayan blackberry (*Rubus armeniacus*), common ladyfern (*Athyrium filix-femina*), and giant horsetail (*Equisetum telmateia*). The emergent community is dominated by reed canarygrass (*Phalaris arundinacea*), red-osier dogwood (*Cornus sericea*), and policeman's helmet (*Impatiens glandulifera*). The wetland extends offsite to the east and west but it is assumed that the buffer habitat is primarily a deciduous forest interspersed with invasive vegetation and roadways. To the south the buffer includes fill, the trestle, and red alder. The buffer to the north is a deciduous forest (including black cottonwood [*Populus balsamifera*], bigleaf maple [*Acer macrophyllum*], and red alder) with some invasive vegetation including Scotch broom (*Cytisus scoparius*) and Himalayan blackberry.

Because of the wetland's adjacency to Kelsey Creek and degraded condition with invasive species cover, it is a good candidate for buffer enhancement and for wetland restoration and enhancement and buffer enhancement.

STREAM NAME: Coal Creek

Segment: Main Line

Jurisdiction: Bellevue

Map Number: B7



COAL CREEK AND WB6—LOOKING SOUTH (UPSTREAM)



**COAL CREEK AND WB6—LOOKING WEST (DOWN-
STREAM) AT TRESTLE FROM EAST SIDE**

DATE OF SITE VISIT: 06/17/2014

DRAINAGE BASIN: COAL CREEK

DESCRIPTION: Coal Creek flows through the rail right-of-way under and adjacent to a trestle located northwest of the Interstate 405 (I-405) and Coal Creek Parkway SE interchange. The stream is perennial. Pilings for the rail trestle were observed below the ordinary high water mark (OHWM); however, due to steep terrain and lack of suitable conditions for GPS data collection, the OHWM was not determined at the time of the site visit. As observed from a distance, the substrate includes large angular boulders, some cobbles, mixed gravels, and finer grains. Coal Creek receives surface water from Stream SR5 and Wetlands WB6 and WB7. Vegetation in the riparian buffer is forested with black cottonwood (*Populus balsamifera*), red alder (*Alnus rubra*), bigleaf maple (*Acer macrophyllum*), and western redcedar (*Thuja plicata*) in the overstory, and western sword fern (*Polystichum munitum*), giant horsetail (*Equisetum telmateia*), vine maple (*Acer circinatum*), and English ivy (*Hedera helix*) in the understory.

The City of Bellevue classifies Coal Creek as Type F. In 1946, according to the City of Bellevue's report Fish Use of Stream Drainage Basins in the City of Bellevue, April 2009, Coal Creek was reported to have a robust run of native kokanee (*O. nerka*). However, in 1956, kokanee were almost entirely exterminated due to coal mining activities. Fish use, as described in the 2009 Bellevue report, includes cutthroat trout (*O. clarki clarki*), which are found throughout the basin, as well as adult coho salmon (*O. kisutch*), sockeye salmon (*O. nerka*), Chinook salmon (*O. tshawytscha*), and steelhead (*O. mykiss*), which all have been observed in Coal Creek below river mile 2.5 (includes proposed trail location). Other fish observed in Coal Creek include sculpin (*Cottus* sp.), lamprey (*Lampetra* sp.), and largescale suckers (*Catostomus macrocheilus*). The Washington Department of Fish and Wildlife's SalmonScape (queried October 2014) indicated the "documented" presence of sockeye salmon, Chinook salmon (fall Chinook), steelhead trout (winter run), and coho salmon.

STREAM NAME: Kelsey Creek

Segment: Main Line
Jurisdiction: Bellevue
Map Number: B12



KESLEY CREEK—FROM UNDER TRESTLE LOOKING EAST (UPSTREAM)



KESLEY CREEK—FROM UNDER TRESTLE LOOKING WEST (DOWNSTREAM)

DATE OF SITE VISIT: 09/12/2014

DRAINAGE BASIN: MERCER SLOUGH

DESCRIPTION: Kelsey Creek flows through the right-of-way under and adjacent to the Wilburton Trestle which is located east of Interstate 405 (I-405) and spans both SE 8th Street and SE 9th Street. The stream is perennial. Pilings for the Wilburton Trestle are located below the ordinary high water mark (OHWM). Vegetation in the riparian buffer includes red alder (*Alnus rubra*) saplings, red-osier dogwood (*Cornus sericea*), salmonberry (*Rubus spectabilis*), Himalayan blackberry (*Rubus armeniacus*), common ladyfern (*Athyrium filix-femina*), giant horsetail (*Equisetum telmateia*), reed canarygrass (*Phalaris arundinacea*), and policeman's helmet (*Impatiens glandulifera*). Some large woody debris was observed. Also observed were two King County Metro wastewater main line pipes that parallel the west side of the Wilburton Trestle. Also observed were two King County Metro wastewater main line pipes that parallel the west side of the Wilburton Trestle.

The City of Bellevue classifies the water type of Kelsey Creek as a shoreline (Type S stream). According to the City of Bellevue's report Fish Use of Stream Drainage Basins in the City of Bellevue, April 2009, sockeye salmon (*O. nerka*), coho salmon (*O. kisutch*), Chinook salmon (*O. tshawytscha*), cutthroat trout (*O. clarki clarki*), and peamouth (*Mylocheilus caurinus*) are all known to spawn in the Kelsey drainage basin, and salmon have access to the entire mainstem (likely to Phantom Lake). The Washington Department of Fish and Wildlife's SalmonScape (queried October 2014) data also indicated the "documented" presence of sockeye salmon, Chinook salmon (fall Chinook), steelhead trout (*O. mykiss*) (winter run), and coho salmon in Kelsey Creek in the study area.

Mitigation and Conservation in the project area could include riparian vegetation enhancement and stream channel restoration including removal of pilings from OHWM, if trestle replacement or removal occurs. Other potential actions in the project vicinity could include those identified by the Final Lake Washington/Cedar/Sammamish Watershed (WRIA 8) Chinook Salmon Conservation Plan such as improving connections to nearby wetlands and cold water seeps, restoring channel (e.g., remove riprap and install LWD), enhancing riparian vegetation, and modifying existing culverts that are partial barriers.

STREAM NAME: SB1

Segment: Main Line

Jurisdiction: Bellevue

Map Number: B1



SB1—LOOKING EAST FROM RAILBED



SB1—LOOKING EAST AT PIPE (WEST OF RAIL)

DATE OF SITE VISIT: 06/10/2014

DRAINAGE BASIN: EAST LAKE WASHINGTON - BELLEVUE SOUTH

DESCRIPTION: Stream SB1 enters the right-of-way east of the railbed from a pipe that extends under 106th Avenue SE near the 106th Avenue SE and Hazelwood Lane SE intersection, south of Pleasure Point. East of the rail, Stream SB1 daylights a short distance, extends under the railbed, and discharges through a perched concrete culvert where it again daylights for a short distance within the right-of-way before entering another pipe that extends under Hazelwood Lane NE and through adjacent residential development, ultimately discharging to Lake Washington. Some erosion of the railbed was observed in the vicinity of the culvert. The water was flowing at the time of the site visit. The average width of the stream is 2 to 3 feet. Vegetation in the riparian buffer east of the rail is dominated by climbing nightshade (*Solanum dulcamara*), black cottonwood (*Populus balsamifera*), Himalayan blackberry (*Rubus armeniacus*), and giant horsetail (*Equisetum telmateia*). Vegetation in the riparian buffer west of the rail is dominated by nonnative landscaping and giant horsetail, with some trees to the north. Roadways and development limit the vegetated buffer.

STREAM NAME: SB2

Segment: Main Line

Jurisdiction: Bellevue

Map Number: B3



**SB2—FROM STREAM LOOKING AT OUTLET UNDER
RAILBED**



SB2—FROM RAILBED LOOKING UPSTREAM

DATE OF SITE VISIT: 06/17/2014

DRAINAGE BASIN: EAST LAKE WASHINGTON - BELLEVUE SOUTH

DESCRIPTION: Stream SB2 is located approximately 0.20 mile south of the Lake Washington Boulevard SE and the Interstate 405 (I-405) interchange, north of Pleasure Point. Water was observed trickling from a pipe that extends under 106th Avenue SE, on the east side of the railbed. The stream is seasonal (at the point of discharge, the water was infiltrating and no flow was observed in the channel). The incised stream averages 2 feet in width. It appears the stream is piped under the railbed and through the west side of the right-of-way. Roadways and development limit the vegetated buffer, which is comprised of a deciduous-coniferous forest. Vegetation in the riparian buffer includes bigleaf maple (*Acer macrophyllum*) with an understory of Himalayan blackberry (*Rubus armeniacus*), snowberry (*Symphoricarpos albus*), and English ivy (*Hedera helix*). Yellow archangel (*Lamiaeum galeobdolon*) was observed in and adjacent to the channel east of the railbed.

STREAM NAME: SB3

Segment: Main Line

Jurisdiction: Bellevue

Map Number: B6



**SB3—LOOKING AT PIPE (DOWN GRADIENT) AT OUTLET
EXTENDING UNDER RAIL**

DATE OF SITE VISIT: 06/17/2014

DRAINAGE BASIN: EAST LAKE WASHINGTON - BELLEVUE SOUTH

DESCRIPTION: The daylighted portion of Stream SB3 is located west of the railbed north of the Newcastle Beach Park entrance, and southeast of Newcastle Beach Park. Stream SB3 was observed flowing from a corrugated pipe that extends under the railbed. A separate concrete pipe, in the vicinity of the corrugated pipe, also extends under the railbed. It is likely the concrete pipe connects Wetlands WB4 and WB5, which are located east and west of the railbed, respectively. After Stream SB3 emerges from the pipe, it continues west through Wetland WB5 and down a steep slope onto the Newcastle Beach Park property.

STREAM NAME: SB4

Segment: Main Line

Jurisdiction: Bellevue

Map Number: B6



SB4—LOOKING DOWN GRADIENT

DATE OF SITE VISIT: 06/17/2014

DRAINAGE BASIN: EAST LAKE WASHINGTON - BELLEVUE SOUTH

DESCRIPTION: Stream SB4 is located west of the railbed north of the Newcastle Beach Park entrance, and east of Newcastle Beach Park. It daylights within the right-of-way after emerging from a culvert that extends under the railbed from the east. The stream serves as an outlet to Wetland WB4, flowing through Wetland WB5 and down a steep slope onto the Newcastle Beach Park property. The stream, averaging 2 to 4 feet in width in the vicinity of the rail, was flowing during the site visit.

STREAM NAME: SB5

Segment: Main Line

Jurisdiction: Bellevue

Map Number: B7



SB5—LOOKING NORTH



**WB6 AND SB5—LOOKING NORTH FROM SOUTH END
OF WB6**

DATE OF SITE VISIT: 06/17/2014

DRAINAGE BASIN: COAL CREEK (CEDAR)

DESCRIPTION: Stream SB5 is located south of Coal Creek, west of the Coal Creek Parkway SE southbound Interstate 405 (I-405) on-ramp. Stream SB5 is hydrologically connected with a forested wetland (Wetland WB6) and is a tributary to Coal Creek. The stream varies in width at the upgradient (south) end with some sections that are narrow and incised, then widens to the north as it flows through Wetland WB6 to its confluence with Coal Creek. Water was flowing at the time of the site visit. Vegetation in the riparian buffer includes bigleaf maple (*Acer macrophyllum*) and locally dominant black cottonwood (*Populus balsamifera*) with an understory of Himalayan blackberry (*Rubus armeniacus*). Giant horsetail (*Equisetum telmateia*) and reed canarygrass (*Phalaris arundinacea*) are concentrated directly adjacent to the stream. The railbed and associated (steep) fill slope are to the northwest, and the Lake Washington Bike Trail and I-405 are to the southeast.

STREAM NAME: SB6

Segment: Main Line

Jurisdiction: Bellevue

Map Number: B8



SB6—LOOKING WEST FROM RAILBED

DATE OF SITE VISIT: 06/20/2014

DRAINAGE BASIN: EAST LAKE WASHINGTON - BELLEVUE MIDDLE

DESCRIPTION: Stream SB6 is a small stream located at the north end of Wetland WB9 approximately 0.9 mile north of Coal Creek Parkway SE bridge/trestle. Originating from a headwater wetland (Wetland WB8), the stream emerges from under the railbed through a culvert and continues outside the right-of-way to the west. Water was flowing at the time of the site visit. The channel is an average of 2 feet in width. Vegetation in the buffer includes bigleaf maple (*Acer macrophyllum*) and black cottonwood (*Populus balsamifera*) with an understory of Himalayan blackberry (*Rubus armeniacus*).

STREAM NAME: SB7

Segment: Main Line

Jurisdiction: Bellevue

Map Number: B9



SB7—AT PIPE UNDER RAIL EAST SIDE (DOWNSTREAM)



SB7—LOOKING EAST (UPSTREAM) FROM RAIL

DATE OF SITE VISIT: 06/20/2014

DRAINAGE BASIN: EAST LAKE WASHINGTON - BELLEVUE MIDDLE

DESCRIPTION: Stream SB7 is a small, narrow stream located at the south end of Wetland WB10. Water was observed flowing in the channel. Stream SB7 flows briefly through Wetland WB10, in a pipe under the rail to Wetland WB11, then exits the right-of-way to the west. Vegetation in the riparian buffer includes bigleaf maple (*Acer macrophyllum*) with an understory of Himalayan blackberry (*Rubus armeniacus*) and bigleaf maple saplings.

STREAM NAME: SB8

Segment: Main Line

Jurisdiction: Bellevue

Map Number: B12



SB8—LOOKING SOUTH TO NORTH (DOWNSTREAM)



SB8—LOOKING NORTH TO SOUTH (UPSTREAM)

DATE OF SITE VISIT: 09/12/2014

DRAINAGE BASIN: MERCER SLOUGH

DESCRIPTION: Stream SB8 flows parallel below the Wilburton Trestle, east of Interstate 405, and spans both SE 8th Street and SE 9th Street. The stream was not flowing during the field visit. The headwater to Stream SB8 is a wetland (Wetland WB25). Stream SB8 discharges to Kelsey Creek and associated riverine Wetland WB26. The stream is approximately 4 feet in width. Vegetation in the riparian buffer includes red alder (*Alnus rubra*), bigleaf maple (*Acer macrophyllum*), salmonberry (*Rubus spectabilis*), red-osier dogwood (*Cornus sericea*), vine maple (*Acer circinatum*), beaked hazelnut (*Corylus cornuta*), snowberry (*Symphoricarpos albus*), reed canarygrass (*Phalaris arundinacea*), sword fern (*Polystichum munitum*), Himalayan blackberry (*Rubus armeniacus*), common ladyfern (*Athyrium filix-femina*), giant horsetail (*Equisetum telmateia*), policeman's helmet (*Impatiens glandulifera*), and piggyback plant (*Tolmiea menziesii*).

STREAM NAME: Sturtevant Creek

Segment: Main Line

Jurisdiction: Bellevue

Map Number: B13



STURTEVANT CREEK—EAST OF RAILBED, LOOKING SOUTH (DOWNSTREAM) AT STRUCTURE



STURTEVANT CREEK—EAST OF RAILBED, LOOKING NORTH (UPSTREAM)

DATE OF SITE VISIT: 06/20/2014

DRAINAGE BASIN: MERCER SLOUGH

DESCRIPTION: The segment of Sturtevant Creek in the right-of-way is located north of NE 8th Street. It flows out of Lake Bellevue, which is the headwater to the stream, continues along the east side of the railbed to a drainage structure that conveys the water west of the railbed where it daylights briefly, then continues in a mostly piped system to the southwest. Water was flowing at the time of the site visit. Sturtevant Creek is generally about 6 feet wide but widens along the northern (upstream) section up to 14 feet. The southern portion of the stream is incised with steep banks. The northern portion is also incised with some riparian vegetation consisting of shrubs and trees along the eastern perimeter. Otherwise, riparian buffer vegetation is dominated by maintained grass and forbs with the occurrence of some Scotch broom (*Cytisus scoparius*) and reed canarygrass (*Phalaris arundinacea*). In-stream vegetation includes broadleaf cattail (*Typha latifolia*), common duckweed (*Lemna minor*), and reed canarygrass.

The City of Bellevue classifies this stream as Type F. According to the City of Bellevue's report Fish Use of Stream Drainage Basins in the City of Bellevue, April 2009, the downstream reach of Sturtevant Creek is the least altered (flows into Mercer Slough) and supports salmonids, including Chinook salmon (*O. tshawytscha*). The Bellevue report asserts that anadromous fish passage in Sturtevant Creek is blocked by a culvert in the vicinity of Interstate 405 (I-405). The Washington Department of Fish and Wildlife's SalmonScape (queried October 2014) did not identify a known fish passage barrier to Sturtevant Creek at I-405. SalmonScape data indicate a "modeled" presence of sockeye salmon (*O. nerka*), Chinook salmon (fall Chinook), steelhead trout (*O. mykiss*) (winter run), and coho salmon (*O. kisutch*). WDFW defines "modeled presence" as "habitat upstream of known species presence, but downstream of any known natural barrier. The modeled category does not factor habitat quality, flow or any other natural or human-caused condition that would otherwise prevent habitat use."

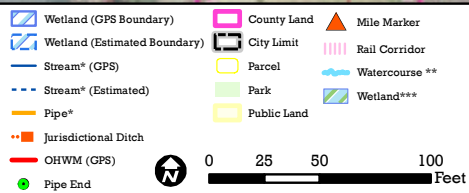


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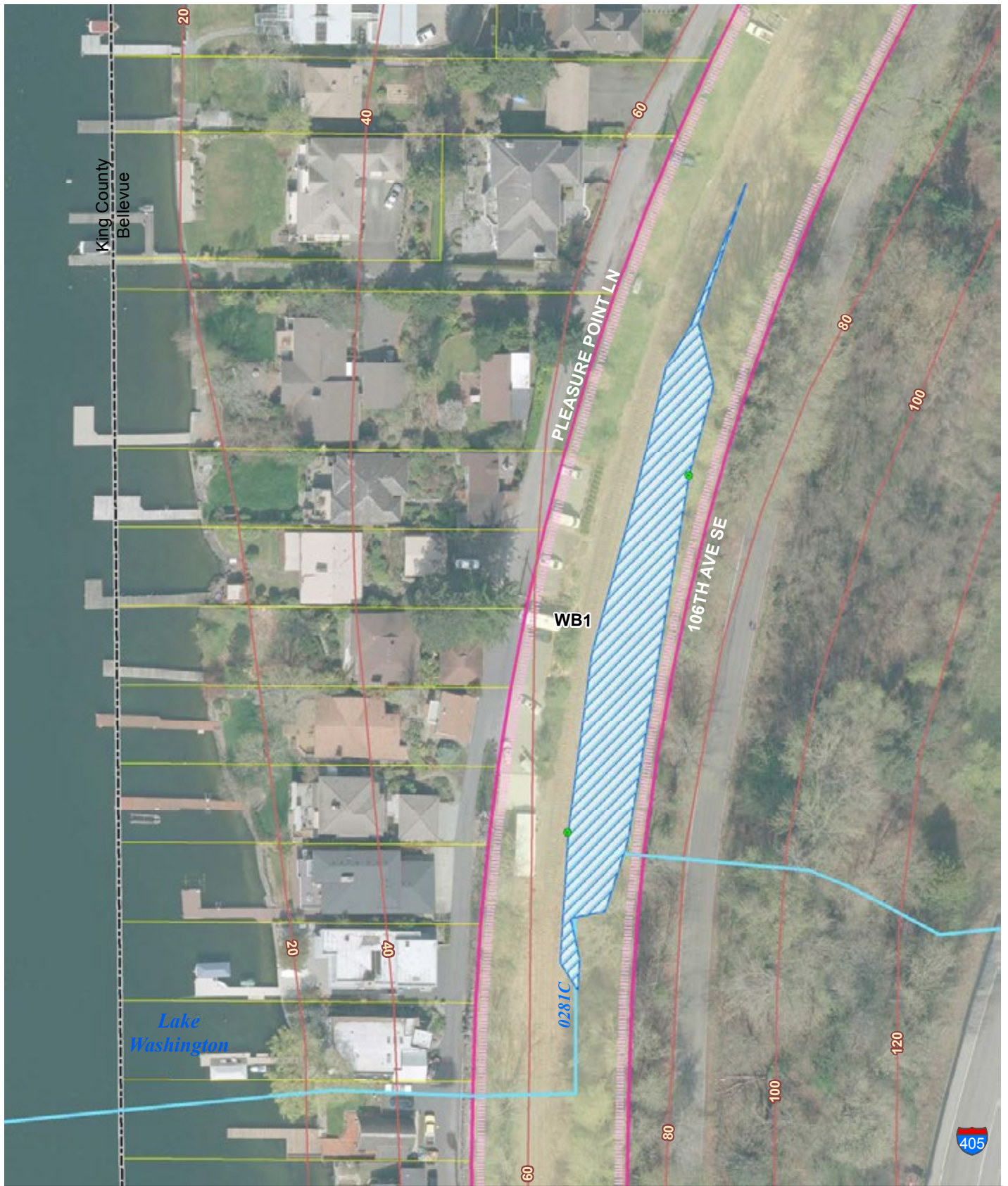
Map B1

Wetland Feature(s):
 Water Feature(s): SB1 (0281B), JDB1, JDB2



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory Data

Parametrix

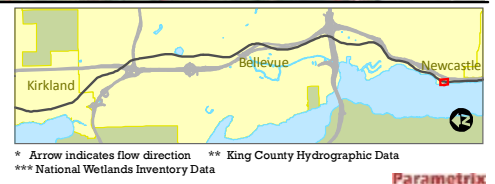
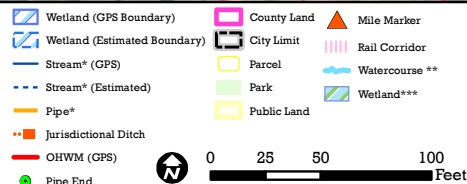


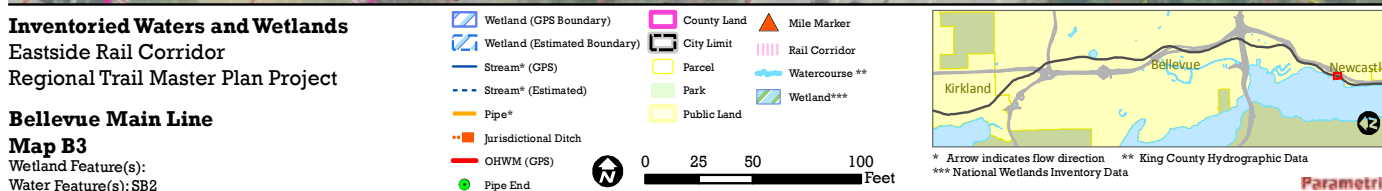
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Map B2

Wetland Feature(s): WB1
 Water Feature(s): 0281C





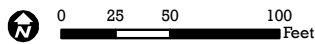
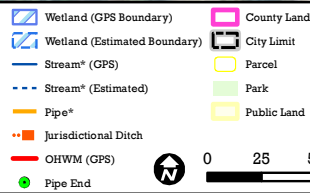


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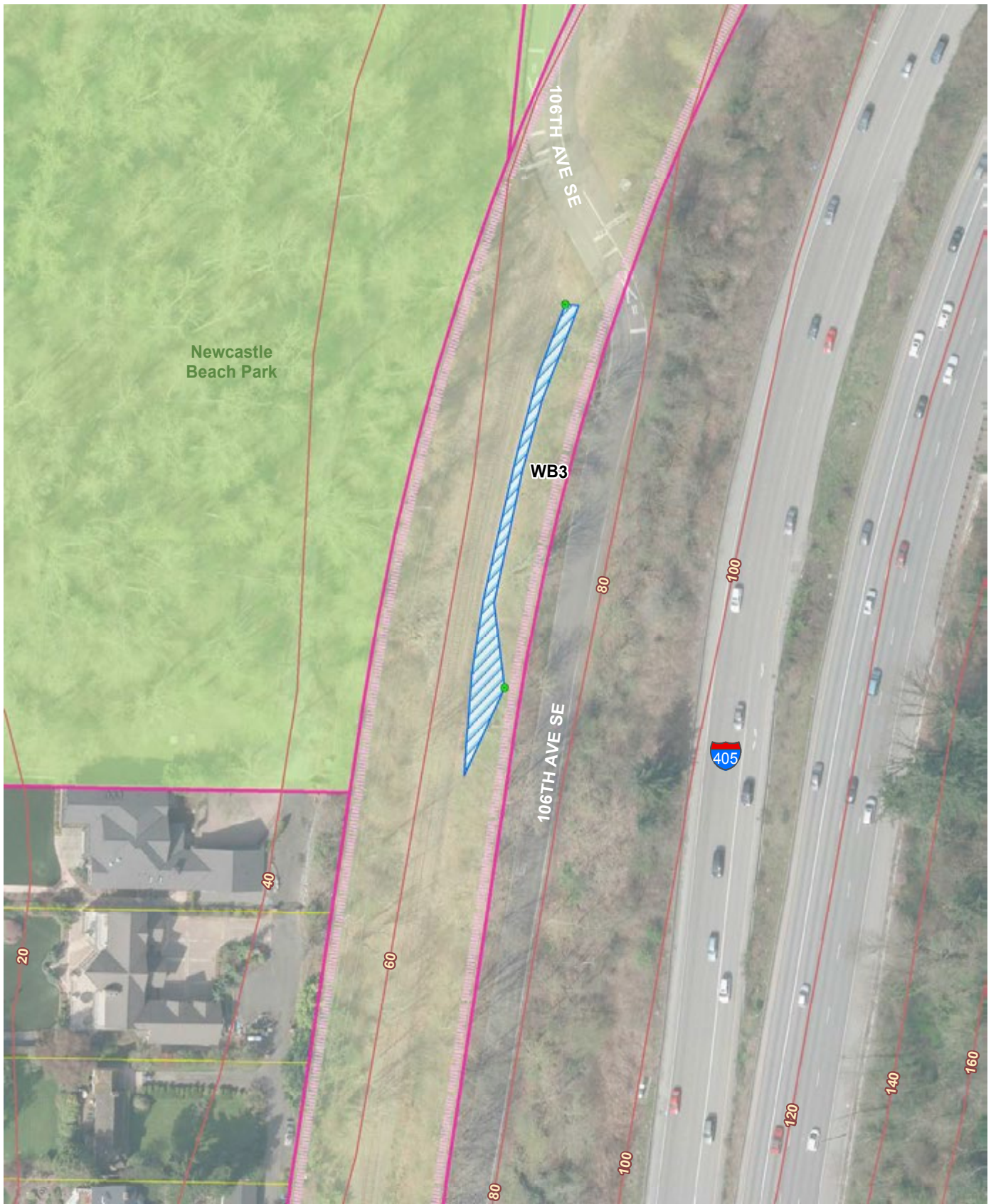
Map B4

Wetland Feature(s): WB2
 Water Feature(s): 0281



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory Data

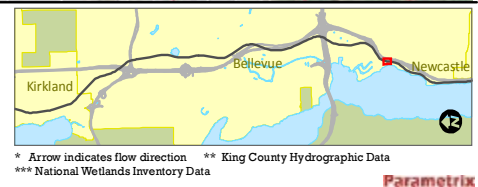
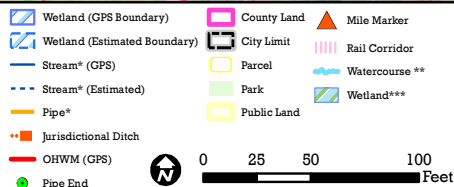
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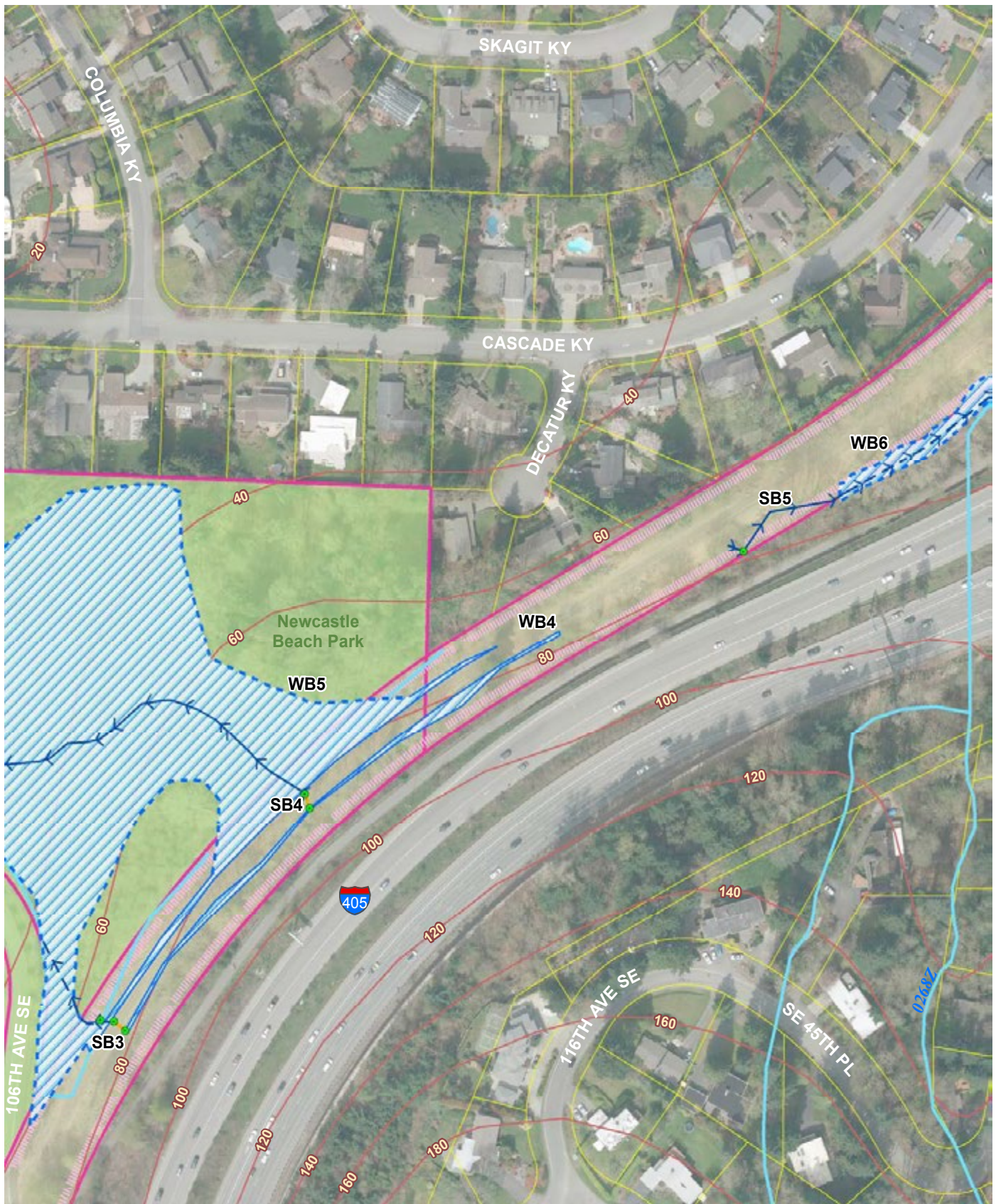


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Map B5

Wetland Feature(s): WB3
 Water Feature(s):



