DEVELOPMENT SERVICES DEPARTMENT
ENVIRONMENTAL COORDINATOR
450 110th Ave NE., P.O. BOX 90012
BELLEVUE, WA 98009-9012

OPTIONAL DETERMINATION OF NON-SIGNIFICANCE (DNS) NOTICE MATERIALS

The attached materials are being sent to you pursuant to the requirements for the Optional DNS Process (WAC 197-11-355). A DNS on the attached proposal is likely. This may be the only opportunity to comment on environmental impacts of the proposal. Mitigation measures from standard codes will apply. Project review may require mitigation regardless of whether an EIS is prepared. A copy of the subsequent threshold determination for this proposal may be obtained upon request.

File No. 22-118213-LO

Project Name/Address: COBU Cedar Terrace Pump Station Rehabilitation Project
3205 115th Avenue NE, 11000 NE 33rd Place, and the King County Eastrail

Planner: Drew Folsom
(425) 452-4441
dfolsom@bellevuewa.gov

Minimum Comment Period: November 28, 2022

Materials included in this Notice:

- ☑ Blue Bulletin
- ☑ Checklist
- ☑ Vicinity Map
- ☑ Plans
- ☐ Other:

OTHERS TO RECEIVE THIS DOCUMENT:

- ☑ State Department of Fish and Wildlife
- ☑ State Department of Ecology, Shoreline Planner N.W. Region
- ☑ Army Corps of Engineers
- ☑ Attorney General
- ☑ Muckleshoot Indian Tribe

Development Services

SEPA Environmental Checklist

The City of Bellevue uses this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions

The checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully and to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions.

You may respond with “Not Applicable” or "Does Not Apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies and reports. Please make complete and accurate answers to these questions to the best of your ability in order to avoid delays. For assistance, see SEPA Checklist Guidance on the Washington State Department of Ecology website.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The city may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Background

1. Name of proposed project, if applicable Cedar Terrace Pump Station Rehabilitation Project
2. Name of applicant City of Bellevue Utilities Department
3. Contact person Vanaja S. Rajah, PE Phone (425) 452-4881
4. Contact person address 450 110th Avenue NE, Bellevue, WA 98004
5. Date this checklist was prepared 11/3/2022
6. Agency requesting the checklist City of Bellevue

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7. Proposed timing or schedule (including phasing, if applicable)

Construction is proposed to start in Spring of 2023 and continue through to Summer of 2024. Construction will begin at the western-most portion of the new gravity pipeline and will proceed to the east and south. The last phase of work before Project completion will be to tie the new gravity pipeline into the existing wastewater infrastructure at the Cedar Terrace apartments property.

8. Do you have any plans for future additions, expansion or further activity related to or connected with this proposal? If yes, explain.

No, this pump station rehabilitation project will not require any future additions, expansions, or other activity in the project area. The Cedar Terrace Pump Station is a City of Bellevue wastewater pump station that exclusively serves the basement levels of some buildings in the Cedar Terrace apartment complex. It was built at the same time as the apartment complex—in 1983/1984— and was last upgraded in 1985. Bellevue Utilities obtained this station through bill of sale in 1985 from the Cedar Terrace Apartment complex owner. Due to several deficiencies that are causing frequent maintenance concerns, and interruption of sewer service for the building tenants, Bellevue Utilities will be discontinuing use of the Cedar Terrace Pump Station and providing gravity sewers that can convey the wastewater that the pump station currently discharges. The purpose of this project is to replace the existing force main with an 8-inch gravity pipeline.

9. List any environmental information you know about that has been prepared or will be prepared, that is directly related to this proposal.

In addition to this SEPA checklist, the following have been prepared: Documents for the City of Bellevue Critical Areas Land Use Permit (CALUP) and Clearing and Grading permits, including 1) a Project Narrative and Code Consistency Analysis; 2) a Geotechnical Report; 3) CSWPPP; 4) Critical Areas Study; 5) Restoration Plan; 6) Arborist Report; and 7) a Special Use Agreement with King County Parks Department.

10. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

No other applications are pending at this time, per the King County Department of Assessments (King County 2022a).

11. List any government approvals or permits that will be needed for your proposal, if known.

Permit applications have been, or will be, submitted to the City of Bellevue for 1) geotechnical boring, 2) CALUP, 3) clearing and grading, 4) haul route, and 5) special use agreement with King County Parks Department.

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12. Give a brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

The Cedar Terrace Pump Station is a City of Bellevue wastewater facility that exclusively serves the basement levels of some buildings in the Cedar Terrace apartment complex. It was built in 1983 and was last upgraded in 1985. The pump station is a suction lift station with a capacity of 200 gallons per minute. Bellevue Utilities obtained this station through bill of sale in 1985 from the Cedar Terrace Apartment complex owner. The pump station's 4-inch-diameter force main extends 58 feet to a maintenance hole (MH) where it combines with the rest of the apartment complex sewer flows from the main floor units. The force main is within the Cedar Terrace apartment property; the gravity pipe is partly on the apartment property and partly on King County park property. Due to several deficiencies that are causing frequent maintenance concerns, and interruption of sewer service for the building tenants, Bellevue Utilities will be discontinuing use of the Cedar Terrace Pump Station and providing gravity sewers that can convey the wastewater that the pump station currently discharges.

The new gravity pipeline will extend north from MH #2 through the first new maintenance hole (MH A1) to the second new maintenance hole (MH A) and then cross to the west to join the King County interceptor. The pipeline between MH #2 and MH A will be installed via open cut-and-cover construction. This segment of the pipeline is on the Cedar Terrace property (parcel 2025059160). The new gravity pipeline will continue west from MH A via trenchless construction underneath the former railroad corridor to the third new maintenance hole (MH B) in the rear parking lot of property owned by SW Bel-Kirk LLC (parcel 2025059102). The new gravity pipeline will continue west from MH B via open cut-and-cover construction through the parking lot to the fourth new maintenance hole (MH C), which connects to an existing Bellevue sewer pipeline in the SCGVF2 Evergreen Office Park property. The project will cross 5 parcels and occupy approximately 845 linear feet, disturb approximately 31,335 square feet of area, and require 1,047 cubic yards of excavation and 1,148 cubic yards of fill.

13. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and the section, township and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The project is located within the City of Bellevue and S20, T25N, R05E. The proposed linear project area crosses 5 King County tax parcels: 2025059101 (the project occurs only at the eastern edge), 2025059102 (the project crosses the northern section), 2025059117 (the project crosses laterally), 2025059034 (the project crosses laterally), and 2025059160 (the project runs along the western edge). The project area is therefore associated with the following addresses from east to west: 3205 115TH AVE NE, 11120 NE 33RD PL, and 11000 NE 33RD PL. In summary, the proposed project area will cross through 2 privately owned, commercial business parks, an undeveloped King County parcel, a King County-owned trail corridor, and a privately owned apartment complex.

Environmental Elements

Earth

1. General description of the site:
   - ☑ Flat
   - ☑ Rolling
   - ☐ Hilly
   - ☑ Steep Slopes
   - ☐ Mountainous
   - ☐ Other _____

2. What is the steepest slope on the site (approximate percent slope)? 70%

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3. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

Per the USDA Web Soil Survey, soils along the project area are all the same series of Everett very gravelly sandy loam with 15% to 30% slopes (USDA 2022). Per the Geotechinical Report prepared for the project, the soils encountered within the project site during geotechnical investigations include: fill, recessional outwash, advance outwash, glaciolacustrine, and till-like (Shannon & Wilson 2022). Between MH2 and MHA, the soils consist primarily of fill over recessional outwash deposits consisting of glaciolacustrine and advance outwash. The fill is 7 to 12 feet thick and is loose to medium dense, silty sand and silty sand with gravel. The recessional outwash ranges from 7 to 15+ feet thick and consists of loose to medium dense, silty sand and silty sand with gravel. The glacioslacustrine is 7 feet thick and consists of hard, silty clay and dense, silty sand and the underlying advance outwash consists of very dense, silty sand. At the trenchless portion of the proposed construction, the soil consists of up to 38 feet of loose to medium dense fill within the embankment. Underlying the fill is about 11 feet of glaciolacustrine and over 40 feet of advance outwash. The fill consists of loose to medium dense, silty sand, poorly graded sand with silt, silty sand with gravel, and silty gravel with sand. The glaciolacustrine consists of very dense, sandy silt and the underlying advance outwash consists of very dense, silty sand, poorly graded sand, and sandy silt. Between MHB and MHC, soils consist of 0 to 7 feet of recessional outwash over advance outwash and till-like deposits. The recessional outwash consists of medium dense to dense, silty sand and silt. The advance outwash and till-like deposits consist of very dense, silty sand and silty sand with gravel.

4. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

Per the City of Bellevue Map Viewer, the project area crosses some mapped Steep Slopes along the King County-owned trail corridor (City of Bellevue 2022). However, the project area does not occur in a liquefaction-prone area or a potential or known slide area. The geotechnical study has determined that there are no indications of landslides or unstable soils within the project area.

5. Describe the purpose, type, total area and approximate quantities and total affected area of any filling, excavation and grading proposed. Indicate the source of the fill.

The project will require clearing and grading actions, specifically excavation and backfilling, throughout most of the project area in order to install and connect the new gravity pipeline. Only in the 2 King County-owned parcels will the gravity pipeline be installed via trenchless construction. In the other 3 parcels, open-cut construction will be used for pipeline installation. The total area of ground disturbance for open cut-and cover will be 28,115 square feet, with a total of 1,047 CY of excavation and 1,148 of fill. Fill material will be the retained native soils from the excavation to the extent possible.

6. Could erosion occur as a result of clearing, construction or use? If so, generally describe.

The project is intended to be as minimally invasive as possible by means of trenchless construction where possible, and the minimum necessary open cut-and-cover construction elsewhere. The construction will occur in 3 distinct areas: the eastern-most portion runs flat along the toe of the slope created by the King County trail corridor; the central portion will be placed through trenchless construction under the trail corridor, and the western-most segment runs through a flat and mostly developed area (parking lot). Because the pipeline is to be installed at the toe of a slope, trenchlessly, and in a flat, developed area, there is very little risk of erosion from clearing or construction. Additionally, best management practices (BMPs) will be employed to prevent erosion and sedimentation. See Item #8 and the list of proposed BMPs on the following page.

7. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? 0%

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List of Proposed Best Management Practices (BMPs) for Erosion Control:

• A Temporary Erosion and Sediment Control (TESC) Plan and a Source Control Plan will be developed and implemented for all clearing, vegetation removal, grading, ditching, filling, soil compaction, or excavation. The BMPs in the plans will be used to control sediments from all vegetation removal or ground disturbing activities.

• The contractor will designate at least one employee as the erosion and spill control (ESC) lead, also called a Certified Erosion and Sediment Control Lead (CESCL; BMP C160). The CESCL will be responsible for the installation and monitoring of erosion control measures and maintaining spill containment and control equipment. The CESCL will also be responsible for ensuring compliance with all erosion and sediment control requirements.

• All exposed soils will be stabilized during the first available period, and no soils will remain without stabilization for more than two days from October 1 to April 30 or for more than seven days from May 1 to September 30.

• Disturbed areas will be returned to existing or improved conditions (e.g., replanting or repaving) as soon as practical after construction is completed.

• Mulching (BMP C121): Mulching soils provides immediate temporary erosion protection and additionally enhances plant establishment. Mulching may be used in combination with seeding and planting.

• Topsoiling/Composing (BMP C125): Topsoiling and composting provide a suitable growth medium for final site stabilization with vegetation. Although the priority is to retain existing native soils and duff layers, topsoil and compositing may be used where project construction has resulted in poor soil quality.

• Sodding (BMP C124): Sodding established turf for immediate erosion protection and to stabilize drainage paths. Sod may be installed in combination with seeding and planting to reestablish turf in the areas of existing lawn on the Project site.

• Nets and Blankets (BMP C122): Erosion control blankets will be installed on steep slopes that are susceptible to erosion and where ground-disturbing activities have occurred. This will prevent erosion and assist with establishment of native vegetation.

• Temporary and Permanent Seeding (BMP C120): Seeding reduces erosion by stabilizing exposed soils. Seeding may be used in combination with planting throughout the project on disturbed areas that have reached final grade.

• Plastic Covering (BMP C123): Plastic covering provides immediate, short-term erosion protection to slopes and disturbed areas.

• All temporary and permanent erosion and sedimentation control measures will be inspected, maintained, and repaired on a regular basis to ensure continued performance of their intended functions.

 Fences will be inspected immediately after substantial rainfall and at least daily during prolonged rainfall.

 Sediment will be removed as it collects behind fences and prior to their final removal.

 Regular street cleaning will occur where necessary to control mud and dust, and minimization measures will be taken to minimize tracking of sediment onto public roadways by construction vehicles.

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8. Proposed measures to reduce or control erosion, or other impacts to the earth, if any.

The project will use standard sediment and erosion control BMPs, including perimeter sediment control around all excavated areas or disturbed soils (silt fence, straw wattles, sand bags, etc.), covering stockpiles with plastic sheeting, and using catch basin filter inserts in all storm drain inlets near the project area. See the previous page (4.1) for a list of proposed BMPs for erosion control.

Air

1. What types of emissions to the air would result from the proposal during construction, operation and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

Emissions to the air could only result from the proposed project during the construction phase. Construction-generated emissions could result from the use of material-delivery vehicles and heavy machinery on site, including jackhammers and backhoes for open-cut excavation or drill rigs for the trenchless construction. However, any construction-generated emissions are expected to be minimal and not degrade the background air quality. Similarly, there should be no impacts to air quality from sewer off-gassing. All project operations will occur below ground and will not require any outside power source (gravity pipeline). Project maintenance is not anticipated to result in emissions unless excavation is required to access the pipeline.

2. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

There are no off-site sources of emissions or order that could affect the proposed project.

3. Proposed measures to reduce or control emissions or other impacts to air, if any.

No measures are proposed.

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Water

1. Surface Water
   a. Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

Per the Critical Area Study completed for the project, there are no wetlands located within 300 feet of the project site (Confluence 2022). No open water channels were observed on the project site parcels or within 300 feet. However, an unnamed tributary to Yarrow Creek is culverted through the project site, and quickly flowing water was observed at catch basin inlets throughout parcels 2025059160 and 2025059102. This tributary's flow is briefly exposed at the eastern edge of parcel 2025059102 where the culvert comes out from the Eastrail multi-use corridor berm and directs the tributary water into a detached standpipe. From this point, the tributary flows in an uninterrupted culvert to the southwestern edge of parcel 2025059102 along NE 33rd Place where it is daylighted into an open channel along the roadside. Fish use of this stream is highly unlikely given that the majority of the feature is in culverts through the project site, which was confirmed by WDFW (2022). This stream is a Type O water with no critical area buffer per Bellevue LUC 20.25H.075(C)(1)(b). There are no other natural surface water bodies in the immediate vicinity of the site.

   b. Will the project require any work over, in or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

The Project alignment will cross the aforementioned unnamed tributary. However, the intersection of these features has been designed as to not disturb the existing culvert and to ensure that the stream could be daylighted in the future without impacting the project, per Bellevue LUC 20.25H.090.

   c. Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of the fill material.

No material will be added to (fill) or removed from (dredge) any surface water or wetland.

   d. Will the proposal require surface water withdrawals or diversions? Give a general description, purpose and approximate quantities, if known.

No, the proposed project will not require surface water withdrawals or diversions of any kind.

   e. Does the proposal lie within a 100-year floodplain? No.
   If so, note the location on the site plan.

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f. Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No, the proposal does not involve any discharges of waste materials to surface waters.

2. Ground Water

a. Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

Groundwater withdrawals during dewatering will be necessary during the open cut-and-cover construction. Sump pumps and wells may be used at the discretion of the contractor to temporarily dewater these work areas where the excavation depths are within approximately three feet below the groundwater table. Turbid water will be removed from site via vactor trucks. No discharges will be made into the groundwater. The approximate quantity of groundwater estimated to be withdrawn during construction is 20 gpm.

b. Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals…; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

None; the proposed project will not discharge waste material to the ground.

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3. Water Runoff (including stormwater)
   a. Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Stormwater runoff during construction will occur at semi-pervious and impervious areas within the limits of construction, and in some locations from adjacent upland areas. Quantities will vary based on precipitation events. The project will not result in an increase in impervious area and so ultimately stormwater runnoff will not increase due to the project. Stormwater runoff will infiltrate, discharge to surface drainage features, or be collected in a conveyance system and ultimately flow into existing stormwater conveyance or sanitary sewer systems. The project will use standard sediment and erosion control BMPs, including perimeter sediment control around all excavated areas or disturbed soils (silt fence, straw wattles, sand bags, etc.) and covering stockpiles with plastic sheeting to prevent the generation of turbid water and to retain water on site. See Page 8.1 for a list of proposed runoff BMPs.

   b. Could waste materials enter ground or surface waters? If so, generally describe.