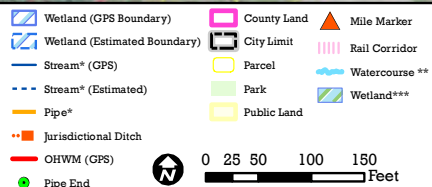


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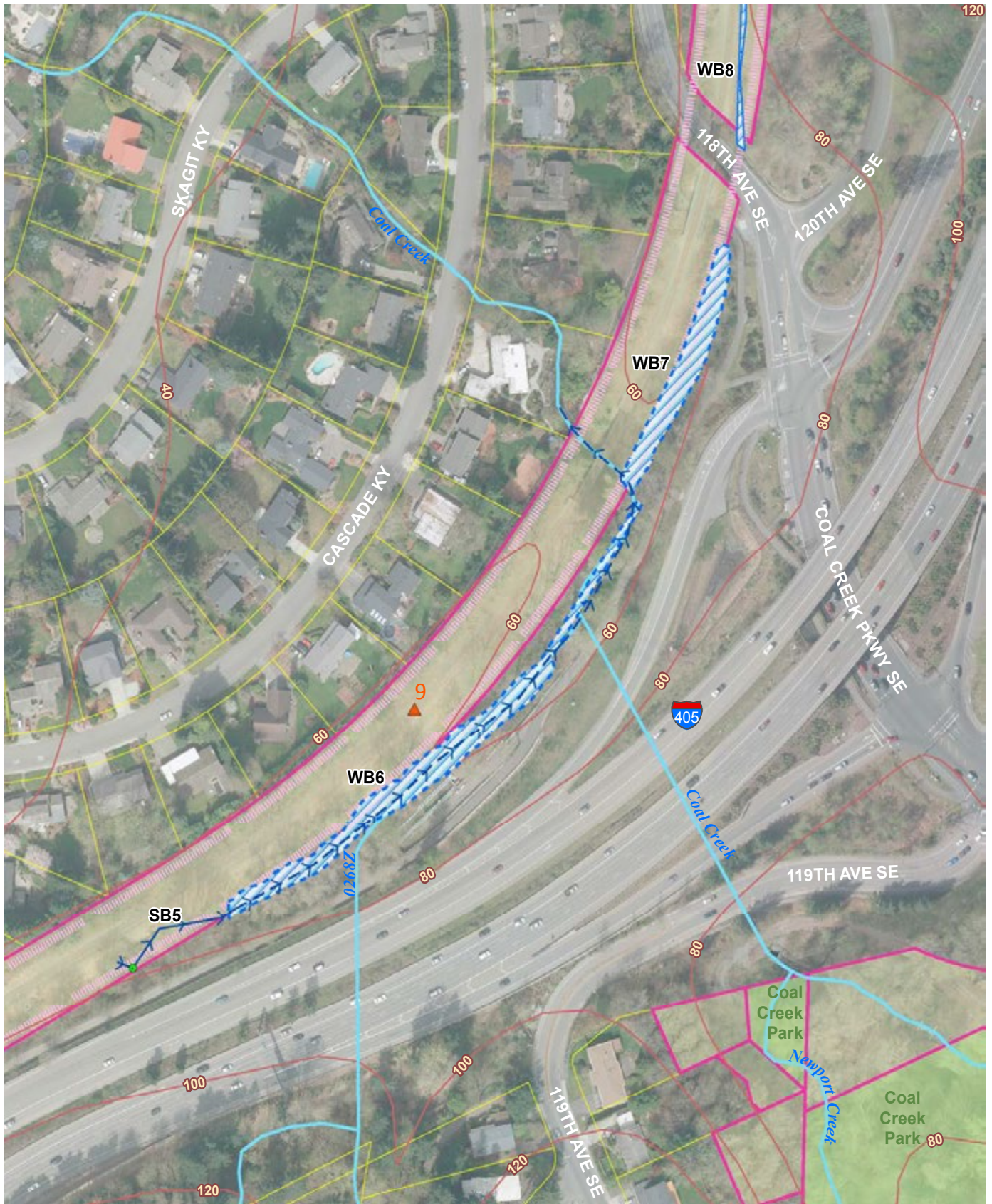
Map B6

Wetland Feature(s): WB4, WB5, WB6
 Water Feature(s): SB3, SB4, SB5, 0268Z



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory Data

Parametrix



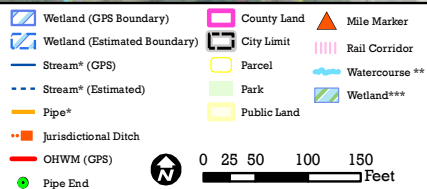
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Map B7

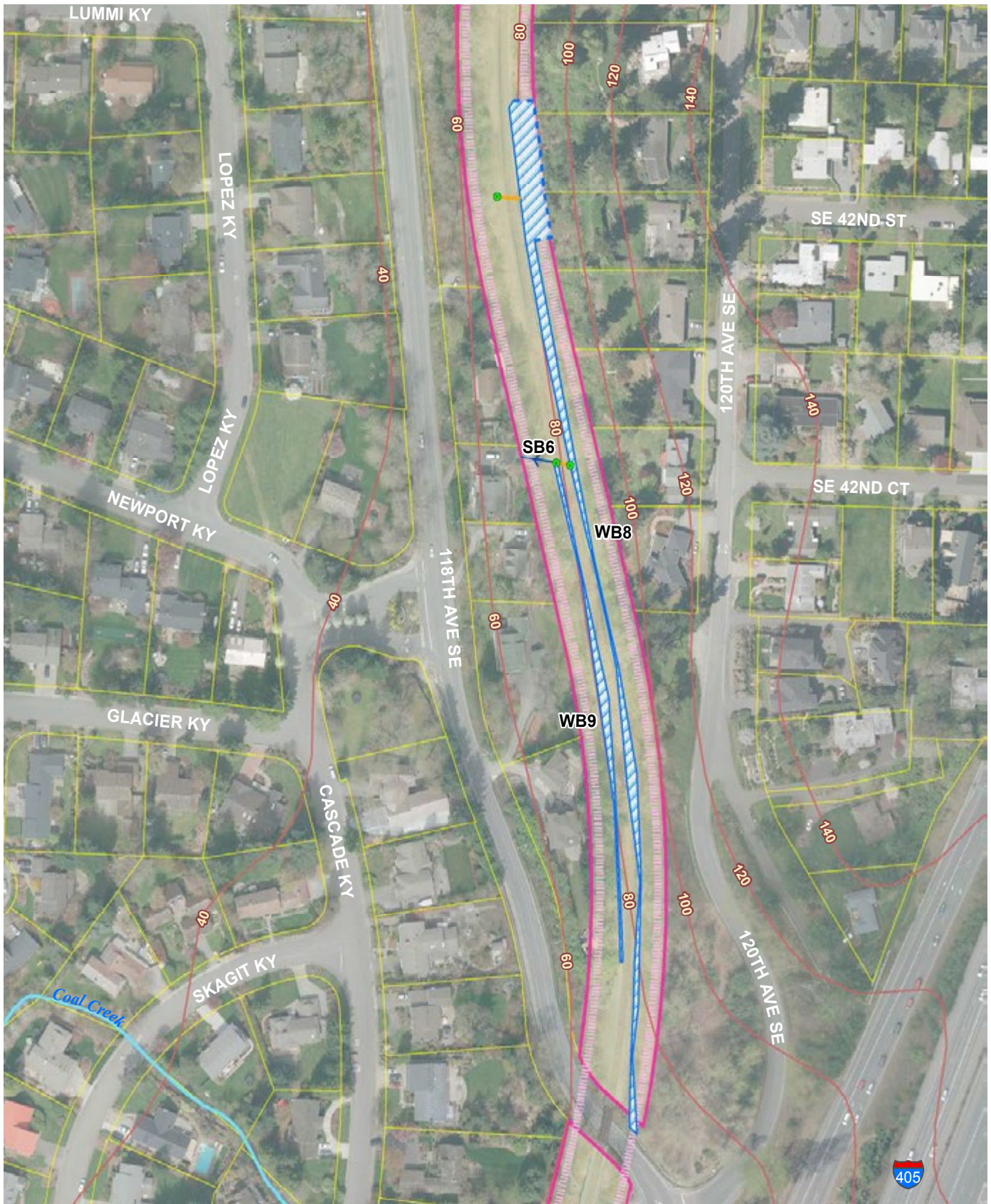
Wetland Feature(s): WB6, WB7, WB8

Water Feature(s): Coal Creek, SB5, 0268Z



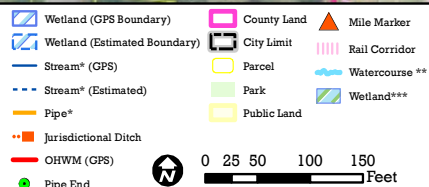
* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory Data

Parametrix



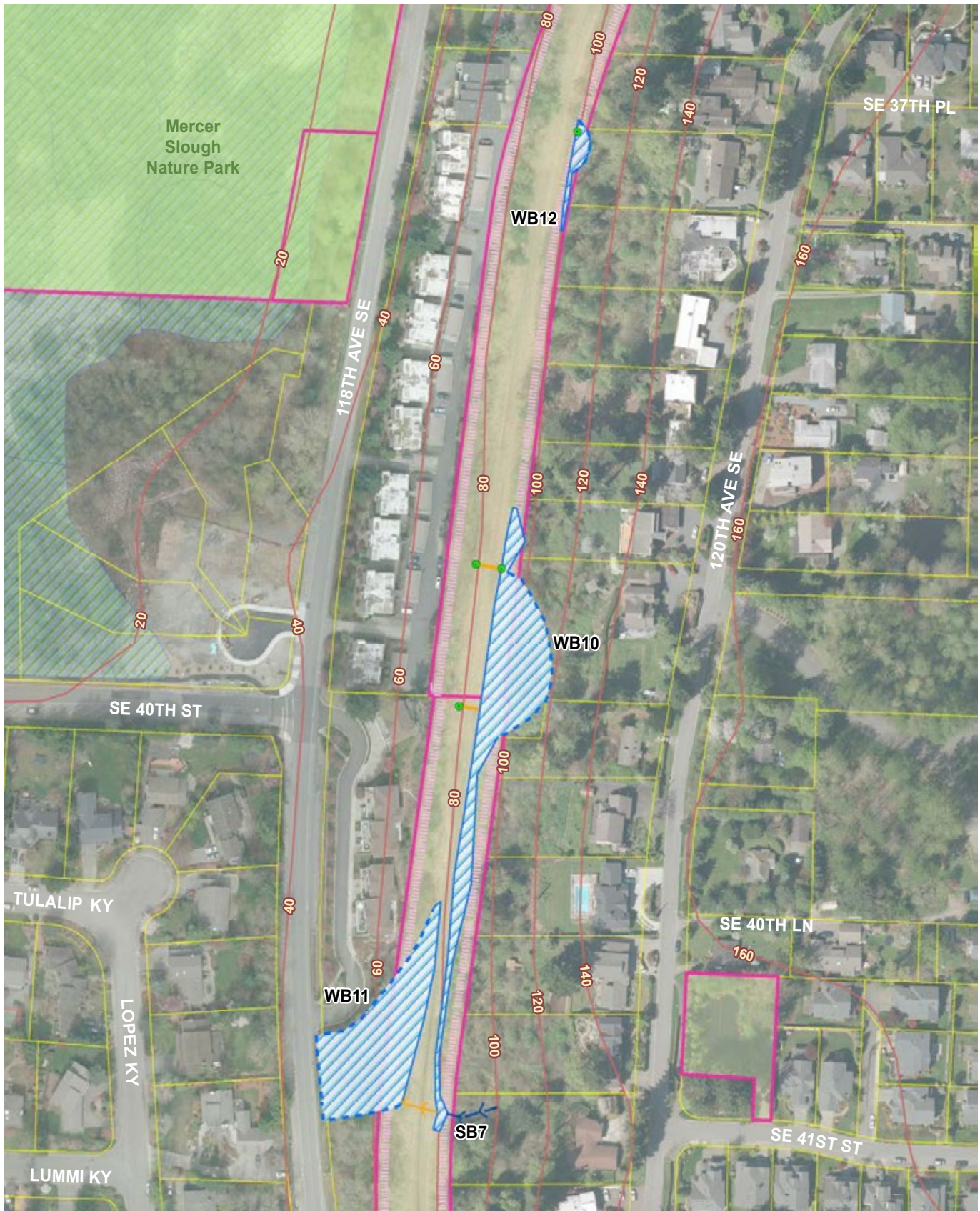
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Map B8
 Wetland Feature(s): WB8, WB9
 Water Feature(s): SB6



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory Data

Parametrix

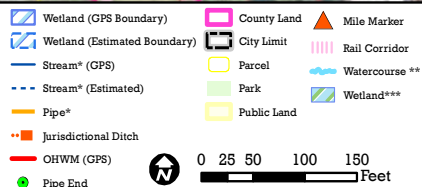


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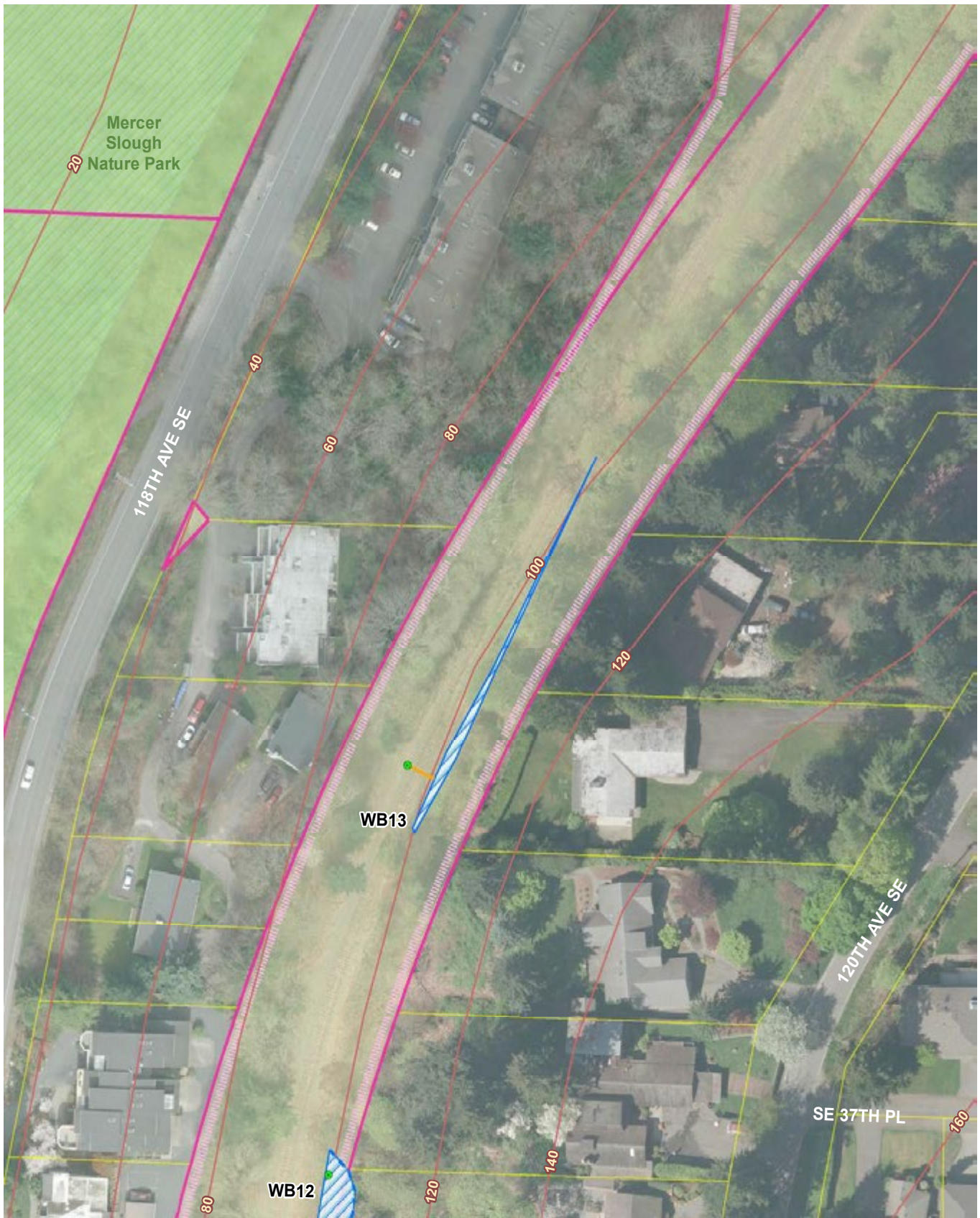
Map B9

Wetland Feature(s): WB10, WB11, WB12
 Water Feature(s): SB7



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory Data

Parametrix

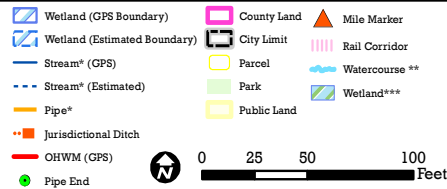


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Map B10

Wetland Feature(s): WB12, WB13
 Water Feature(s):



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory Data

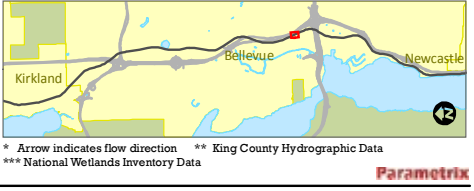
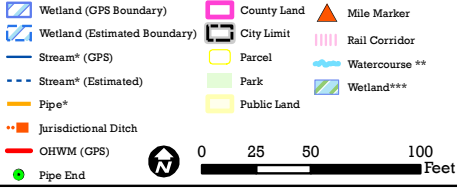
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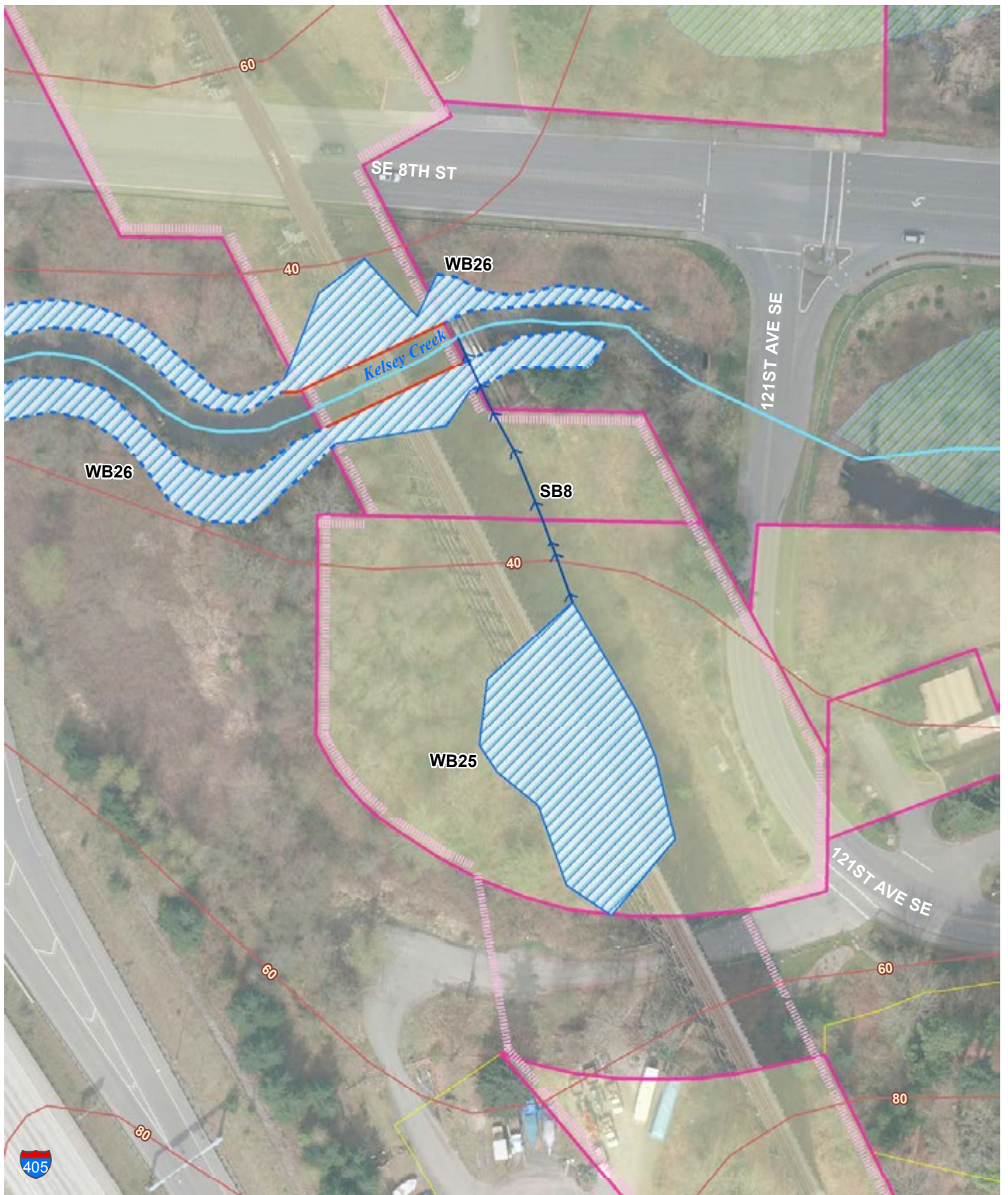


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Map B11

Wetland Feature(s): WB14
 Water Feature(s):





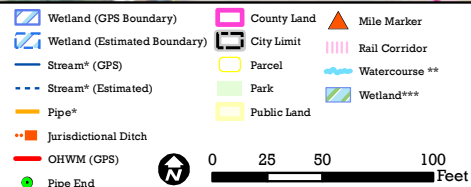
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Map B12

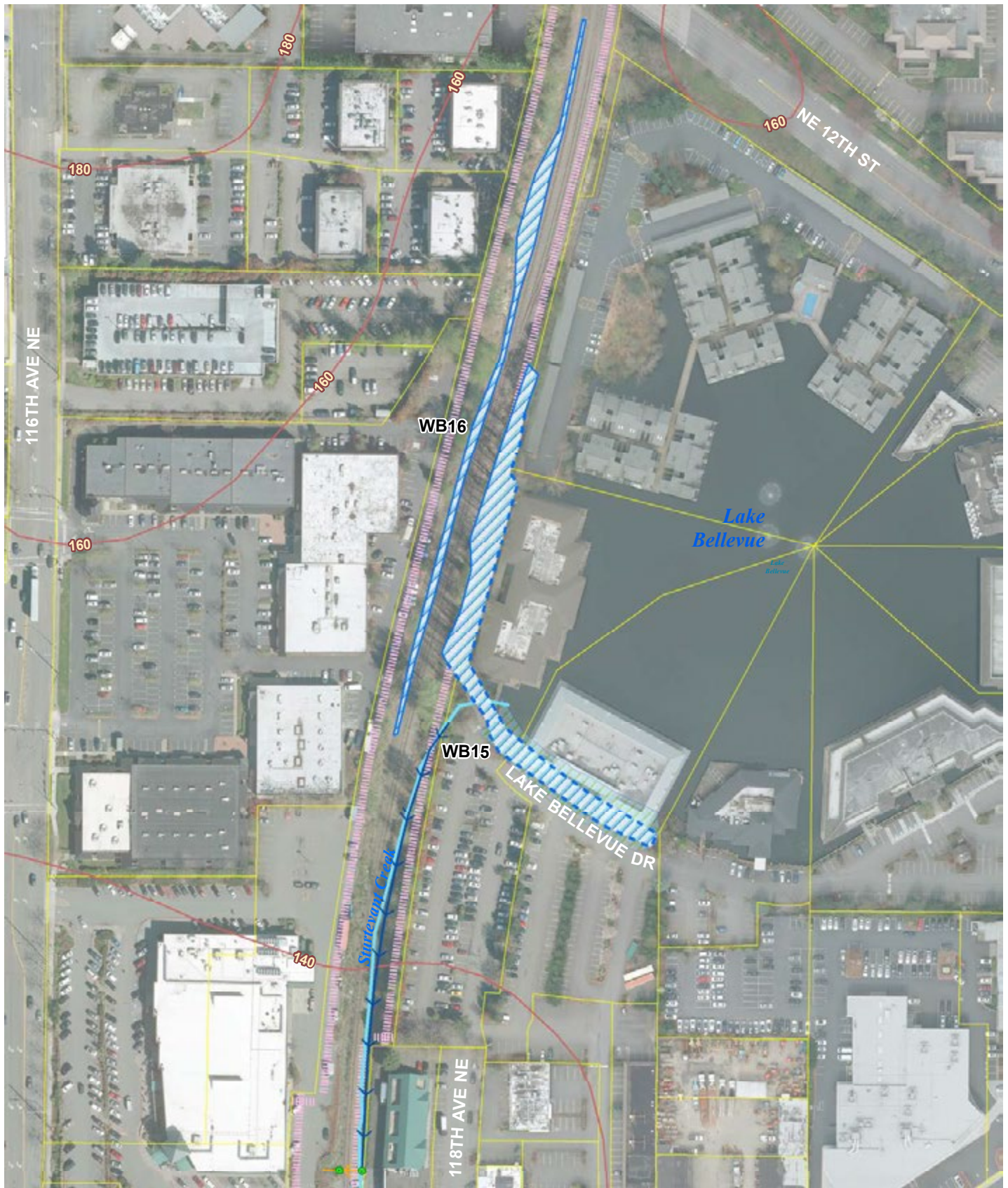
Wetland Feature(s): WB25, WB26

Water Feature(s): SB8, Kelsey Creek



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory Data

Parametrix



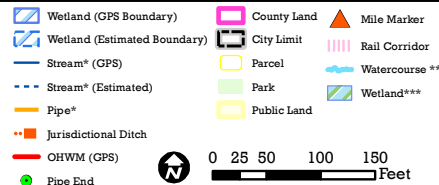
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Bellevue Main Line

Map B13

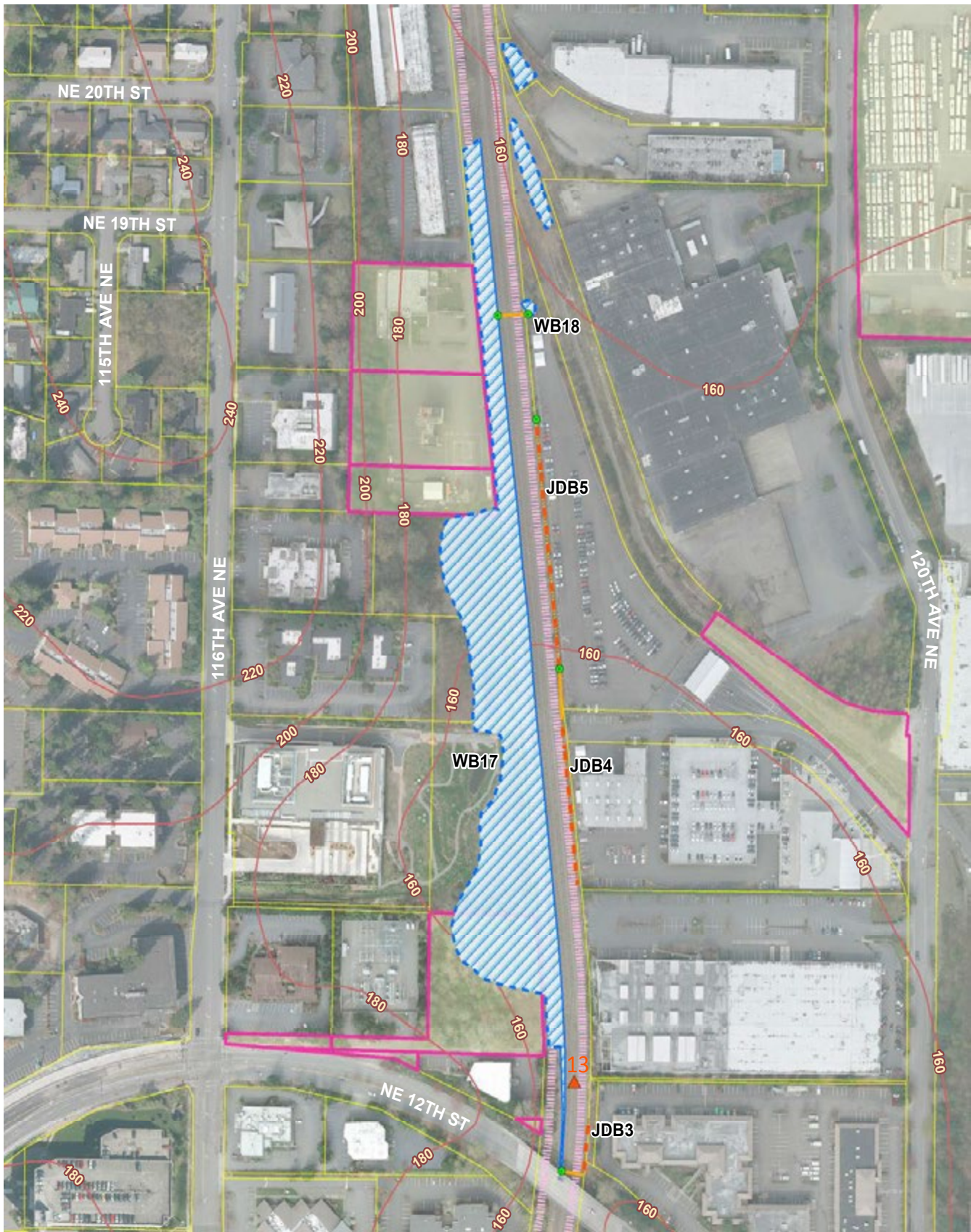
Wetland Feature(s): WB15, WB16

Water Feature(s): Sturvant Creek, Lake Bellevue



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory Data

Parametrix

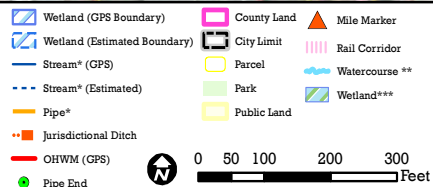


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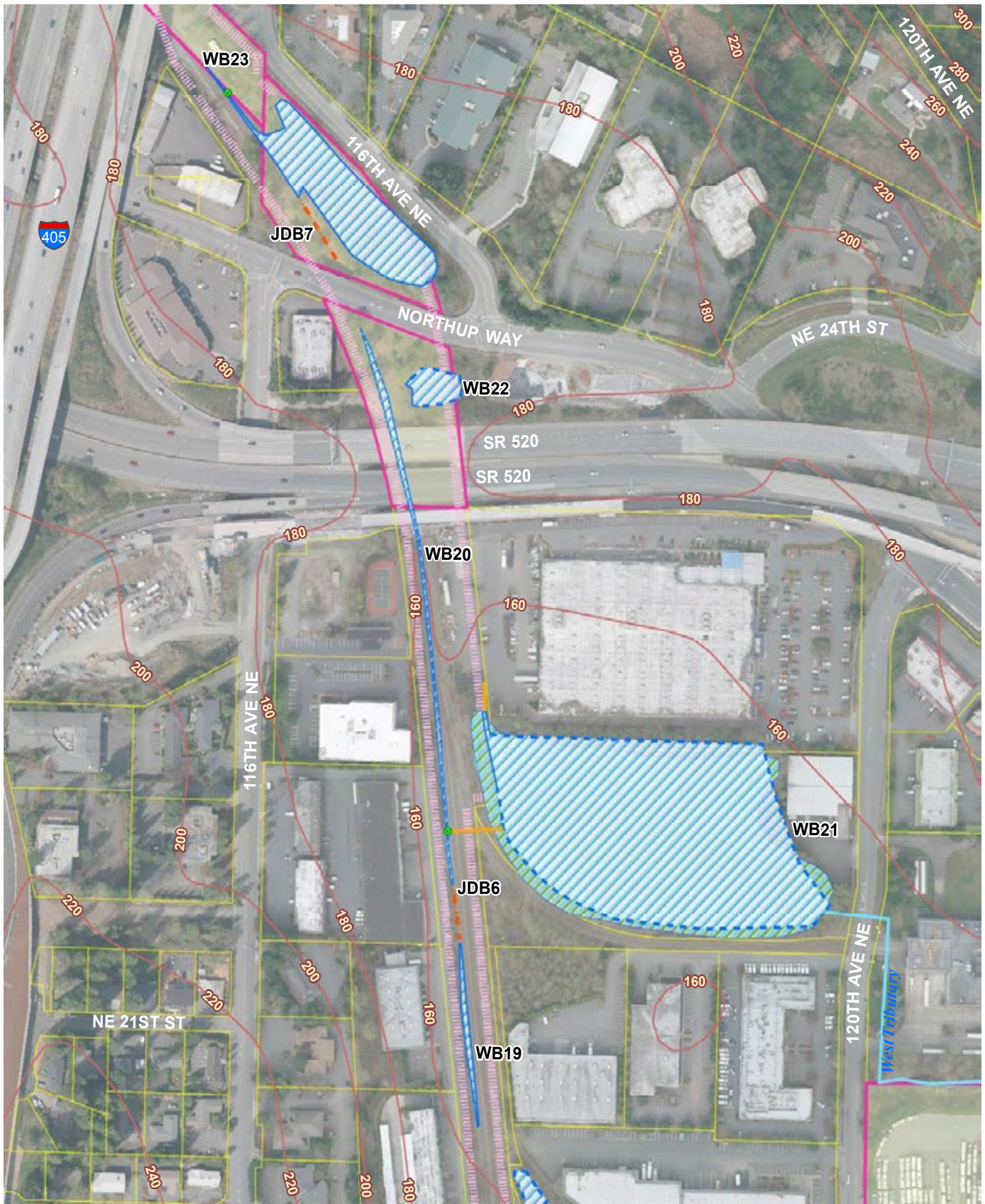
Map B14