No, the project will not generate waste materials that could enter ground or surface waters. BMPs will be in place to avoid unanticipated releases of sewage during construction.

   c. Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

The proposed project will not alter or impact drainage patterns on or around the site, since the completed project will occur entirely underground. The ground surface of the project area will be restored to the existing condition with one minor exception. The only location that is changing from existing conditions is the 150-foot section of fill to match the existing grade along the access road. The open cut-and-cover area in the Cedar Terrace property will also include compaction on top of the pipe and installation of ecology blocks to control erosion along the detention pond slope. Ecology blocks will be placed on the downhill side of the proposed path along the edge of the detention pond. This will provide support to the path and bank and will prevent erosion of the fill over the top of the pipe. The ecology blocks will form a wall, two blocks high, for approximately 180 feet.

Indicate any proposed measures to reduce or control surface, ground and runoff water, and drainage pattern impacts, if any.

Measures to reduce or control surface, ground, and runoff as well as drainage patter impacts are included on Page 8.1. Other relevant BMPs are included on Page 4.1

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List of Proposed BMPs for Water Runoff:

• Preserving Natural Vegetation (BMP C101): The purpose of preserving natural vegetation is to reduce erosion wherever practicable. Limiting site disturbance is the single most effective method for reducing erosion. Natural vegetation should be preserved on steep slopes, near perennial and intermittent watercourses or swales, and on building sites in wooded areas. Trees and other vegetation within the work area to be preserved during construction will be designated with high visibility fencing at a sufficient distance to prevent soil compaction or root damage. Additionally, during construction, the duff layer, native topsoil, and vegetation will be retained to the maximum extent practicable.

• High Visibility Fence (BMP C103): High-visibility fencing is intended to restrict clearing and construction to the approved limits and prevent disturbance in those areas that should be protected. Prior to beginning land disturbing activities, the work area limits will be clearly delineated with high visibility fencing. Additionally, any sensitive areas and their buffers or significant trees to be retained will be marked for preservation.

• Tree Protection during Construction (BMP T101): The tree protection procedures and requirements as outlined under T101 will be completed, including:

  The submittal of a Tree Protection Plan by the project arborist that outlines the location and specifics of each significant tree (Tree Solutions 2022).

  The installation of tree protection fencing around the tree protection zone at a sufficient distance to prevent both above- and below-ground impacts.

  The installation of mulch or woodchips in the tree protection zone.

  Long-term care and monitoring of preserved trees.

  The supervision of all tree protection activities by the Project arborist, as needed.

• Wattles (BMP C235) will be implemented as defined in the 2019 SWMMWW to ensure that no sedimentation occurs. Wattles are temporary erosion and sediment control barriers consisting of straw, compost, or other material that is wrapped in netting made of natural plant fiber or similar encasing material. They reduce the velocity and can spread the flow of rill and sheet runoff and can capture and retain sediment. Wattles will be installed as needed to slow flows and as secondary protection along silt fence.

• Protect drain inlets (catch basins) from turbid water or sediment discharges using drain inlet protection (BMP C220). Inlet protection prevents coarse sediment from entering drainage systems prior to permanent stabilization of the disturbed area. The project will provide protection for all storm drain inlets downslope and within 500 feet of a disturbed or construction area unless those inlets are preceded by a sediment trapping BMP. Storm drain inlet protection is required at all times for functioning catch basins.

Plants

1. Check the types of vegetation found on the site:

- ☑ deciduous tree: alder, maple, aspen, other Red alder, black cotton wood, bigleaf maple, willo
- ☑ evergreen tree: fir, cedar, pine, other Douglas fir, western red-cedar, shorepine
- ☑ shrubs
- ☑ grass
- ☐ pasture
- ☐ crop or grain
- ☐ orchards, vineyards or other permanent crops
- ☐ wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other _____
- ☐ water plants: water lily eelgrass, milfoil, other _____
- ☑ other types of vegetation Herbaceous ground cover, invasive Himalayan blackberry thickets, orn

2. What kind and amount of vegetation will be removed or altered?

Vegetation to be disturbed is either a native forest community, invasive blackberry thicket, or ornamental trees and shrubs in the developed western portion. The project intends to keep vegetation disturbance and removal to a minimum to reduce impacts to the site, and it is estimated that 20,985 square feet of vegetation will be removed and replaced. The Project proposes to remove 13 significant trees from the site, including 2 trees within a steep slope critical area, as described in the Critical Areas Study (Confluence 2022). The project will replace 27 trees (Confluence et al. 2022).

3. List any threatened and endangered species known to be on or near the site.

Per the USFWS iPaC list, no threatened or endangered plant species are known to be on or near the site. Per the USFWS iPaC list, the following animal species may occur near the site: Marbled Murrelet (Brachyramphus marmoratus), Streaked Horned Lark (Eremophila alpestris strigata), Yellow-billed Cuckoo (Coccyzus americanus), Bull Trout (Salvelinus confluentus), and Monarch Butterfly (Danaus plexippus). It is highly likely that these birds or insect will occur on-site, and it is impossible that the bull trout occurs on-site given the lack of streams adjacent to the area. Salmonids have been documented in the nearby Yarrow Creek, including fall Chinook salmon (Oncorhynchus tshawytscha) and winter steelhead trout (Oncorhynchus mykiss), but not in the culverted streams associated with the project site (WDFW 2022). Bull trout have not been identified in Yarrow Creek.

4. Proposed landscaping, use of native plants or other measures to preserve or enhance vegetation on the site, if any.

The portions of the project area that occur as natural open spaces and that are disturbed during the project construction will be replanted with native species after the construction is completed, including a mix of shrubs and groundcover. Replanting will include planting 27 native trees for the 13 trees that will be removed.

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5. List all noxious weeds and invasive species known to be on or near the site.

Himalayan blackberry (Rubus armeniacus) and English ivy (Hedera helix).

Animals

1. List any birds and other animals which have been observed on or near the site or are known to be on or near the site. Examples include:

   Birds: ☐hawk, ☐heron, ☐eagle, ☑songbirds, ☐other _____

   Mammals: ☐deer, ☐bear, ☐elk, ☐beaver, ☐other _____

   Fish: ☐bass, ☐salmon, ☐trout, ☐herring, ☐shellfish, ☐other _____

2. List any threatened and endangered species known to be on or near the site.

Per the USFWS iPaC list, no threatened or endangered plant species are known to be on or near the site. Per the USFWS iPaC list, the following animal species may occur near the site: Marbled Murrelet (Brachyramphus marmoratus), Streaked Horned Lark (Eremophila alpestris strigata), Yellow-billed Cuckoo (Coccyzus americanus), Bull Trout (Salvelinus confluentus), and Monarch Butterfly (Danaus plexippus). It is highly likely that these birds or insect will occur on-site, and it is impossible that the bull trout occurs on-site given the lack of streams adjacent to the area. Salmonids have been documented in the nearby Yarrow Creek, including fall Chinook salmon (Oncorhynchus tshawytscha) and winter steelhead trout (Oncorhynchus mykiss), but not in the culverted streams associated with the project site (WDFW 2022). Bull trout have not been identified in Yarrow Creek.

3. Is the site part of a migration route? If so, explain.

The site is not part of a known migration route for any species.

4. Proposed measures to preserve or enhance wildlife, if any.

The project proposes to minimize impacts to habitat (i.e., soils, water, vegetation) generally, and all areas of disturbance will be restored to the existing condition or better after project completion.

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5. List any invasive animal species known to be on or near the site.

No invasive animal species are known to be on or near the site.

Energy and Natural Resources

1. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

The completed project--a wastewater gravity pipeline--will not require any form of energy to operate.

2. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No, the proposed project, once completed, will occur completely underground and therefore have no impact on the potential use of solar energy by adjacent properties.

3. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any.

None; the finished project will not use energy, and energy used during the construction of the project is the minimum required to complete the project.

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Environmental Health

1. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill or hazardous waste, that could occur as a result of this proposal? If so, describe.

The construction phase of this project will require the use of vehicles and heavy machinery, and as such, there are associated risks with the toxic fuels (e.g., gasoline and oil) and materials (e.g. asphalt) used to operate these machines. There is a small risk of these materials being spilled from machinery during construction, or catching fire. Appropriate best management practices will be used when fueling, operating, and maintaining this equipment. There should be no risk of exposure to sewage or other toxic chemicals or hazardous wastes.

a. Describe any known or possible contamination at the site from present or past uses.

There are no known contaminations at the site.

b. Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

There are no known hazardous chemicals or site conditions within the project area.

c. Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

During project construction, some toxic chemicals will be used on site, specifically gasoline, oil, asphalt, and other materials used in pipeline construction and the operation of heavy machinery. These materials, if stored on site, will be stored in secondary containment. Appropriate best management practices will be used when fueling, operating, and maintaining this equipment and when using any toxic building materials. No toxic or hazardous chemicals will be produced during the operating life of the project.

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d. Describe special emergency services that might be required.

No special emergency services will be required during project construction or operation.

e. Proposed measures to reduce or control environmental health hazards, if any.

During construction, BMPs will be implemented to minimize the potential for spills or mechanical failures to occur, and to minimize the potential for adverse effects from fuels, fluids, and lubricants to workers, nearby residents, or the environment. Any toxic or hazardous materials kept on site for any amount of time will be retained in proper packaging and secondary containment. Any machinery that requires toxic or hazardous materials to function will be regularly maintained and checked for leaks. Fueling equipment will occur off-site or over secondary containment (spill pads, ecopans, etc.). During construction, the contractor will be responsible for complying with all applicable regulations. Applicable Project BMPs identified above will also reduce or control environmental health hazards. Additionally, the Project will comply with following regulations by the cities of Bellevue: fire code, wastewater treatment codes, and construction spill protocols.

2. Noise

a. What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

The project occurs between I-405 and SR-520 near the intersection of these 2 major highways. Traffic from these highways as well as Northrup Way could impact the site. However, the project occurs in a relatively quiet area and is adjacent to an apartment complex, a green belt with a trail, and business park. That being said, the project is a utility project that will not be impacted by noise.

b. What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

On a long-term basis, the project will not create any noise (as a buried, wastewater gravity pipeline). On a short-term basis, specifically during construction, the heavy machinery required to install the pipeline will create elevated noise levels in and around the project area. Noise-generating machinery may include the drill rig, jack hammer, excavator, trucks, and other such equipment. The loudest of these machines may be the jackhammer at 95 Lmax at 50 feet (WSDOT 2021). Most noise will be generated from site during normal work hours (8:00AM to 5:00PM). The only exception to this is the need for a pump during horizontal directional drilling, which is needed for 24 hours during the drilling operation.

c. Proposed measures to reduce or control noise impacts, if any.

• The contractor will equip construction equipment engines with adequate mufflers, intake silencers, and engine enclosures to reduce their noise by 5 to 10 dBA.
• The contractor will turn off construction equipment during prolonged periods of non-use to eliminate extraneous noise.
• The contractor will maintain all equipment and train equipment operators in good practices to reduce noise levels.
• Temporary diesel generators and temporary pumping equipment to be operated at night will be required to be fitted with sound attenuation equipment.

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Land and Shoreline Uses

1. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

   The site and adjacent properties are used for multi-family residential appartment complexes, light industry (office parks), and recreation (the King County trail corridor). The proposed project will not affect current or projected land uses on adjacent properties. The project will allow the multi-family residential use to continue by providing ongoing wastewater services.

2. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to non-farm or non-forest use?

   No, not applicable.

   a. Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling and harvesting? If so, how?

      No, not applicable.

3. Describe any structures on the site.

   The site, composed of 5 parcels, includes multi-family residential apartments (parcel #2025059160), and office buildings and parking lots (parcel #2025059101 and #2025059102). There are no structures on parcel #2025059034 or #2025059117.

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4. Will any structures be demolished? If so, what?

Only the defunct Cedar Terrace Pump Station will be decommissioned and demolished. This will result in a reduction of impervious surface area, which will be replanted with trees.

5. What is the current zoning classification of the site? R-20 (Multi-family residential) and O (office).

6. What is the current comprehensive plan designation of the site? Multi-family res/light industrial.

7. If applicable, what is the current shoreline master program designation of the site?

Not applicable.

8. Has any part of the site been classified as a critical area by the city or county? If so, specify.

King County iMap does not show any critical areas mapped within or near the project area (King County 2022b). The City of Bellevue Map Viewer shows steep slopes within and adjacent to the site, as well as a stream just outside of the site (City of Bellevue 2022). The steep slopes and Type O (culverted) stream have been confirmed during the site investigation.

9. Approximately how many people would reside or work in the completed project? 0

10. Approximately how many people would the completed project displace? 0

11. Proposed measures to avoid or reduce displacement impacts, if any.

None.

12. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any.

None; the proposed project is a small, underground wastewater utility rehabilitation project, and therefore it is compatible with the existing and projected land uses (i.e., residential and office park).

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13. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any.

None; there are no adjacent agricultural or forest lands of commercial significance.

Housing

1. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None; no housing units will be provided as a part of this project.

2. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None; no housing units will be eliminated as a part of this project.

3. Proposed measures to reduce or control housing impacts, if any.

None.

Aesthetics

1. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

None; all proposed structures will occur below ground (buried gravity pipeline).

2. What views in the immediate vicinity would be altered or obstructed?

None; all proposed structures will occur below ground.

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3. Proposed measures to reduce or control aesthetic impacts, if any

None.

Light and Glare

1. What type of light or glare will the proposal produce? What time of day would it mainly occur?

Project construction will take place largely during daylight hours. No artificial light will be used for work occuring between April and September. Temporary site lighting may be used at the beginning and end of work days during construction when daylight hours are short in the fall and winter. The proposed project will not create light or glare during the operation phase of the project.

2. Could light or glare from the finished project be a safety hazard or interfere with views?

No, the finished project will not create any light or glare (it will be a buried wastewater utility).

3. What existing off-site sources of light or glare may affect your proposal?

None.

4. Proposed measures to reduce or control light and glare impacts, if any.

During construction, all exterior lights will be focused or shielded as necessary to cast light only in areas that require it and to minimize light spilling onto neighboring properties. No permanent new lighting is proposed.

Recreation

1. What designated and informal recreational opportunities are in the immediate vicinity?

The project bisects the King County trail corridor and the Eastrail Multi-Use Trail, which can be used for walking, biking, nature viewing, etc. However, the gravity pipeline will be conveyed under the trail corridor via horizontal directional drilling, so the trail will not be impacted.

2. Would the proposed project displace any existing recreational uses? If so, describe.

No.

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3. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any.

None, the project will neither impact recreation opportunities or create recreational opportunities.

Historic and Cultural Preservation

1. Are there any buildings, structures or sites located on or near the site that are over 45 years old listed in or eligible for listing in national, state or local preservation registers located on or near the site? If so, specifically describe.

Per the DAHP WISAARD, there are no historic buildings, structures, or sites within or near the project area. The closest eligible historical property--the Northup Homestead/Dairy and Cherry Farm--is over 1,000 feet from the project area.

2. Are there any landmarks, features or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

The DAHP WISAARD predictive model for environmental factors with archaeological resources lists the project area are occurring within both a moderately low risk area and moderate risk area. The moderately low risk area occurs at the eastern portion of the site, and the moderate risk area occurs to the west. No material evidence has been observed at these sites, and no professional studies have been conducted within the project area.

3. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

Potential impacts to cultural and historic resources on or near the project area were assessed via the DAHP WISAARD online database, that shows both the inventory of eligible properties and the publicly registered properties and landmarks, but also has a predictive model for archaeological resources.

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4. Proposed measures to avoid, minimize or compensate for loss, changes to and disturbance to resources. Please include plans for the above and any permits that may be required.

None.

Transportation

1. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

The project area is served by Northup Way and 115th Ave NE, in addition to being very near I-405 and SR-520, which also directly service the area. The completed project will not require ongoing access to the existing street system. During construction, the site will be accessed from the Cedar Terrace Apartments off of 115th Ave NE as well as the Evergreen Office Park and SW Bel-Kirk LLC property off of NE 33rd Pl and Northup Way. The construction site access is shown on the site plans.

2. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

Yes, there are multiple bus stops along Northup Way. The project construction and operation will not use or impact public transit, however.

3. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

None, not applicable.

4. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

No, not applicable.

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5. Will the project or proposal use (or occur in the immediate vicinity of) water, rail or air transportation? If so, generally describe.

No, not applicable.

6. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and non-passenger vehicles). What data or transportation models were used to make these estimates?

The completed project will not generated additional vehicular trips per day. However, the construction of the project will temporarily increase the number of vehicular trips per day for hauling equipment.

7. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No, not applicable.

8. Proposed measures to reduce or control transportation impacts, if any.

None.

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Public Service

1. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

No.

2. Proposed measures to reduce or control direct impacts on public services, if any.

None.