Wetland Feature(s): WB17, WB18
 Water Feature(s): JDB3, JDB4, JDB5



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory Data

Parametrix

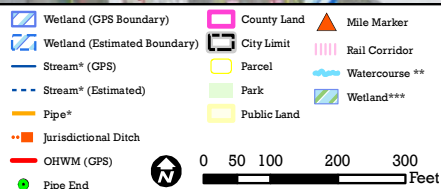


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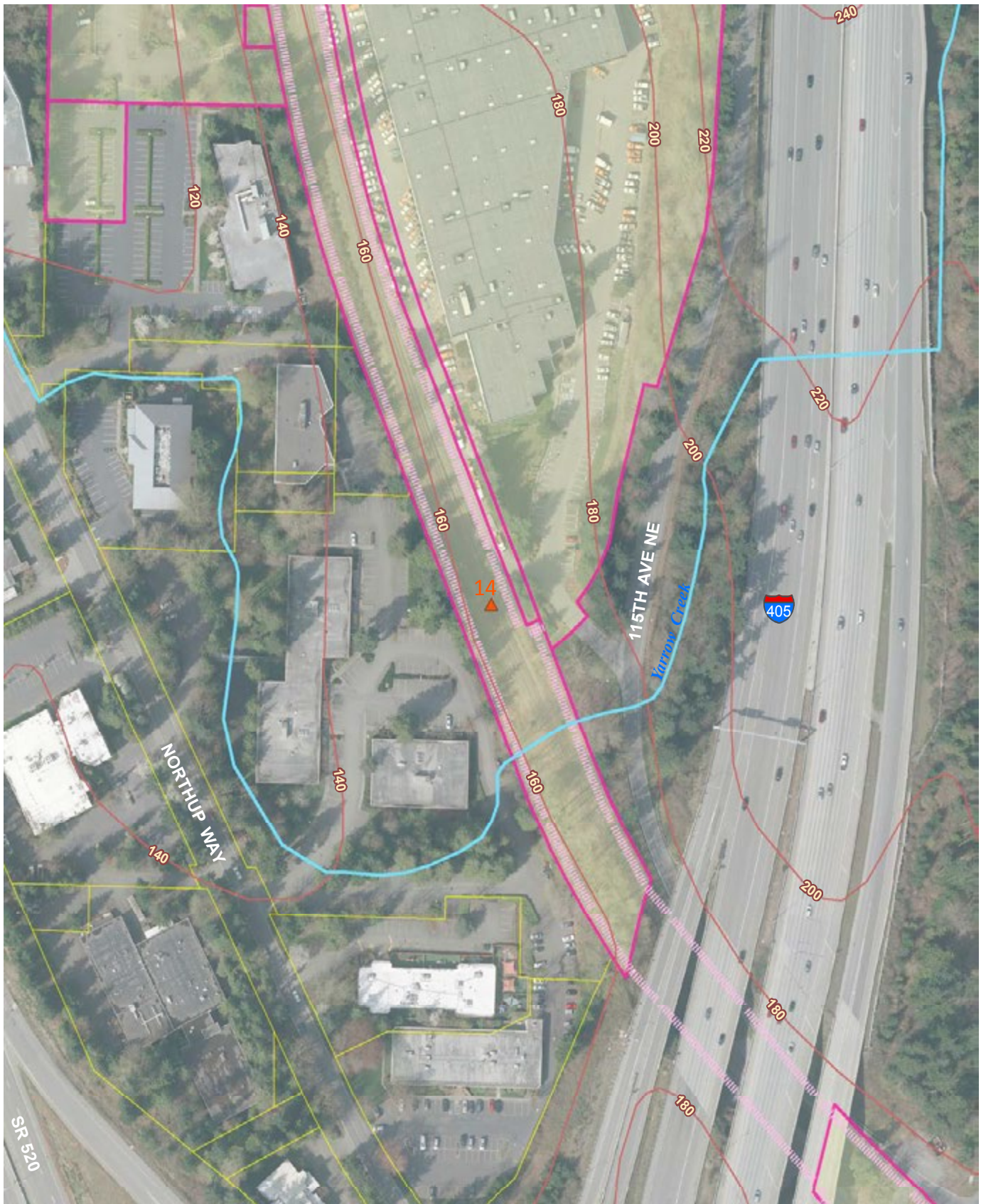
Map B15

Wetland Feature(s): WB19, WB20, WB21, WB22, WB23
 Water Feature(s): JDB6, JDB7



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory Data

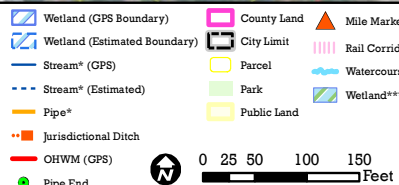
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Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

Bellevue Main Line
Map B16

Wetland Feature(s):
 Water Feature(s): Yarrow Creek



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory Data

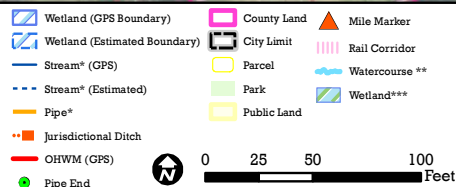
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Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

Bellevue Main Line
Map B17

Wetland Feature(s):
 Water Feature(s):



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory Data

Parametrix



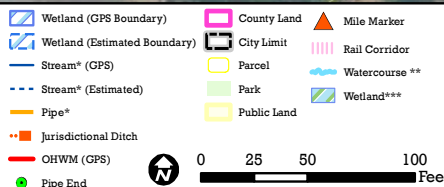
Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

Bellevue Main Line

Map B18

Wetland Feature(s): WB24

Water Feature(s):

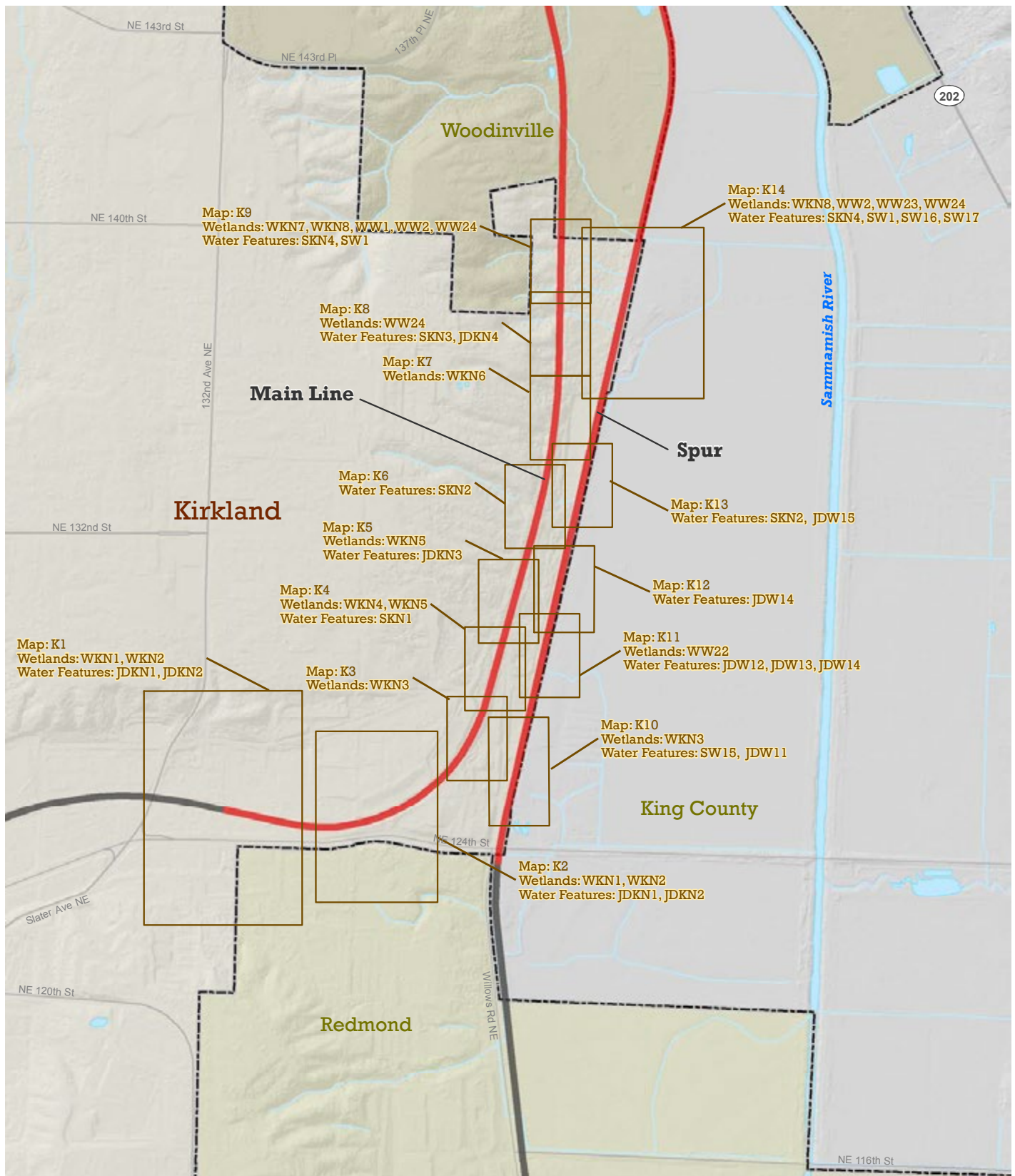


Parametrix

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KIRKLAND



Inventoried Waters and Wetlands Map Index

- Rail Corridor - Study Area
- Rail Corridor - Outside Study Area
- Watercourse *
- Inventoried Waters and Wetlands Map Extent



* King County Hydrographic Data

Kirkland Main Line, Spur



Parametrix

WETLAND NAME: WKN1

Segment: Main Line

Jurisdiction: Kirkland

Map Number: K1



WKN1—MIDDLE OF WETLAND FACING WEST



WKN1—FROM EAST FACING WEST

DATE OF SITE VISIT: 06/26/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PFO/PSS/PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.6 / 0.4

DESCRIPTION: WKN1 is a depressional wetland located north of the railbed and east of Slater Avenue NE/132nd Avenue NE. This wetland lies mostly within the rail-side ditch that extends out of the right-of-way to the north. Hydrologic sources supporting WKN1 include groundwater and local area runoff. It is possible there is a piped inlet from a wetland located west of Slater Avenue NE/132nd Avenue NE. The outlet is a pipe to the west that flows under a private roadway to Wetland WKN2. Observed indicators of hydrology include inundation, soil saturation in the upper 12 inches, and water-stained leaves. Vegetation consists of forested, shrub, and emergent communities. The forested community is dominated by Pacific willow (*Salix lasiandra*) with some black cottonwood (*Populus balsamifera*); the shrub community is dominated by hardhack (*Spiraea douglasii*) and reed canarygrass (*Phalaris arundinacea*) with a few individuals of red alder (*Alnus rubra*), Sitka willow (*Salix sitchensis*), and common rush (*Juncus effusus*); and the emergent community consists of dominant patches of reed canarygrass and broadleaf cattail (*Typha latifolia*) with lesser amounts of common rush, bird's foot trefoil (*Lotus corniculatus*), softstem bulrush (*Scirpus tabernaemontani*), sawbeak sedge (*Carex stipata*), and common spikerush (*Eleocharis palustris*). The vegetated portion of the buffer directly adjacent to the wetland to the north is mostly limited to a narrow strip of Himalayan blackberry (*Rubus armeniacus*), grasses, and sparse trees with the exception of the east end of the wetland, which has the greatest density of trees (bigleaf maple [*Acer macrophyllum*], western red cedar [*Thuja plicata*], and black cottonwood). The remaining buffer consists of the railbed, buildings, roadways, driveways, and parking lots.

WETLAND NAME: WKN2

Segment: Main Line

Jurisdiction: Kirkland

Map Number: K2



WKN2—FROM WEST FACING EAST



WKN2—FROM EAST FACING WEST

DATE OF SITE VISIT: 06/26/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.1 / 0.1

DESCRIPTION: WKN2 is a linear depression associated with the rail-side ditch, located north of NE 124th Street and east of a private roadway. Hydrologic sources supporting WKN2 include groundwater and surface water piped from Wetland WKN1 (inlet) under a private driveway to the west. There is an outlet (pipe) that extends south under the railbed at the east end of the wetland, likely contributing to a potential wetland and stream system south of the railbed and outside the right-of-way. Observed indicators of hydrology include inundation, soil saturation in the upper 12 inches, and algal mats. The vegetation is dominated by broadleaf cattail (*Typha latifolia*) with common occurrences of softstem bulrush (*Scirpus tabernaemontani*), reed canarygrass (*Phalaris arundinacea*), common rush (*Juncus effusus*), watercress (*Nasturtium officinale*), and ciliated willowherb (*Epilobium ciliatum*). The buffer to the north and east is a limited vegetated strip dominated by Himalayan blackberry (*Rubus armeniacus*) and a few trees (black cottonwood [*Populus balsamifera*], bigleaf maple [*Acer macrophyllum*], and red alder [*Alnus rubra*]). The remaining northern buffer consists of parking areas. The buffer to the south has limited vegetation and consists primarily of the railbed. The buffer to the west is a private driveway.

WETLAND NAME: WKN3

Segment: Main Line

Jurisdiction: Kirkland

Map Number: K3



WKN3—FACING SOUTH



WKN3—FROM RAILBED FACING NORTHWEST AT MIDDLE OF WETLAND

DATE OF SITE VISIT: 06/27/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PFO

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): <0.1 / <0.1

DESCRIPTION: WKN3 is a small depressional wetland located at the base of a fill slope on the west side of the railbed south of the 139th Avenue NE/Willows Road NE intersection. Hydrologic sources are likely from groundwater and stormwater runoff that is piped from the adjacent property's stormwater structure at the base of the retaining wall to the west (inlet). A pipe extends under the railbed at the north end of the wetland, serving as an outlet. Observed indicators of hydrology include soil saturation in the upper 12 inches and hydrophytic vegetation. The vegetation is dominated by red alder (*Alnus rubra*) and reed canarygrass (*Phalaris arundinacea*). In addition to the railbed and associated steep fill slope, the buffer to the north, south, and west is vegetated with red alder, Himalayan blackberry (*Rubus armeniacus*), reed canarygrass, and giant horsetail (*Equisetum telmateia*). Beyond the vegetated buffer, west of the wetland, is a retaining wall and large parking lot. The buffer to the east is mostly railbed followed by a corridor of deciduous forest. This wetland has been delineated by others as evidenced by pink flags near the boundary and sample plots.

WETLAND NAME: WKN4

Segment: Main Line

Jurisdiction: Kirkland

Map Number: K4



WKN4—FROM SOUTH FACING NORTH



WKN4—FROM RAILBED NEAR MIDDLE OF WETLAND
FACING SOUTH

DATE OF SITE VISIT: 06/27/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.1 / 0.1

DESCRIPTION: WKN4 is a linear depressional wetland located west of the railbed and south of the intersection with 139th Avenue NE/Willows Road NE. Hydrologic sources supporting WKN4 include groundwater with the potential for limited input from a stream (SKN1) at the north end of the wetland. The outlet is Stream SKN1 and a pipe that extends southeast under the railbed at the north end of the wetland. Observed indicators of hydrology include inundation (small area near SKN1) and soil saturation in the upper 12 inches. The vegetation is dominated by reed canarygrass (*Phalaris arundinacea*) with limited occurrences of common ladyfern (*Athyrium filix-femina*), hardhack (*Spiraea douglasii*), and black twinberry (*Lonicera involucrata*). The buffer north of the wetland includes sparse vegetation and roadways. The buffer to the south and west is dominated by bigleaf maple (*Acer macrophyllum*) with some Douglas-fir (*Pseudotsuga menziesii*), western red cedar (*Thuja plicata*), and black cottonwood (*Populus balsamifera*). Large trees extend outside the right-of-way to the west. The understory consists of Himalayan blackberry (*Rubus armeniacus*) with some salmonberry (*Rubus spectabilis*), beaked hazelnut (*Corylus cornuta*), and sword fern (*Polystichum munitum*). The buffer to the east is a prominent fill slope with a narrow vegetated strip of Himalayan blackberry and giant horsetail (*Equisetum telmateia*).

WETLAND NAME: WKN5

Segment: Main Line

Jurisdiction: Kirkland

Map Number: K5



WKN5—FROM SOUTH FACING NORTH



WKN5—FROM NORTH FACING SOUTH

DATE OF SITE VISIT: 06/27/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PSS/PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.1 / 0.1

DESCRIPTION: WKN5 is small depressional wetland located west of the railbed and north of the intersection with NE 139th Street/Willows Road NE, extending upslope (west) outside of the right-of-way. WKN5 is supported by groundwater but may also receive surface water from a jurisdictional ditch (JDKN3) north of the wetland. The outlet is a pipe conveying flow east under the railbed. No indicators of hydrology were observed during the field visit with the exception of hydrophytic vegetation. Vegetation consists of a shrub community and an emergent community. The shrub community is dominated by Himalayan blackberry (*Rubus armeniacus*) and Scouler's willow (*Salix scouleriana*) on the western edge. The emergent community is dominated by reed canarygrass (*Phalaris arundinacea*) with some common rush (*Juncus effusus*). The buffer to the south and east includes the railbed, roadway, and a sparse band of vegetation (rooted in fill) dominated by giant horsetail (*Equisetum telmateia*) and Himalayan blackberry. The buffer to the north and west consists of bigleaf maple (*Acer macrophyllum*), black cottonwood (*Populus balsamifera*), beaked hazelnut (*Corylus cornuta*), black locust (*Robinia pseudoacacia*), apple (*Malus* spp.), and Himalayan blackberry.

WETLAND NAME: WKN6

Segment: Main Line

Jurisdiction: Kirkland

Map Number: K7



WKN6—FROM RAILBED FACING WEST

DATE OF SITE VISIT: 06/27/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PSS/PEM/PFO

HGM CLASS: DEPRESSIONAL/SLOPE

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.1 / 0.1

DESCRIPTION: WKN6 is located west of the railbed and approximately 0.4 mile north of the intersection with NE 139th Street/Willows Road NE on a slope. WKN6 extends outside the right-of-way to the west. Hydrologic sources supporting the wetland include groundwater and seeps. No inlets or outlets were observed. No indicators of hydrology were observed with the exception of hydrophytic vegetation. Vegetation consists of forested, shrub, and emergent communities. In the right-of-way, the emergent community is dominated by reed canarygrass (*Phalaris arundinacea*), and the shrub community is dominated by Himalayan blackberry (*Rubus armeniacus*) and salmonberry (*Rubus spectabilis*). Outside the right-of-way, the forested community within the wetland is dominated by red alder (*Alnus rubra*). The buffer to the north, south, and west is primarily deciduous forest dominated by bigleaf maple (*Acer macrophyllum*) and red alder with an understory of Himalayan blackberry. Douglas-fir (*Pseudotsuga menziesii*) and trailing blackberry (*Rubus ursinus*) were also observed. To the east is the railbed, a disturbed gravel area, and forest.

WETLAND NAME: WKN7

Segment: Main Line

Jurisdiction: Kirkland

Map Number: K9



WKN7 (AND SKN4)—FROM RAILBED FACING WEST

DATE OF SITE VISIT: 06/27/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PSS

HGM CLASS: SLOPE/RIVERINE

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.1 / 0.1

DESCRIPTION: WKN7 is a slope/riverine wetland west of the railbed and approximately 0.5 mile north of the intersection with NE 139th Street/Willows Road NE on a slope associated with a stream (SKN4). WKN7 extends outside the right-of-way. Hydrologic sources supporting WKN7 include seeps and surface water from a stream (SKN4) that flows through the wetland. The inlet to the wetland is SKN4 and the outlet is SKN4 and a pipe that extends under the railbed conveying the stream to Wetland WKN8. The observed indicators of hydrology include hydrophytic vegetation and the stream. The vegetation is dominated by salmonberry (*Rubus spectabilis*), reed canarygrass (*Phalaris arundinacea*), and giant horsetail (*Equisetum telmateia*). Excluding the railbed, the buffer is a mixed deciduous and coniferous forest.

WETLAND NAME: WKN8

Segment: Main Line

Jurisdiction: Kirkland

Map Number: K9



WKN8 (AND SKN4)—FROM RAILBED FACING EAST

DATE OF SITE VISIT: 06/27/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PEM

HGM CLASS: SLOPE/RIVERINE

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): <0.1 / <0.1

DESCRIPTION: WKN8 is a slope/riverine wetland east of the railbed and approximately 0.5 mile north of the intersection with NE 139th Street/Willows Road NE on a slope associated with a stream (SKN4). WKN8 extends outside the right-of-way. Hydrologic sources supporting WKN8 include seeps and surface water from a stream (SKN4) that flows through the wetland. The inlet to the wetland is SKN4 (associated with WKN7 west of the railbed) and the outlet is SKN4. The observed indicators of hydrology include hydrophytic vegetation and the stream. The vegetation is dominated by reed canarygrass (*Phalaris arundinacea*) with some Himalayan blackberry (*Rubus armeniacus*) overhanging the wetland. Excluding the railbed, the buffer is a mixed deciduous and coniferous forest with Himalayan blackberry in the understory near the railbed.

WETLAND NAME: WW1

Segment: Main Line

Jurisdiction: Kirkland

Map Number: K9



WW1 (AND SW1)—FROM RAILBED FACING WEST

DATE OF SITE VISIT: 06/27/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PSS/PEM

HGM CLASS: SLOPE/RIVERINE

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.1 / <0.1

DESCRIPTION: WW1 is a slope/riverine wetland west of the railbed near the southern limits of Woodinville. WW1 extends outside the right-of-way. Hydrologic sources supporting WW1 include surface water (associated with Stream SW1) and likely from seeps. Both the inlet and outlet is Stream SW1 and a pipe that extends under the railbed to the east conveying the stream to Wetland WW2. Observed indicators of hydrology include the stream and hydrophytic vegetation. Vegetation consists of a shrub community and an emergent community. The shrub community is dominated by salmonberry (*Rubus spectabilis*) and the emergent community is dominated by reed canarygrass (*Phalaris arundinacea*). Excluding the railbed, the buffer consists of a mixed deciduous and coniferous forest.

WETLAND NAME: WW2

Segment: Main Line

Jurisdiction: Kirkland

Map Number: K9



WW2 (AND SW1)—FROM RAILBED FACING EAST

DATE OF SITE VISIT: 06/27/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PSS/PEM

HGM CLASS: SLOPE/RIVERINE

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): <0.1 / <0.1

DESCRIPTION: WW2 is a slope/riverine wetland west of the railbed at the south end of Woodinville. WW2 extends outside the right-of-way. Hydrologic sources supporting WW2 include surface water piped under the railbed (associated with Stream SW1 and Wetland WW1) and discharge likely from seeps. The inlet and outlet are associated with the stream. Observed indicators of hydrology include the stream and the hydrophytic vegetation. Vegetation consists of a shrub community and an emergent community. The shrub community is dominated by salmonberry (*Rubus spectabilis*) and Himalayan blackberry (*Rubus armeniacus*), and the emergent community is dominated by reed canarygrass (*Phalaris arundinacea*) and giant horsetail (*Equisetum telmateia*). Excluding the railbed, the buffer consists of a mixed deciduous and coniferous forest.

WETLAND NAME: WW22

Segment: Spur

Jurisdiction: Kirkland

Map Number: K11



WW22 FACING EAST

DATE OF SITE VISIT: 08/05/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PEM

HGM CLASS: DEPRESSIONAL/SLOPE

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): <0.1 / <0.1

DESCRIPTION: WW22 is a small depressional/slope wetland east of the railbed and adjacent to a JB Lawn access road near Astronics Advanced Electronic Systems. The primary hydrologic source supporting WW22 is surface water from two jurisdictional ditches (JDW12 and JDW14). A third jurisdictional ditch (JDW13) provides an outlet to the south, eventually flowing east to the Sammamish River. The observed indicator of hydrology was water marks. The dominant vegetation is broadleaf cattail (*Typha latifolia*) and reed canarygrass (*Phalaris arundinacea*). The vegetated buffer is narrow, consisting mostly of non-native vegetation. The remaining buffer includes the railbed, 141st Avenue NE, and an access road to adjacent agricultural areas.

WETLAND NAME: WW23

Segment: Spur

Jurisdiction: Kirkland

Map Number: K14



**WW23 SOUTH END LOOKING NORTH ALONG
RAILBED**



WW23 LOOKING (EAST) AT DITCH

DATE OF SITE VISIT: 08/06/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PFO/PSS/PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.4 / 0.4

DESCRIPTION: WW23 is a long linear depressional wetland east of the railbed and south of Chateau Ste. Michelle winery. The wetland is confined mostly to a ditch paralleling the railbed and a JB Lawn access road. The primary hydrologic sources supporting WW23 is surface water and groundwater. Inlets to the wetland include pipes that extend under the railbed originating from a wetland (WW24) and associated streams (SW16 and SW17). Water exits the wetland to the north in SW17, which flows east to a pipe under the JB Lawn access road. Observed indicators of hydrology include inundation and soil saturation in the upper 12 inches. The dominant emergent community includes broadleaf cattail (*Typha latifolia*), reed canarygrass (*Phalaris arundinacea*), bird's foot trefoil (*Lotus corniculatus*), spikerush (*Eleocharis* sp.), soft-stem bulrush (*Schoenoplectus tabernaemontani*), fringed willowherb (*Epilobium ciliatum*), common duckweed (*Lemna minor*), and small-fruited bulrush (*Scirpus microcarpus*). The dominant shrub community includes willow (*Salix* spp.) and red alder (*Alnus rubra*) saplings. The forested community has an overstory of red alder. The vegetated buffer is limited to the area between the wetland and the railbed, which is dominated by giant horsetail (*Equisetum telmateia*), red alder, fringed willowherb, scouring horsetail (*Equisetum hyemale*), and field horsetail (*Equisetum arvense*). A very narrow (approximately 2 feet) vegetated buffer of disturbance-tolerant forbs and grasses is located between the wetland and the adjacent access road for JB Lawn. The lawn and sod operation is located further east.

WETLAND NAME: WW24

Segment: Spur

Jurisdiction: Kirkland

Map Number: K14



WW24 SOUTH END LOOKING NORTH



WW24 STANDING WATER IN DITCH

DATE OF SITE VISIT: 08/06/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PFO/PSS/PEM

HGM CLASS: DEPRESSIONAL/SLOPE

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 7.1 / 1.0

DESCRIPTION: WW24 is a large linear depression/slope wetland located west of the railbed and south of Chateau Ste. Michelle. The wetland extends outside the study area to the west. A portion of the wetland is in a maintained ditch area. The primary hydrologic sources supporting WW24 include a seep, surface water from a stream (SW16), and groundwater. The outlet to WW24 consists of pipes that discharge flow to WW23 and SW16. Small fish were observed in this segment of SW16. Another stream (SW17) flows southeast in the northern portion of the wetland to WW23 through pipes under the rail. Observed indicators of hydrology include inundation and soil saturation in the upper 12 inches. The dominant emergent community includes reed canarygrass (*Phalaris arundinacea*) and watercress (*Nasturtium officinale*). The dominant shrub community is red osier dogwood (*Cornus sericea*), Pacific willow (*Salix lasiandra*), and salmonberry (*Rubus spectabilis*). The forested community includes Pacific willow, western red cedar (*Thuja plicata*), red alder (*Alnus rubra*), salmonberry, and other willow (*Salix* spp.) species. The vegetated buffer is limited to a narrow vegetated buffer between the railbed and the wetland consisting of disturbance-tolerant vegetation including giant horsetail (*Equisetum telmateia*), Himalayan blackberry (*Rubus armeniacus*), and reed canarygrass. To the north, south, and west is a well-established forested (coniferous and deciduous) buffer. Berms were observed in the wetland and it is likely there are additional upland hummocks within the wetland, resulting in a wetland mosaic.

STREAM NAME: SKN1

Segment: Main Line

Jurisdiction: Kirkland

Map Number: K4



SKN1— LOOKING WEST TOWARDS WILLOWS ROAD AT
BASE OF SLOPE SOUTH OF RAIL.



SKN1— LOOKING UPSLOPE, NORTH OF 139TH AVE. NE.
APPEARS OHWM WAS FLAGGED (OUTSIDE ROW).

DATE OF SITE VISIT: 06/27/2014

DRAINAGE BASIN: SAMMAMISH RIVER

DESCRIPTION: Stream SKN1 is a small stream located south of the intersection with NE 139th Street/Willows Road NE flowing from west to east through the right-of-way. It provides some hydrologic input to the north end of Wetland WKN4 and also serves as an outlet to this wetland. The stream was flowing during the site visit. Vegetation in the riparian buffer includes bigleaf maple (*Acer macrophyllum*) with some Douglas-fir (*Pseudotsuga menziesii*), western redcedar (*Thuja plicata*), and black cottonwood (*Populus balsamifera*) in the overstory and Himalayan blackberry (*Rubus armeniacus*) with some salmonberry (*Rubus spectabilis*), beaked hazelnut (*Corylus cornuta*), and western swordfern (*Polystichum munitum*) in the understory.

STREAM NAME: SKN2

Segment: Main Line

Jurisdiction: Kirkland

Map Number: K6



SKN2—WEST SIDE AT PIPE (DOWNSTREAM)



SKN2—WEST SIDE LOOKING WEST

DATE OF SITE VISIT: 06/27/2014

DRAINAGE BASIN: SAMMAMISH RIVER

DESCRIPTION: Stream SKN2 is a small stream located approximately 0.20 mile north of the intersection with NE 139th Street/Willows Road NE and northwest of a parking lot. The stream, which is a braided channel west of the railbed, was flowing at the time of the site visit. The east side of the railbed fill slope is steep. Wetland vegetation was observed in the channel. Vegetation in the riparian buffer is a mixed coniferous and deciduous forest.

STREAM NAME: SKN3

Segment: Main Line

Jurisdiction: Kirkland

Map Number: K8



**SKN3—WEST SIDE OF RAILBED LOOKING WEST
(UPSTREAM)**



**SKN3—EAST SIDE OF RAILBED LOOKING EAST (DOWN-
STREAM)**

DATE OF SITE VISIT: 06/27/2014

DRAINAGE BASIN: SAMMAMISH RIVER

DESCRIPTION: Stream SKN3 is a small stream located approximately 0.5 mile north of the intersection of NE 139th Street and Willows Road NE, south of Stream SKN4, and immediately north of a jurisdictional ditch (JDKN4). This ditch connects to Stream SKN3 the pipe inlet where water is conveyed east under the rail.. The stream has an incised channel that was flowing at the time of the site visit. Wetland vegetation was observed in the channel with the potential for an adjacent wetland. The pipe that conveys flow underneath the railbed appears fairly new. Vegetation in the riparian buffer is a mixed coniferous and deciduous forest.

STREAM NAME: SKN4

Segment: Main Line

Jurisdiction: Kirkland

Map Number: K9



**SKN4 (AND WKN7)—FROM RAIL LOOKING WEST
(UPSTREAM)**



**SKN4 (AND WKN8)—FROM RAIL LOOKING EAST
(DOWNSTREAM)**

DATE OF SITE VISIT: 06/27/2014

DRAINAGE BASIN: SAMMAMISH RIVER

DESCRIPTION: Stream SKN4 is a small stream located approximately 0.5 mile north of the intersection with NE 139th Street/Willows Road NE and north of Stream SKN3. It is hydrologically connected to Wetland WKN7 west of the railbed and Wetland WKN8 east of the railbed. The riparian buffer vegetation west of the railbed is dominated by salmonberry (*Rubus spectabilis*), reed canarygrass (*Phalaris arundinacea*) and giant horsetail (*Equisetum telmateia*) in Wetland WKN7 with a mixed deciduous and coniferous forest in the surrounding upland. Vegetation in the riparian buffer east of the railbed is dominated by reed canarygrass with some Himalayan blackberry (*Rubus armeniacus*) in Wetland WKN8 with a mixed deciduous and coniferous forest in the surrounding upland. Himalayan blackberry is present in the understory near the railbed.

STREAM NAME: SW1

Segment: Main Line

Jurisdiction: Kirkland

Map Number: K9



SW1—FROM RAIL LOOKING WEST



SW1—FROM RAIL LOOKING EAST

DATE OF SITE VISIT: 06/27/2014

DRAINAGE BASIN: SAMMAMISH RIVER

DESCRIPTION: Stream SW1 is a small stream located near the southern limits of Woodinville. It is hydrologically connected to Wetland WW1, west of the railbed, and Wetland WW2, east of the railbed. During the site visit, the stream was flowing. It has a gravel substrate, and the average width is 3.5 feet. Vegetation in the riparian buffer includes an understory of salmonberry (*Rubus spectabilis*) and reed canarygrass (*Phalaris arundinacea*) in the wetland areas, and a mixed deciduous and coniferous forest in the surrounding upland.

STREAM NAME: SW15

Segment: Main Line

Jurisdiction: Kirkland

Map Number: K10



SW15—FACING NORTH (DOWNSTREAM) AT NORTH END, ON WEST SIDE (ALSO END OF JDW11)



SW15—FACING NORTH (DOWNSTREAM) ON EAST SIDE AT CULVERT OUTLET UNDER RAILBED

DATE OF SITE VISIT: 08/05/2014

DRAINAGE BASIN: SAMMAMISH RIVER

DESCRIPTION: Stream SW15 enters the right-of-way from a pipe under Willows Road NE on the west side of the railbed, approximately 0.05 mile north of the Willows Road NE/NE 124th Street intersection. A jurisdictional ditch (JDW11) connects to Stream SW15 on the west side of the rail. The stream turns north for a short distance before entering a pipe under the railbed. On the east side, the stream flows north, enters another pipe, then opens up again before flowing into a linear wetland adjacent to the right-of-way. Standing water was observed in the channel during the site visit. The riparian buffer is limited by the railbed, roadways, and surrounding businesses. The vegetated portion of the buffer has some deciduous trees, but is mainly reed canarygrass (*Phalaris arundinacea*) and Himalayan blackberry (*Rubus armeniacus*). The Washington Department of Fish and Wildlife's SalmonScape (queried November 2014) data indicate a "modeled" presence of Chinook salmon (fall Chinook) and coho salmon (*O. kisutch*) and the "documented" presence of, steelhead trout (*O. mykiss*) (winter run) and sockeye salmon (*O. nerka*). WDFW defines "modeled presence" as "habitat upstream of known species presence, but downstream of any known natural barrier. The modeled category does not factor habitat quality, flow or any other natural or human-caused condition that would otherwise prevent habitat use."

STREAM NAME: SW16

Segment: Main Line

Jurisdiction: Kirkland

Map Number: K14



SW16 (IN WW24)—LOOKING SOUTH (DOWNSTREAM)

DATE OF SITE VISIT: 08/06/2014

DRAINAGE BASIN: SAMMAMISH RIVER

DESCRIPTION: Stream SW16 enters the right-of-way on the west side in Wetland WW24, then flows south parallel to the railbed before crossing east through a pipe to Wetland WW23 (approximately 0.75 mile south of NE 145th Street). Water was flowing during the field visit, and small fish were observed. Fine sediment was observed in the stream, and the substrate was silty. The riparian buffer vegetation, dominated by wetland species, includes red-osier dogwood (*Cornus sericea*), Pacific willow (*Salix lasiandra*), salmonberry (*Rubus spectabilis*), western redcedar (*Thuja plicata*), red alder (*Alnus rubra*), and other willow (*Salix* spp) species. Vegetation directly adjacent to the wetted edge is dominated by reed canarygrass (*Phalaris arundinacea*) and watercress (*Nasturtium officinale*). The railbed is east of the stream. The Washington Department of Fish and Wildlife’s SalmonScape (queried November 2014) data indicate a “modeled” presence of Chinook salmon (fall Chinook) and coho salmon (*O. kisutch*) and the “documented” presence of, steelhead trout (*O. mykiss*) (winter run) and sockeye salmon (*O. nerka*). WDFW defines “modeled presence” as “habitat upstream of known species presence, but downstream of any known natural barrier. The modeled category does not factor habitat quality, flow or any other natural or human-caused condition that would otherwise prevent habitat use.”

STREAM NAME: SW17

Segment: Main Line

Jurisdiction: Kirkland

Map Number: K14



SW17 (AND WW24)—FROM PIPE LOOKING NORTHWEST (UPSTREAM) AT WEST SIDE RAILBED

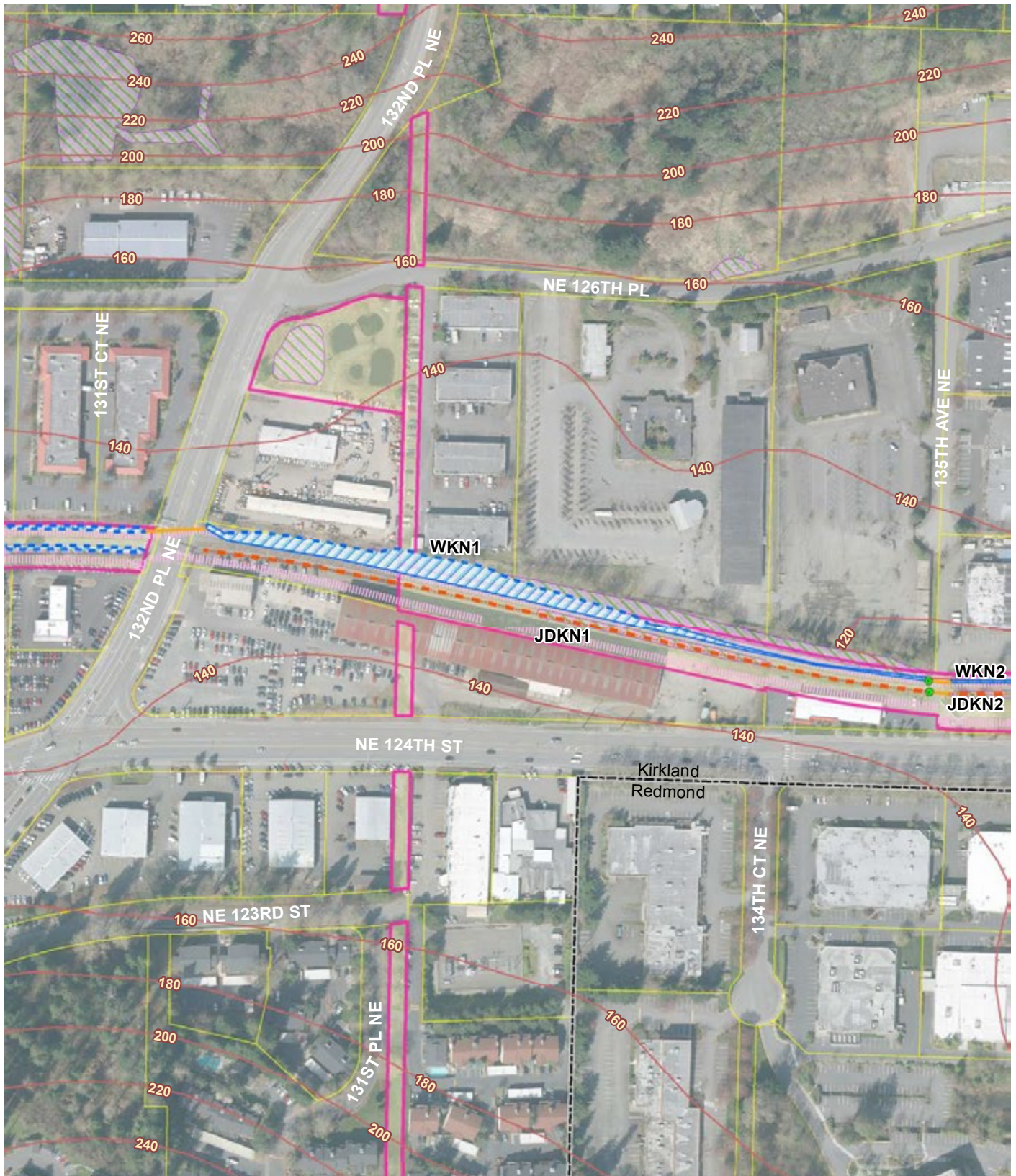


SW17 (AND WW23)—LOOKING NORTH (DOWNSTREAM) FROM PIPE UNDER RAILBED

DATE OF SITE VISIT: 08/06/2014

DRAINAGE BASIN: SAMMAMISH RIVER

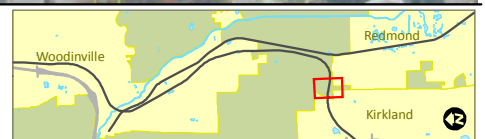
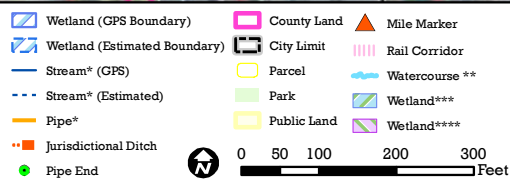
DESCRIPTION: Starting approximately 0.50 mile south of NE 145th Street, Stream SW17 flows southwest along the west side of the railbed and then extends under the railbed via a culvert, flowing north, and then east outside the right-of-way. Stream SW17 is associated with two wetlands: Wetland WW24 on the west side of the railbed and Wetland WW23 on the east side of the railbed. Water was flowing during the field visit. Fine sediment was observed in the stream, and the substrate was silty. On the west side of the railbed, riparian buffer vegetation is dominated by wetland species and includes red-osier dogwood (*Cornus sericea*), Pacific willow (*Salix lasiandra*), salmonberry (*Rubus spectabilis*), western redcedar (*Thuja plicata*), red alder (*Alnus rubra*), and other willow (*Salix* spp.) species. Vegetation directly adjacent to the wetted edge is dominated by reed canarygrass (*Phalaris arundinacea*) and watercress (*Nasturtium officinale*). On the east side of the railbed, the riparian buffer vegetation is limited by the adjacent lawn business. Dominant species in the right-of-way include broadleaf cattail (*Typha latifolia*), reed canarygrass, bird's foot trefoil (*Lotus corniculatus*), spikerush (*Eleocharis* spp.), soft-stem bulrush (*Schoenoplectus tabernaemontani*), fringed willowherb (*Epilobium ciliatum*), common duckweed (*Lemna minor*), and small-fruited bulrush (*Scirpus microcarpus*), willow, and red alder. Washington Department of Fish and Wildlife's SalmonScape (queried November 2014) data indicate a "modeled" presence of sockeye salmon (*O. nerka*), Chinook salmon (fall Chinook), steelhead trout (*O. mykiss*) (winter run), and coho salmon (*O. kisutch*). WDFW defines "modeled presence" as "habitat upstream of known species presence, but downstream of any known natural barrier. The modeled category does not factor habitat quality, flow or any other natural or human-caused condition that would otherwise prevent habitat use."



Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

Kirkland Main Line
Map K1

Wetland Feature(s): WKN1, WKN2
 Water Feature(s): JDKN1, JDKN2



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory **** City of Kirkland Wetlands Inventory

Parametrix



Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

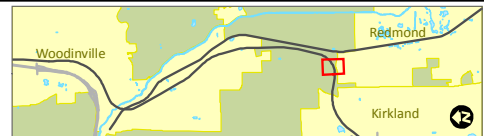
Kirkland Main Line

Map K2

Wetland Feature(s): WKN1, WKN2
 Water Feature(s): JDKN1, JDKN2

- | | | | | | |
|--|------------------------------|--|-------------|--|-------------|
| | Wetland (GPS Boundary) | | County Land | | Mile Marker |
| | Wetland (Estimated Boundary) | | City Limit | | Parcel |
| | Stream* (GPS) | | Park | | Public Land |
| | Stream* (Estimated) | | Wetland*** | | Wetland**** |
| | Pipe* | | Wetland**** | | |
| | Jurisdictional Ditch | | | | |
| | Pipe End | | | | |

0 25 50 100 150 Feet



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory **** City of Kirkland Wetlands Inventory

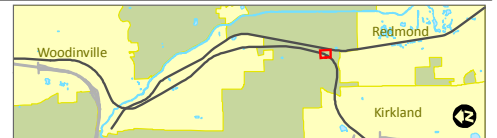
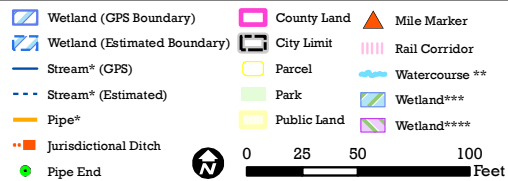
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Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

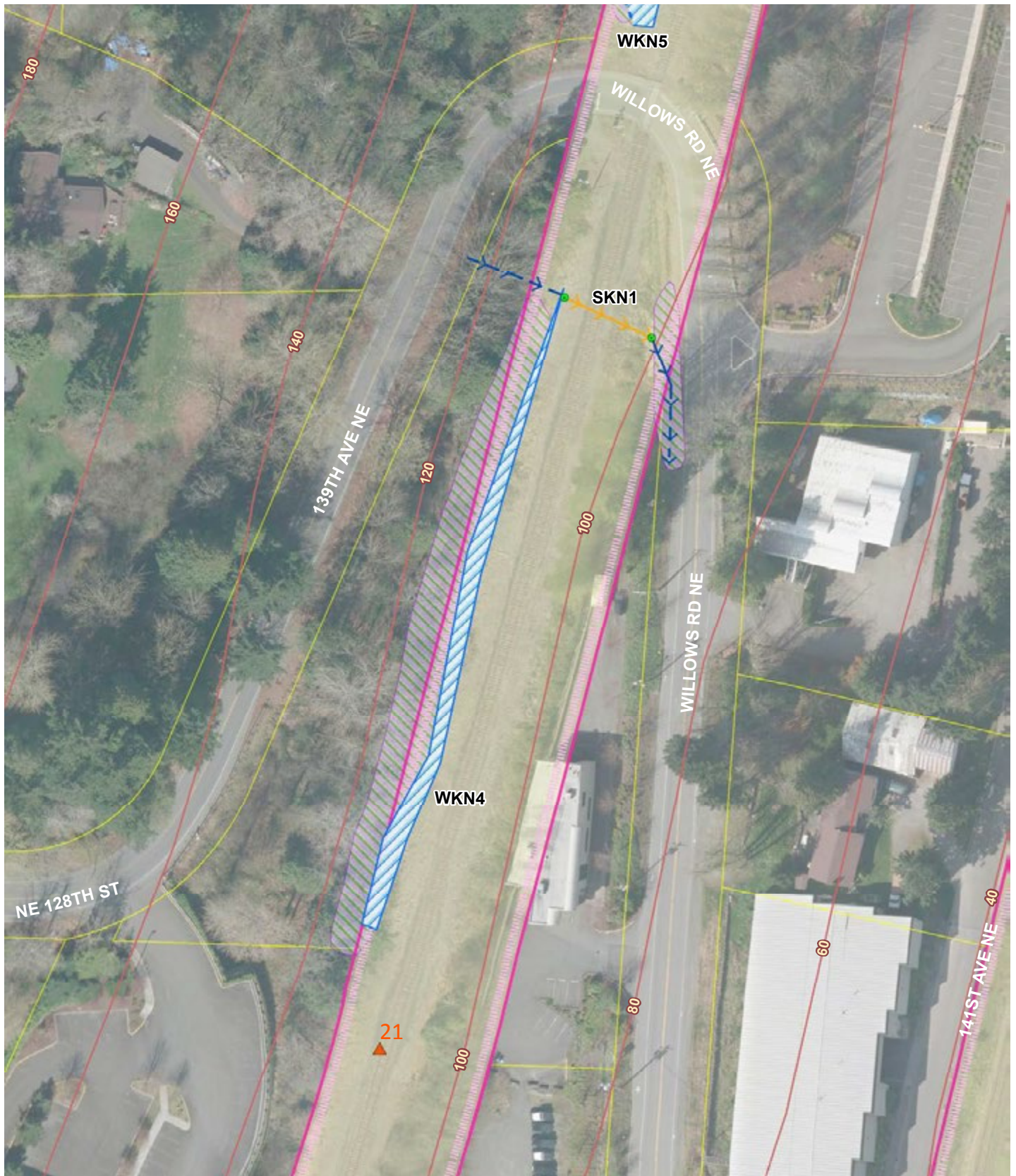
Kirkland Main Line
Map K3

Wetland Feature(s): WKN3
 Water Feature(s):



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory **** City of Kirkland Wetlands Inventory

Parametrix



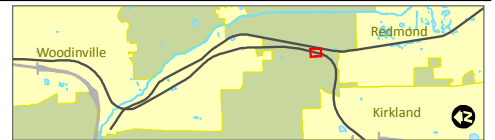
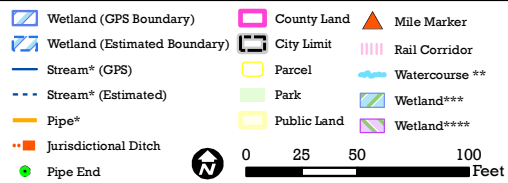
Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

Kirkland Main Line

Map K4

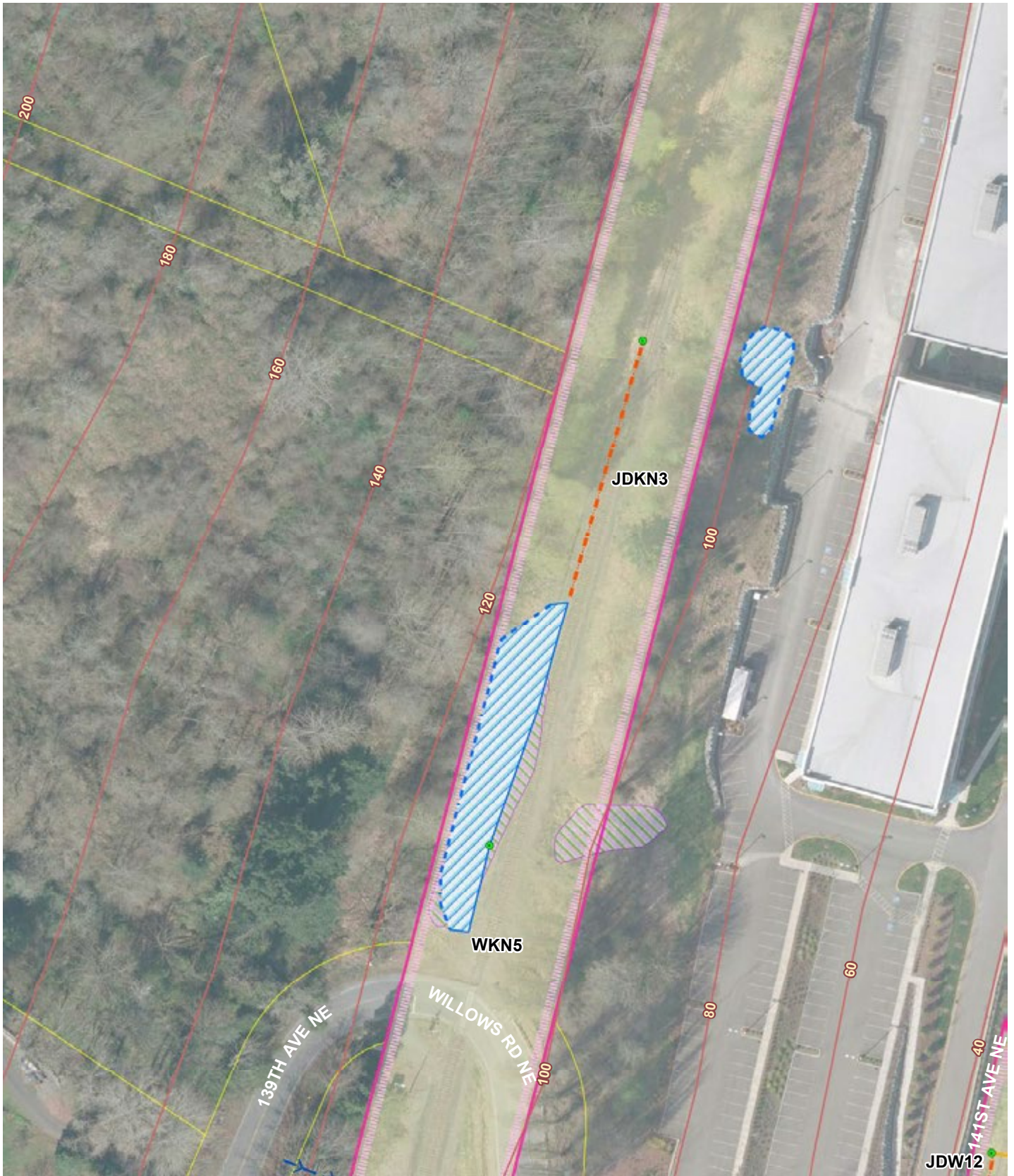
Wetland Feature(s): WKN4, WKN5

Water Feature(s): SKN1



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory **** City of Kirkland Wetlands Inventory

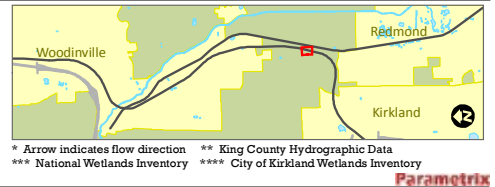
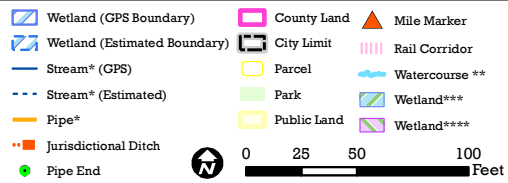
Parametrix



Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

Kirkland Main Line
Map K5

Wetland Feature(s): WKN5
 Water Feature(s): JDKN3

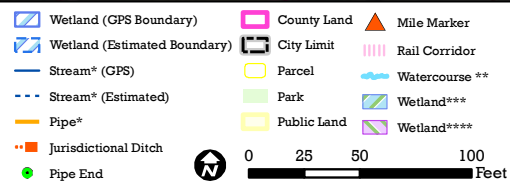




Inventoried Waters and Wetlands
 Eastside Rail Corridor
 Regional Trail Master Plan Project

Kirkland Main Line
Map K6

Wetland Feature(s):
 Water Feature(s): SKN2



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory **** City of Kirkland Wetlands Inventory

Parametrix



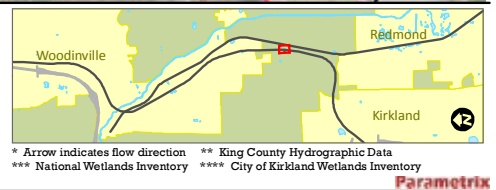
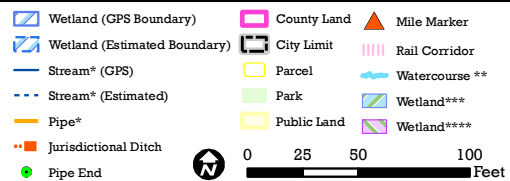
Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

Kirkland Main Line

Map K7

Wetland Feature(s): WKN6

Water Feature(s):



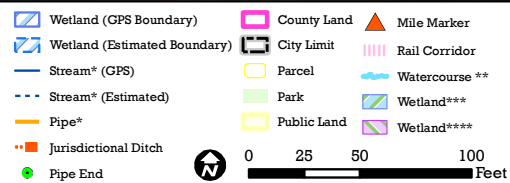
Parametrix



Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

Kirkland Main Line
Map K8

Wetland Feature(s): WW24
 Water Feature(s): SKN3, JDKN4



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory **** City of Kirkland Wetlands Inventory

Parametrix

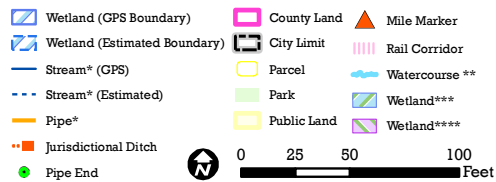


Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

Kirkland Main Line

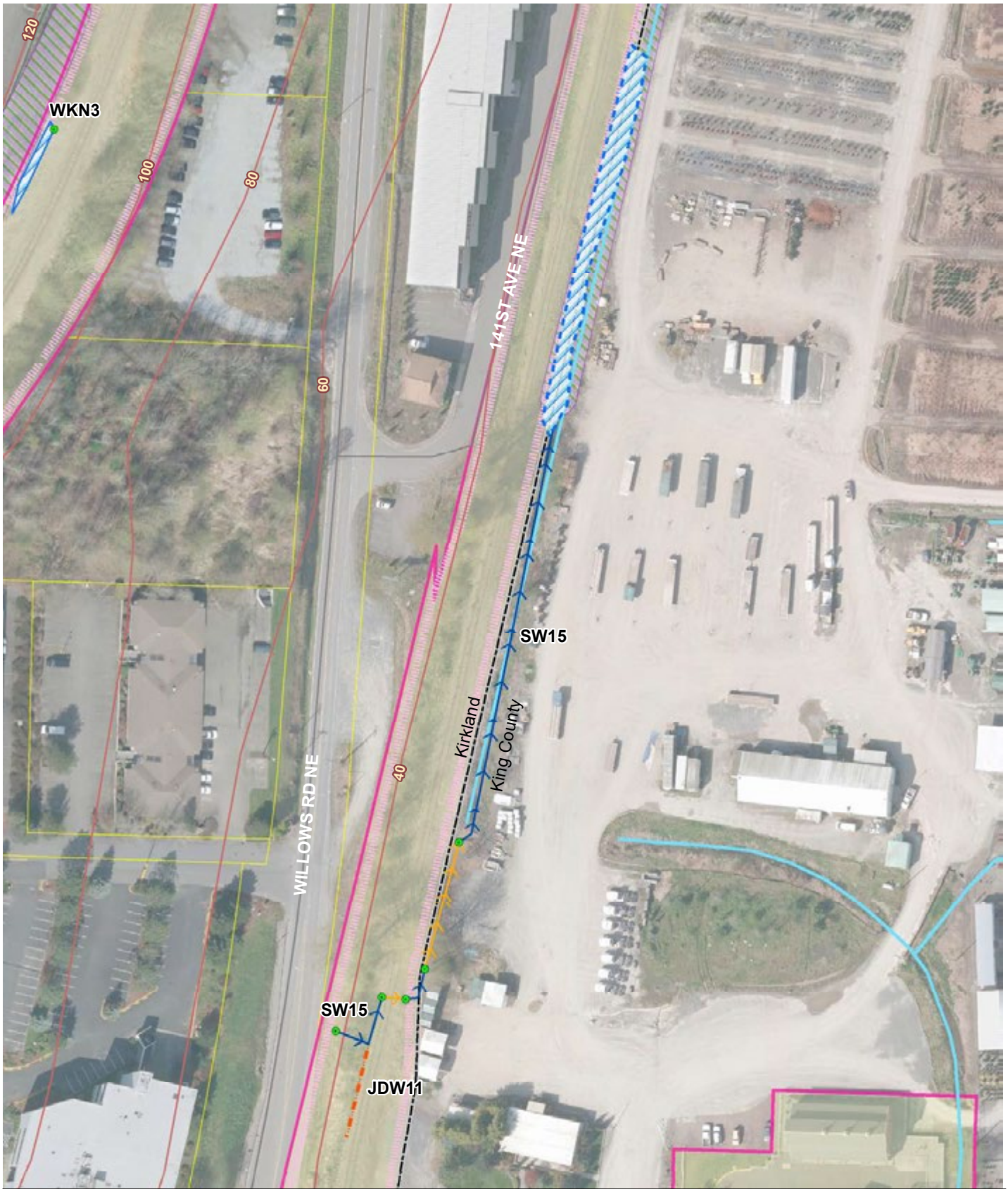
Map K9

Wetland Feature(s): WKN7, WKN8, WW1, WW2, WW24
 Water Feature(s): SKN4, SW1



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory **** City of Kirkland Wetlands Inventory

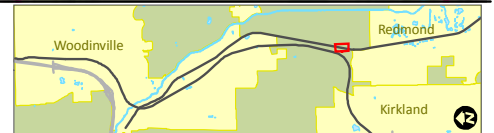
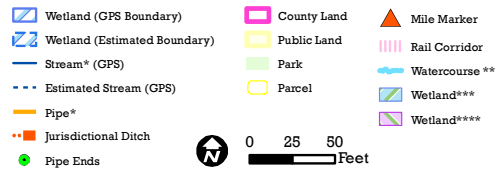
Parametrix



Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

Kirkland Spur
Map K10

Wetland Feature(s): WKN3
 Water Feature(s): SW15, JDW11



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory **** City of Kirkland Wetlands Inventory

Parametrix



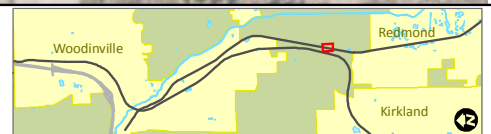
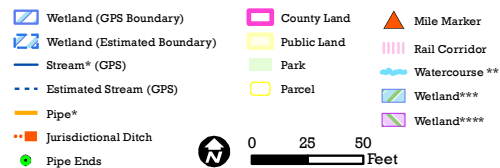
Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

Kirkland Spur

Map K11

Wetland Feature(s): WW22

Water Feature(s): JDW12, JDW13, JDW14



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory **** City of Kirkland Wetlands Inventory

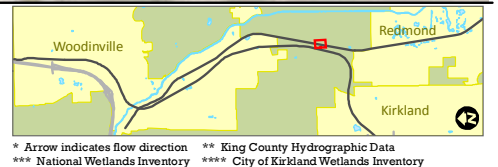
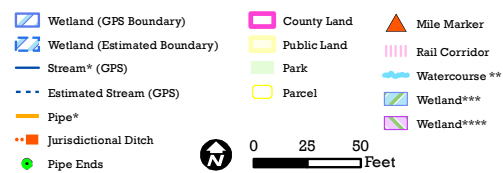
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Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

Kirkland Spur
Map K12

Wetland Feature(s):
 Water Feature(s): JDW14



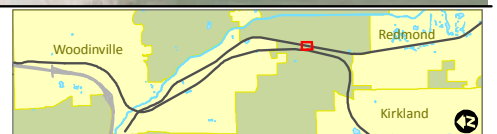
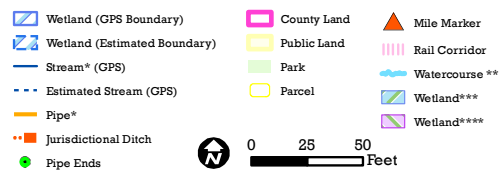
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Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

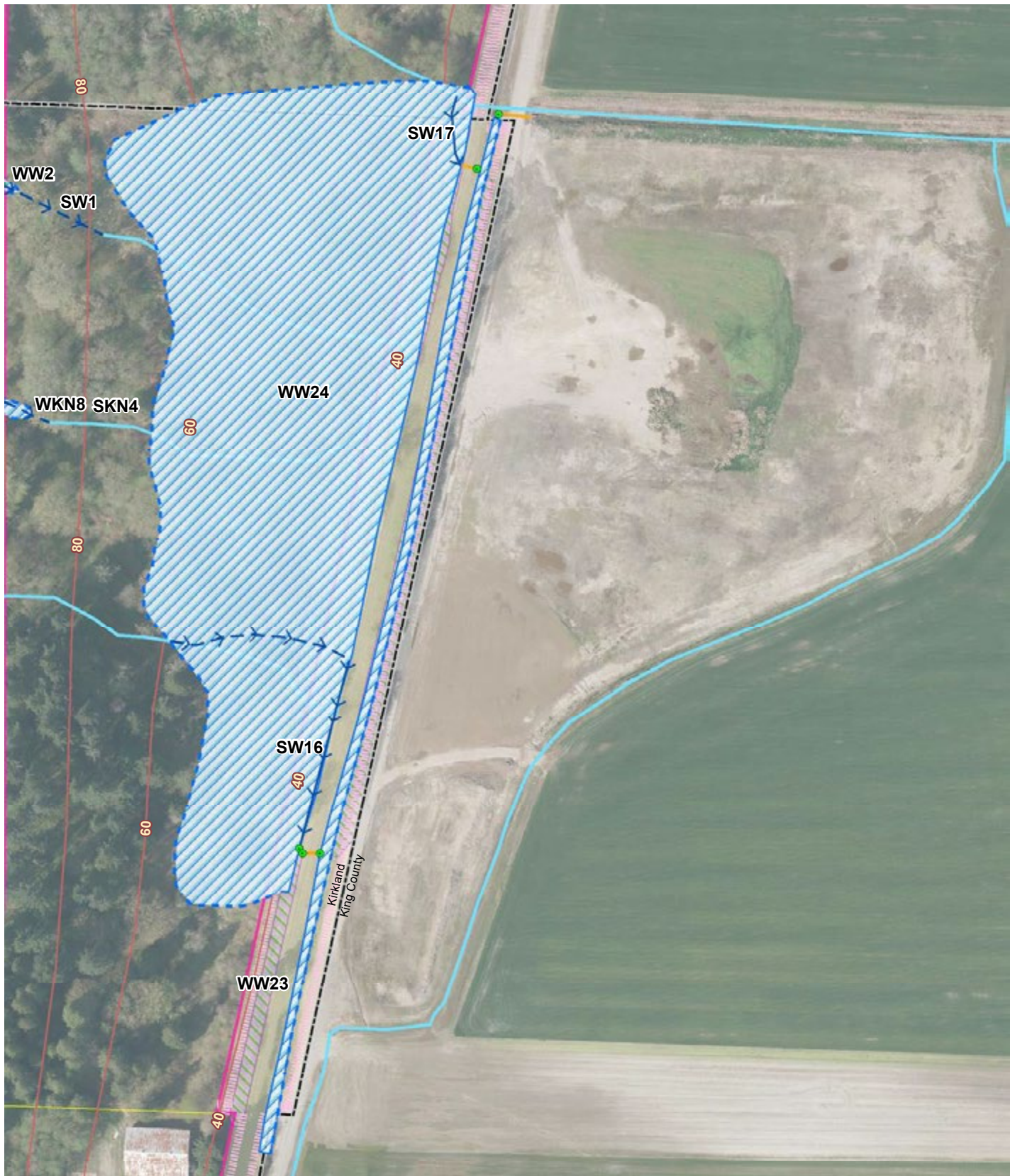
Kirkland Spur
Map K13

Wetland Feature(s):
 Water Feature(s): SKN2, JDW15



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory **** City of Kirkland Wetlands Inventory