Utilities

1. Check the utilities currently available at the site:
   - ☑ Electricity
   - ☐ natural gas
   - ☑ water
   - ☑ refuse service
   - ☑ telephone
   - ☑ sanitary sewer
   - ☐ septic system
   - ☐ other

2. Describe the utilities that are proposed for the project, the utility providing the service and the general construction activities on the site or in the immediate vicinity which might be needed.

No utilities are proposed for the project, as the project itself is a wastewater utility project intended to improve wastewater service for the Cedar Terrace Apartment Complex.

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Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature Marlene Meaders

Name of signee Marlene Meaders

Position and Agency/Organization Principal, Confluence Environmental Company

Date Submitted 11/3/2022

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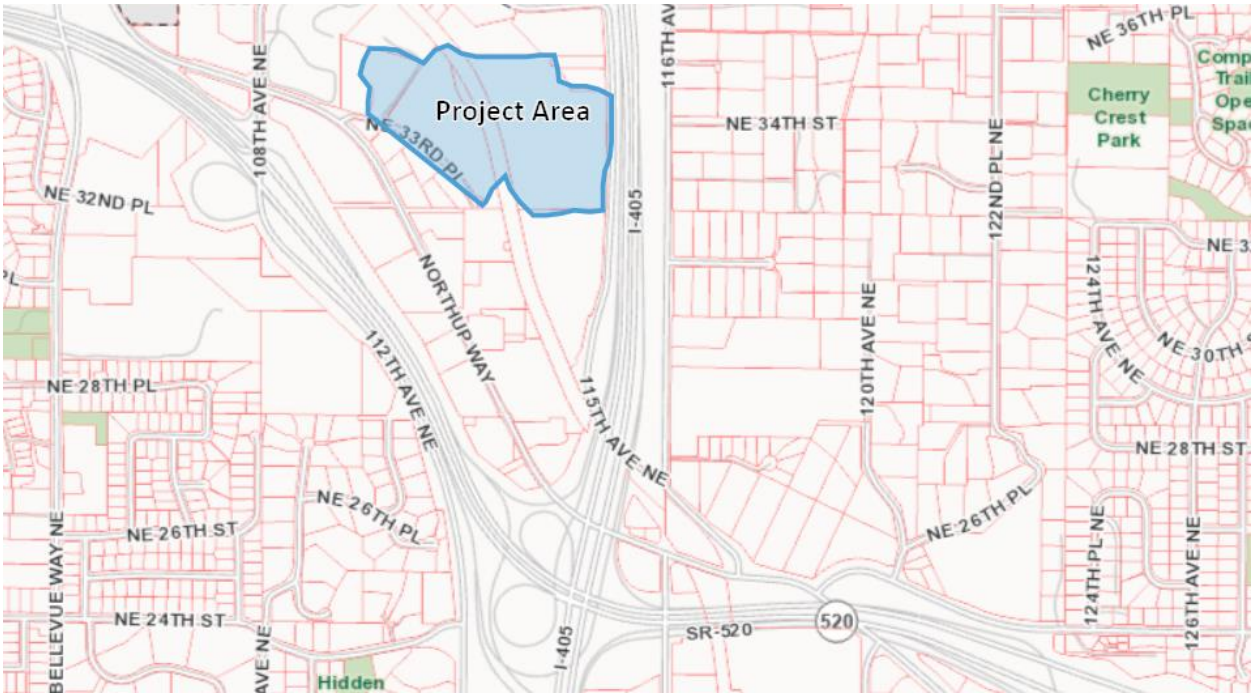
Vicinity Map



Cedar Terrace Pump Station Rehabilitation

Critical Areas Study

TETRA TECH

CONFLUENCE ENVIRONMENTAL COMPANY

September 2022

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Cedar Terrace Pump Station Rehabilitation: Critical Areas Study

September 2022

PREPARED FOR

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1. INTRODUCTION

The Cedar Terrace Pump Station is a City of Bellevue (the City or Bellevue) wastewater pump station that exclusively serves the basement levels of some buildings in the Cedar Terrace apartment complex. The pump station is at 3205 115th Avenue NE, Bellevue, Washington, located on the apartment complex private property owned by Essex Property Trust Inc. (parcel 2025059160). It was built at the same time as the apartment complex—in 1983/1984— and was last upgraded in 1985. The pump station is a suction lift station with a capacity of 200 gallons per minute. Bellevue Utilities obtained this station through bill of sale in 1985 from the Cedar Terrace Apartment complex owner.

The existing Cedar Terrace Pump Station includes a 4-inch-diameter force main that extends south for 58 feet to a maintenance hole (MH) where it combines with the rest of the apartment complex sewer flows from the main floor units (Figure 1). From there, an 8-inch, 90-foot-long ductile iron gravity pipe conveys flow to a discharge point into an 84-inch-diameter King County interceptor. The force main is within the Cedar Terrace apartment property; the gravity pipe is partly on the apartment property and partly on King County park property. The King County park property is a former Burlington Northern Santa Fe (BNSF) Railway Company corridor that is currently used as a public trail and called the Eastrail multi-use corridor (parcel 2025059034). The pump station has reached the end of its useful service life. Bellevue Utilities will be discontinuing use of the Cedar Terrace Pump Station and installing a new high-density polyethylene (HDPE) gravity pipeline that can convey the wastewater that the pump station currently discharges. This will provide reliable service to the residents at the Cedar Terrace apartments. The Cedar Terrace Pump Station Rehabilitation Project (the Project) is scheduled for work under the City's S-16 capital improvement program (Sewer Pump Station Program Improvements).

1.1 PROJECT DESCRIPTION

The following is a summary of the Project description provided in the Project Narrative and Code Consistency Analysis (Tetra Tech and Confluence 2022). Please refer to that document for additional details. The Project proposes to install a new gravity pipeline and four new maintenance holes (MH A1, A, B, and C) and to convert the existing pump station to be used as a maintenance hole for the new pipeline (MH #2). The new gravity pipeline will extend north from MH#2 through the first new maintenance hole (MH A1) to the second new maintenance hole (MH A) and then cross to the west to join the King County interceptor (Figure 2). The pipeline between MH#2 and MH A will be installed via open cut-and-cover construction. This segment of the pipeline is on the Cedar Terrace property (parcel 2025059160). The new gravity pipeline will then continue west from MH A via horizontal directional drilling (HDD) construction methods underneath the former railroad corridor to a third new maintenance hole (MH B) in the rear parking lot of property owned by SW Bel-Kirk LLC (parcel 2025059102). The new gravity pipeline will exit MH B north via open cut-and-cover construction through the parking lot to the fourth new maintenance hole (MH C), which connects to an existing Bellevue sewer pipeline in the SCGVF2 Evergreen Office Park.

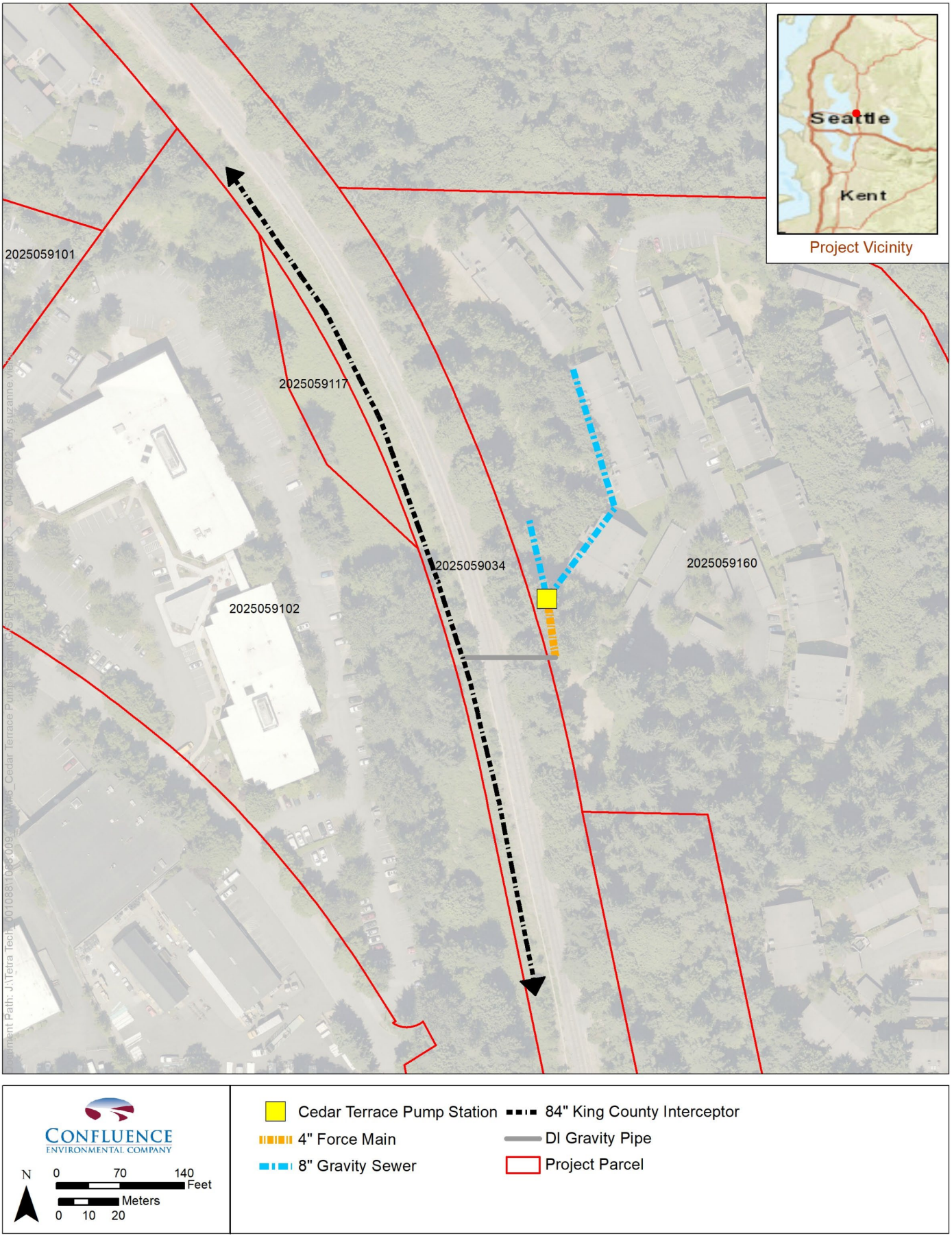

Figure 1. Existing Cedar Terrace Pump Station and Force Main Site

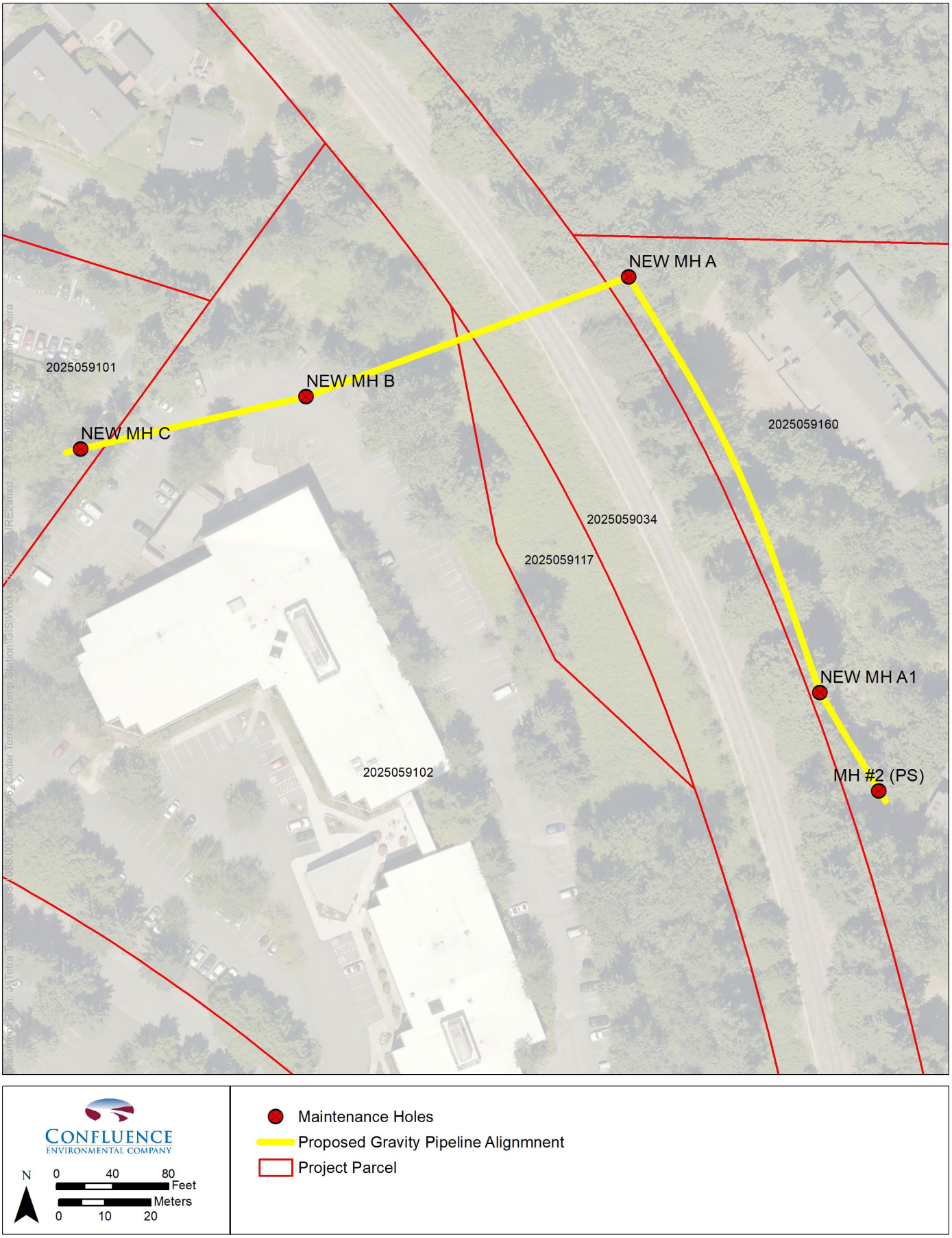

Figure 2. Proposed Gravity Pipeline Alignment

1.2 PROJECT SITE

The Project is located within the City of Bellevue and Section/Township/Range: S20, T25N, R05E. The proposed pipeline crosses five King County tax parcels from west to east, as outlined in Table 1.

Table 1. Properties Associated with the Cedar Terrace Pump Station Rehabilitation Project

Parcel Number	Address	Use
2025059101	11000 NE 33RD PL	Evergreen Office Park
2025059102	11120 NE 33RD PL	SW Bel-Kirk LLC
2025059117	--	King County Parks - undeveloped
2025059034	--	King County Parks trail corridor
2025059160	3205 115TH AVE NE	Cedar Terrace Apartment Complex

The Project site includes a linear pipeline of approximately 840 linear feet and staging areas. The total Project site that will result in ground surface disturbance includes approximately 31,331 square feet (SF). Note that this provides a conservative estimate that adds 15% to the work areas to account for changes during design. The proposed Project impacts are described in detail in Section 4. For additional information on the project site impacts, please refer to the Project Narrative and Code Consistency Analysis (Tetra Tech and Confluence 2022).

1.3 CONSTRUCTION SCHEDULE AND DURATION

Construction is proposed to start in Spring of 2023 and continue through to Summer of 2024. Construction will begin at the western-most portion of the new gravity pipeline and will proceed to the east and south. The last phase of work before Project completion will be to tie the new gravity pipeline into the existing wastewater infrastructure at the Cedar Terrace apartments property.

2. METHODS

Confluence Environmental Company (Confluence) conducted a desktop analysis, field investigation, and background research on the Project site parcels to understand existing conditions and location of critical areas. This section describes the methods used to confirm the presence or absence of critical areas on or adjacent to the Project site. Note that any geologic hazard areas on-site were not delineated by Confluence but were identified by a certified geotechnical engineer. The Geotechnical Report contains a description of these critical areas within the Project site (Shannon & Wilson 2022). Similarly, trees were identified by a certified arborist and discussed in the Arborist Report (Tree Solutions 2022). A summary of the findings from the Geotechnical Report and Arborist Report are provided in Section 3.

2.1 DESKTOP ANALYSIS

To develop a strategy for field investigation, Confluence reviewed relevant regulations and publicly available geographic information system (GIS) databases. Confluence also reviewed Bellevue Land Use Code (LUC) to determine the standard buffer requirements for critical areas in the Project vicinity.

Confluence reviewed GIS databases for the documented presence of wetlands, streams, lakes, species listed under the Endangered Species Act (ESA) as threatened or endangered, or species of local importance located on or within 300 feet of the Project site. It was necessary to search within 300 feet to determine the presence of subterranean features (i.e., closed streams) and to determine whether buffers for off-site critical areas encroach onto the site (i.e., 225 feet is the largest critical area buffer identified under LUC 20.25H.035(A)). The following GIS databases were reviewed:

- Bellevue Mapshot (Bellevue 2021)
- Bellevue Map Viewer (Bellevue 2022)
- Bellevue Drainage Basin Details: Yarrow Creek Basin Fact Sheet (Bellevue 2017)
- King County iMap (King County 2021)
- U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) (USFWS 2021a)
- USFWS Information for Planning and Consultation (iPaC) (USFWS 2021b)
- National Marine Fisheries Service (NMFS) Species Directory (NMFS 2022)
- Natural Resources Conservation Service (NRCS) Soil Survey (NRCS 2021)
- Washington Department of Fish and Wildlife (WDFW) SalmonScape (WDFW 2021a)
- WDFW Priority Habitats and Species (PHS) (WDFW 2021b)
- WDFW Washington State Fish Passage (WDFW 2022)

- Washington Department of Natural Resources (WDNR) Water Type GIS (WDNR 2021)

Results of the GIS database review are in Appendix A.

2.2 FIELD INVESTIGATION

On January 11, 2022, Confluence conducted a field investigation to determine the presence or absence of wetland and stream critical areas on or near the property. This investigation was a reconnaissance-level survey to determine if a more detailed survey was needed. The following subsections provide the methods used to identify and categorize critical areas, as applicable.

2.2.1 Wetlands

The following is an overview of the wetland identification, delineation, and rating methods used by Confluence. No wetland conditions were found on the Project site or within 300 feet of the Project site parcels.

Wetland Identification and Delineation

Confluence delineates wetland boundaries using the methods described by the U.S. Army Corps of Engineers (Corps) in the Wetland Delineation Manual (Corps 1987) and the Regional Supplement to the Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Corps 2010). The Corps typically requires that the following three characteristics be present for an area to be identified as a wetland: (1) hydrophytic vegetation, (2) hydric soil, and (3) wetland hydrology. For each criterion, there are several possible indicators that can be used to determine whether the criterion has been met. The indicators were established so that if a wetland were present on-site, sufficient indicators would be observed at any time of the year, including the driest or wettest months, to identify the wetland. Since "normal circumstances," as defined by the Corps (1987), exist on the site, all three criteria must be present for an area to be determined a wetland. Wetland determination data forms completed during the field investigation are provided in Appendix B.

To confirm the presence or absence of a wetland, data are collected from representative test plots within and outside of potential wetlands. The locations of the test plots are based on the presence of visual wetland indicators (e.g., wetland vegetation, evidence of standing water) or chosen to represent vegetative, topographic, or hydrologic features in the vicinity. Within these test plots, vegetation, soils, and hydrology are examined to determine whether wetland characteristics were present. Plots that meet all three wetland criteria are determined to be wetland plots; plots that do not meet all three wetland criteria are determined to be upland plots. The location of test plots is recorded using a Trimble global positioning system (GPS) unit.

If the presence of a wetland is confirmed, visual wetland indicators, such as topographic and vegetative shifts, are used to delineate the remainder of the wetland boundary. However, no wetland conditions were identified within the Project site.

Confluence uses the PLANTS Database (NRCS 2022) to provide consistency in scientific naming and the National Wetland Plant List (Corps 2020) to determine the wetland indicator status of plants.

Off-Site Wetland Identification

To assess whether there are possible wetlands with buffers encroaching from adjacent properties, Confluence modified the methods described by the Corps (Corps 1987, 2010). The modified method identified the presence or absence of visual wetland indicators. If hydrophytic vegetation were dominant and visual indicators of wetland hydrology were observed, then hydric soils would have been assumed; however, no visual wetland indicators were observed within 300 feet of the Project site parcels.

Wetland Rating

Confluence determines wetland ratings using the Washington State Wetland Rating System for Western Washington (Hruby 2014) to assess the resource value of any wetland identified on the site. However, as no wetlands were identified on or within 300 feet of the Project site, no wetland rating was conducted.

2.2.2 Streams

The Washington State Code defines the ordinary high water mark (OHWM) as follows: "On all lakes, streams, and tidal water [the OHWM] is that mark that will be found by examining the bed and banks and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland, in respect to vegetation as that condition exists on June 1, 1971, as it may naturally change thereafter, or as it may change thereafter in accordance with permits issued by a local government or the department" (RCW 90.58.030).

Washington State Department of Ecology has published a guide (Anderson et al. 2016) to interpret the code and provide guidance for field OHWM determinations. Confluence uses this guidance to determine the OHWM of any unnamed streams in the vicinity of the Project site. However, no daylighted streams or shorelines were identified within 300 feet the Project site, so no OHWM delineation was conducted.

2.2.3 Habitat Assessment for Species of Local Importance

Bellevue LUC 20.25H.150, identifies species of local importance. According to LUC 20.25H.150.B, habitat associated with and used by these species of local importance is designated as a critical area. Those habitats discussed elsewhere in LUC 20.25H (i.e., wetlands, streams, frequently flooded areas, etc.) do not apply to the species of local importance critical area designation.

Based on life history requirements of designated species of local importance and site characteristics, Confluence biologists evaluated the Project site for nesting, breeding, foraging, and loafing opportunities for the species of local importance most likely to occur within the Project site.

3. RESULTS

The following information details the results of the desktop analysis, field investigation, and background research. Photographs taken during the site investigation can be found in Appendix C.

3.1 SITE VISIT CONDITIONS AND LIMITATIONS

The weather prior to and during the January 11, 2022, site visit produced site conditions that were not ideal for conducting wetland delineations and may have resulted in a more conservative estimate of the wetland indicators. The site visit was conducted immediately following several days of rain and rain-on-snow events that resulted in significant stormwater runoff and soil saturation. This led to the presence of visual indicators of wetland hydrology that would likely not be present during normal climatic conditions and that, therefore, were not considered representative of actual wetland hydrology.

The preceding 3-month average temperatures and total precipitation were within normal ranges as compared to the historical mean data from 2000 to present (USDA 2022). Although the preceding 3-month period was historically normal, the level of precipitation over the course of 9 days in January 2022 and the rain-on-snow event factor caused a high level of soil saturation and surface ponding in a short amount of time throughout the region. Intensely saturated soils can make coloring wetland soils more difficult. Soils should be moist but not fully wet during the coloring exercise. Overly wet soils may result in a lower chroma and value color estimation, leading to misidentifying a soil as meeting hydric soil indicators. Additionally, coloring soils on a rainy day with a cloud cover is not ideal as soils should be observed in sunlight when possible.

Due to the time of year and the recent snows, the herbaceous vegetation layer was lacking. Live growth of annual species was not present and any growth from the previous season was not observable. Although the hydrophytic vegetation assessment methodology is valid for any time of year, the absence of any potential herbaceous species due to the time of year has the potential to skew the dominance determination as compared to a summertime assessment when all present species exhibit observable growth.

3.2 WETLANDS

No wetlands are mapped on the Project site parcels or within 300 feet of the Project site (Bellevue 2021, 2017, King County 2021, USFWS 2021a, WDFW 2021a,b, WDNR 2021). The closest identified wetlands are associated with Yarrow Creek. These include a palustrine wetland over 1,100 feet to the northeast and 1,000 feet to the west of the Project site parcels.

Test plots were established on-site to determine the presence or absence of wetlands during the site reconnaissance on January 11, 2022. The location of each test plot was based on the information gathered during the desktop analysis and from on-site observations made during the site visit. It was determined that the

depression in the northwestern portion of the Cedar Terrace property (parcel 2025059160) was the only area with a likely landscape position and visible indicators that required further investigation. The locations of the test plots are shown in Figure 3. Test plot data forms are included in Appendix B.

Test Plot 1 (TP-1) was in the northwestern portion of parcel 2025059160 in a relatively undisturbed depression at the base of the Eastrail multi-use corridor in an area with obvious surface water. The vegetation at TP-1 met the wetland vegetation criterion, although it can be described as marginal. The soils did not meet any hydric soil indicator; therefore, the hydric soil criterion was not met. Three primary wetland hydrology indicators were observed: Surface Water (A1), High Water Table (A2), and Saturation (A3); therefore, the wetland hydrology criterion was met. However, as explained above, it is likely that the recent snowmelt and heavy rain in the week preceding the site visit were the cause of the wetland hydrology indicators and that, based on the lack of hydric soils and marginal vegetation, these were not true wetland hydrology indicators. Since TP-1 did not meet all three criteria, the area represented by TP-1 is not a wetland.

TP-2 was in the northwestern portion of parcel 2025059160 to the north of TP-1. Vegetation within TP-2 met the Dominance Test; therefore, the vegetation at TP-2 met the wetland vegetation criterion. The soils did not meet any hydric soil indicator; therefore, the hydric soil criterion was not met. Two primary wetland hydrology indicators were observed: High Water Table (A2) and Saturation (A3); therefore, the wetland hydrology criterion was met. Note that the soil was saturated to the surface, but the water table was only at 12-inches below the surface. As explained above, it is likely that the recent snowmelt and heavy rain in the week preceding the site visit were the cause of the wetland hydrology indicators and that, based on the lack of hydric soils, these were not true wetland hydrology indicators. Since TP-2 did not meet all three criteria, the area represented by TP-2 is not a wetland.

TP-3 was in the northwestern portion of parcel 2025059160 to the south of TP-1 and TP-2. Vegetation within TP-3 met the Dominance Test; therefore, the vegetation at TP-3 met the wetland vegetation criterion. The soils did not meet any hydric soil indicator; therefore, the hydric soil criterion was not met. Two primary wetland hydrology indicators were observed: High Water Table (A2) and Saturation (A3); therefore, the wetland hydrology criterion was met. As explained above, it is likely that the recent snowmelt and heavy rain in the week preceding the site visit were the cause of the wetland hydrology indicators and that, based on the lack of hydric soils, these were not true wetland hydrology indicators. Since TP-3 did not meet all 3 criteria, the area represented by TP-3 is not a wetland.

The area surrounding the Project site, including the public Eastrail multi-use corridor, was assessed for wetland indicators. Some visual wetland indicators were observed to the southwest of the trail near 108th Ave NE. No test plots were evaluated in this area. The estimated edges of this feature were mapped during the site visit, and the feature is well over 300 feet from the Project site at the closest point, as shown in Figure 3. Because the Project is far enough away to have no impact on this feature or its possible buffer, no further investigation is needed. No other off-site wetlands or wetland indicators were identified during the site investigation.

None of the test plots represented areas that met all three wetland criteria in the Project site. No other areas within the Project site parcel had visual wetland indicators (e.g., wetland vegetation, evidence of standing water, indicative topography), and no other wetlands were identified within 300 feet of the Project site. Therefore, there were no wetlands present within or adjacent to the Project site parcels.

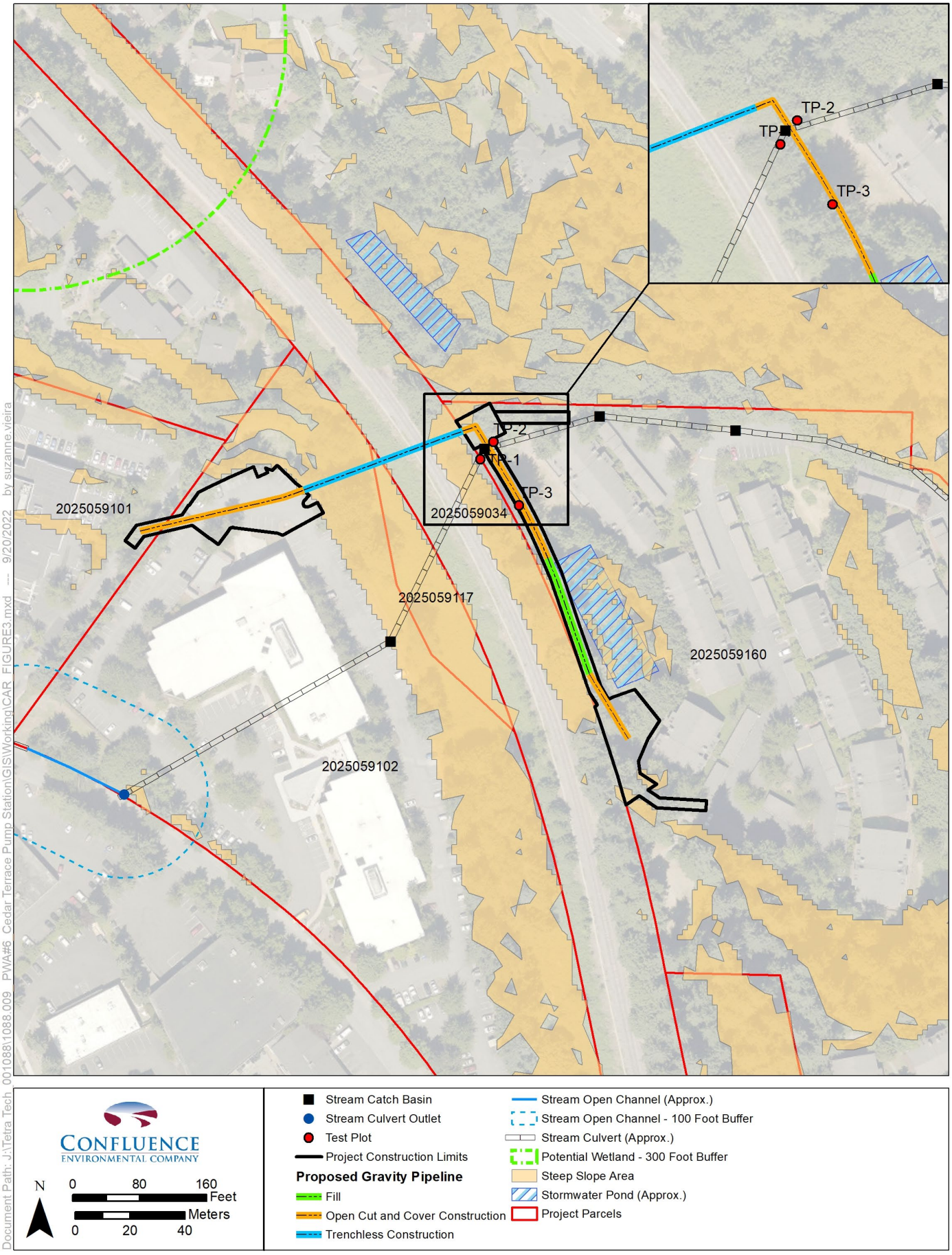

Figure 3. Test Plot Locations and Critical Areas

3.2 STREAMS

The closest open stream to the Project site is Yarrow Creek, which flows south along State Route 405 before flowing west under the freeway, northwest along Northup Way, and eventually into Yarrow Bay in Lake Washington (Bellevue 2017, 2021, 2022; King County 2021; USFWS 2021a; NRCS 2021; WDFW 2021a,b; WDNR 2021). Yarrow Creek is a Type F (fish bearing) stream (Bellevue 2017, WDFW 2021a,b, WDNR 2021). However, Yarrow Creek appears to be partially culverted in the areas adjacent to the Project site. Another stream is present south of the Project site, but the exact configuration of the stream is not consistent across the databases (King County 2021, USFWS 2021a, WDNR 2021). This feature is an unnamed tributary to Yarrow Creek. It is partially typed as a Type F stream by Bellevue, although the tributary is not typed in other databases (King County 2021, WNDR 2021).

No open water channels were observed on the Project site parcels within 300 feet of the Project site. The unnamed tributary to Yarrow Creek is culverted through the Project site, and quickly flowing water was observed at catch basin inlets throughout parcels 2025059160 and 2025059102. An approximate alignment of the culverted tributary is shown in Figure 3. This tributary's flow is briefly exposed at the eastern edge of parcel 2025059102 where the culvert comes out from the Eastrail multi-use corridor berm and directs the tributary water into a detached standpipe (see Photos 27 and 28 in Appendix C). From this point, the tributary flows in an uninterrupted culvert to the southwestern edge of parcel 2025059102 along NE 33rd Place where it is daylighted into an open channel along the roadside.

Although a portion of the unnamed tributary is identified by Bellevue as a Type F stream on parcel 2025059102 (Bellevue 2017), fish use on this parcel is unlikely because the tributary is entirely culverted through the parcel and there are fish barriers in the system. The culvert was surveyed by WDFW on February 24, 2022 (site ID 922607) and was identified as a fish barrier with no identified use by anadromous salmonids (WDFW 2022). As noted during the desktop analysis, no SalmonScape or PHS species are mapped as occurring within the tributary (WDFW 2021a, b).