Parametrix

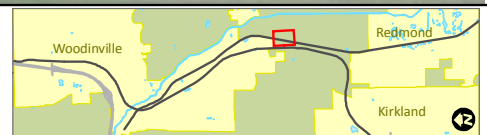
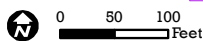
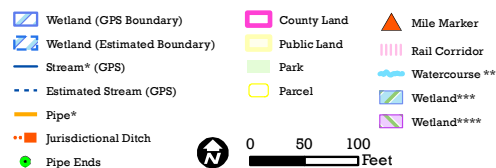


Inventoried Waters and Wetlands **Eastside Rail Corridor** **Regional Trail Master Plan Project**

Kirkland Spur

Map K14

Wetland Feature(s): WKN8, WW2, WW23, WW24
 Water Feature(s): SKN4, SW1, SW16, SW17



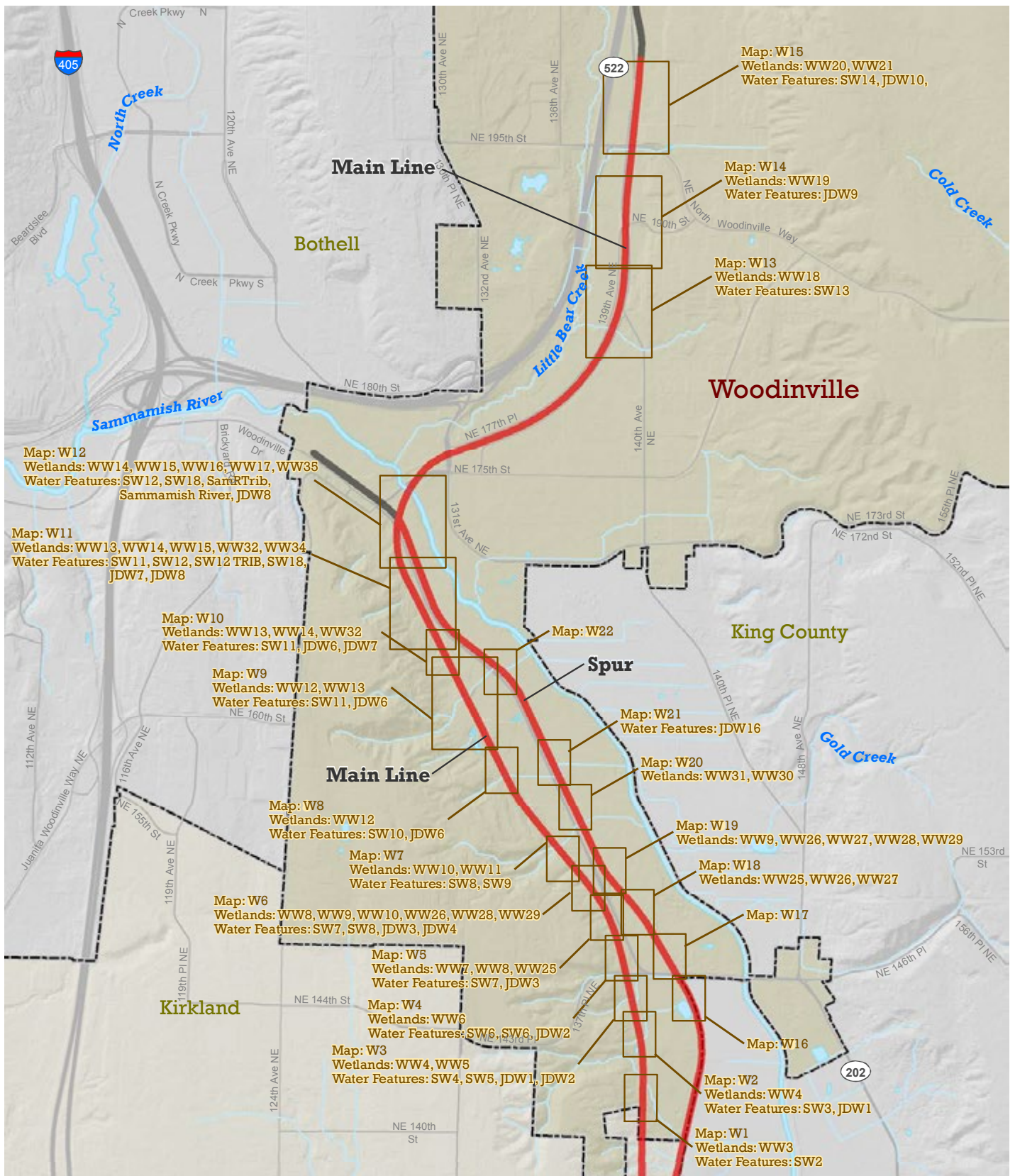
* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory **** City of Kirkland Wetlands Inventory

Parametrix

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WOODINVILLE



Inventoried Waters and Wetlands Map Index

- Rail Corridor - Study Area
- Rail Corridor - Outside Study Area
- ~ Watercourse *
- Inventoried Waters and Wetlands Map Extent



* King County Hydrographic Data

Woodinville Main Line, Spur

Parametrix

WETLAND NAME: WW3

Segment: Main Line

Jurisdiction: Woodinville

Map Number: W1



WW3 (AND SW2)—FROM RAILBED (MIDDLE PORTION OF WETLAND) FACING SOUTHEAST



CAPTION: WW3 (AND SW2)—FROM RAILBED (NORTH END OF WETLAND) LOOKING SOUTH

DATE OF SITE VISIT: 06/27/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PSS

HGM CLASS: SLOPE/RIVERINE

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.1 / 0.1

DESCRIPTION: WW3 is a slope/riverine wetland west of the railbed at the south end of Woodinville and the south end of the Chateau Ste. Michelle winery. WW3 extends outside the right-of-way. Hydrologic sources supporting WW3 include surface water (associated with Stream SW2) and a seep (groundwater observed seeping at the time of the site visit). The outlet is SW2 and a pipe that extends under the railbed. Observed indicators of hydrology include inundation and soil saturation in the upper 12 inches. Vegetation is dominated by salmonberry (*Rubus spectabilis*), red alder (*Alnus rubra*) saplings, and reed canarygrass (*Phalaris arundinacea*), with lesser amounts of common ladyfern (*Athyrium filix-femina*), sawbeak sedge (*Carex stipata*), and giant horsetail (*Equisetum telmateia*). Excluding the railbed, the buffer consists of a mixed deciduous and coniferous forest. It appears the wetland is a headwater wetland for SW2.

WETLAND NAME: WW4

Segment: Main Line

Jurisdiction: Woodinville

Map Number: W2



WW4—FROM SOUTH, FACING NORTH



WW4—FROM NORTH, FACING SOUTH

DATE OF SITE VISIT: 07/01/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): <0.1 / <0.1

DESCRIPTION: WW4 is a linear depressional wetland west of the railbed and south of NE 145th Street near the Chateau Ste. Michelle winery. WW4 extends outside the right-of-way. Hydrologic sources supporting WW4 include groundwater and local area runoff. No inlets were detected. The outlet is likely a jurisdictional ditch (JDW1) north of the wetland, which is connected to Wetland WW5. Observed indicators of hydrology include soil saturation in the upper 12 inches and water-stained leaves. Vegetation is dominated by reed canarygrass (*Phalaris arundinacea*) and giant horsetail (*Equisetum telmateia*), with lesser amounts of small-fruited bulrush (*Scirpus microcarpus*), common ladyfern (*Athyrium filix-femina*), and climbing nightshade (*Solanum dulcamara*). Excluding the railbed, the buffer consists primarily of a mixed deciduous and coniferous forest with maintained vegetation between the wetland and the railbed. Common species include giant horsetail, bigleaf maple (*Acer macrophyllum*) saplings, red alder (*Alnus rubra*) saplings, and Himalayan blackberry (*Rubus armeniacus*).

WETLAND NAME: WW5

Segment: Main Line

Jurisdiction: Woodinville

Map Number: W3



WW5—FROM SOUTH, FACING NORTH



WW5—FROM NORTH, FACING SOUTH

DATE OF SITE VISIT: 07/01/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PFO

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.4 / <0.1

DESCRIPTION: WW5 is a depressional wetland that extends west of the railbed and right-of-way, south of NE 145th Street near Chateau Ste. Michelle winery. WW5 extends outside the right-of-way. The primary hydrologic source supporting WW5 is groundwater. A jurisdictional ditch (JDW1) to the south conveys water from WW4. The outlet is likely a catch basin/drop structure that connects to a piped stream (SW4). Observed indicators of hydrology include pockets of inundation and soil saturation in the upper 12 inches. Vegetation is dominated by red alder (*Alnus rubra*), black cottonwood (*Populus balsamifera*), salmonberry (*Rubus spectabilis*), reed canarygrass (*Phalaris arundinacea*), and giant horsetail (*Equisetum telmateia*). Excluding the railbed, the buffer consists primarily of a mixed deciduous and coniferous forest.

WETLAND NAME: WW6

Segment: Main Line

Jurisdiction: Woodinville

Map Number: W4



SW6 IN WW6 (CHANNEL)



WW6 FROM NORTH, FACING SOUTH

DATE OF SITE VISIT: 07/01/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PFO/PEM

HGM CLASS: DEPRESSIONAL/RIVERINE/SLOPE

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.7 / 0.3

DESCRIPTION: WW6, located west of the railbed north of NE 145th Street, is a depressionnal/riverine/slope wetland that extends outside the right-of-way. Hydrologic sources supporting WW6 include groundwater and surface water from a stream (SW6) that extends through the wetland. The inlet and outlet is Stream SW6, which enters the wetland at the south end, flows parallel north adjacent to the railbed, and is ultimately piped under the railbed at the north end of the wetland. Observed indicators of hydrology include the stream and hydrophytic vegetation. Vegetation consists of a forested community and an emergent community. The forested community is dominated by red alder (*Alnus rubra*), reed canarygrass (*Phalaris arundinacea*), and giant horsetail (*Equisetum telmateia*). Watercress (*Nasturtium officinale*), along with common duckweed (*Lemna minor*), are dominant in the stream channel (SW6). Other species observed in the forested area include common ladyfern (*Athyrium filix-femina*) and bird's foot trefoil (*Lotus corniculatus*), coastal hedgenettle (*Stachys chamissonis*), common rush (*Juncus effusus*), and Himalayan blackberry (*Rubus armeniacus*). The emergent community is dominated by reed canarygrass. Excluding the railbed, the buffer consists primarily of a mixed coniferous and deciduous forest with an understory of Himalayan blackberry.

WETLAND NAME: WW7

Segment: Main Line

Jurisdiction: Woodinville

Map Number: W5



WW7 FROM RAILBED, FACING WEST

DATE OF SITE VISIT: 07/01/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PFO

HGM CLASS: DEPRESSIONAL/SLOPE

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.3 / <0.1

DESCRIPTION: WW7 is a depression/slope wetland located west of the railbed and south of the Tolt Pipeline Trail that extends outside the right-of-way. The primary hydrologic source supporting WW7 is groundwater. No inlets were detected. WW7 appears to be the headwater for a small stream (SW7) that flows out of the wetland to the north. Observed indicators of hydrology include inundation and soil saturation in the upper 12 inches. Vegetation is dominated by red alder (*Alnus rubra*), salmonberry (*Rubus spectabilis*), stinging nettle (*Urtica dioica*), climbing nightshade (*Solanum dulcamara*), reed canarygrass (*Phalaris arundinacea*), and common ladyfern (*Athyrium filix-femina*). Watercress (*Nasturtium officinale*) is dominant in the standing water and stream channel. Excluding the railbed, the buffer consists primarily of a mixed coniferous and deciduous forest dominated by bigleaf maple (*Acer macrophyllum*), red alder, and Douglas-fir (*Pseudotsuga menziesii*).

WETLAND NAME: WW8

Segment: Main Line

Jurisdiction: Woodinville

Map Number: W5



WW8 FROM RAILBED, LOOKING WEST

DATE OF SITE VISIT: 07/01/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PSS

HGM CLASS: DEPRESSIONAL/SLOPE

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.3 / <0.1

DESCRIPTION: WW8 is a depressional/slope wetland situated west of the railbed and south of the Tolt Pipeline Trail that extends outside the right-of-way. The primary hydrologic source supporting WW8 is groundwater. A small stream (SW7) and a jurisdictional ditch (JDW3) flow into the downgradient side of the wetland near the railbed. A pipe under the railbed conveys surface water from the wetland and SW7 to the east. The only observed indicator of hydrology was hydrophytic vegetation. Vegetation is dominated by salmonberry (*Rubus spectabilis*) with common ladyfern (*Athyrium filix-femina*), reed canarygrass (*Phalaris arundinacea*), and Himalayan blackberry (*Rubus armeniacus*). Excluding the railbed, the buffer consists primarily of a mixed deciduous and coniferous forest.

WETLAND NAME: WW9

Segment: Main Line

Jurisdiction: Woodinville

Map Number: W6



WW9 FROM SOUTH, LOOKING NORTH



WW9 FROM NORTH, LOOKING SOUTH

DATE OF SITE VISIT: 07/01/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): <0.1 / <0.1

DESCRIPTION: WW9 is a depressional wetland west of the railbed and immediately north of the Tolt Pipeline Trail. The primary hydrologic source supporting WW9 is groundwater. No inlets were detected and the outlet is a jurisdictional ditch (JDW4) that extends north. Observed indicators of hydrology were areas of inundation, soil saturation in the upper 12 inches, and algal mats. Vegetation is dominated by reed canarygrass (*Phalaris arundinacea*) and small-fruited bulrush (*Scirpus microcarpus*) with some giant horsetail (*Equisetum telmateia*). Excluding the railbed, the buffer consists primarily of a mixed coniferous and deciduous forest to the south, an opened maintained right-of-way and easement for the Tolt Pipeline and trail. The wetland is primarily confined to a rail-side ditch with only a small portion that extends west on a cut slope.

WETLAND NAME: WW10

Segment: Main Line

Jurisdiction: Woodinville

Map Number: W7



WW10 FROM RAILBED, LOOKING WEST

DATE OF SITE VISIT: 07/01/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PFO

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): <0.1/ <0.1

DESCRIPTION: WW10 is a depressional wetland located west of the railbed and north of the Tolt Pipeline Trail. The primary hydrologic source supporting WW10 is groundwater. No inlets were detected. The outlet is a pipe that extends under the railbed to the east, which ultimately forms a small stream (SW8). Observed indicators of hydrology were areas of inundation including a small amount of surface water emerging from the cut slope at the culvert (outlet) and soil saturation in the upper 12 inches. Vegetation is dominated by red alder (*Alnus rubra*) and salmonberry (*Rubus spectabilis*). Other species observed include Himalayan blackberry (*Rubus armeniacus*), vine maple (*Acer circinatum*), reed canarygrass (*Phalaris arundinacea*), common ladyfern (*Athyrium filix-femina*), stinging nettle (*Urtica dioica*), and giant horsetail (*Equisetum telmateia*). Excluding the railbed, the buffer consists primarily of a mixed coniferous and deciduous forest. It appears the wetland is a headwater wetland for SW8.

WETLAND NAME: WW11

Segment: Main Line

Jurisdiction: Woodinville

Map Number: W7



WW11 FROM RAILBED, LOOKING WEST

DATE OF SITE VISIT: 07/01/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PFO

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): <0.1 / <0.1

DESCRIPTION: WW11 is a depressional wetland west of the railbed and north of the Tolt Pipeline Trail. The primary hydrologic source supporting WW11 is groundwater. No inlets were detected. The outlet is a small stream (SW9) that intersects the wetland at the north end, and a pipe that extends under the railbed to the east. Observed indicators of hydrology include topography and hydrophytic vegetation. Vegetation is dominated by red alder (*Alnus rubra*), salmonberry (*Rubus spectabilis*), and red osier dogwood (*Cornus sericea*). Other species observed include reed canarygrass (*Phalaris arundinacea*) and common ladyfern (*Athyrium filix-femina*). Excluding the railbed, the buffer consists primarily of a mixed coniferous and deciduous forest.

WETLAND NAME: WW12

Segment: Main Line

Jurisdiction: Woodinville

Map Number: W8



WW12 FROM NORTH, LOOKING SOUTH



WW12 FROM SOUTH END, LOOKING NORTH

DATE OF SITE VISIT: 07/01/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PFO/PSS

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 1.3 / 0.5

DESCRIPTION: WW12 is a depressional wetland west of the railbed and an open field, and north of the Tolt Pipeline Trail. The primary hydrologic sources supporting WW12 include groundwater and a stream (SW10) near the southern portion of the wetland (flowing water was observed at the time of the field visit). A jurisdictional ditch (JDW6) may provide a seasonal outlet to the north, connecting to Stream SW11. Observed indicators of hydrology include pockets of inundation, water-stained leaves, and an algal mat. Vegetation is dominated by Sitka willow (*Salix sitchensis*), red alder (*Alnus rubra*), salmonberry (*Rubus spectabilis*), reed canarygrass (*Phalaris arundinacea*), and giant horsetail (*Equisetum telmateia*). Excluding the railbed, the buffer consists primarily of deciduous forest including red alder, bitter cherry (*Prunus emarginata*), and Himalayan blackberry (*Rubus armeniacus*), with some Douglas-fir (*Pseudotsuga menziesii*). Red alder saplings and giant horsetail were observed on the slope between the wetland and the railbed.

WETLAND NAME: WW13

Segment: Main Line

Jurisdiction: Woodinville

Map Number: W9



WW13, SOUTH END, LOOKING NORTHWEST



WW13 NEAR NORTH END, LOOKING NORTHWEST

DATE OF SITE VISIT: 07/18/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PFO/PSS/PEM

HGM CLASS: DEPRESSIONAL/SLOPE

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.1 / 0.1

DESCRIPTION: WW13 is a depressional/slope wetland located west of the railbed and Redmond-Woodinville Road NE (SR 202), and about 0.5 mile south of 128th Place NE. The primary hydrologic sources supporting WW13 include groundwater and a small stream (SW11). Significant flow (for the size of stream and time of year) was observed upstream from the intersection of SW11 and WW13; therefore, it is assumed water infiltrates through the gravel substrate of the streambed even though water was not flowing directly adjacent to the wetland at the time of the field visit. The inlet and outlet is likely SW11, which continues under the railbed through a concrete pipe to the east. Wetland WW13 is also hydrologically connected to Wetland WW14 via a jurisdictional ditch (JDW7). Observed indicators of hydrology include hydrophytic vegetation and topographic position. The dominant vegetation includes red osier dogwood (*Cornus sericea*), salmonberry (*Rubus spectabilis*), red alder (*Alnus rubra*), Sitka willow (*Salix sitchensis*), reed canarygrass (*Phalaris arundinacea*), and Himalayan blackberry (*Rubus armeniacus*). Excluding the railbed, the buffer is a coniferous and deciduous forest consisting of red alder, Douglas-fir (*Pseudotsuga menziesii*), and western sword fern (*Polystichum munitum*).

WETLAND NAME: WW14

Segment: Main Line

Jurisdiction: Woodinville

Map Number: W11



WW14 FROM NEAR SOUTH END, LOOKING NORTHWEST



WW14 NEAR CENTER, LOOKING SOUTHWEST

DATE OF SITE VISIT: 07/18/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PFO/PEM

HGM CLASS: DEPRESSIONAL/SLOPE

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.7 / 0.5

DESCRIPTION: WW14 is a depressional/slope wetland located west of the railbed, southwest of Schuyler Rubber.

The southern extent of the wetland is approximately 0.25 mile south of 128th Place NE. The primary hydrologic source supporting WW14 is groundwater. Another source is likely surface water that originates from SW12 providing hydrology to the north end of the wetland (via overbank flow), and potentially from a jurisdictional ditch (JDW7) south of the wetland that is connected to Wetland WW13.. The center of the wetland drains to the rail-side ditch that flows to SW12 (functions as outlet to wetland) and the north end of the wetland. Observed indicators of hydrology include hydrophytic vegetation, cracked bare soils, and topographic position. The dominant vegetation includes red osier dogwood (*Cornus sericea*), black cottonwood (*Populus balsamifera*), Pacific willow (*Salix lasiandra*), and reed canarygrass (*Phalaris arundinacea*). Excluding the railbed, the buffer is dominated by deciduous forest and shrubs including Himalayan blackberry (*Rubus armeniacus*), red alder (*Alnus rubra*), and black cottonwood.

WETLAND NAME: WW15

Segment: Main Line

Jurisdiction: Woodinville

Map Number: W11



WW15 FROM NEAR NORTH END, LOOKING SOUTHEAST



WW15 FROM NEAR SOUTH END, LOOKING SOUTHEAST

DATE OF SITE VISIT: 07/18/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PEM

HGM CLASS: SLOPE

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): <0.1 / <0.1

DESCRIPTION: WW15 is a narrow slope wetland east of the railbed, north of Schuyler Rubber. The primary hydrologic input to WW15 is groundwater (seep). No inlets were observed. The outlet is a jurisdictional ditch (JDW8) located to the north. No indicators of hydrology except for hydrophytic vegetation were observed during the official field visit, but inundation was observed when passing through the area earlier in the growing season. The dominant emergent vegetation includes small-fruited bulrush (*Scirpus microcarpus*) and giant horsetail (*Equisetum telmateia*) with some Himalayan blackberry (*Rubus armeniacus*). The buffer is narrow and includes the railbed to the west and a house and business with large parking areas to the east. The business and house are separated from the wetland by a thin strip of shrubs and trees including Himalayan blackberry, red alder (*Alnus rubra*), and black locust (*Robinia pseudoacacia*).

WETLAND NAME: WW16

Segment: Main line/Spur

Jurisdiction: Woodinville

Map Number: W12



WW16 FROM NORTH END LOOKING SOUTH (SPUR)



WW16 FROM SOUTH END LOOKING NORTH (SPUR)

DATE OF SITE VISIT: 07/18/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.1 / 0.1

DESCRIPTION: WW16 is a small depressional wetland associated with the rail-side ditch, south of the intersection of the main line and spur segments of the rail corridor near the intersection of 128th Place NE and Redmond Woodinville Road NE. The hydrologic sources supporting WW16 is groundwater and potentially surface water from Stream SW12, a jurisdictional ditch (JDW8), and Wetland WW17, although no specific inlets were observed. There is likely an outlet that directs surface water to WW35 to the south. The observed indicator of hydrology was inundation. The dominant vegetation includes broadleaf cattail (*Typha latifolia*), common duckweed (*Lemna minor*), small-fruited bulrush (*Scirpus microcarpus*), hardstem bulrush (*Schoenoplectus acutus*), and two-headed water starwort (*Callitriche heterophylla*). Other species observed include reed canarygrass (*Phalaris arundinacea*), American skunk cabbage (*Lysichiton americanus*), and giant horsetail (*Equisetum telmateia*). The buffer is mostly disturbed by the railbed, roadways, and a business park. There is a small vegetated fill area to the southwest of the wetland dominated by reed canarygrass, giant horsetail, Canada thistle (*Cirsium arvense*), and unidentified grasses.

WETLAND NAME: WW17

Segment: Main Line

Jurisdiction: Woodinville

Map Number: W12



WW17 FROM SOUTH END LOOKING NORTH

DATE OF SITE VISIT: 07/18/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): <0.1 / <0.1

DESCRIPTION: WW17 is a small depressional wetland southwest of the intersection of the main line and spur segments of the rail corridor near the intersection of 128th Place NE and Redmond Woodinville Road NE. The primary hydrologic source supporting WW17 is groundwater. No inlets or outlets were detected. The observed indicator of hydrology was inundation. The dominant vegetation includes broadleaf cattail (*Typha latifolia*) and two-headed water starwort (*Callitriche heterophylla*). The buffer is mostly disturbed by the railbed and Redmond Woodinville Road NE. The vegetated buffer area is disturbed with a mix of disturbance-tolerant forbs and grasses as well as Scotch broom (*Cytisus scoparius*).

WETLAND NAME: WW18

Segment: Main Line
Jurisdiction: Woodinville
Map Number: W13



WW18, MID WETLAND, LOOKING NORTH AT CATTAIL



WW18, FROM NORTH END, LOOKING SOUTH

DATE OF SITE VISIT: 07/18/2014

DRAINAGE BASIN: LITTLE BEAR CREEK

USFWS CLASS: PFO/PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.5 / 0.5

DESCRIPTION: WW18 is a long linear depressional wetland southeast of the railbed and west of the intersection at NE 183rd Street and Woodinville Snohomish Road NE. The primary hydrologic source supporting WW18 is groundwater. No inlets were detected. The outlet is a small stream (SW13) at the south end of the wetland that flows from a pipe under Woodinville Snohomish Road NE, briefly daylights near the southern portion of the wetland, and exits to the southeast through a pipe that extends under the railbed and 139th Avenue NE, likely discharging to Little Bear Creek. Observed indicators of hydrology include inundation, soil saturation in the upper 12 inches, bare soil, and water-stained leaves. The dominant forested community includes red alder (*Alnus rubra*) and reed canarygrass (*Phalaris arundinacea*). The dominant emergent community includes reed canarygrass and locally dominant broadleaf cattail (*Typha latifolia*), climbing nightshade (*Solanum dulcamara*), forget-me-not (*Myosotis* sp.), and monkey flower (*Mimulus* sp.). Patches of willow (*Salix* sp.) and common duckweed (*Lemna minor*) are present in standing water. The southwestern portion of the wetland is lobed, separated by a narrow vegetated berm dominated by thimbleberry (*Rubus parviflorus*) and salmonberry (*Rubus spectabilis*), with some rose (*Rosa* sp.) and beaked hazelnut (*Corylus cornuta*). The remaining buffer is limited to disturbance-tolerant species including Himalayan blackberry (*Rubus armeniacus*), Japanese knotweed (*Polygonum cuspidatum*), and Canada thistle (*Cirsium arvense*) between the railbed and Woodinville Snohomish Road NE.

This wetland area within the corridor provides opportunity for wetland creation and enhancement. A berm could be removed to create additional wetland and other portions of the wetland and buffer could be enhanced. This wetland is in the Little Bear Creek Watershed, which has restoration projects identified in the Final WRIA 8 Chinook Salmon Conservation Plan. Although this wetland is outside of the area currently railbanked for trail development, it may be an appropriate location to consider for potential mitigation of impacts associated with the project.

WETLAND NAME: WW19

Segment: Main Line

Jurisdiction: Woodinville

Map Number: W14



WW19 FROM SOUTH END, LOOKING NORTH



WW19 FROM NORTH END, LOOKING SOUTH

DATE OF SITE VISIT: 07/18/2014

DRAINAGE BASIN: LITTLE BEAR CREEK

USFWS CLASS: PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.1 / 0.1

DESCRIPTION: WW19 is a linear depressional wetland east of the railbed and south of the 139th Avenue NE/NE 190th Street/Woodinville-Snohomish Road NE intersection. The primary hydrologic source supporting WW19 is groundwater. No inlets or outlets were detected. Inundation was observed during the site visit. Dominant vegetation includes broadleaf cattail (*Typha latifolia*) and climbing nightshade (*Solanum dulcamara*). Reed canarygrass (*Phalaris arundinacea*) and bird's foot trefoil (*Lotus corniculatus*) were also observed. The vegetated buffer between the wetland, railbed, and Woodinville-Snohomish Road NE is limited to disturbance-tolerant vegetation including Himalayan blackberry (*Rubus armeniacus*) and giant horsetail (*Equisetum telmateia*).

WETLAND NAME: WW20

Segment: Main Line

Jurisdiction: Woodinville

Map Number: W15



WW20 NEAR SOUTH END, LOOKING NORTH



WW20 NEAR NORTH END, LOOKING NORTH

DATE OF SITE VISIT: 08/01/2014

DRAINAGE BASIN: LITTLE BEAR CREEK

USFWS CLASS: PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.1 / 0.1

DESCRIPTION: WW20 is a linear depression associated with the ditch east of the railbed and north of NE 195th Street. The primary hydrologic sources supporting WW20 include groundwater and surface water from a jurisdictional ditch (JDW10) to the north. The outlet is a pipe under the railbed that conveys water west to WW21. Observed indicators of hydrology include inundation, soil saturation in the upper 12 inches, water marks, drainage patterns, water-stained leaves, and cracked soils. Vegetation includes broadleaf cattail (*Typha latifolia*), reed canarygrass (*Phalaris arundinacea*), and giant horsetail (*Equisetum telmateia*). With the exception of small forested areas to the north and east, the vegetated buffer is limited to invasive or disturbance-tolerant species. The developed portions of the buffer consist of the railbed, buildings to the east, and NE 195th Street.

WETLAND NAME: WW21

Segment: Main Line

Jurisdiction: Woodinville

Map Number: W15



WW21 SOUTH END, FACING NORTH



WW21 MIDDLE OF WETLAND FROM WOODINVILLE-SNOHOMISH ROAD NE, FACING SOUTH

DATE OF SITE VISIT: 08/01/2014

DRAINAGE BASIN: LITTLE BEAR CREEK

USFWS CLASS: PSS/PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.4 / 0.3

DESCRIPTION: WW21 is a linear depressional wetland associated with ditches west of the railbed between NE 195th Street and NE 200th Street. The hydrologic sources supporting WW21 include groundwater and surface water from WW20, a stream (SW14), and a jurisdictional ditch (JDW10). The outlet is a pipe that extends under Woodinville-Snohomish Road NE to the west. Observed indicators of hydrology include inundation and soil saturation in the upper 12 inches. Dominant species in the emergent community include broadleaf cattail (*Typha latifolia*), reed canarygrass (*Phalaris arundinacea*), and small-fruited bulrush (*Scirpus microcarpus*). The dominant species in the shrub community is hardhack (*Spiraea douglasii*). The majority of the buffer is developed consisting of the railbed and roadway. The vegetated portion of the buffer consists of disturbed areas with reed canarygrass, Himalayan blackberry (*Rubus armeniacus*), giant horsetail (*Equisetum telmateia*), Scotch broom (*Cytisus scoparius*), Canada thistle (*Cirsium arvense*), and other disturbance-tolerant forbs and grasses, with a few young Douglas-fir (*Pseudotsuga menziesii*).

WETLAND NAME: WW25

Segment: Spur

Jurisdiction: Woodinville

Map Number: W18



WW25 FROM SOUTH END FACING NORTH



WW25 CHANNELIZED FLOW

DATE OF SITE VISIT: 09/10/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PFO/PSS/PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.5 / 0.3

DESCRIPTION: WW25 is a linear depressional wetland located west of the railbed, north of NE 145th Street, and east of the Novelty Hill Januik winery. The primary hydrologic sources supporting WW25 include surface water and groundwater. The outlet for WW25 is likely a pipe that extends north under the Tolt Pipeline Trail to a separate wetland (WW26) west of the railbed. A large corrugated pipe and a smaller black plastic pipe were observed in the southwestern portion of the wetland, extending from the vicinity of the winery, both serving as inlets to the wetland. It is likely that additional piped inlets to WW25 exist along the western extent of the wetland, discharging flow from either adjacent businesses or SR 202, both upslope of the wetland. Observed indicators of hydrology include inundation, soil saturation, and drainage patterns (free-flowing water in wetland). A small channel was flowing in portions of the wetland, which is defined in some areas, but not throughout.

The dominant emergent community includes reed canarygrass (*Phalaris arundinacea*), common duckweed (*Lemna minor*) and watercress (*Nasturtium aquaticum*) in standing water, and some small-fruited bulrush (*Scirpus microcarpus*), giant horsetail (*Equisetum telmateia*), soft-stem bulrush (*Schoenoplectus tabernaemontani*), and common ladyfern (*Athyrium filix-femina*). The dominant shrub community is red alder (*Alnus rubra*) saplings, red osier dogwood (*Cornus sericea*), Pacific willow (*Salix lasiandra*), Scouler's willow (*Salix scouleriana*), and overhanging Himalayan blackberry (*Rubus armeniacus*). The forested community includes red alder, Pacific willow, and black cottonwood (*Populus balsamifera*). The buffer to the north is the Tolt Pipeline Trail, and to the south, winery landscaping. To the east is a thin strip of disturbance-tolerant forbs and grasses, and to the west, the buffer comprises a cement wall, and facilities associated with the winery. A wetland sign is located northeast of the winery, likely indicating a mitigation site.