According to LUC 20.25H.075(A), the unnamed, culverted tributary on the Project site is regulated as a stream because the artificial channel (i.e., the culvert) conveys a stream that once occurred naturally. LUC 20.25H.075(B) includes stream designation criteria. This tributary within the Project site can be classified as a Type O water. Regardless of type, stream segments that are fully enclosed in an underground pipe are defined in LUC 20.50.014 as a "closed stream segment." Per LUC 20.25H.075(C)(1)(b), closed stream segments have no critical area buffer.

3.3 GEOLOGIC HAZARD AREAS

Steep slopes are the only geologic hazard areas identified in the Project site (Shannon & Wilson 2022). Steep slopes are defined as those areas with a slope of 40% or greater with a rise of at least 10 feet and that exceed 1,000 square feet in area (LUC 20.25H.120(A)(2)). The Project site parcels, and the surrounding areas, are significantly encumbered by steep slope critical areas (Bellevue 2022). The aspect of the slope on parcel 2025059160 is generally west-facing and comprises the undeveloped, vegetated areas of this parcel and the steep edges of the created stormwater (or detention) pond near the northwestern portion of the parcel. On all other Project parcels, steep slope areas are primarily associated with the Eastrail multi-use corridor, which is an elevated trail constructed of a relic railway with steep slopes along either edge. For additional information

regarding geologic hazard areas on the Project site, soil conditions, and groundwater conditions, please refer to the Geotechnical Report (Shannon & Wilson 2022).

Per LUC 20.25H.120(B), the critical area buffer for steep slopes is 50 feet from the top-of-slope. The Project proposes work near the toe-of-slope, and the critical area buffer does not extend into most work areas. There is one steep slope buffer from the existing detention pond on parcel 2025059160 that extends slightly into the work area for the open cut-and-cover work. Figure 3 provides the location of the steep slopes in relation to the Project.

For an in-depth assessment of the on-site geological characteristics and the Project hazard analysis as required by LUC 20.25H.140(B) and (C), please see the Geotechnical Report (Shannon & Wilson 2022).

3.4 TREES

The Project site and surrounding area include several significant trees, as defined in LUC 20.50.046, and other non-significant trees (Tree Solutions 2022). A total 63 significant trees were surveyed within and adjacent to the proposed HDPE gravity pipeline alignment and work, access, or staging areas. The trees are generally evenly spread throughout the site and comprise 10 species (Figure 4). The trees on the SW Bel-Kirk and Evergreen Office Park properties (west of the Eastrail multi-use corridor) are primarily Douglas-fir (*Pseudotsuga menziesii*), red maple (*Acer rubrum*), and Austrian black pine (*Pinus nigra*) (Tree Solutions 2022). These trees appear to have been planted during parking lot construction and are in fair to good shape in terms of health and structural condition. The trees on the Cedar Terrace property (east of the Eastrail multi-use corridor) are primarily big-leaf maple (*Acer macrophyllum*), black cottonwood (*Populus trichocarpa*), western red cedar (*Thuja plicata*), red alder (*Alnus rubra*), and Douglas-fir. These trees are also in fair to good shape in terms of health and structural condition with the exception of tree ID# 410, which is in poor health and partially dead.

The specific details of those trees within the Project alignment are included in Table 2. If the tree is proposed for removal due to Project activities, that is noted with bold in the table.

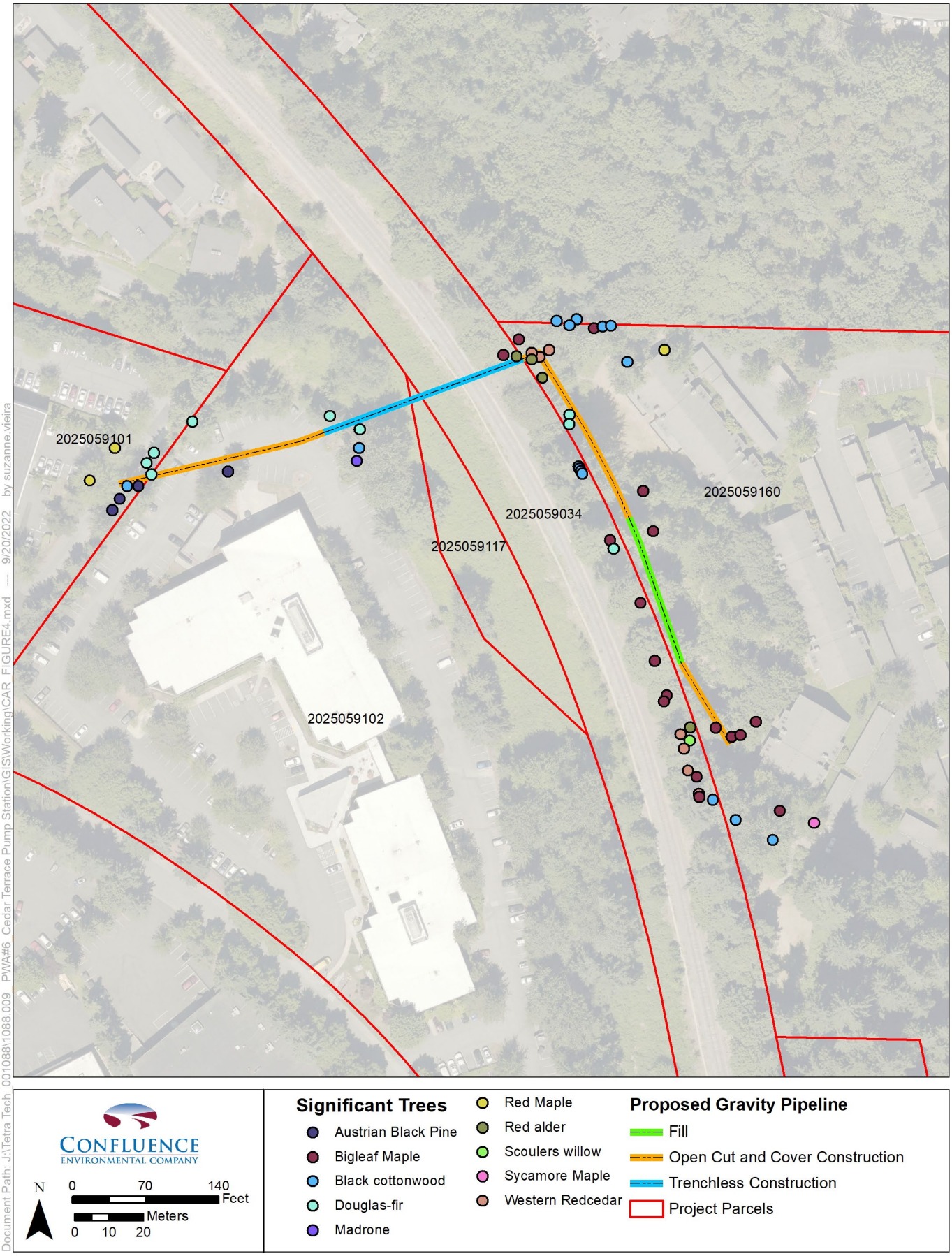

Figure 4. Significant Trees within the Project Site

Table 2. Trees within the Project Alignment

I.D. #	Scientific Name	Common Name	DSH	Proposed Action	Location
1	***Pinus nigra***	**Austrian black pine**	**14**	**Remove**	**Evergreen Office Park**
2	***Populus trichocarpa***	**Black cottonwood**	**18.5**	**Remove**	**Evergreen Office Park**
3	*Pinus nigra*	Austrian black pine	13.3	Protect**	Evergreen Office Park
4	*Pinus nigra*	Austrian black pine	12.9	Retain	Evergreen Office Park
5	*Acer rubrum*	Red maple	21	Protect**	Evergreen Office Park
6	*Pseudotsuga menziesii*	Douglas fir	19	Retain	Evergreen Office Park
7	*Arbutus menziesii*	Madrone	16	Retain	Evergreen Office Park
8	*Acer rubrum*	Red maple	15.1	Protect**	Cedar Terrace
9	*Populus trichocarpa*	Black cottonwood	19.8	Protect**	Cedar Terrace
10	*Populus trichocarpa*	Black cottonwood	11.6	Protect**	Cedar Terrace
11	*Populus trichocarpa*	Black cottonwood	16.6	Protect**	Cedar Terrace
12	*Acer macrophyllum*	Bigleaf maple	10.9	Protect**	Cedar Terrace
13	*Populus trichocarpa*	Black cottonwood	16.5	Protect**	Cedar Terrace
14	*Populus trichocarpa*	Black cottonwood	26.8, 8.4, 25.4	Protect**	Cedar Terrace
15	*Populus trichocarpa*	Black cottonwood	16.6	Protect**	Cedar Terrace
16	*Acer macrophyllum*	Bigleaf maple	12.3	Retain	Cedar Terrace
17	*Acer macrophyllum*	Bigleaf maple	38.5, 18, 34	Protect**	Cedar Terrace
18	*Pseudotsuga menziesii*	Douglas fir	19.9	Retain	Cedar Terrace
19	*Acer macrophyllum*	Bigleaf maple	57.3, 55, 16	Protect**	Cedar Terrace
20	*Acer macrophyllum*	Bigleaf maple	23.2, 11.1, 11.2, 12.2, 11.8	Retain	Cedar Terrace
21	*Acer macrophyllum*	Bigleaf maple	10.5	Retain	Cedar Terrace
22	*Thuja plicata*	Western red cedar	18.5	Retain	Cedar Terrace
23	*Salix scouleriana*	Scouler's willow	11.5	Protect**	Cedar Terrace
24	*Thuja plicata*	Western red cedar	17.5	Retain	Cedar Terrace
25	*Thuja plicata*	Western red cedar	26.5	Protect**	Cedar Terrace
26	*Acer macrophyllum*	Bigleaf maple	8.3	Retain	Cedar Terrace
27	*Acer macrophyllum*	Bigleaf maple	35.7, 9.5, 7, 18, 17, 14, 18	Protect**	Cedar Terrace
28	*Populus trichocarpa*	Black cottonwood	21	Protect**	Cedar Terrace
29	*Thuja plicata*	Western red cedar	16	Retain	Cedar Terrace
30	*Acer macrophyllum*	Bigleaf maple	10.2, 8.3, 6	Retain	Cedar Terrace
31	*Populus trichocarpa*	Black cottonwood	25	Protect**	Cedar Terrace
32	*Acer macrophyllum*	Bigleaf maple	16.7, 10.5, 7, 11	Protect**	Cedar Terrace
33	*Populus trichocarpa*	Black cottonwood	19.5	Protect**	Cedar Terrace
34	*Acer pseudoplatanus*	Sycamore maple	14.6	Protect**	Cedar Terrace

Table 2. Trees within the Project Alignment

I.D. #	Scientific Name	Common Name	DSH	Proposed Action	Location
401	*Pseudotsuga menziesii*	Douglas fir	13.2	Retain	Evergreen Office Park
402	*Pseudotsuga menziesii*	Douglas fir	14.2	Protect**	Evergreen Office Park
403	***Pseudotsuga menziesii***	**Douglas fir**	**8.8**	**Remove**	**SW Bel-Kirk**
404	*Acer rubrum*	Red maple	16.5	Retain	Evergreen Office Park
405	***Pinus nigra***	**Austrian black pine**	**19**	**Remove**	**SW Bel-Kirk**
406	*Acer rubrum*	Red maple	7	Retain	SW Bel-Kirk
407	*Pseudotsuga menziesii*	Douglas fir	20.2	Retain	SW Bel-Kirk
408	*Pseudotsuga menziesii*	Douglas fir	30	Retain	SW Bel-Kirk
409	*Populus trichocarpa*	Black cottonwood	18	Retain	SW Bel-Kirk
410	*Acer macrophyllum*	Bigleaf maple	10.8	Retain	Cedar Terrace
411	***Alnus rubra***	**Red alder**	**9.5**	**Remove**	**Cedar Terrace**
412	***Acer macrophyllum***	**Bigleaf maple**	**28**	**Remove**	**Cedar Terrace**
413	***Thuja plicata***	**Western red cedar**	**39.1, 12, 37.2**	**Remove**	**Cedar Terrace**
414	***Thuja plicata***	**Western red cedar**	**17**	**Remove**	**Cedar Terrace**
415	***Thuja plicata***	**Western red cedar**	**28**	**Remove**	**Cedar Terrace**
416	***Alnus rubra***	**Red alder**	**9**	**Remove**	**Cedar Terrace**
417	***Alnus rubra***	**Red alder**	**10.8**	**Remove**	**Cedar Terrace**
418	***Pseudotsuga menziesii***	**Douglas-fir**	**12.1, 10.2, 6.5**	**Remove**	**Cedar Terrace**
419	*Pseudotsuga menziesii*	Douglas-fir	8.8	Protect**	Cedar Terrace
420	*Populus trichocarpa*	Black cottonwood	8.7	Retain	Cedar Terrace
421	*Populus trichocarpa*	Black cottonwood	9.1	Retain	Cedar Terrace
422	*Populus trichocarpa*	Black cottonwood	20.7	Retain	Cedar Terrace
423	*Populus trichocarpa*	Black cottonwood	28.6, 26.1, 11.7	Protect**	Cedar Terrace
424	*Acer macrophyllum*	Bigleaf maple	12.7, 9, 8, 4	Protect**	Cedar Terrace
425	*Acer macrophyllum*	Bigleaf maple	48	Protect**	Cedar Terrace
426	*Alnus rubra*	Red alder	9	Protect**	Cedar Terrace
427	***Acer macrophyllum***	**Bigleaf maple**	**11**	**Remove**	**Cedar Terrace**
428	*Acer macrophyllum*	Bigleaf maple	14.2, 7, 7, 7, 5.5, 5	Protect**	Cedar Terrace
429	*Acer macrophyllum*	Bigleaf maple	8.8, 6.5, 6	Retain	Cedar Terrace

DSH = Diameter at Standard Height (i.e., diameter at 4 feet above grade).
*Generated from the Arborist Report (Tree Solutions 2022)
**The Arborist Report indicates that this tree will be impacted by the Project. It will be protected with BMPs to reduce impacts so that it can be retained.

3.5 HABITAT FOR SPECIES OF LOCAL IMPORTANCE

During the site investigation, a habitat assessment was conducted to evaluate the potential presence or absence of designated species of local importance and their associated habitat, per the requirements identified in LUC 20.25H.165(A). Based on the life history requirements of the species of local importance listed in LUC 20.25H.150, the species most likely to occur within the Project site are as follows:

- Bald eagle (*Haliaeetus leucocephalus*)
- Pileated woodpecker (*Dryocopus pileatus*)
- Vaux's swift (*Chaetura vauxi*)
- Merlin (*Falco columbarius*)
- Purple martin (*Progne subis*)
- Great blue heron (*Ardea herodias*)
- Osprey (*Pandion haliaetus*)
- Green heron (*Butorides striatus*)
- Red-tailed hawk (*Buteo jamaicensis*)
- Western big-eared bat (*Plecotus townsendii*)
- Long-eared myotis (*Myotis evotis*)

Other species identified in LUC 20.25H.150 were determined to have no reasonable presence at the Project site due to their habitat requirements.

The Project site includes land uses with moderate to high intensity that have little to no habitat opportunity. These land uses include the Cedar Terrace apartment complex lawn, access trail, and detention pond; the Eastrail multi-use corridor; the SW Bel-Kirk LLC paved parking lot; and the Evergreen Office Park roadway and planting strip. Vegetation on the steep slope to the west of the Eastrail multi-use corridor (parcels 2025059034, 2025059117, and 2025059102) is primarily invasive Himalayan blackberry (*Rubus armeniacus*). A sparse row of large native trees, including Douglas-fir, occurs at the toe of this slope on parcel 2025059102. Vegetation within the planting strip between parcels 2025059102 and 2025059101 includes a row of sub-mature Douglas-fir with an understory of salal (*Gaultheria shallon*) and cherry laurel (*Prunus laurocerasus*). Other vegetation within the vicinity of the Project site west of the Eastrail multi-use corridor includes lawn and landscaped areas with low, ornamental shrubs and ground cover. Because these vegetated areas are either dominated by invasive vegetation or include only a narrow area of native vegetation surrounded by paved areas and buildings, the associated habitat functions and values are relatively low.

No species of local importance were observed during site visits. Additionally, no evidence of nesting by species of local importance was observed on the Project parcels. Thus, species that are present are more likely to use the properties for hunting, foraging, perching, or loafing, if at all. Due to the Project site's connection to additional forested area both north and south, it is possible that species of local importance could use this vegetated area of the Project site as a movement corridor to access larger undisturbed areas. Overall, it is unlikely that any of the species listed above have a primary association with the habitat within the Project site, but use of the site by species of local importance cannot be fully ruled out.

3.6 OTHER FEATURES

Other features include the wildland urban interface and ESA-listed species. The Project site and surrounding area are mapped as a non-vegetated inhabited portion of the wildland urban interface (Bellevue 2022). No SalmonScape or PHS species are mapped as occurring within the Project site parcels or immediately adjacent areas (WDFW 2021a,b). Yarrow Creek and some of its associated wetlands are noted to provide habitat for ESA-listed species, including fall Chinook salmon (*Oncorhynchus tshawytscha*), coho salmon (*O. kisutch*), winter steelhead trout (*O. mykiss*), sockeye salmon (*O. nerka*), and resident coastal cutthroat trout (*O. clarkii*) (WDFW 2021a,b, NMFS 2022). However, these species would not occur within the culverted tributary of Yarrow Creek that occurs on the Project site.

Other ESA-listed species identified by USFWS (2021b) include marbled murrelet (*Brachyramphus marmoratus*), streaked horned lark (*Eremophila alpestris strigata*), yellow-billed cuckoo (*Coccyzus americanus*), bull trout (*Salvelinus confluentus*), and monarch butterfly (*Danaus plexippus*). Due to the lack of appropriate habitat—including surface water, open prairie, and old-growth conifer forests—it is unlikely that any of these species would occur within the Project site.

Two man-made detention pond facilities were identified during the site investigation. One occurs within the Project site near the northwestern corner of parcel 2025059160, and the second occurs off-site on parcel 2025059275. Both detention pond features are fully fenced with culverted inlets and outlets. The on-site detention pond collects stormwater from the adjacent Cedar Terrace apartments and the off-site detention pond collects stormwater from the housing developments north of the Project site. Neither detention pond contained standing water during the field investigation on January 11, 2022, although water has been documented through the on-site detention pond during other field visits. These two detention pond features are shown on Figure 3.

Because the detention ponds are artificially created and maintained stormwater features, these features are not considered critical areas per LUC 20.25H.095(A). As such, there are no regulatory buffers associated with the detention ponds.

4. POTENTIAL IMPACTS

This section discusses the proposed Project impacts to critical areas and trees located in the Project site. A more detailed discussion of Project impacts can be found in the Project Narrative and Code Consistency Analysis (Tetra Tech and Confluence 2022). Please refer to that document for additional details.

4.1 CRITICAL AREAS

The Project will have no impacts to wetlands or wetland buffers. Because the unnamed tributary that runs through the Project site parcels is a closed stream segment, it has no critical area buffer and will not be impacted by the Project. The proposed crossing of the stream culvert has been designed to meet the standards in LUC 20.25H.090. Therefore, the Project will not have an impact on the stream or any future potential to daylight the stream.

The geologic hazard area on the Project site—steep slopes along the east and west edges of the Eastrail multi-use corridor and along the detention pond—will not be impacted by the proposed Project. The Project proposes to use HDD to drill under the Eastrail multi-use corridor steep slopes without impacting the slope surface. This avoidance of the steep slopes will allow for the retention of vegetation on the slope and the stability of the slope feature. As required by LUC 20.25H.140(B), slope stability will be maintained during the open cut-and-cover portion of the work within the steep slope buffer using shoring methods. There is also a small area of fill along the open cut-and-cover area due to the low elevation of the ground surface in this area. The Project proposes to fill around the pipeline and increase the grade of the access road, which Bellevue has stated is an allowed use in a steep slope buffer (Folsom, pers. comm., 2022).

No evidence of species of local importance on the Project site was observed during the site reconnaissance. Due to the various specific habitat requirements, it is unlikely that any of these species would have a primary association with the Project site. Because use of the site by species of local importance cannot be fully ruled out, their use at some point during the year can be assumed to occur.

4.2 TREES

The proposed Project has been designed to avoid impacting vegetated, natural areas to the maximum extent feasible by installing the new gravity pipeline through existing disturbed areas. However, the Project will impact 13 significant trees, as defined in LUC 20.50.046. Of these 13 trees, two are located within the steep slope critical area. These trees—ID# 411 and ID# 412—are a red alder with a diameter at standard heigh of 9.5 inches and a bigleaf maple with a diameter at standard height of 28 inches, respectively. They are located on the Cedar Terrace apartment complex property (parcel 2025059160) immediately north of the HDD staging and work area. These trees are in good health condition. The bigleaf maple has a fair structural condition with deadwood in the canopy and large surface roots in sandy, loose soils (Tree Solutions 2022). The red alder has a good structural condition with no deadwood or surface roots. The other 11 trees to be removed are located outside of critical areas or their

buffers. All removed significant trees will be replaced at a ratio of 3:1 (restoration:impact) in critical areas and 1:1 outside of critical areas. The higher ratio of tree replacements in critical areas, compared to the requirements identified in LUC 20.20.900 or in other codes and regulations (e.g., LUC 20.25E.065.F), is based on conversations with Drew Folsom through the predevelopment services permit (21-110757-DC). Vegetation and trees to be restored are identified in the Restoration Plan (Confluence et al. 2022).

4.3 SUMMARY

Impacts from the proposed Project will be temporary during construction. All impacts will be fully restored to existing conditions or better. As explained in the previous sections, there will be no impacts to streams or wetlands. The only impact to geologic hazard areas (steep slopes) will be the removal of two significant trees. There will also be temporary impacts to steep slope buffers, native vegetation, and significant trees that are not within critical areas. While it is unlikely that species of local importance occur on or use the Project site, it is possible that the species noted in Section 3.5 could be present and may alter their behaviors or avoid the site during Project construction. Habitat will be fully restored to existing conditions, or better, and use of the habitat by species of local importance will resume once restoration activities are complete. The Project will comply with the applicable management recommendations for these species, including avoiding nesting buffers and retaining large trees and snags on-site. The Project will not result in any permanent impacts to critical areas or their buffers. Therefore, there will be no probable cumulative impacts to critical areas from this Project.

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Appendix A. GIS Database Results

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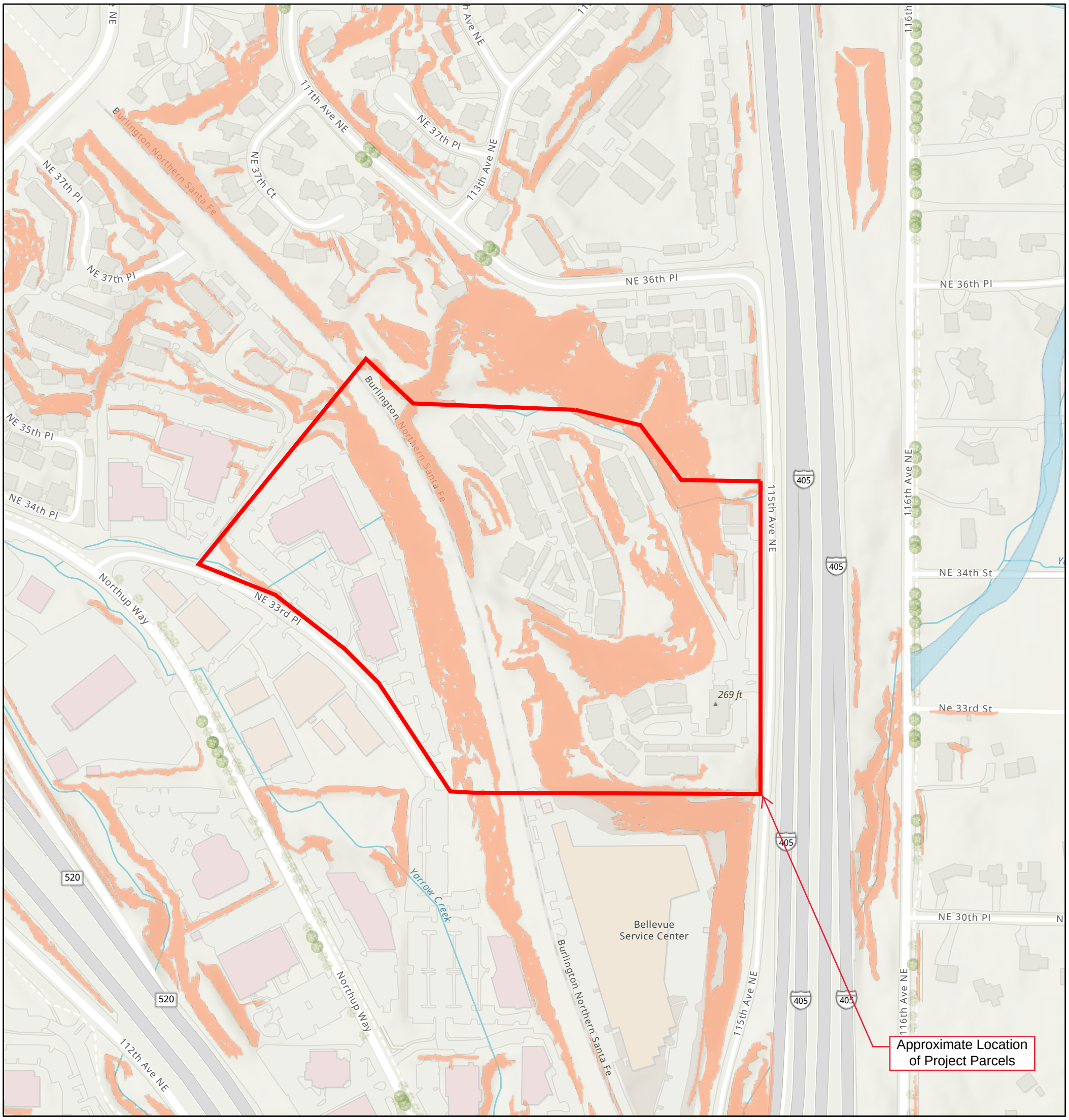
Critical Areas



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Floodplain Boundaries

Steep Slopes

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0 0.05 0.1 0.2 km

City of Bellevue Map Viewer

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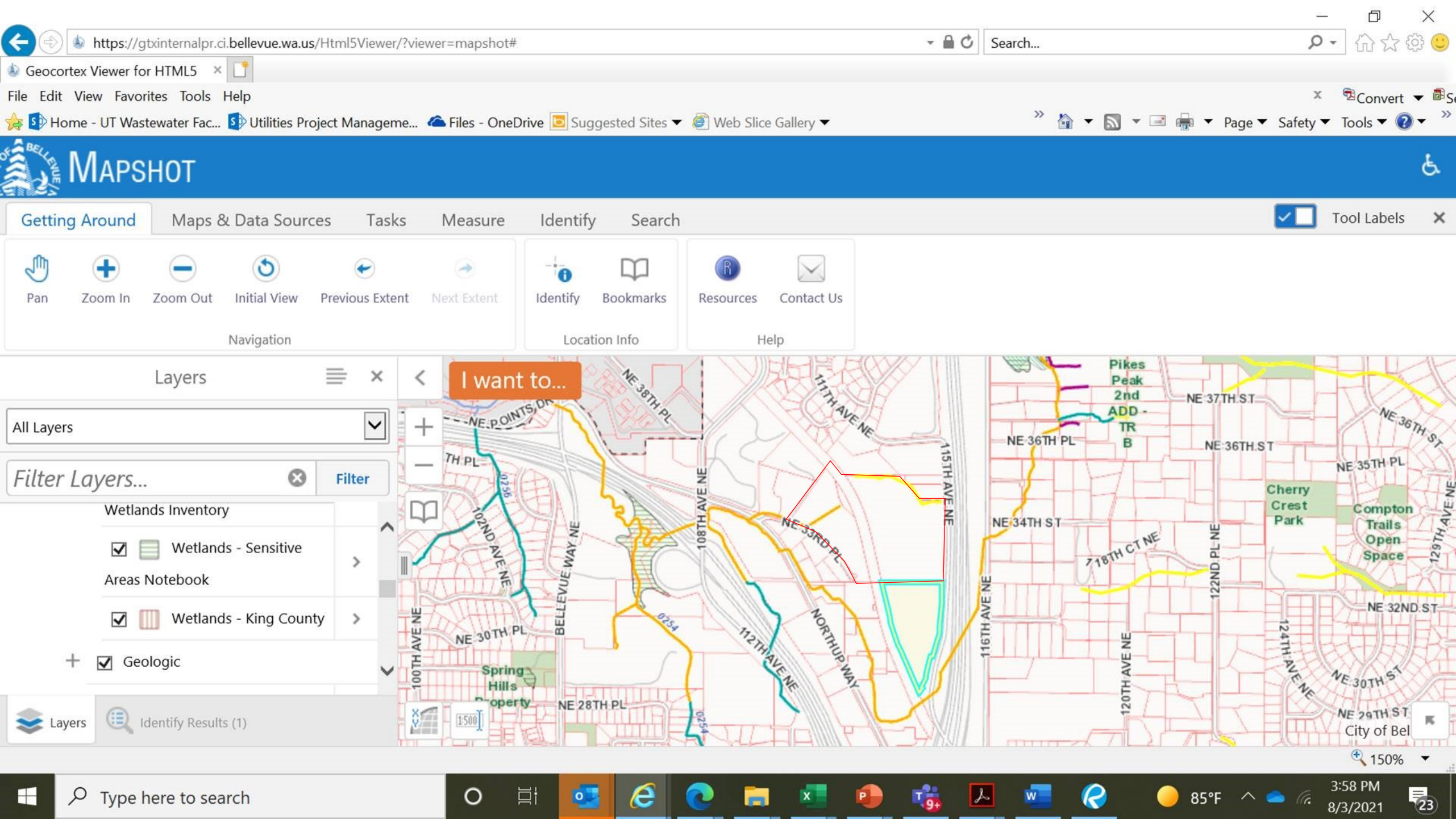
https://gtxinternalpr.ci.bellevue.wa.us/Html5Viewer/?viewer=mapshot#
Search...
Geocortex Viewer for HTML5
File Edit View Favorites Tools Help
Convert
Home - UT Wastewater Fac...
Utilities Project Manageme...
Files - OneDrive
Suggested Sites
Web Slice Gallery
Page Safety Tools
MAPSHOT
Getting Around
Maps & Data Sources
Tasks
Measure
Identify
Search
Tool Labels
Pan
Zoom In
Zoom Out
Initial View
Previous Extent
Next Extent
Navigation
Identify
Bookmarks
Location Info
Resources
Contact Us
Help
Layers
All Layers
Filter Layers...
Filter
Wetlands Inventory
Wetlands - Sensitive Areas Notebook
Wetlands - King County
Geologic
I want to...
NE 38TH PL
NE POINTS DR
111TH AVE NE
115TH AVE NE
108TH AVE NE
BELLEVUE WAY NE
102ND AVE NE
NE 33RD PL
NORTHUP WAY
112TH AVE NE
100TH AVE NE
NE 30TH PL
NE 28TH PL
Spring Hills Property
0256
0254
Pikes Peak 2nd ADD - TR B
NE 37TH ST
NE 36TH PL
NE 36TH ST
NE 35TH PL
NE 34TH ST
Cherry Crest Park
Compton Trails Open Space
718TH CT NE
122ND PL NE
129TH AVE NE
NE 32ND ST
116TH AVE NE
120TH AVE NE
124TH AVE NE
NE 30TH ST
NE 29TH ST
City of Bel
Layers
Identify Results (1)
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8/3/2021

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Yarrow Creek Basin

Lake Washington Watershed (WRIA 8) / State Stream #08-0252

LAND CHARACTERISTICS

Basin Area: 1,654 Total Acres (City area: 4.3 %)
Drainage Jurisdiction(s):

Bellevue: 55.4%	Kirkland: 27.7%
Beaux Arts: 0.0%	Medina: 0.0%
Clyde Hill: 0.0%	Newcastle: 0.0%
Issaquah: 0.0%	Redmond: 0.0%
King County: 16.9%	Renton: 0.0%

Lowest Elevation: 15 Ft
Highest Elevation: 537 Ft

Total Length of Open Channel: 4.7 Miles
Total Length of Storm Drainage Pipes: 20.4 Miles

SALMON PRESENT in BASIN

Chinook*+ (Lake only)	Sockeye (Lake only)
Rainbow trout (Lake only)	Cutthroat trout
Coho+ (Lake only)	Steelhead (Lake only)