WETLAND NAME: WW26

Segment: Spur

Jurisdiction: Woodinville

Map Number: W19



WW26 FROM SOUTH END LOOKING NORTH



WW26 FROM NORTH END LOOKING SOUTH

DATE OF SITE VISIT: 09/10/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PFO/PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.1 / <0.1

DESCRIPTION: WW26 is a linear depressional wetland located west of the railbed, directly north of the Tolt Pipeline Trail and access road. The wetland extends west outside the right-of-way. The primary hydrologic source supporting WW26 is surface water. The inlet for WW26 is likely a pipe that extends under the Tolt Pipeline Trail and access road from a wetland to the south (WW25). The outlet is a pipe that extends east under the railbed to Wetland WW27. Observed indicators of hydrology include inundation and soil saturation in the upper 12 inches. Flow was observed in the vicinity of the inlet pipe. The dominant emergent community includes reed canarygrass (*Phalaris arundinacea*), soft-stem bulrush (*Schoenoplectus tabernaemontani*), and in areas of inundation, common duckweed (*Lemna minor*). The forested community is dominated by red alder (*Alnus rubra*) and quaking aspen (*Populus tremuloides*) with some black cottonwood (*Populus balsamifera*) and western red cedar (*Thuja plicata*). The buffer to the north consists of a paved access road to a business park (Woodinville Corporate Center), the Tolt Pipeline Trail and access road to the south, some coniferous and deciduous trees and unmaintained grasses to the west, and the railbed and disturbance-tolerant forbs and grasses (i.e., giant horsetail [*Equisetum telmateia*]) to the east.

WETLAND NAME: WW27

Segment: Spur

Jurisdiction: Woodinville

Map Number: W19



WW27 FROM NORTH END LOOKING SOUTH



WW27 FROM RAILBED LOOKING EAST AT BROADLEAF CATTAIL (TYPHA LATIFOLIA)

DATE OF SITE VISIT: 09/10/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.3 / <0.1

DESCRIPTION: WW27 is a linear depressional wetland located east of the railbed and directly north of the Tolt Pipeline Trail and access road. A portion of the wetland extends outside the right-of-way close to a business parking area directly to the east, and likely to the south and east along the northern perimeter of the Tolt Pipeline Trail and access road. The primary hydrologic source supporting WW27 is surface water. The inlet for WW27 is a pipe that extends under the pipeline access road from a wetland to the west (WW26) and potentially from a larger pipe that extends under the Woodinville Corporate Center driveway from Wetland WW28. No outlets were observed, but it is likely that surface water flows from the wetland east to the Sammamish River. Observed indicators of hydrology include inundation and soil saturation in the upper 12 inches. Flow was observed in the vicinity of the inlet pipe. The dominant vegetation includes reed canarygrass (*Phalaris arundinacea*), giant horsetail (*Equisetum telmateia*), and locally dominant broadleaf cattail (*Typha latifolia*), with some localized patches of Scouler's willow (*Salix scouleriana*) and red alder (*Alnus rubra*). The buffer is very limited with a paved access road to a business park (Woodinville Corporate Center) to the north; the Tolt Pipeline Trail and access road to the south; a maintained narrow strip of lawn, parking lot, and buildings to the east; and the railbed and disturbance-tolerant forbs and grasses (i.e., giant horsetail).

WETLAND NAME: WW28

Segment: Spur

Jurisdiction: Woodinville

Map Number: W19



WW28 FROM SOUTH END FACING NORTH



WW28 FROM NORTH END LOOKING SOUTH

DATE OF SITE VISIT: 09/10/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): <0.1 / <0.1

DESCRIPTION: WW28 is a depressional wetland located east of the railbed, and 0.3 mile north of NE 145th Street. The primary hydrologic sources supporting WW28 include groundwater and surface water from local area runoff. The outlet is a large pipe at the southern end of the wetland that likely discharges to WW27. An inlet was not detected. The observed indicators of hydrology include hydrophytic vegetation and topographic position. The dominant vegetation includes reed canarygrass (*Phalaris arundinacea*) and giant horsetail (*Equisetum telmateia*). The southern end of the wetland has an ornamental tree and some red alder (*Alnus rubra*) saplings. The buffer is very limited with a maintained lawn to the north; a paved access road to a business park (Woodinville Corporate Center) to the south; a maintained lawn with few shrubs and trees, a sidewalk, and driveway to the east; and the railbed to the west.

WETLAND NAME: WW29

Segment: Spur

Jurisdiction: Woodinville

Map Number: W19



WW29 FROM SOUTH END LOOKING NORTH



WW29 FROM NORTH END LOOKING SOUTH

DATE OF SITE VISIT: 09/10/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PEM/PSS

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.2 / 0.0

DESCRIPTION: WW29 is a depressional wetland located west of the rail, and 0.3 miles north of NE 145th Street. The primary hydrologic source supporting WW29 is likely surface water from Woodinville-Redmond Road NE (SR 202). The inlet is a metal pipe that extends under a paved entrance to the Woodinville Corporate Center. An outlet was not detected. The observed indicators of hydrology included hydrophytic vegetation, topographic position, water-stained leaves, and an algal mat. The dominant emergent community includes reed canarygrass (*Phalaris arundinacea*) with some common rush (*Juncus effusus*). The dominant shrub community includes Sitka willow (*Salix sitchensis*), quaking aspen (*Populus tremuloides*), Pacific willow (*Salix lasiandra*), and locally dominant western red cedar (*Thuja plicata*) and cluster rose (*Rosa pisocarpa*). The buffer includes a maintained lawn to the north, a paved access road to a business park (Woodinville Corporate Center) to the south, the rail and a thin strip of disturbance-tolerant vegetation (i.e. Scotch broom [*Cytisus scoparius*]) to the east, and a strip of primarily deciduous trees and Woodinville-Redmond Road NE (SR 202) to the west.

WETLAND NAME: WW30

Segment: Spur

Jurisdiction: Woodinville

Map Number: W20



WW30 FROM SOUTH END LOOKING NORTH



WW30 FROM NORTH END LOOKING SOUTH

DATE OF SITE VISIT: 09/10/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): <0.1 / <0.1

DESCRIPTION: WW30 is a depressional wetland located west of the railbed and south of the Woodinville Corporation Center II driveway. The wetland is mostly a ditch. The primary hydrologic source supporting WW30 is likely local area runoff from Woodinville-Redmond Road NE (SR 202) and groundwater. The outlet is a pipe that extends under the railbed to Wetland WW31 at the north end of the wetland. An inlet was not detected. The observed indicators of hydrology include hydrophytic vegetation and topographic position. The dominant vegetation is reed canarygrass (*Phalaris arundinacea*). Other commonly observed species include common rush (*Juncus effusus*) and swordleaf rush (*Juncus ensifolius*). The buffer is very limited with the Woodinville Corporation Center II driveway to the north, unmaintained forbs and grasses in a ditch to the south, the railbed to the east, and mowed grass and Woodinville-Redmond Road NE (SR 202) to the west. This wetland was delineated in the past as evidenced by wetland flagging.

WETLAND NAME: WW31

Segment: Spur

Jurisdiction: Woodinville

Map Number: W20



WW31 FROM SOUTH END LOOKING NORTH



WW31 FROM NORTH END LOOKING SOUTH

DATE OF SITE VISIT: 09/10/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): <0.1 / <0.1

DESCRIPTION: WW31 is a depressional wetland located east of the railbed and south of the Woodinville Corporation Center II driveway. The wetland is mostly a ditch. The primary hydrologic sources supporting WW31 is likely surface water leaving WW30 from a pipe that extends under the railbed and groundwater. The outlet is a pipe that extends under the driveway to the north to a stream located east of the right-of-way. The stream appears to be piped under Woodinville-Redmond Road NE (SR 202) and then daylight just east of the railbed and north of WW31. It is possible that the outlet from WW31 experiences backflow from the stream during times of high flow and thus becomes an inlet. Small fish (likely salmonids) were observed at the pipe outlet to the stream to the north. Native saplings along the stream appear to be recently planted (within the last year or two) along the stream. The observed indicators of hydrology include hydrophytic vegetation and topographic position. The dominant vegetation includes reed canarygrass (*Phalaris arundinacea*). The buffer is very limited with the railbed to the west; a paved access road to a business park (Woodinville Corporate Center II) to the north; unmaintained forbs and grasses in a ditch to the south; and tall grasses (approximately 20 feet wide), lawn (approximately 40 feet wide), parking lot, and a row of planted conifers to the east. This wetland was delineated previously as evidenced by flagging.

WETLAND NAME: WW32

Segment: Spur

Jurisdiction: Woodinville

Map Number: W11



WW32 LOOKING FROM SOUTH TO NORTH



WW32 LOOKING FROM NORTH TO SOUTH

DATE OF SITE VISIT: 09/10/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): <0.1 / <0.1

DESCRIPTION: WW32 is a linear depressional wetland located west of the railbed and north of the business park entrance to SASCO, an electric company. The wetland is mostly a ditch. A pipe that extends north under the business park entrance provides an outlet to a separate wetland (WW33). The observed indicators of hydrology include hydrophytic vegetation and topographic position. The dominant emergent community includes reed canarygrass (*Phalaris arundinacea*), common rush (*Juncus effusus*), common plantain (*Plantago major*), narrowleaf plantain (*Plantago lanceolata*), and giant horsetail (*Equisetum telmateia*). The buffer is very limited with a paved access road to a business park to the north; unmaintained forbs and grasses in a ditch to the south; a narrow vegetated buffer of aggressive forbs and grasses and the railbed to the east; and another narrow strip of maintained forbs and grasses and Woodinville-Redmond Road NE (SR 202) to the west. The wetland was delineated previously as evidenced by flagging.

WETLAND NAME: WW33

Segment: Spur

Jurisdiction: Woodinville

Map Number: W11



WW33 LOOKING FROM SOUTH TO NORTH



WW33 LOOKING FROM NORTH TO SOUTH

DATE OF SITE VISIT: 09/10/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.1 / 0.1

DESCRIPTION: WW33 is a linear depressional wetland located west of the railbed and north of the business park entrance to SASCO, an electric company. The primary hydrologic sources supporting WW33 is likely surface water and groundwater. The inlet is a pipe that extends from Wetland WW32 to the south and an ephemeral stream (SW18), which appears to have been recently dredged, north of the site. The outlet is a large concrete culvert that extends under the railbed to Wetland WW34. The observed indicators of hydrology include soil saturation in the upper 12 inches in the vicinity of the culvert and water-stained leaves. The dominant vegetation includes reed canarygrass (*Phalaris arundinacea*), common rush (*Juncus effusus*), and giant horsetail (*Equisetum telmateia*); locally dominant bird's foot trefoil (*Lotus corniculatus*) and Canada thistle (*Cirsium arvense*); and some red alder (*Alnus rubra*) and sow thistle (*Sonchus* spp.). The buffer is very limited with the driveway to the business park to the south, a narrow vegetated strip of forbs and grasses with some stressed conifer saplings and the railbed to the east, and a 20- to 25-foot vegetated strip of forbs and grasses, Himalayan blackberry (*Rubus armeniacus*), Woodinville-Redmond Road NE (SR 202), and gravel highway pullout to the west and north.

WETLAND NAME: WW34

Segment: Spur

Jurisdiction: Woodinville

Map Number: W11



WW34 LOOKING FROM SOUTH TO NORTH



WW34 LOOKING FROM NORTH TO SOUTH

DATE OF SITE VISIT: 09/10/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): 0.2 / 0.1

DESCRIPTION: WW34 is a linear depressional wetland located east of the railbed and north of the business park entrance to SASCO, an electric company. The primary hydrologic sources supporting WW34 is surface water and likely groundwater. There are multiple inlets to this wetland including a small concrete pipe that extends under the driveway entering the business park at the south end of the wetland; several pipes that originate from the parking area to the east; and a large concrete culvert that extends under the railbed from Wetland WW33. No outlet was detected. The observed indicators of hydrology include hydrophytic vegetation and topographic position. Vegetation is dominated by reed canarygrass (*Phalaris arundinacea*). Other species include small-fruited bulrush (*Scirpus microcarpus*), giant horsetail (*Equisetum telmateia*), and bird's foot trefoil (*Lotus corniculatus*) with some Pacific willow (*Salix lasiandra*) and black cottonwood (*Populus balsamifera*) at the north end of the wetland. Small patches of purple loosestrife (*Lythrum salicaria*) were also observed in the wetland. The buffer includes a narrow vegetated strip of unmaintained grass and forbs in a ditch to the north; the driveway to the business park to the south; a slope with Himalayan blackberry (*Rubus armeniacus*) and reed canarygrass, including a narrow vegetated strip of planted conifers and shrubs to the east; and the railbed and unmaintained forbs, grasses, and Scotch broom (*Cytisus scoparius*) to the west.

WETLAND NAME: WW35

Segment: Spur

Jurisdiction: Woodinville

Map Number: W12



WW35 LOOKING FROM SOUTH TO NORTH



WW35 LOOKING FROM NORTH TO SOUTH

DATE OF SITE VISIT: 09/10/2014

DRAINAGE BASIN: SAMMAMISH RIVER

USFWS CLASS: PSS/PEM

HGM CLASS: DEPRESSIONAL

ESTIMATED WETLAND SIZE IN ACRES (TOTAL / WITHIN CORRIDOR RIGHT-OF-WAY): <0.1 / <0.1

DESCRIPTION: WW35 is a small linear depressional wetland located west of the railbed, approximately 0.12 mile south of the intersection to the Woodinville Main Line. The primary hydrologic sources supporting WW35 is surface water and potentially a seep from a slope to the west. The inlet is a small culvert at the north end of the wetland that conveys water from Wetland WW16. The outlet is a pipe that extends under a driveway to the south, discharging to a small ephemeral stream (SW18). The observed indicators of hydrology include soil saturation in the upper 12 inches, algal mat, and cracked soils. The dominant emergent community includes reed canarygrass (*Phalaris arundinacea*), small-fruited bulrush (*Scirpus microcarpus*), giant horsetail (*Equisetum telmateia*), and locally dominant bird's foot trefoil (*Lotus corniculatus*) and broadleaf cattail (*Typha latifolia*). The dominant shrub community includes reed canarygrass, red alder (*Alnus rubra*), and black cottonwood (*Populus balsamifera*). The buffer to the north and south includes driveways to businesses, to the east the buffer is primarily the railbed, and to the west the buffer includes a 20-foot swath of deciduous trees and Woodinville-Redmond Road NE (SR 202).

STREAM NAME: SW2

Segment: Main Line

Jurisdiction: Woodinville

Map Number: W1



SW2 (AND WW3)—FROM RAILBED (NORTH END OF WW3)
LOOKING SOUTH (UPSTREAM)



SW2—EAST SIDE OF RAILBED LOOKING WEST (UP-
STREAM) AT PIPE

DATE OF SITE VISIT: 06/27/2014

DRAINAGE BASIN: SAMMAMISH RIVER

DESCRIPTION: Stream SW2 is a small stream located at the south end of Woodinville and the south end of the Chateau Ste. Michelle winery. It is hydrologically connected to Wetland WW3 located west of the railbed; Wetland WW3 appears to be its headwaters. The stream crosses under the railbed and exits the right-of-way to the east. During the site visit, the stream was flowing. The average channel width is 3 feet. Vegetation in the riparian buffer includes salmonberry (*Rubus spectabilis*), red alder (*Alnus rubra*) saplings, and reed canarygrass (*Phalaris arundinacea*) with lesser amounts of common ladyfern (*Athyrium filix-femina*), sawbeak sedge (*Carex stipata*), and giant horsetail (*Equisetum telmateia*) in the wetland west of the railbed. Excluding the railbed, the remaining buffer consists of a mixed deciduous and coniferous forest.

STREAM NAME: SW3

Segment: Main Line

Jurisdiction: Woodinville

Map Number: W2



**SW3 (STREAM IN PIPE)—ON RAILBED LOOKING WEST AT
CATCH BASIN STRUCTURE**

DATE OF SITE VISIT: 06/27/2014

DRAINAGE BASIN: SAMMAMISH RIVER

DESCRIPTION: Stream SW3 is located south of NE 145th Street near the Chateau Ste. Michelle winery, just south of Wetland WW4. Although it is piped in the right-of-way, water was observed flowing in a catch basin structure located west of the rail. The stream flows from west to east through the right-of-way.

STREAM NAME: SW4

Segment: Main Line

Jurisdiction: Woodinville

Map Number: W3



SW4 (PIPED)—LOOKING WEST (UPSTREAM) AT DROP STRUCTURE



SW4—EAST SIDE, LOOKING EAST (DOWNSTREAM)

DATE OF SITE VISIT: 07/01/2014

DRAINAGE BASIN: SAMMAMISH RIVER

DESCRIPTION: Stream SW4 is a small stream located south of NE 145th Street near the Chateau Ste. Michelle winery. The stream is piped on the west side of the railbed, as evidenced by a drop structure in Wetland WW5. The stream continues in a pipe under the railbed, then daylights in a half pipe east of the railbed where it exits the right-of-way. Water was flowing at the time of the site visit. The vegetation within the riparian buffer is a mixed coniferous and deciduous forest.

STREAM NAME: SW5

Segment: Main Line

Jurisdiction: Woodinville

Map Number: W3



**SW5—WEST SIDE, LOOKING AT PIPE UNDER RAIL
(DOWNSTREAM)**



SW5—WEST SIDE, LOOKING WEST (UPSTREAM)

DATE OF SITE VISIT: 07/01/2014

DRAINAGE BASIN: SAMMAMISH RIVER

DESCRIPTION: Stream SW5 is a small stream located immediately south of the intersection of NE 145th Street. The stream daylight west of the railbed, is piped under the railbed, and continues as a piped stream within the right-of-way, east of the railbed. Stream SW5 is a narrow and incised channel less than 2 feet wide. The stream was flowing during the site visit. A jurisdictional ditch (JDW2) flows into the open channel on the west side of the rail. The vegetated riparian zone is heavily vegetated with reed canarygrass (*Phalaris arundinacea*) and giant horsetail (*Equisetum telmateia*) in the immediate vicinity, followed by a mixed coniferous and deciduous forest. Developed areas in the vicinity consist of northeast of the railbed, 145th Street to the north, residential development to the southwest, and the maintained winery grounds to the southeast.

STREAM NAME: SW6

Segment: Main Line

Jurisdiction: Woodinville

Map Number: W4



**SW6 AND WW6—FROM SOUTH, LOOKING NORTH
(DOWNSTREAM)**



SW6—CHANNEL IN WW6

DATE OF SITE VISIT: 07/01/2014

DRAINAGE BASIN: SAMMAMISH RIVER

DESCRIPTION: Stream SW6 runs parallel to the north side of NE 145th Street and then bends north along the west side of the railbed. It is hydrologically connected to Wetland WW6, extending through the wetland in a railside ditch. It is ultimately piped under the railbed where it eventually daylights east of the railbed, appearing to drain to a wetland outside the right-of-way. Water was flowing during the site visit. Watercress (*Nasturtium officinale*), along with common duckweed (*Lemna minor*), are dominant in the stream channel. The riparian vegetation includes red alder (*Alnus rubra*), reed canarygrass (*Phalaris arundinacea*), giant horsetail (*Equisetum telmateia*), common ladyfern (*Athyrium filix-femina*), bird's foot trefoil (*Lotus corniculatus*), coastal hedgenettle (*Stachys chamissonis*), common rush (*Juncus effusus*), and Himalayan blackberry (*Rubus armeniacus*) in the wetland. Excluding the railbed, the upland buffer consists primarily of a mixed coniferous and deciduous forest with an understory of Himalayan blackberry.

STREAM NAME: SW7

Segment: Main Line

Jurisdiction: Woodinville

Map Number: W5



SW7—WEST SIDE OF RAILBED FROM SOUTH LOOKING NORTH (DOWNSTREAM)



SW7—WEST SIDE OF RAILBED FROM NORTH (PIPE), LOOKING SOUTH (UPSTREAM)

DATE OF SITE VISIT: 07/01/2014

DRAINAGE BASIN: SAMMAMISH RIVER

DESCRIPTION: Stream SW7 is located north of NE 145th Street, south of the Tolt Pipeline Trail and flows north along the east side of the railbed, prior to crossing to the east. Wetland WW7, located at the southern (upstream) portion of the stream, is likely the headwater. Stream SW7 is also hydrologically connected to Wetland WW8 and a jurisdictional ditch (JDW3) in the vicinity of where the stream is piped east of the railbed. East of the railbed, Stream SW7 daylights briefly then enters another pipe that flows out of the right-of-way. Water was flowing during the site visit. The channel is incised and less than 2 feet wide (west of the railbed). Vegetation in Wetland WW7 includes red alder (*Alnus rubra*), salmonberry (*Rubus spectabilis*), stinging nettle (*Urtica dioica*), climbing nightshade (*Solanum dulcamara*), reed canarygrass (*Phalaris arundinacea*), and common ladyfern (*Athyrium filix-femina*). Vegetation in Wetland WW8 includes salmonberry with common ladyfern, reed canarygrass, and Himalayan blackberry (*Rubus armeniacus*). Excluding the railbed and Woodinville-Redmond Road NE, the buffer consists primarily of a mixed deciduous and coniferous forest dominated by bigleaf maple (*Acer macrophyllum*), red alder, and Douglas-fir (*Pseudotsuga menziesii*).

STREAM NAME: SW8

Segment: Main Line

Jurisdiction: Woodinville

Map Number: W7



SW8—LOOKING EAST AT PIPE (UPSTREAM) UNDER RAILBED



SW8—LOOKING WEST (DOWNSTREAM) TOWARDS PIPE OUTSIDE OF RIGHT-OF-WAY

DATE OF SITE VISIT: 07/01/2014

DRAINAGE BASIN: SAMMAMISH RIVER

DESCRIPTION: Stream SW8 is located approximately 0.10 mile north of the Tolt Pipeline Trail on the east side of the railbed. The stream appears to form in Wetland WW10 (headwaters) west of the railbed, then flows east under the railbed where it forms a channel. Then it is piped east of the right-of-way near a parking lot that had construction activity during the field visit. The stream was not flowing at the time of the site visit, but there were areas of standing water with exposed cobbles and gravel in the channel. The channel is 3 feet wide. Vegetation in Wetland WW10 is dominated by red alder (*Alnus rubra*) and salmonberry (*Rubus spectabilis*). The upland riparian buffer vegetation consists of deciduous and coniferous forest.

STREAM NAME: SW9

Segment: Main Line

Jurisdiction: Woodinville

Map Number: W7



**SW9—LOOKING SOUTHEAST (TOWARD RAILBED AND
DOWNSTREAM) ON WEST SIDE**

DATE OF SITE VISIT: 07/01/2014

DRAINAGE BASIN: SAMMAMISH RIVER

DESCRIPTION: Stream SW9 is located approximately 0.17 mile north of the Tolt Pipeline Trail and runs perpendicular to the railbed, extending through a culvert underneath. Stream SW9 serves as an outlet to Wetland WW11. The stream was flowing at the time of the site visit. It is incised and averages 5 feet in width. The substrate consists of cobble and gravel. The slope is extremely steep along the east side of the railbed, and the riparian buffer vegetation consists primarily of a mixed coniferous and deciduous upland forest. Vegetation in Wetland WW11 is dominated by red alder (*Alnus rubra*), salmonberry (*Rubus spectabilis*), and red-osier dogwood (*Cornus sericea*).

STREAM NAME: SW10

Segment: Main Line

Jurisdiction: Woodinville

Map Number: W8



SR10—LOOKING WEST WHERE THE STREAM FLOWS OFF A STEEP SLOPE



SR10—LOOKING SOUTHWEST (DOWNSTREAM) WHERE STREAM IS PIPED UNDER THE RAIL

DATE OF SITE VISIT: 07/01/2014

DRAINAGE BASIN: SAMMAMISH RIVER

DESCRIPTION: Stream SW10 is located approximately 0.40 mile north of the Tolt Pipeline Trail. The stream flows off a steep slope perpendicular to the west side of the railbed flows south along the rail, and then into a pipe under the rail. Some water may also flow north to Wetland WW12 during the winter. Water was flowing during the site visit. No pipe or culvert outlet was observed east of the railbed. The bed and bank is undercut by erosion where the stream emerges from the steep slope. There is a hydrologic connection to WW12. The riparian buffer vegetation consists primarily of a mixed coniferous and deciduous upland forest.

STREAM NAME: SW11

Segment: Main Line

Jurisdiction: Woodinville

Map Number: W9



SW11—LOOKING NORTH (DOWNSTREAM)



SW11—CULVERT UNDER RAILBED (WEST SIDE) FACING EAST (DOWNSTREAM)

DATE OF SITE VISIT: 07/18/2014

DRAINAGE BASIN: SAMMAMISH RIVER

DESCRIPTION: Stream SW11 is located approximately 0.50 mile south of the intersection of Woodinville-Redmond Road NE and 128th Place NE. The stream likely originates from a seep upslope and outside (west) of the right-of-way. Within the study area, Stream SW11 flows north and west of the railbed for several hundred feet before it enters Wetland WW13 and crosses (east) under the railbed through a pipe. The stream outlet east of the railbed is steep. Flow was observed at the southern (upstream) extent of the stream during the site visit. A jurisdictional ditch (JDW6) likely conveys seasonal water from Wetland WW12 to Stream SW11. The stream is likely perennial at the south end and then transitions to ephemeral at the north end where surface water infiltrates in Wetland WW13. The substrate is cobble and gravel. The dominant vegetation in Wetland WW13 includes red-osier dogwood (*Cornus sericea*), salmonberry (*Rubus spectabilis*), red alder (*Alnus rubra*), Sitka willow (*Salix sitchensis*), reed canarygrass (*Phalaris arundinacea*), and Himalayan blackberry (*Rubus armeniacus*). Excluding the railbed, the remaining buffer is a coniferous and deciduous forest consisting of red alder, Douglas-fir (*Pseudotsuga menziesii*), and western swordfern (*Polystichum munitum*).

STREAM NAME: SW12

Segment: Main Line

Jurisdiction: Woodinville

Map Number: W11



SW12 AND WW14—LOOKING SOUTHWEST (UPSTREAM)



SW12 AND WW14—LOOKING NORTH (DOWNSTREAM)

DATE OF SITE VISIT: 07/18/2014

DRAINAGE BASIN: SAMMAMISH RIVER

DESCRIPTION: Stream SW12 is a small seasonal stream associated with Wetland WW14, located south of the intersection of Woodinville-Redmond Road NE and 128th Place NE. The stream runs parallel to the west side of the railbed in a ditch until it reaches a pipe at Woodinville-Redmond Road NE. The stream bed has heavy sediment deposition from high flows. The dominant vegetation in Wetland WW14 includes red-osier dogwood (*Cornus sericea*), black cottonwood (*Populus balsamifera*), Pacific willow (*Salix lasiandra*), and reed canarygrass (*Phalaris arundinacea*). Upland buffer west of Stream SW12 is primarily deciduous forest with red alder (*Alnus rubra*), black cottonwood, and Himalayan blackberry (*Rubus armeniacus*). To the east are a vegetated the riparian buffer (a mix of weedy herbs and forbs), the railbed, and a commercial business. A tributary was observed entering the stream from the west. This tributary was severely eroded just upgradient of Stream SW12.

STREAM NAME: Sammamish River

Segment: Main Line

Jurisdiction: Woodinville

Map Number: W12



**SAMMAMISH RIVER—LOOKING NORTHWEST
(DOWNSTREAM)**



**SAMMAMISH RIVER—LOOKING SOUTHEAST
(UPSTREAM)**

DATE OF SITE VISIT: 07/18/2014

DRAINAGE BASIN: SAMMAMISH RIVER

DESCRIPTION: The Sammamish River flows northwest under the rail bridge, located south of NE 175th Street and west of the Sammamish River Trail. Pilings for the rail bridge are located below the ordinary high water mark (OHWM). Portions of the riparian buffer are disturbed due to the rail, roadway, and development. The vegetated portion of the buffer includes Himalayan blackberry (*Rubus armeniacus*), reed canarygrass (*Phalaris arundinacea*), willow (*Salix* spp.), red-osier dogwood (*Cornus sericea*), oceanspray (*Holodiscus discolor*), common snowberry (*Symphoricarpos albus*), Sitka spruce (*Pinus sitchensis*), and Douglas-fir (*Pseudotsuga menziesii*). Small patches of purple loosestrife (*Lythrum salicaria*) were also observed.

The City of Woodinville classifies this stream as Type S. The Washington Department of Fish and Wildlife's SalmonScape (queried November 2014) data indicated the "documented" presence of sockeye salmon (*O. nerka*), Chinook salmon (*O. tshawytscha*) (fall Chinook), steelhead trout (*O. mykiss*) (winter run), bull trout (*Salvelinus confluentus*), kokanee (*O. nerka*), and coho salmon (*O. kisutch*) in the Sammamish River in the study area. Actions in the project area could include riparian vegetation enhancement and stream channel restoration such as removal of pilings from OHWM, if trestle replacement or removal occurs. Other potential actions in the project vicinity could include those identified by the Final Lake Washington/Cedar/Sammamish Watershed (WRIA 8) Chinook Salmon Conservation Plan such as restoring the floodplain and re-grading channel to increase meanders.

STREAM NAME: SamRTrib

Segment: Main Line

Jurisdiction: Woodinville

Map Number: W12



**SAMRTRIB – LOOKING NORTH TOWARD SAMRTRIB
(FLOWING FROM LEFT TO RIGHT IN PHOTO)**



**SAMRTRIB – LOOKING NORTHEAST TOWARDS WILLOW-
DOMINATED SHRUB PATCH THAT BLOCKS VIEW OF SAMRTRIB**

DATE OF SITE VISIT: 09/23/2014

DRAINAGE BASIN: SAMMAMISH RIVER

DESCRIPTION: SamRTrib is located northwest of the rail bridge that extends across the Sammamish River, and southwest of the Sammamish River. The stream is likely perennial. Flow, which discharges to the Sammamish River, was observed during two site visits in mid-summer and early fall. The majority of the tributary is fenced off, limiting access. Riparian vegetation includes willow (*Salix* spp.), red-osier dogwood (*Cornus sericea*), Sitka spruce (*Pinus sitchensis*), Himalayan blackberry (*Rubus armeniacus*), small-fruited bulrush (*Scirpus microcarpus*), climbing nightshade (*Solanum dulcamara*), and jewelweed (*Impatiens capensis*).

STREAM NAME: SW13

Segment: Main Line

Jurisdiction: Woodinville

Map Number: W13



**SW13—OUTLET CULVERT LOOKING WEST
(DOWNSTREAM) FROM EAST OF RAILBED**



**SW13—LOOKING SOUTH (DOWNSTREAM) FROM EAST
OF RAILBED**

DATE OF SITE VISIT: 07/18/2014

DRAINAGE BASIN: LITTLE BEAR CREEK

DESCRIPTION: Stream SW13 is a small stream located northwest of the intersection of NE Mill Place/NE 178th Place and Woodinville Snohomish Road. Stream SW13 enters the right-of-way through a pipe that extends under Woodinville Snohomish Road, briefly daylights, and then exits through a pipe that extends under the railbed and 139th Avenue NE, likely discharging to Little Bear Creek. SW13 serves as an outlet to adjacent Wetland WW18. The riparian buffer vegetation is primarily Japanese knotweed (*Polygonum cuspidatum*). Fish were observed in the stream.

STREAM NAME: SW14

Segment: Main Line

Jurisdiction: Woodinville

Map Number: W15



SW14—FROM NORTH LOOKING SOUTH (DOWNSTREAM)



SW14—NORTH OF NE 200TH STREET LOOKING EAST (UPSTREAM)

DATE OF SITE VISIT: 08/01/2014

DRAINAGE BASIN: LITTLE BEAR CREEK

DESCRIPTION: Stream SW14 originates east of the rail, flows along the north side of NE 200th Street, turns south and is piped under NE 200th Street, then runs parallel along the railbed right-of-way before turning west in a pipe under the railbed to Wetland WW21. A jurisdictional ditch (JDW10) joins the stream at the pipe inlet. Stream SW14 was flowing during the site visit, and it was narrow and incised. Riparian vegetation includes Himalayan blackberry (*Rubus armeniacus*) and hedge false bindweed (*Convolvulus sepium*) with some Douglas-fir (*Pseudotsuga menziesii*) on the upper slope. Giant horsetail (*Equisetum telmateia*) dominates the wetted edge, and some common duckweed (*Lemna minor*) was in the channel. Patches of Japanese knotweed (*Polygonum cuspidatum*) were also observed.