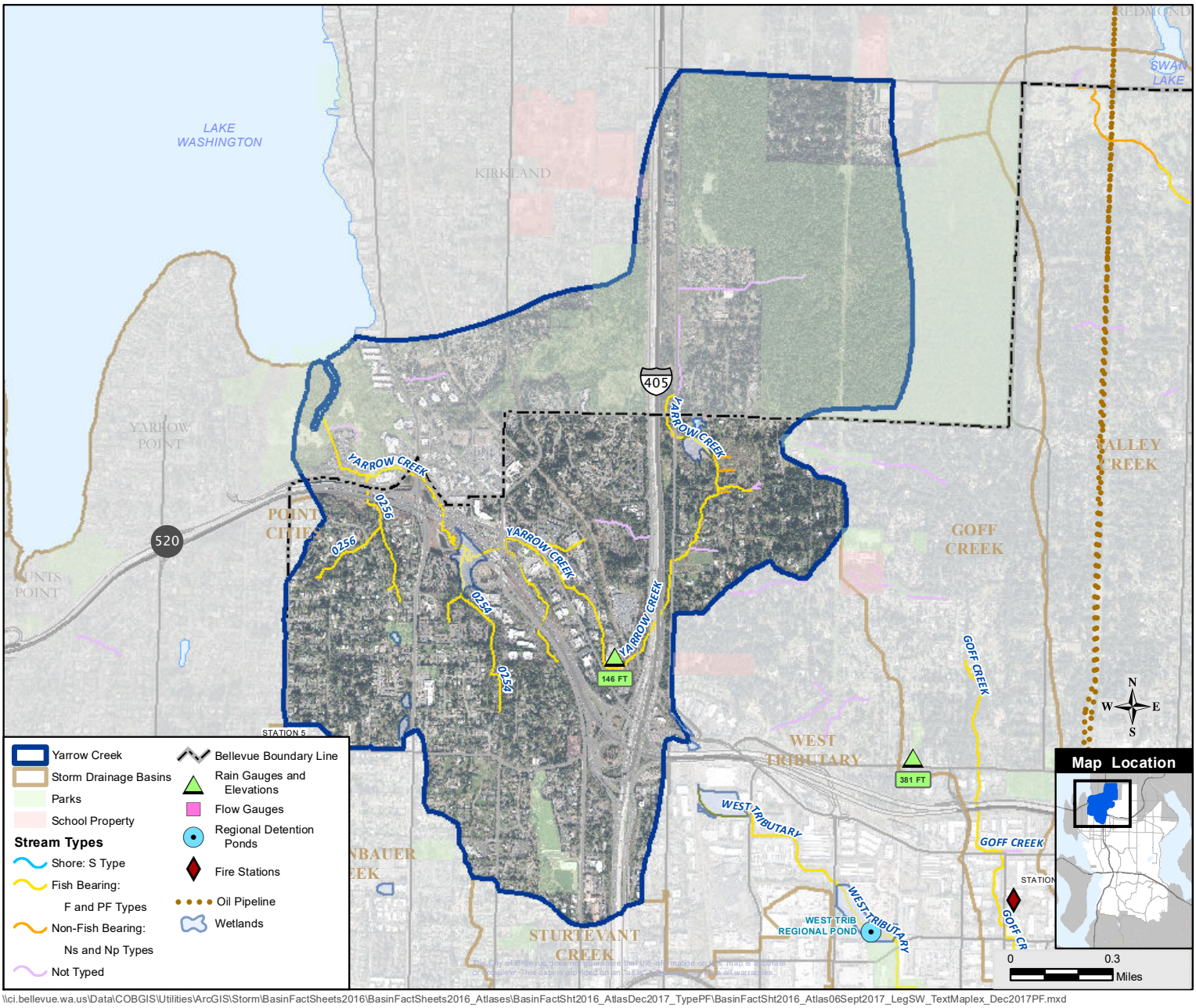
* Listed Federal Endangered Species
\+ City Species of Local Importance (Bellevue Land Use Code 20.25H.150A)

POPULATION

Basin Population (2016): 5,849 (3.9% of all Basins)
Basin Population Density: 2,263 People per Square Mile
The population density in Bellevue ranges from 1,344 to 9,851 people per square mile.

LAND USE	Entire Basin	Within Bellevue
Public Right of Way:	21.0 %	60.6 %
Commercial/Office:	7.9 %	5.6 %
Industrial:	0.6 %	0.6 %
Institutional/Government:	1.9 %	1.7 %
Mixed Use/Misc:	5.2 %	4.0 %
Multi-Family	2.6 %	1.9 %
Open Space/Park:	25.2 %	1.3 %
Single Family Residential:	30.8 %	21.3 %
Unknown:	4.9 %	3.0 %

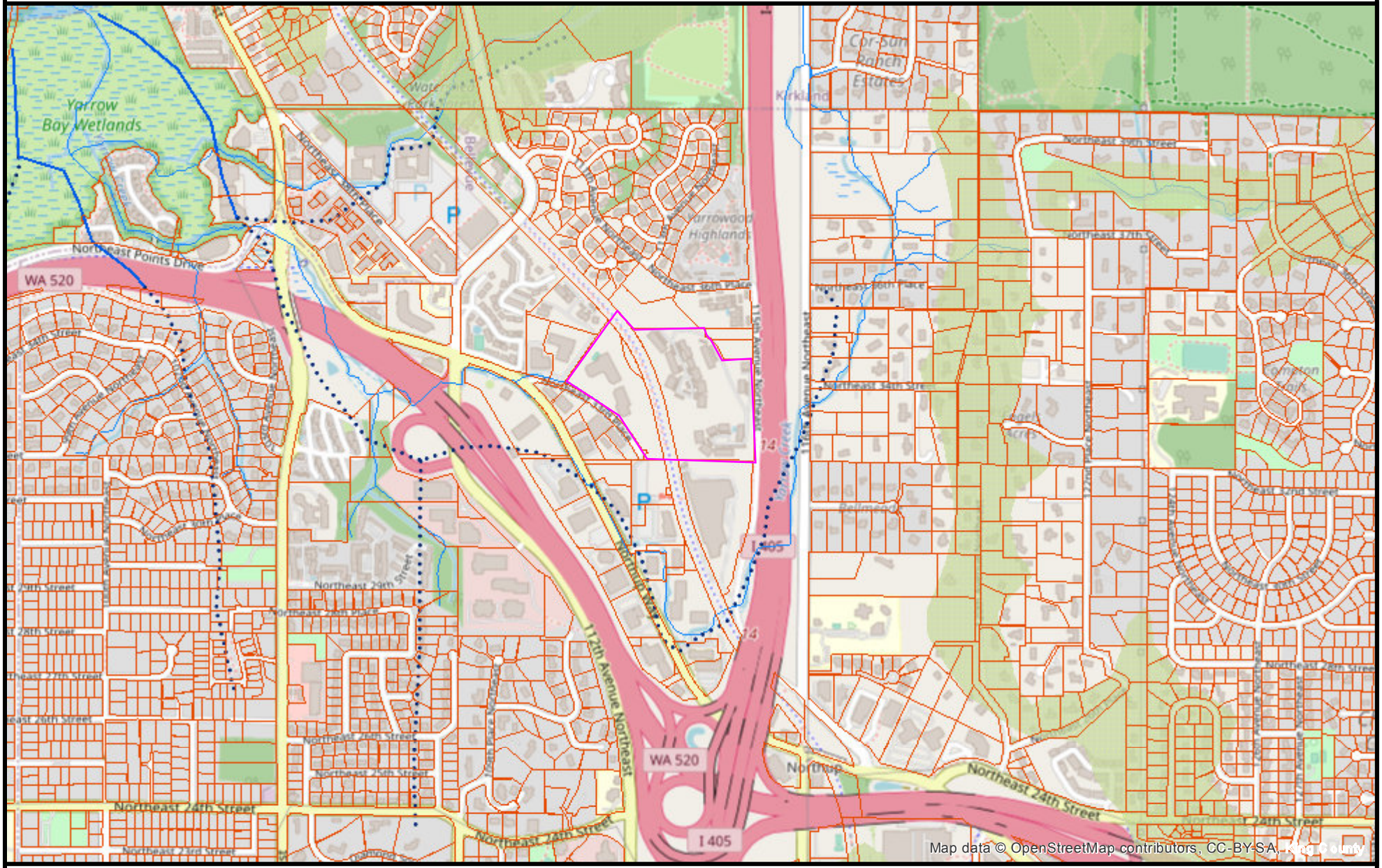
LAND COVER	Entire Basin	Within Bellevue
Impervious:	32.6 %	42.4 %
Tree Canopy:	53.8 %	40.0 %
Impervious in 100 Ft Stream Buffer:	27.6 %	23.2 %
Tree Canopy in 100 Ft Stream Buffer:	57.2 %	41.2 %



\\ci.bellevue.wa.us\Data\COBGIS\Utilities\ArcGIS\Storm\BasinFactSheets2016\BasinFactSheets2016_Atlases\BasinFactSht2016_AtlasDec2017_TypePF\BasinFactSht2016_Atlas06Sept2017_LegSW_TextMaplex_Dec2017PF.mxd

Updated: July 2017

King County iMap



Date: 8/3/2021 Notes:

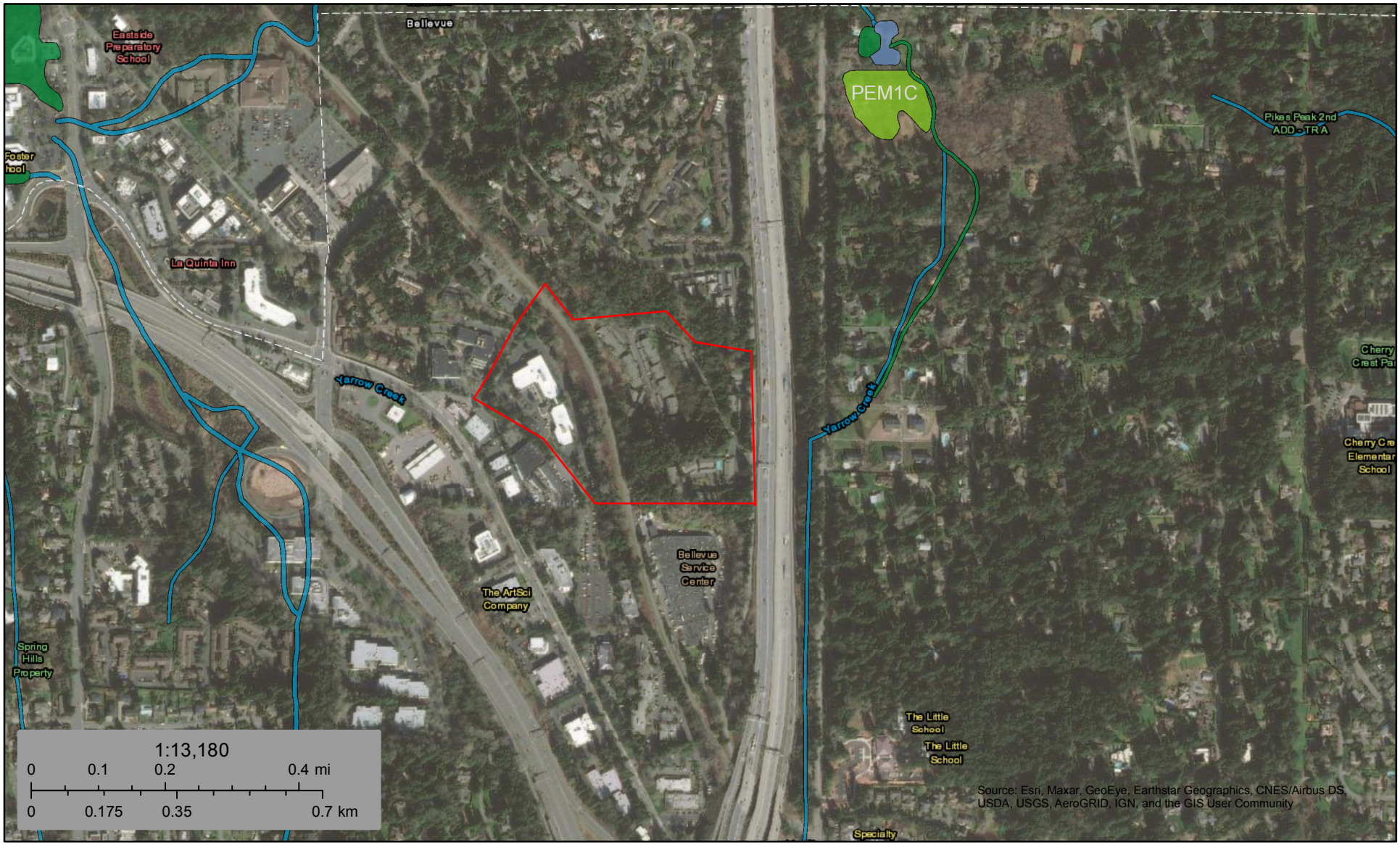
N

King County

U.S. Fish and Wildlife Service

National Wetlands Inventory

Wetlands



November 18, 2021

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Custom Soil Resource Report
Soil Map

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: King County Area, Washington
Survey Area Data: Version 17, Aug 23, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 25, 2020—Jul 27, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

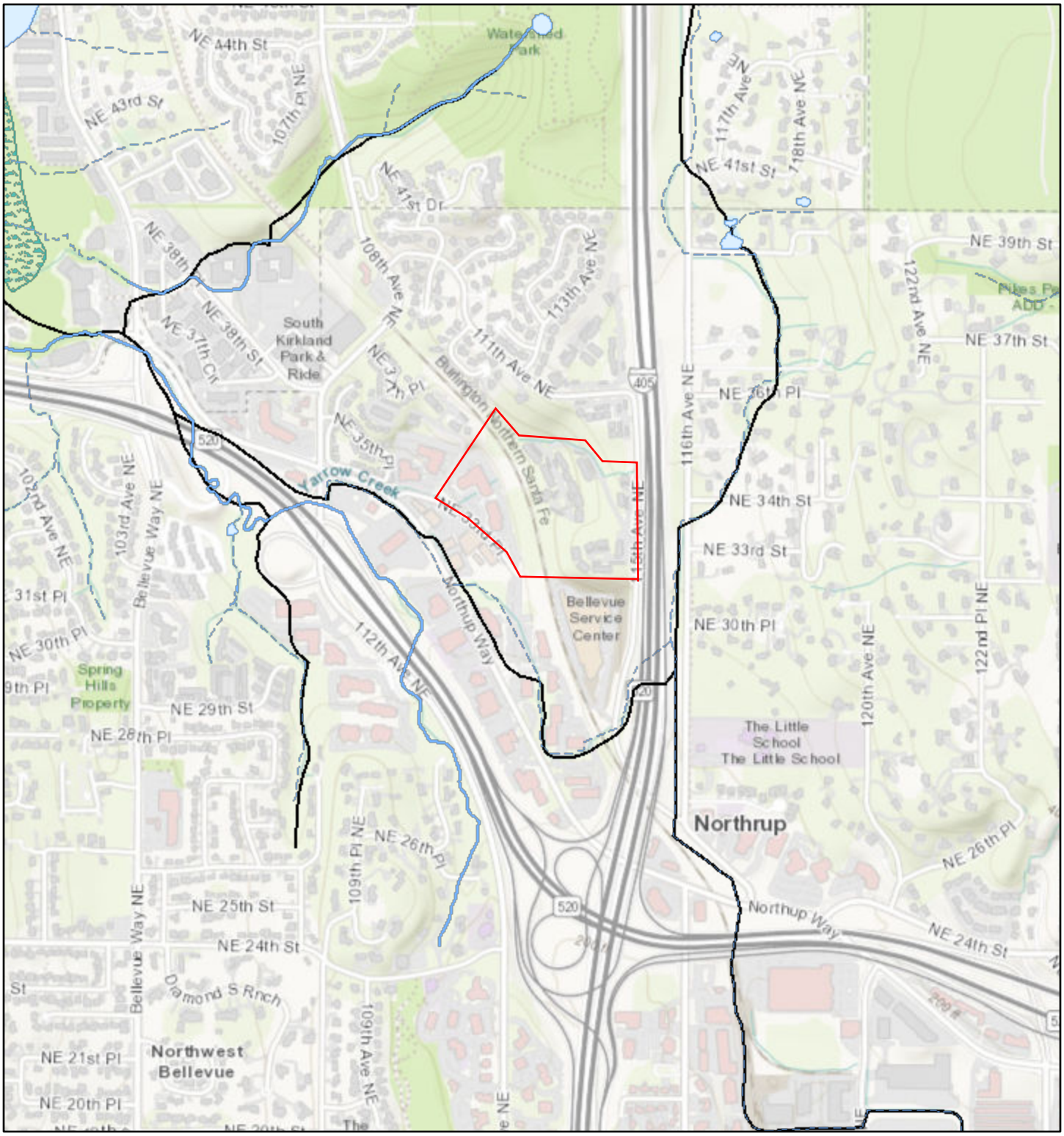
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AgC	Alderwood gravelly sandy loam, 8 to 15 percent slopes	15.3	25.2%
AgD	Alderwood gravelly sandy loam, 15 to 30 percent slopes	1.9	3.1%
EvC	Everett very gravelly sandy loam, 8 to 15 percent slopes	11.6	19.1%
EvD	Everett very gravelly sandy loam, 15 to 30 percent slopes	29.4	48.4%
PITS	Pits	2.5	4.2%
Totals for Area of Interest		**60.7**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.