STREAM NAME: SW18

Segment: Main Line

Jurisdiction: Woodinville

Map Number: W11



SW18—LOOKING FROM SOUTH TO NORTH (UPSTREAM)



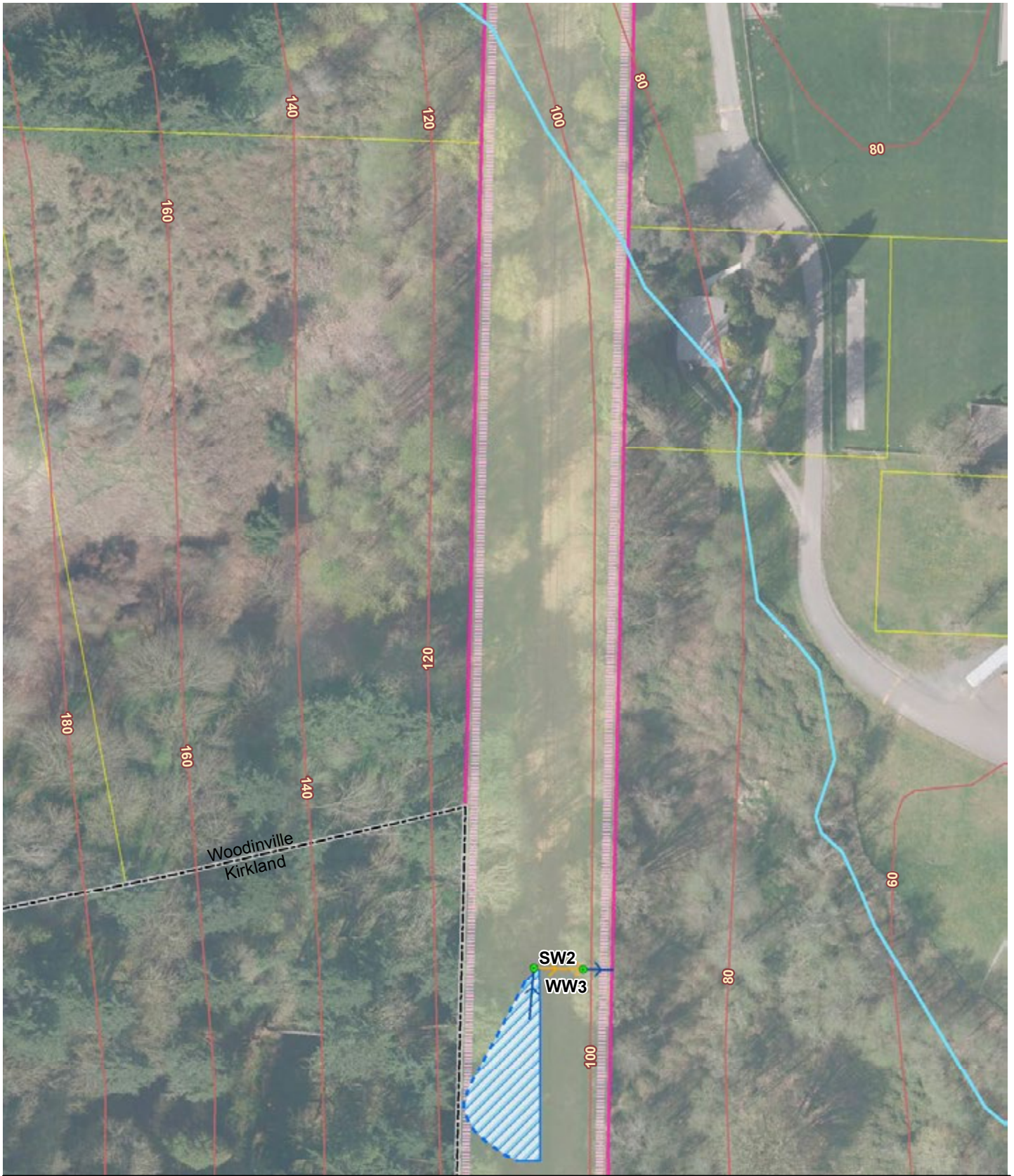
SW18—LOOKING FROM NORTH TO SOUTH (DOWNSTREAM)

DATE OF SITE VISIT: 09/10/2014

DRAINAGE BASIN: SAMMAMISH RIVER

DESCRIPTION: Stream SW18 extends along the west side of the railbed, approximately 0.15 mile south of the intersection to the Woodinville Main Line. Surface water from Wetland WW35 supports Stream SW18 which then connects south to Wetland WW33. The stream was not flowing at the time of the site visit; however, observed indicators of hydrology included cracked surface soil, soil saturation, and bare soils. Stream SW18 is 4 to 6 feet wide and maintained as evidenced by the appearance of being dredged and/or excavated. The gradient from the base of the stream to the top of bank is steep. There is some vegetation in the channel but it is mostly on the top of the stream's banks. Likely sources of hydrology to the stream include wetlands upstream and a stream upslope. Riparian vegetation is narrow and limited, consisting of fringed willowherb (*Epilobium ciliatum*), giant horsetail (*Equisetum telmateia*), perennial ryegrass (*Lolium perenne*), common velvetgrass (*Holcus lanatus*), common plantain (*Plantago lanceolata*), reed canarygrass (*Phalaris arundinacea*), red alder (*Alnus rubra*) saplings, small-fruited bulrush (*Scirpus microcarpus*), Sitka willow (*Salix sitchensis*) saplings, and a variety of disturbance-tolerant grasses and forbs.

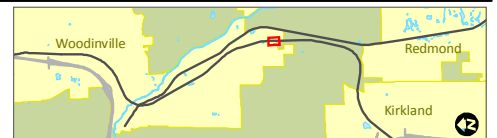
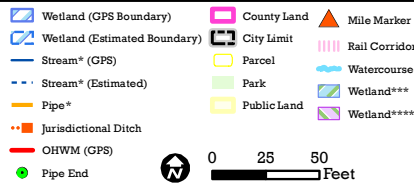
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Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

Woodinville Main Line
Map W1

Wetland Feature(s): WW3
 Water Feature(s): SW2



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory **** City of Woodinville Wetlands Inventory

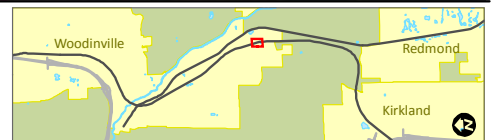
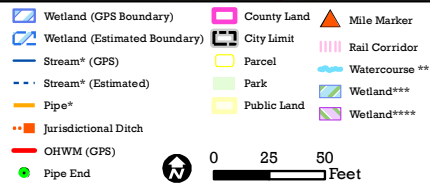
Parametrix



Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

Woodinville Main Line
Map W2

Wetland Feature(s): WW4
 Water Feature(s): SW3, JDW1



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory **** City of Woodinville Wetlands Inventory

Parametrix



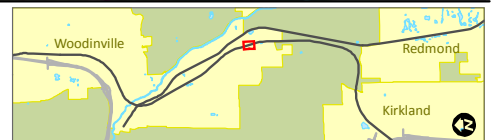
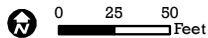
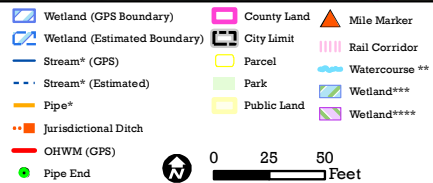
Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

Woodinville Main Line

Map W3

Wetland Feature(s): WW4, WW5

Water Feature(s): SW4, SW5, JDW1, JDW2



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory **** City of Woodinville Wetlands Inventory

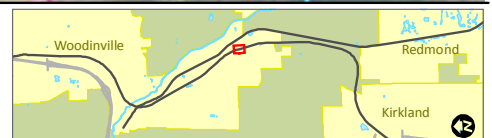
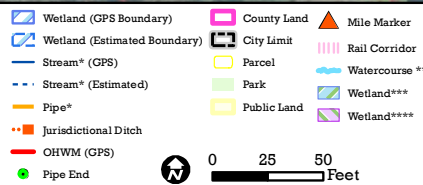
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Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

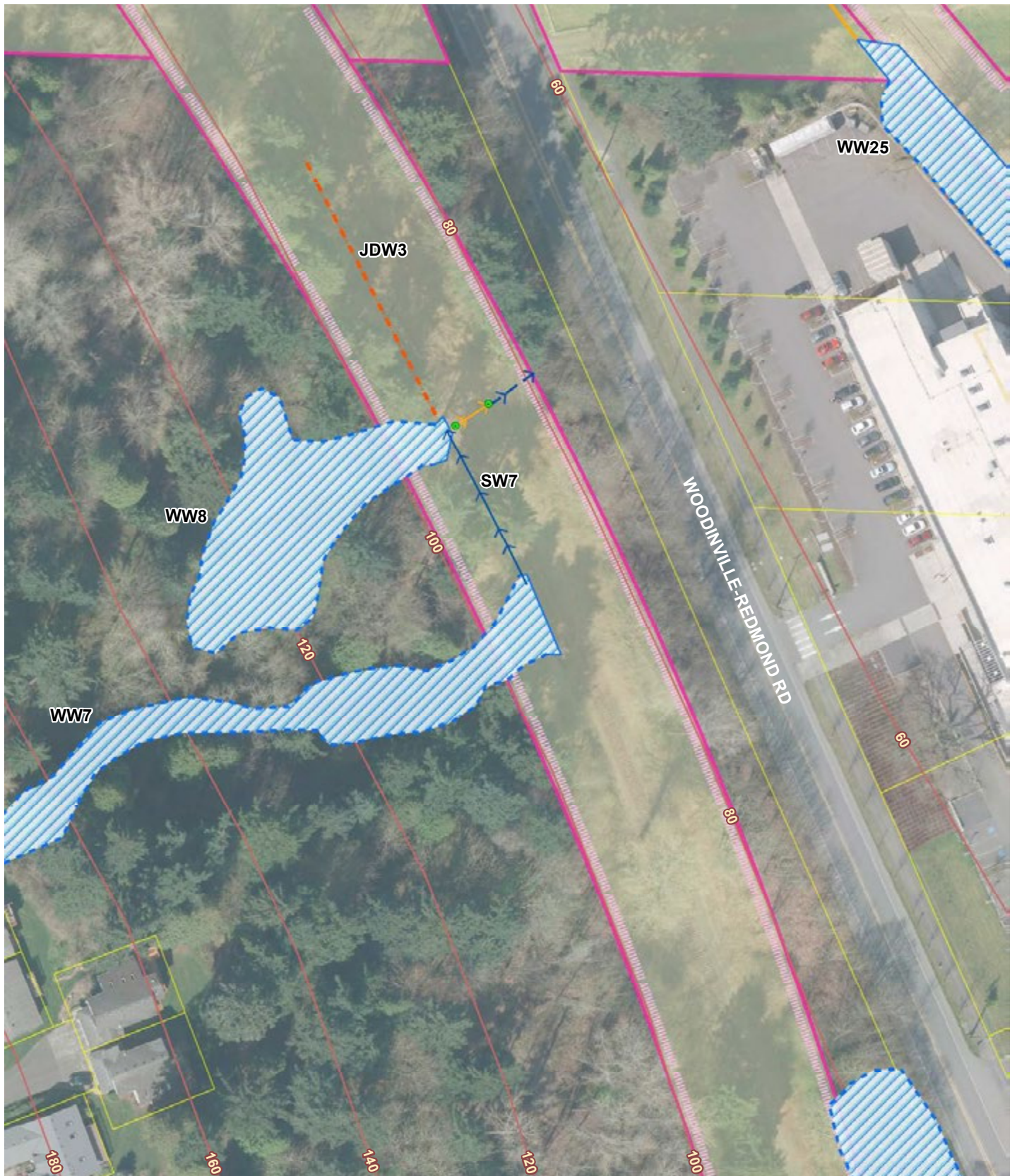
Woodinville Main Line
Map W4

Wetland Feature(s): WW6
 Water Feature(s): SW5, SW6, JDW2



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory **** City of Woodinville Wetlands Inventory

Parametrix



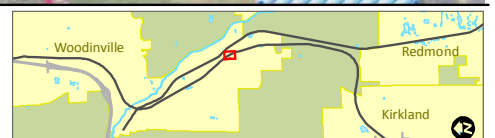
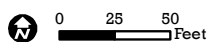
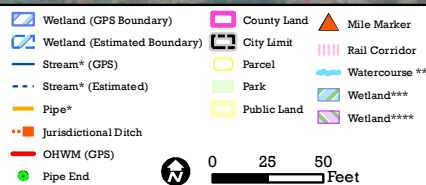
Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

Woodinville Main Line

Map W5

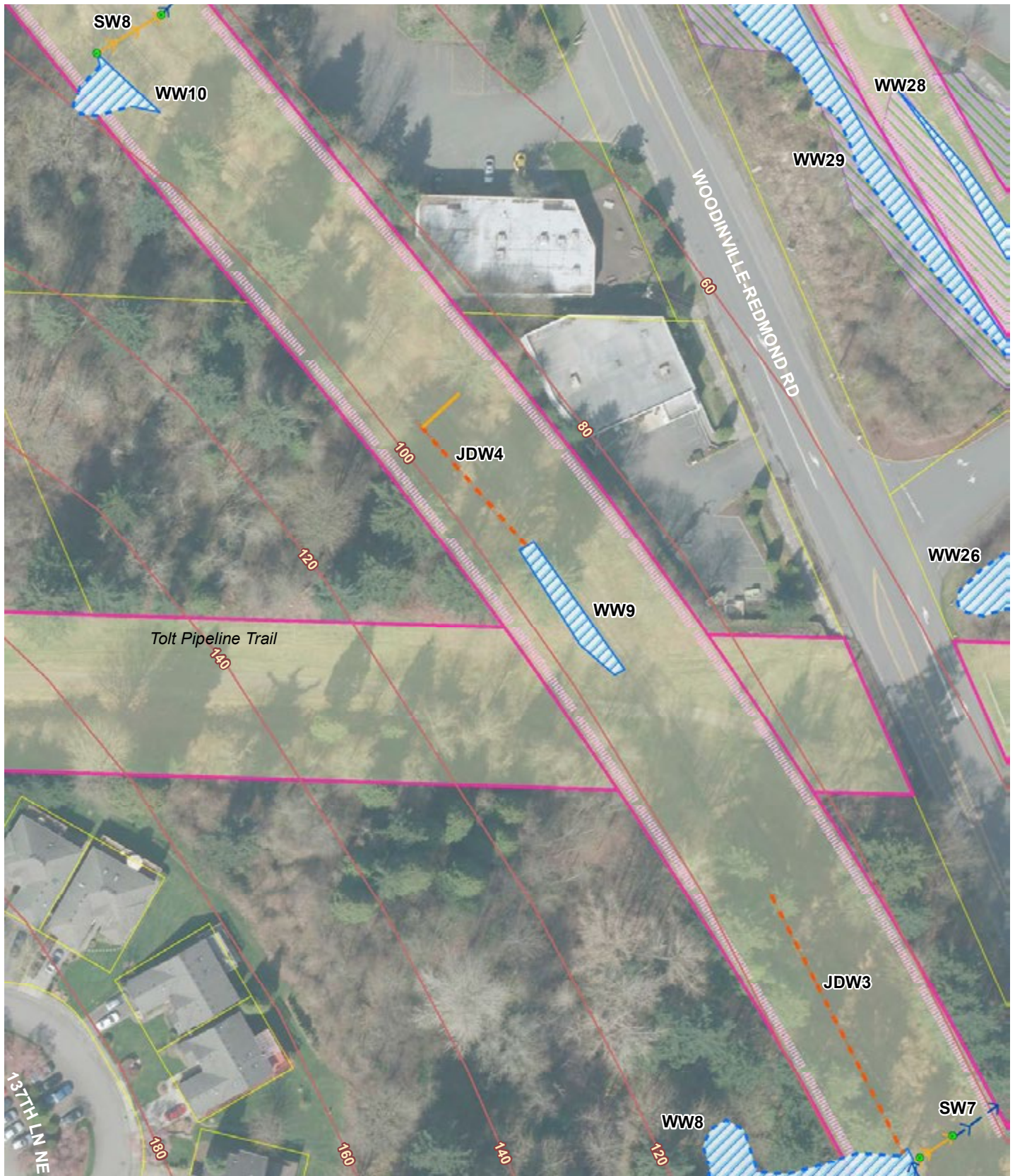
Wetland Feature(s): WW7, WW8, WW25

Water Feature(s): SW7, JDW3



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory **** City of Woodinville Wetlands Inventory

Parametrix

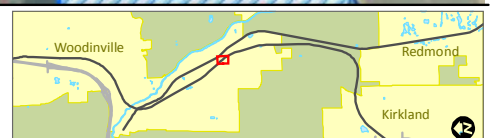
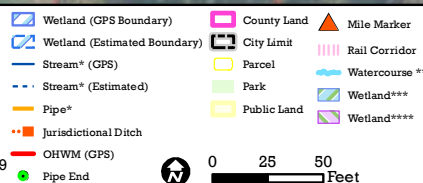


Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

Woodinville Main Line

Map W6

Wetland Feature(s): WW8, WW9, WW10, WW26, WW28, WW29
 Water Feature(s): SW7, SW8, JDW3, JDW4



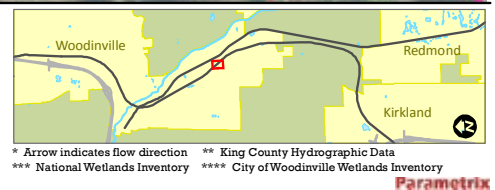
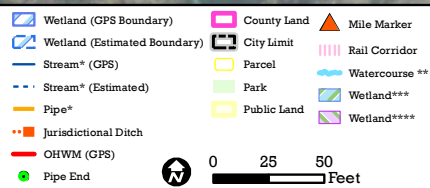
* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory **** City of Woodinville Wetlands Inventory

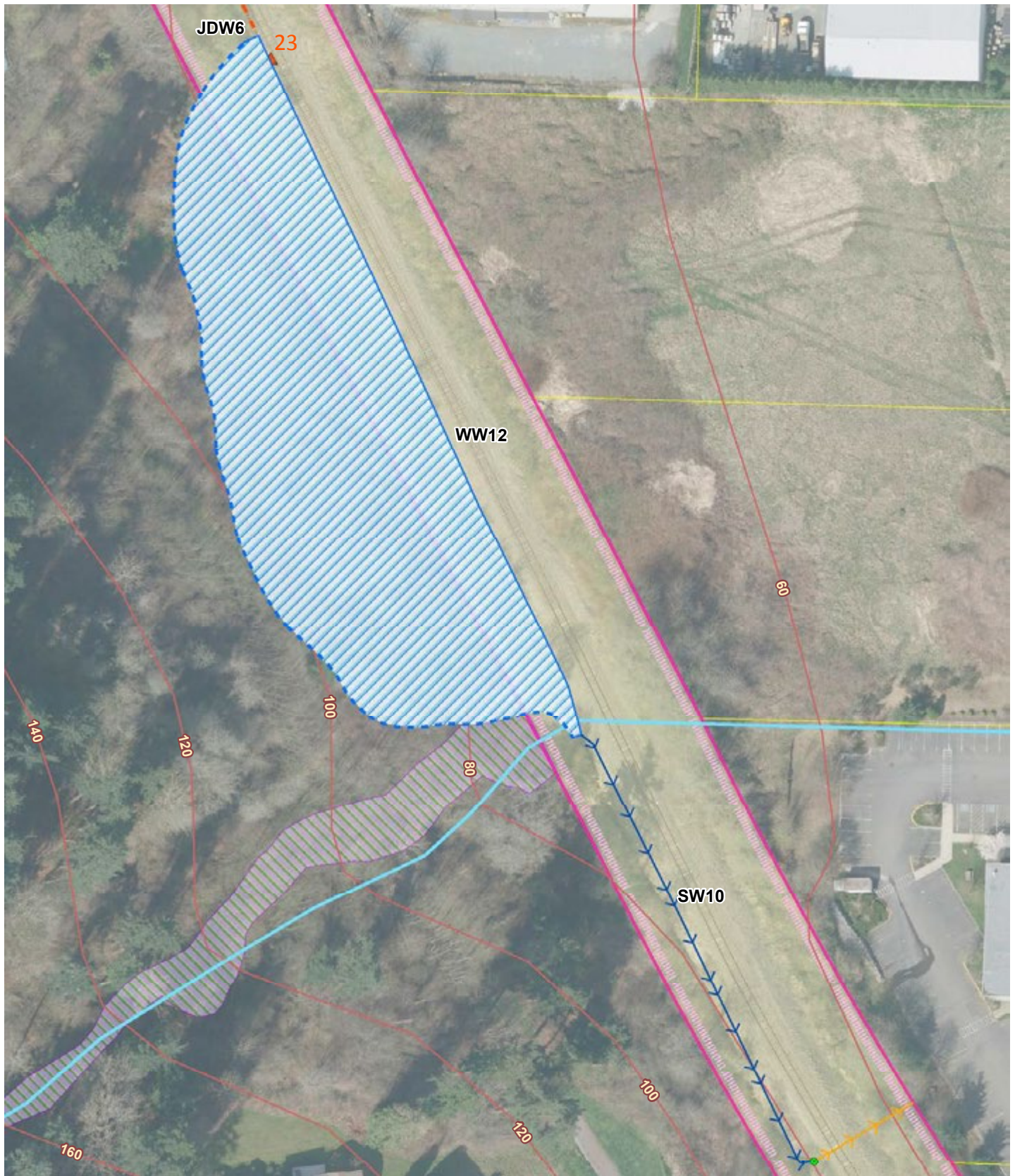
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Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

Woodinville Main Line
Map W7
Wetland Feature(s): WW10, WW11
Water Feature(s): SW8, SW9

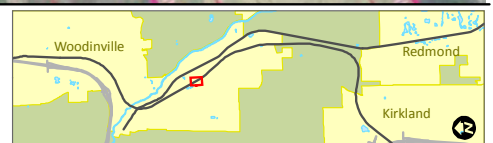
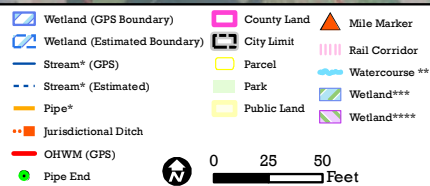




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Eastside Rail Corridor
Regional Trail Master Plan Project

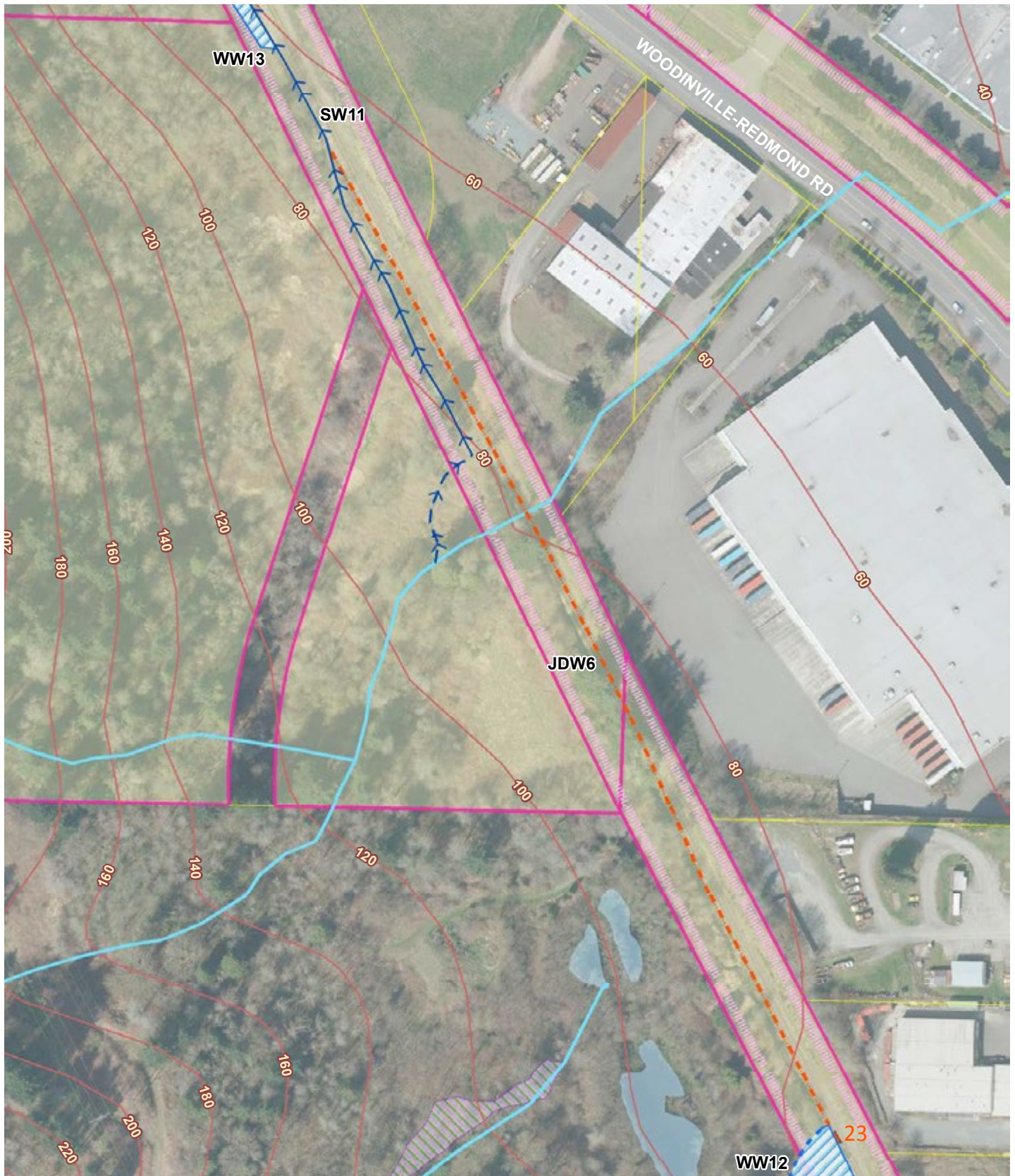
Woodinville Main Line
Map W8

Wetland Feature(s): WW12
 Water Feature(s): SW10, JDW6



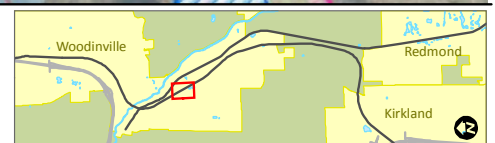
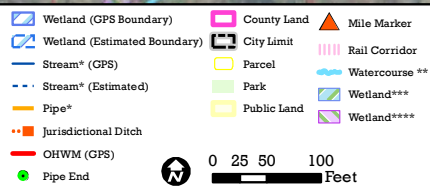
* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory **** City of Woodinville Wetlands Inventory

Parametrix



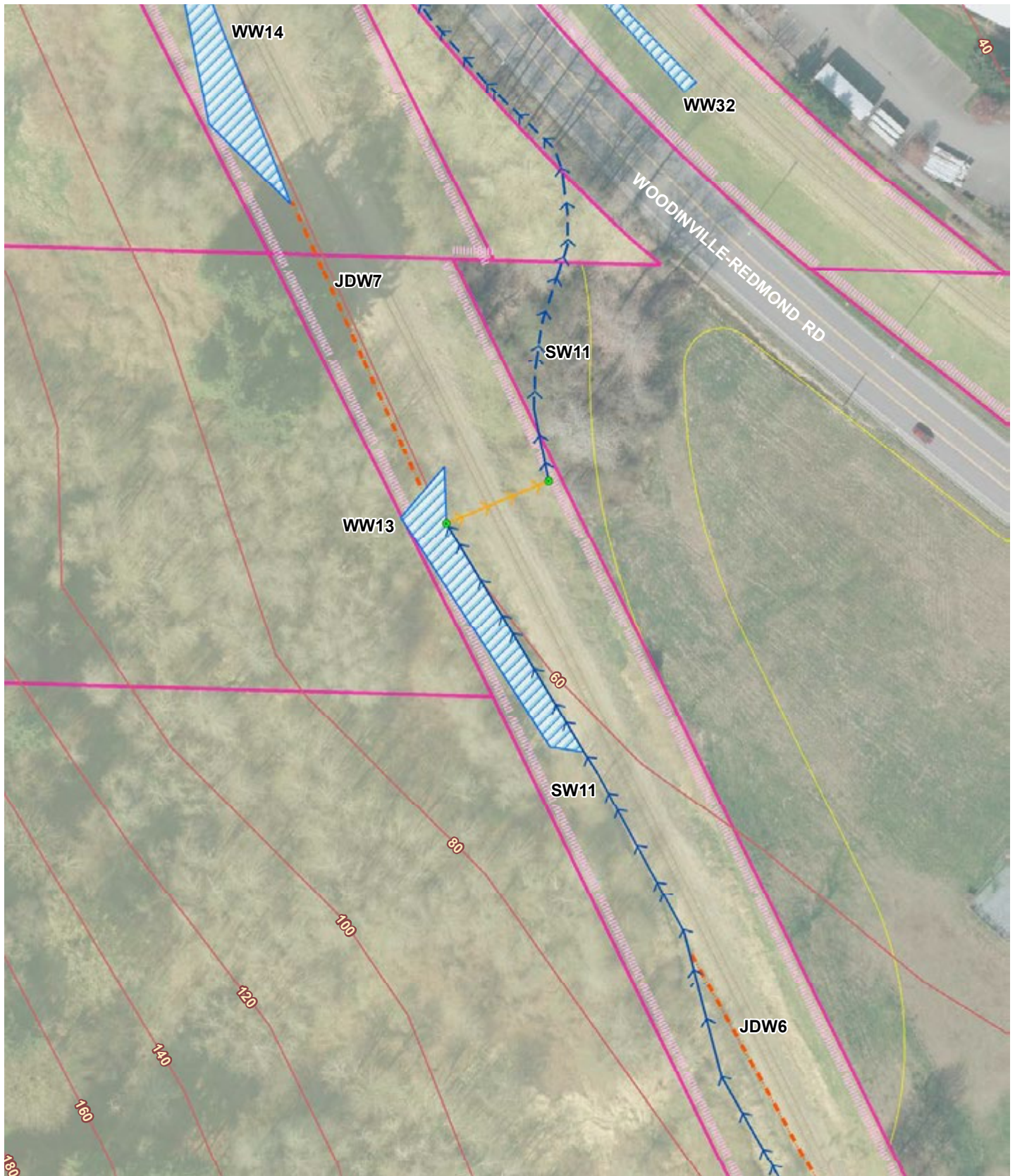
Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

Woodinville Main Line
Map W9
 Wetland Feature(s): WW12, WW13
 Water Feature(s): SW11, JDW6



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory **** City of Woodinville Wetlands Inventory

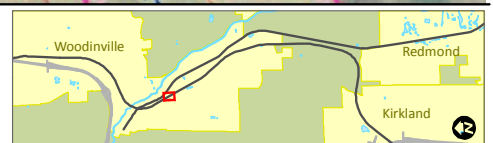
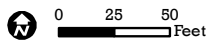
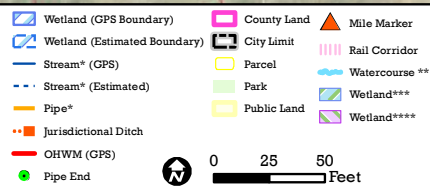
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Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

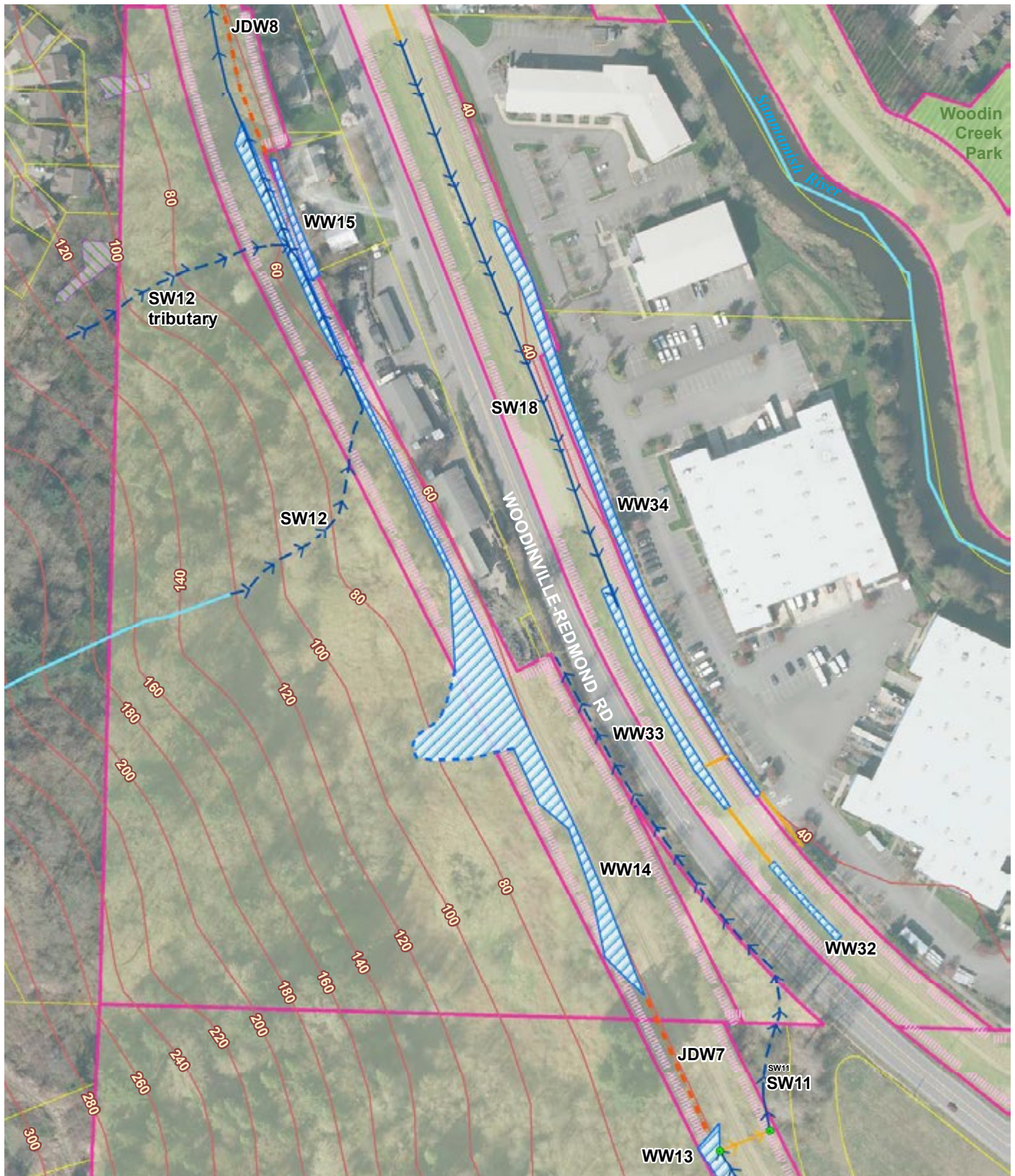
Woodinville Main Line
Map W10

Wetland Feature(s): WW13, WW14, WW32
 Water Feature(s): SW11, JDW6, JDW7



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory **** City of Woodinville Wetlands Inventory

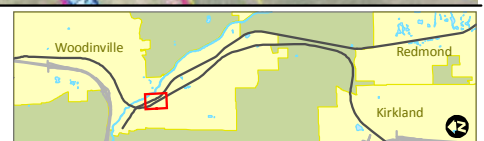
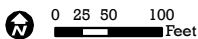
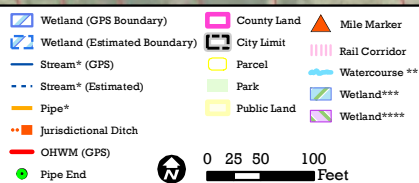
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Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

Woodinville Main Line/Spur
Map W11

Wetland Feature(s): WW13, WW14, WW15, WW32, WW34
 Water Feature(s): SW11, SW12, SW12 TRIB, SW18, JDW7, JDW8



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory **** City of Woodinville Wetlands Inventory

Parametrix

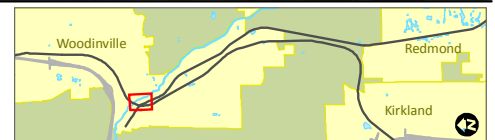
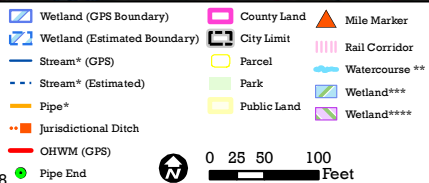


Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

Woodinville Main Line/Spur
Map W12

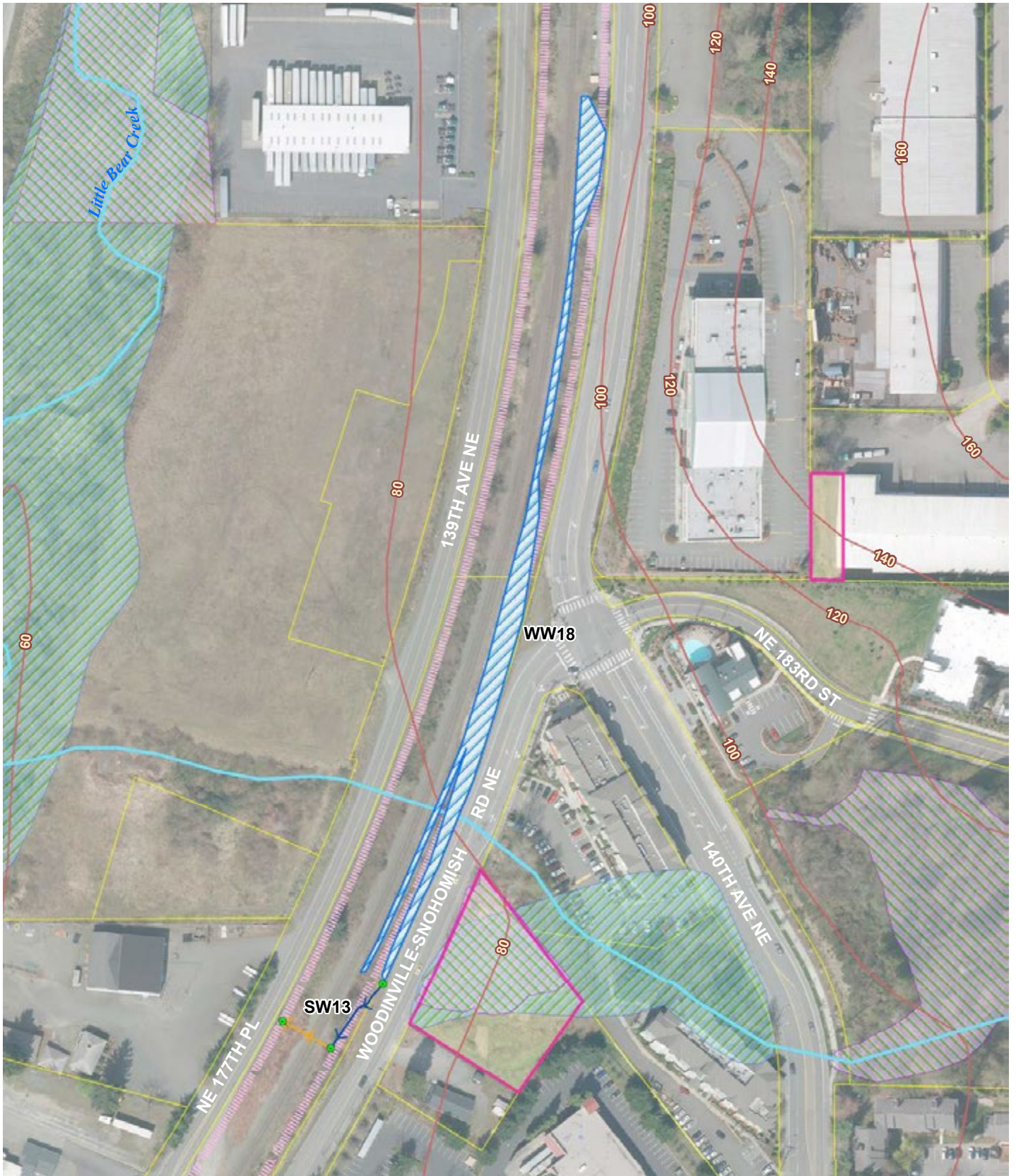
Wetland Feature(s): WW14, WW15, WW16, WW17, WW35

Water Feature(s): SW12, SW18, SamRTrib, Sammamish River, JDW8



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory **** City of Woodinville Wetlands Inventory

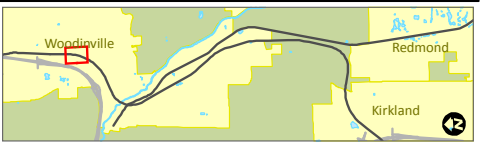
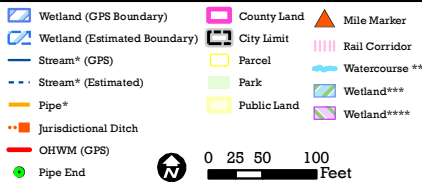
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Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

Woodinville Main Line
Map W13

Wetland Feature(s): WW18
 Water Feature(s): SW13



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory **** City of Woodinville Wetlands Inventory

Parametrix

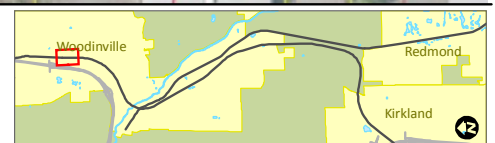


Inventoried Waters and Wetlands
 Eastside Rail Corridor
 Regional Trail Master Plan Project

Woodinville Main Line
Map W14

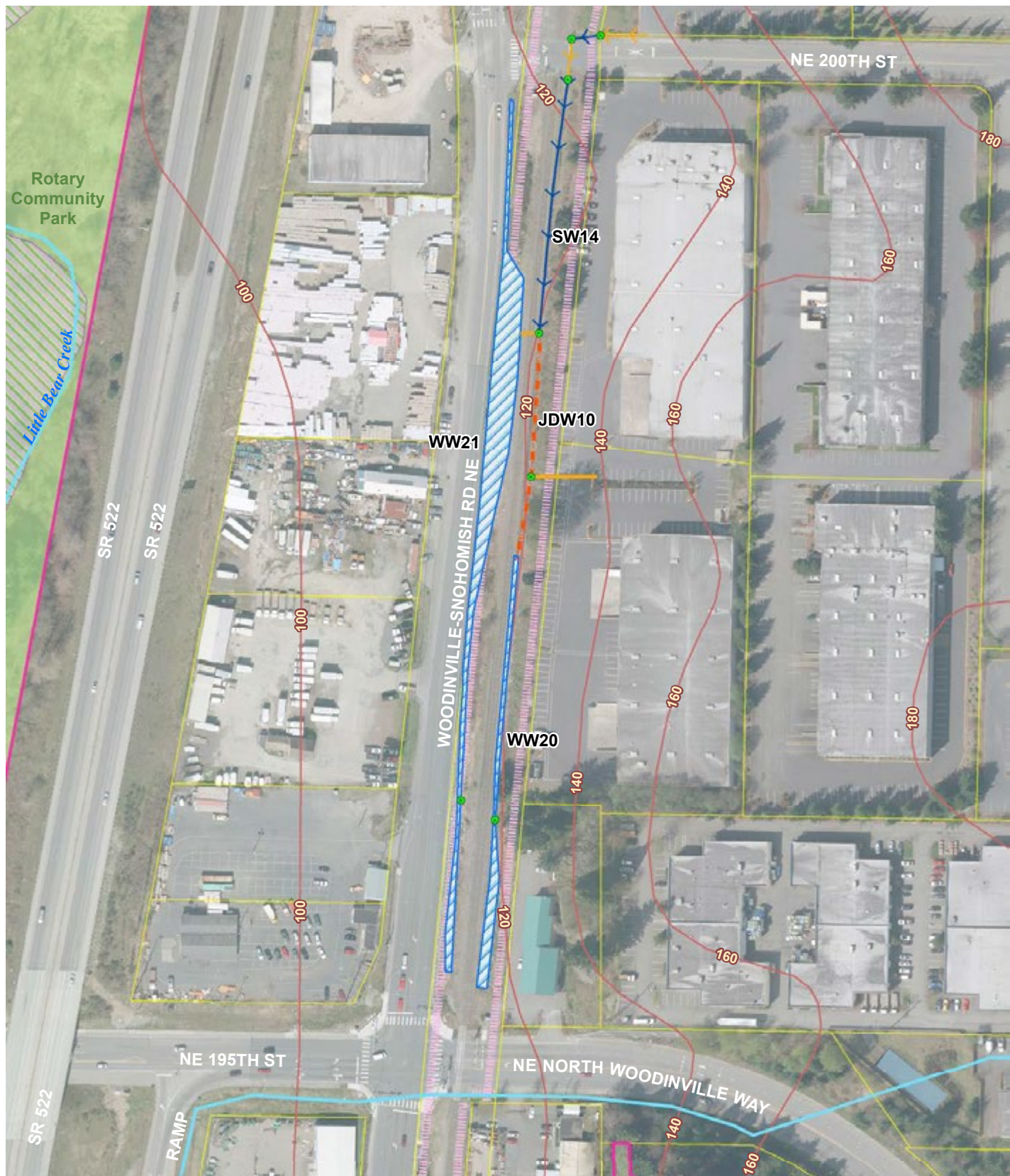
Wetland Feature(s): WW19
 Water Feature(s): JDW9

- Wetland (GPS Boundary)
- Wetland (Estimated Boundary)
- Stream* (GPS)
- Stream* (Estimated)
- Pipe*
- Jurisdictional Ditch
- OHWM (GPS)
- Pipe End
- County Land
- City Limit
- Parcel
- Park
- Public Land
- Rail Corridor
- Watercourse**
- Wetland***
- Wetland****
- Mile Marker



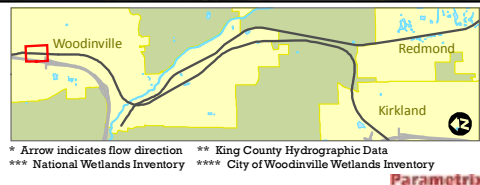
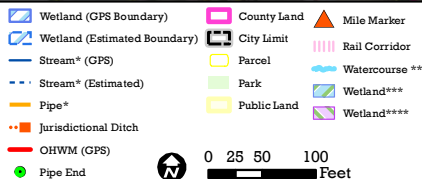
* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory **** City of Woodinville Wetlands Inventory

Parametrix



Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

Woodinville Main Line
Map W15
Wetland Feature(s): WW20, WW21
Water Feature(s): SW14, JDW10

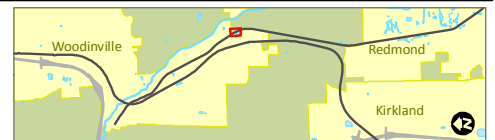
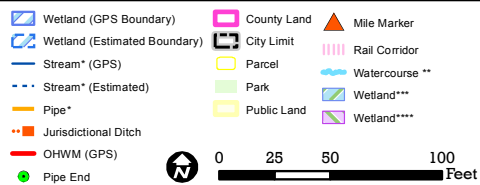




Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

Woodinville Spur
Map W16

Wetland Feature(s):
 Water Feature(s):



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory **** City of Woodinville Wetlands Inventory

Parametrix



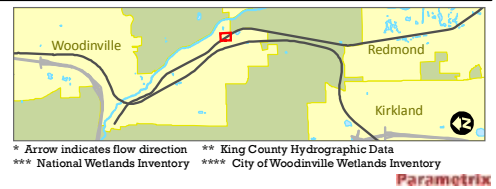
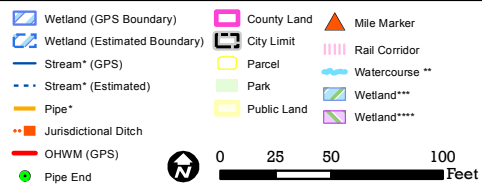
Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

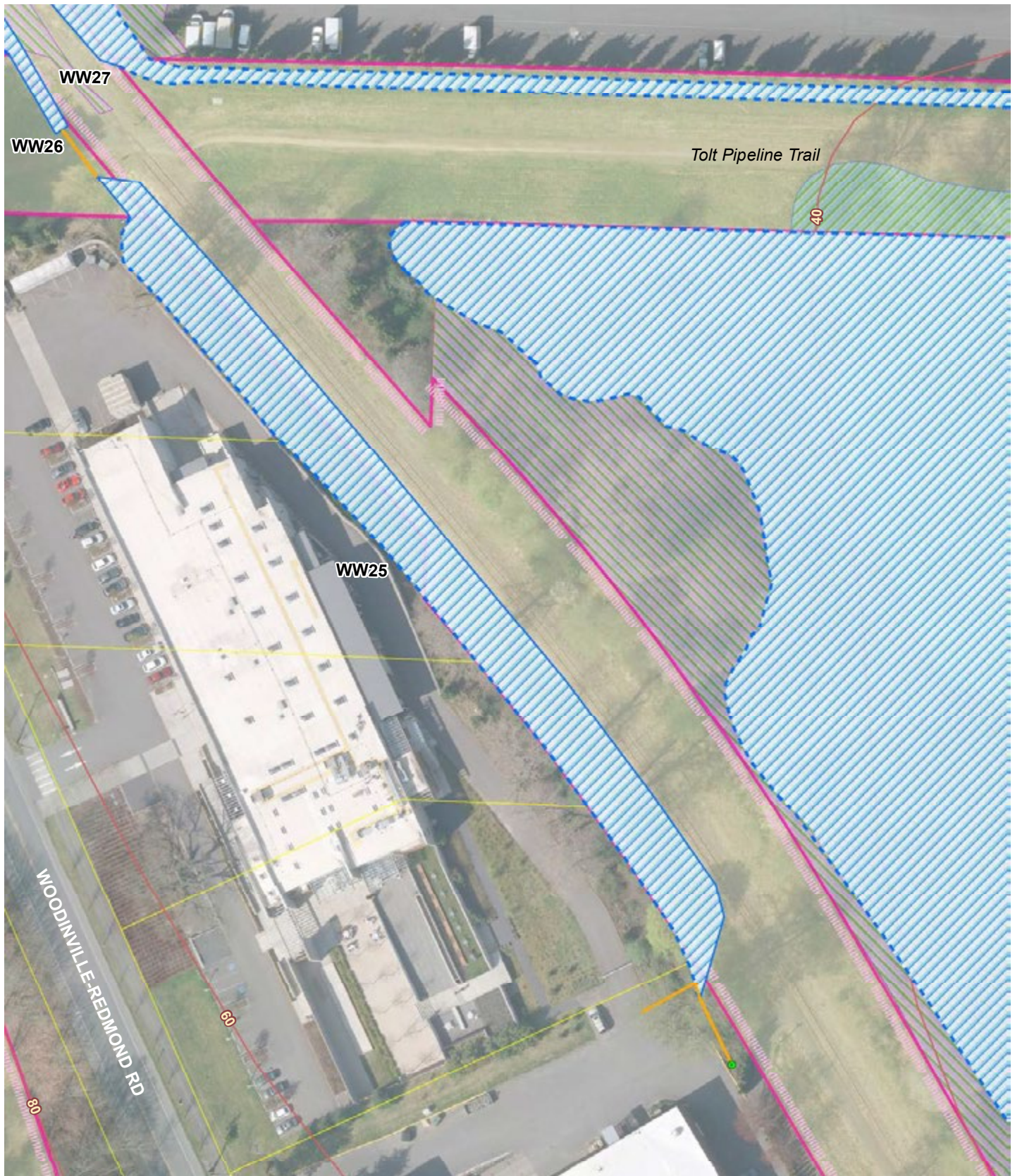
Woodinville Spur

Map W17

Wetland Feature(s):

Water Feature(s):





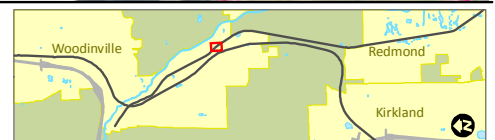
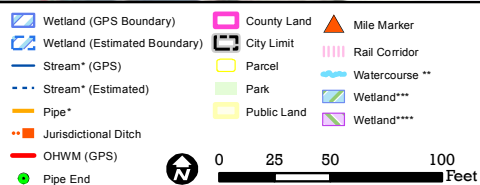
Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

Woodinville Spur

Map W18

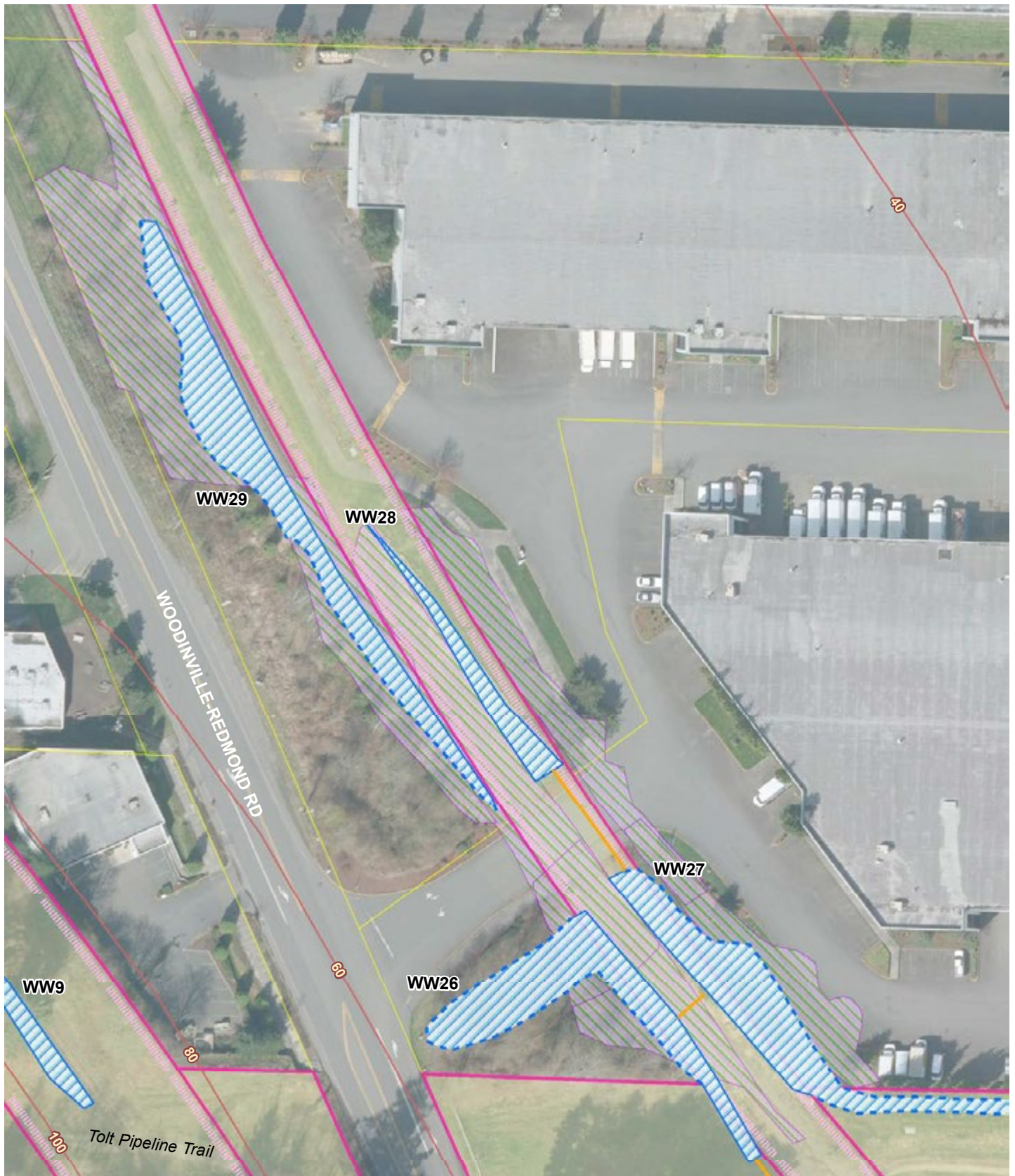
Wetland Feature(s): WW25, WW26, WW27

Water Feature(s):



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory **** City of Woodinville Wetlands Inventory

Parametrix

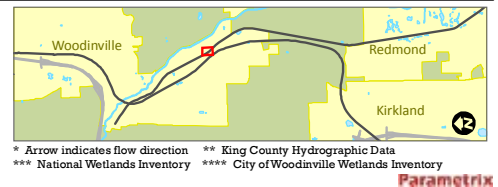
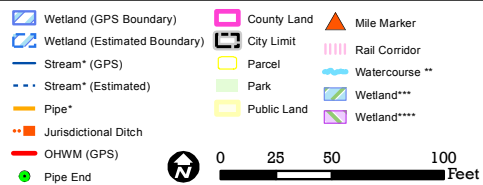


Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

Woodinville Spur

Map W19

Wetland Feature(s): WW9, WW26, WW27, WW28, WW29
 Water Feature(s):





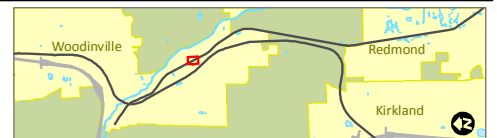
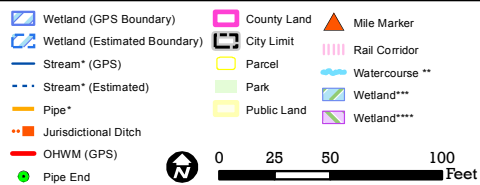
Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

Woodinville Spur

Map W20

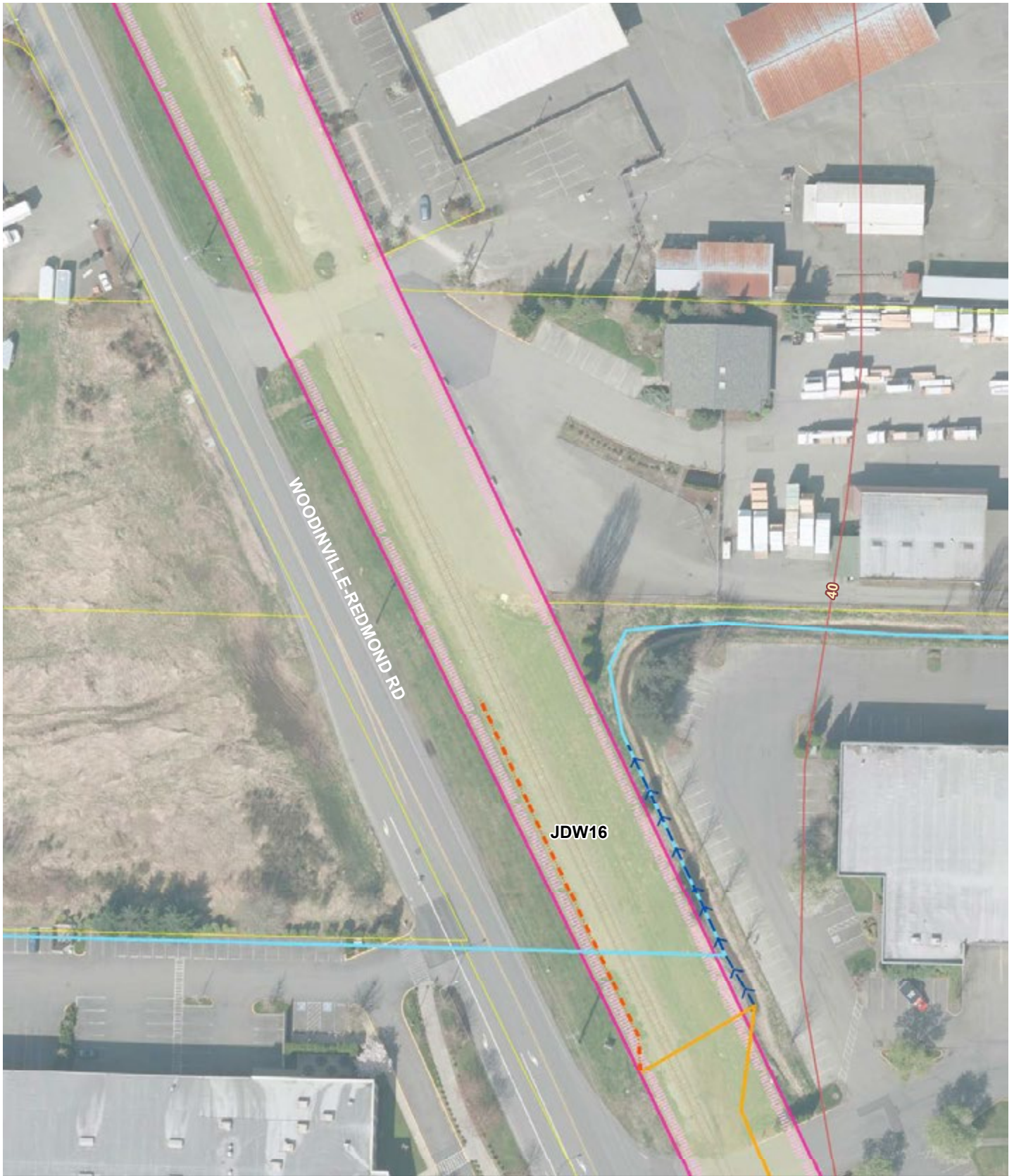
Wetland Feature(s): WW31, WW30

Water Feature(s):



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory **** City of Woodinville Wetlands Inventory

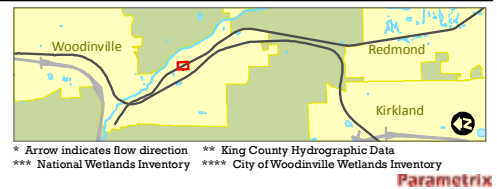
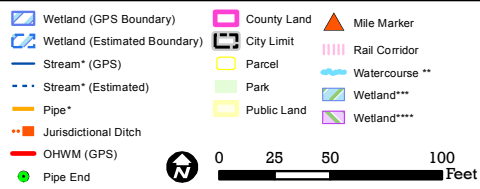
Parametrix



Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

Woodinville Spur
Map W21

Wetland Feature(s):
 Water Feature(s): JDW16





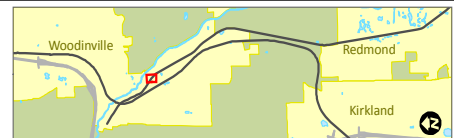
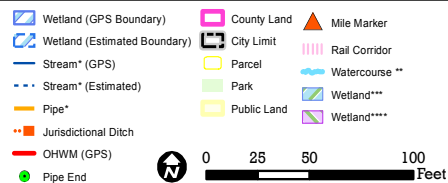
Inventoried Waters and Wetlands
Eastside Rail Corridor
Regional Trail Master Plan Project

Woodinville Spur

Map W22

Wetland Feature(s):

Water Feature(s):



* Arrow indicates flow direction ** King County Hydrographic Data
 *** National Wetlands Inventory **** City of Woodinville Wetlands Inventory

Parametrix

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JURISDICTIONAL DITCHES ATLAS

This atlas includes a table listing jurisdictional ditches and describes their connectivity with regulated waterbodies and wetlands. The jurisdictional ditches are shown on the maps in the wetland and stream atlas.

Inventory of Potential Jurisdictional Ditches within the ERC Corridor		
Jurisdictional Ditch	Atlas Jurisdiction–Map (see Appendix A)	Hydrologically Connected Regulatory Wetlands and/or Waterbodies
JDR1	Renton–Map R1	Stream SR1, to Lake Washington
JDR2	Renton–Map R3	Lake Washington
JDK1	King County–Map KC1	Stream SK2, to Lake Washington
JDB1	Bellevue–Map B1	JDB2, to Lake Washington
JDB2	Bellevue–Map B1	Lake Washington (connected upgradient to JDB1)
JDB3	Bellevue–Map B14	Wetland WB17
JDB4	Bellevue–Map B14	JDB5, to Wetland WB18
JDB5	Bellevue–Map B14	Wetland WB18 (connected upgradient to JDB4)
JDB6	Bellevue–Map B15	Wetland WB20, to Wetland WB21 and West Fork Kelsey Creek (connected upgradient to Wetland WB19)
JDB7	Bellevue–Map B15	Wetland WB23
JDKN1	Kirkland Main Line–Map K1	JDKN2, to offsite wetland and stream
JDKN2	Kirkland Main Line–Map K2	Offsite wetland and stream (connected upgradient to JDKN1)
JDKN3	Kirkland Main Line–Map K5	Wetland WKN5 and offsite wetland
JDKN4	Kirkland Main Line–Map K8	Stream SKN3
JDW1	Woodinville Main Line–Maps W2 and W3	Wetland WW5 (connected upgradient to Wetland WW4)
JDW2	Woodinville Main Line–Maps W3 and W4	Stream SW5
JDW3	Woodinville Main Line–Map W5	Wetland WW8 and SW7
JDW4	Woodinville Main Line–Map W5	Offsite (downgradient connection unknown, connected upgradient to Wetland WW9)
JDW6	Woodinville Main Line–Map W9	Stream SW11 and Wetland WW12
JDW7	Woodinville Main Line–Map W10	Wetlands WW13 to Stream SW11, Wetland WW14
JDW8	Woodinville Main Line–Map W12	Wetland WW16 and Stream SW12 (connected upgradient to Wetland WW15)
JDW9	Woodinville Main Line–Map W14	Little Bear Creek
JDW10	Woodinville Main Line–Map W15	Wetland WW20, Stream SW14 to Wetland WW21
JDW11	Kirkland Spur–Map K10	Stream SW15
JDW12	Kirkland Spur–Map K11	Wetland WW22, to JDW13, to Sammamish River
JDW13	Kirkland Spur–Map K11	Sammamish River (connected upgradient to Wetland WW22)
JDW14	Kirkland Spur–Maps K11 and K12	Wetland WW22, to JDW13, to Sammamish River
JDW15	Kirkland Spur–Maps K11 and K12	Sammamish River
JDW16	Woodinville Spur–Map W21	Offsite stream



EASTSIDE RAIL CORRIDOR REGIONAL TRAIL MASTER PLAN PROJECT

KING COUNTY DEPARTMENT OF NATURAL RESOURCES AND PARKS

WWW.KINGCOUNTY.GOV/PARKS/EASTSIDERAILCORRIDOR

ERCTRAIL@KINGCOUNTY.GOV

PARAMETRIX

PRR

TOOLE DESIGN GROUP

ESA

ICICLE CREEK ENGINEERS

UNIVERSAL FIELD SERVICES

THE LAW OFFICE OF CHARLES MONTANGE