August 3, 2021

1:18,056

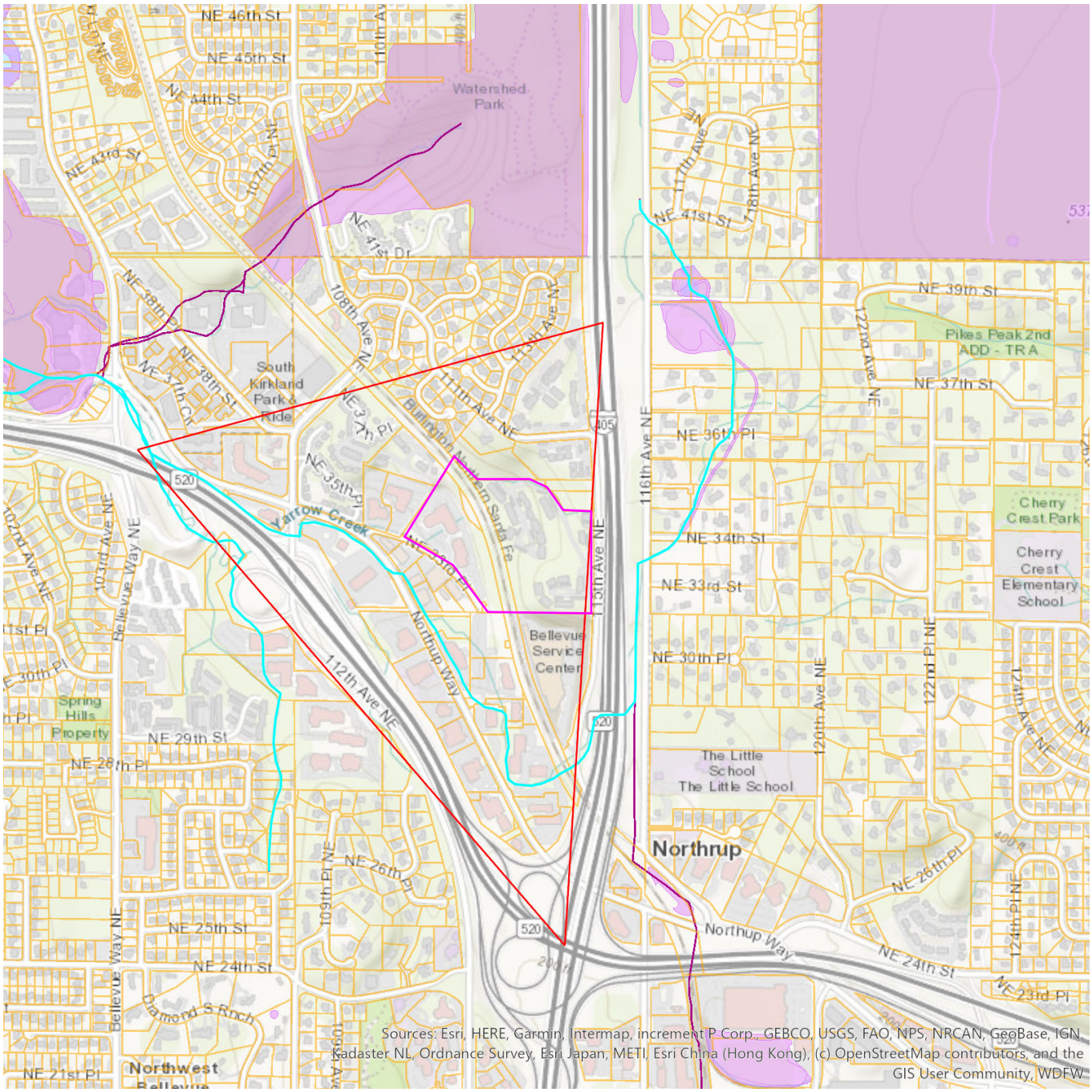
All SalmonScape Species

0 0.1 0.2 0.4 mi

0 0.15 0.3 0.6 km

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community, USGS/NHD, Dale Gombert (WDFW), WDFW

Priority Habitats and Species on the Web



Report Date: 08/03/2021

PHS Species/Habitats Overview:

Occurence Name	Federal Status	State Status	Generalized Location
Resident Coastal Cutthroat	N/A	N/A	No
Coho	Candidate	N/A	No
Coho	N/A	N/A	No

PHS Species/Habitats Details:

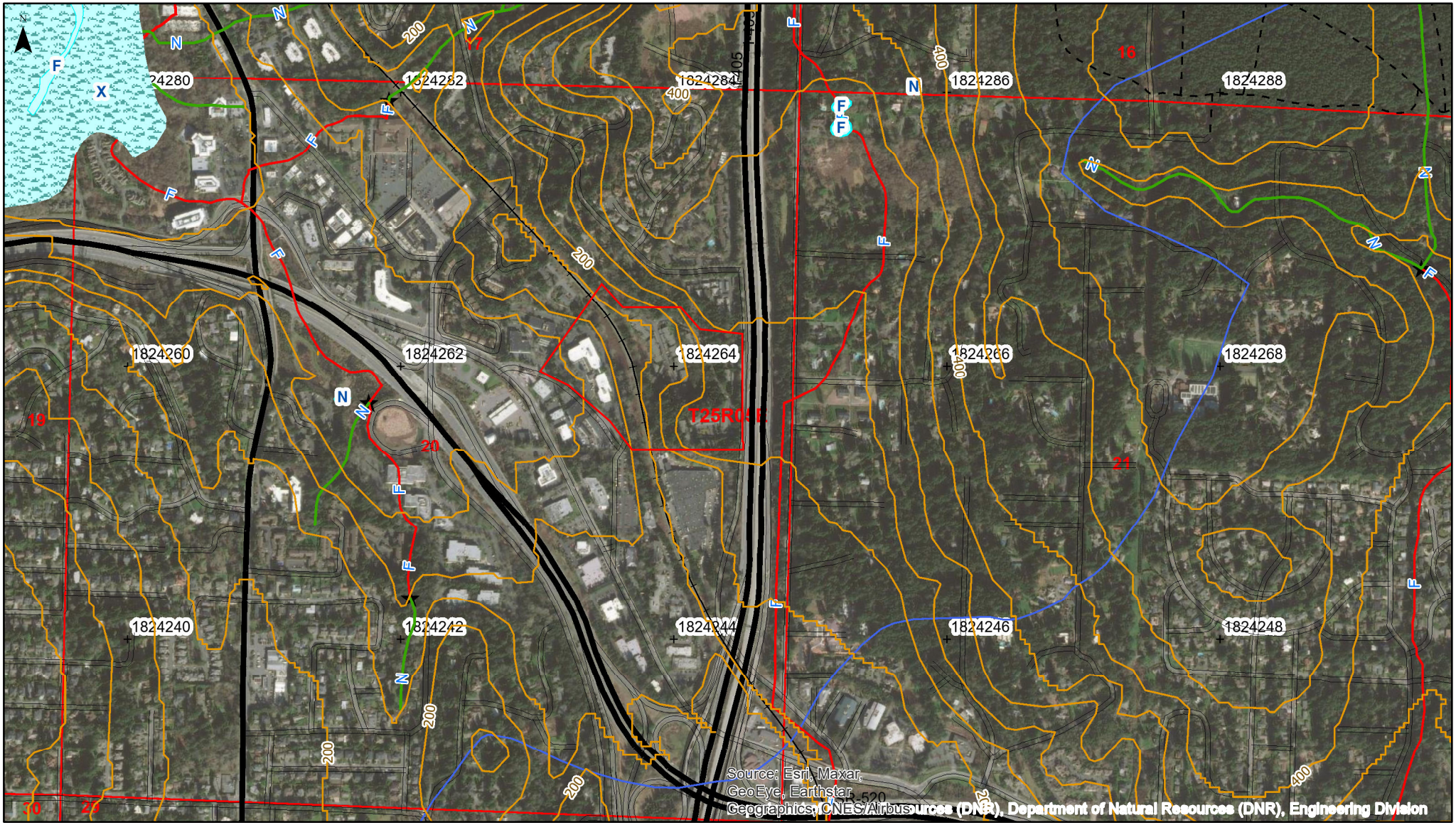
Resident Coastal Cutthroat	
Scientific Name	*Oncorhynchus clarki*
Priority Area	Occurrence/Migration
Accuracy	NA
Notes	LLID: 1221976476419, Fish Name: Cutthroat Trout, Run Time: Unknown or not Applicable, Life History: Unknown
Source Record	35788
Source Dataset	SWIFD
Federal Status	N/A
State Status	N/A
PHS Listing Status	PHS Listed Occurrence
Sensitive	N
SGCN	N
Display Resolution	AS MAPPED
More Info	http://wdfw.wa.gov/wlm/diversty/soc/soc.htm
Geometry Type	Lines

Coho	
Scientific Name	*Oncorhynchus kisutch*
Priority Area	Occurrence
Accuracy	NA
Notes	LLID: 1222386476652, Stock Name: Lake Washington/Sammamish Tribs Coho, Run: Unspecified, Status: Depressed
Source Record	3120
Source Dataset	SASI
Source Name	Not Given
Source Entity	WDFW Fish Program
Federal Status	Candidate
State Status	N/A
PHS Listing Status	PHS Listed Occurrence
Sensitive	N
SGCN	N
Display Resolution	AS MAPPED
More Info	http://wdfw.wa.gov/wlm/diversty/soc/soc.htm
Geometry Type	Lines

Coho	
Scientific Name	*Oncorhynchus kisutch*
Priority Area	Breeding Area
Accuracy	NA
Notes	LLID: 1222386476652, Fish Name: Coho Salmon, Run Time: Unknown or not Applicable, Life History: Anadromous
Source Record	38026
Source Dataset	SWIFD
Federal Status	N/A
State Status	N/A
PHS Listing Status	PHS Listed Occurrence
Sensitive	N
SGCN	N
Display Resolution	AS MAPPED
More Info	http://wdfw.wa.gov/wlm/diversty/soc/soc.htm
Geometry Type	Lines

Resident Coastal Cutthroat	
Scientific Name	*Oncorhynchus clarki*
Priority Area	Occurrence/Migration
Accuracy	NA
Notes	LLID: 1222386476652, Fish Name: Cutthroat Trout, Run Time: Unknown or not Applicable, Life History: Unknown
Source Record	38023
Source Dataset	SWIFD
Federal Status	N/A
State Status	N/A
PHS Listing Status	PHS Listed Occurrence
Sensitive	N
SGCN	N
Display Resolution	AS MAPPED
More Info	http://wdfw.wa.gov/wlm/diversty/soc/soc.htm
Geometry Type	Lines

Forest Practices Activity Map - Application #_____



Map Symbols

- Harvest Boundary
- Road Construction
- Stream
- RMZ / WMZ Buffers
- Rock Pit
- Landing
- Waste Area
- Clumped WRTS/GRTS
- Existing Structure

Additional Information

Legal Description

S16 T25.0N R05.0E, S21 T25.0N R05.0E
S20 T25.0N R05.0E, S19 T25.0N R05.0E
S17 T25.0N R05.0E, S18 T25.0N R05.0E

WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

0 0.25 Miles

Date: 11/18/2021 Time: 8:24:35 AM

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

King County, Washington

Local office

Washington Fish And Wildlife Office

(360) 753-9440
(360) 753-9405

510 Desmond Drive Se, Suite 102
Lacey, WA 98503-1263

http://www.fws.gov/wafwo/

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

---

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS
Marbled Murrelet Brachyramphus marmoratus There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/4467	Threatened
Streaked Horned Lark Eremophila alpestris strigata Wherever found There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/7268	Threatened
Yellow-billed Cuckoo Coccyzus americanus There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/3911	Threatened

Fishes

NAME	STATUS
Bull Trout Salvelinus confluentus There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/8212	Threatened

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE

	BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Sep 30
Black Swift Cypseloides niger This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8878	Breeds Jun 15 to Sep 10
Evening Grosbeak Coccothraustes vespertinus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 15 to Aug 10
Lesser Yellowlegs Tringa flavipes This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Olive-sided Flycatcher Contopus cooperi This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31
Rufous Hummingbird selasphorus rufus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8002	Breeds Apr 15 to Jul 15

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used

to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (▬)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

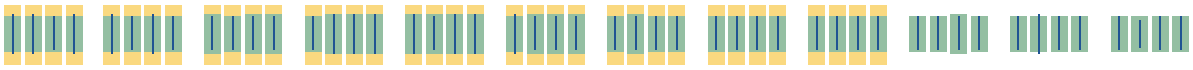
No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

▬ probability of presence ▬ breeding season | survey effort – no data

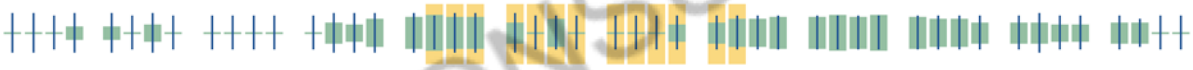
SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

Bald Eagle Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



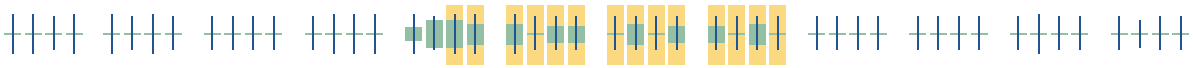
Black Swift BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Evening Grosbeak BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

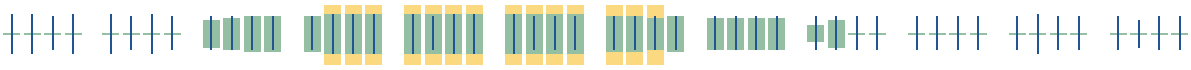


Lesser Yellowlegs BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Olive-sided Flycatcher BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Rufous Hummingbird BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird

on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential

impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the NWI map to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Appendix B. Wetland Determination Data Forms

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WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Cedar Terrace City/County: Bellevue/King Sampling Date: 11/11/22

Applicant/Owner: City of Bellevue State: WA Sampling Point: TP-1

Investigator(s): KAM/SRV Section, Township, Range: S20, T25N, R05E

Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Concave Slope (%): 0

Subregion (LRR): A Lat: 47.64171°N Long: 122.19070 Datum: WGS84

Soil Map Unit Name: Everett very gravelly sandy loam, 15%-30% NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No ____	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ✓	No ____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 10')	Absolute % Cover	Dominant Species?	Indicator Status
1. Bigleaf maple	50	✓	FACU
2. red alder	50	✓	FAC
3.			
4.			
	100 = Total Cover		
Sapling/Shrub Stratum (Plot size: 10')			
1. Blackberry	30	✓	FAC
2.			
3.			
4.			
5.			
	30 = Total Cover		
Herb Stratum (Plot size: 10')			
1. herb robert	1		FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	1 = Total Cover		
Woody Vine Stratum (Plot size: 10')			
1. trailing blackberry	40	✓	FACU
2.			
	40 = Total Cover		

% Bare Ground in Herb Stratum 50

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	80	x 3 =	240
FACU species	90	x 4 =	360
UPL species	0	x 5 =	0
Column Totals:	170 (A)		500 (B)

Prevalence Index = B/A = 2.9

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

✓ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ 5 - Wetland Non-Vascular Plants[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No ____

Remarks:

SOIL

Sampling Point: TP-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/2	100					silty sand w/ gravel & spall & organic detritus	
6-11+	10YR 4/2	100					silty sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (**except MLRA 1**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: railroad spall

Depth (inches): 6+ - 11"

Hydric Soil Present? Yes ____ No ✓

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ✓ Surface Water (A1)
- ✓ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) (**LRR A**)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) (**LRR A**)
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ✓ No ____ Depth (inches): 2"

Water Table Present? Yes ✓ No ____ Depth (inches): 1"

Saturation Present? (includes capillary fringe) Yes ✓ No ____ Depth (inches): 0

Wetland Hydrology Present? Yes ✓ No ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

recent snow melt & heavy rains likely cause of hydro. indicators observed & not actual wtl hydrology based on soils & veg.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Cedar Terrace City/County: Bellevue, King Sampling Date: 11/11/22

Applicant/Owner: City of Bellevue State: WA Sampling Point: TP2

Investigator(s): KMM/SRV Section, Township, Range: S20, T25N, R05E

Landform (hillslope, terrace, etc.): — Local relief (concave, convex, none): none Slope (%): 0

Subregion (LRR): A Lat: 47.644175° N Long: 122.19067° W Datum: WGS 84

Soil Map Unit Name: Everett very gravelly sandy loam NWI classification: PUA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No ____	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ✓	No ____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 10')	Absolute % Cover	Dominant Species?	Indicator Status
1. W. red cedar	50	✓	FAC
2. red alder	50	✓	FAC
3.			
4.			
	100 = Total Cover		

Sapling/Shrub Stratum (Plot size: 10')			
1. H. blackberry	25	✓	FAC
2.			
3.			
4.			
5.			
	25 = Total Cover		

Herb Stratum (Plot size: 10')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	0 = Total Cover		

Woody Vine Stratum (Plot size: 10')			
1. trailing blackberry	30	✓	FACU
2.			
	30 = Total Cover		

% Bare Ground in Herb Stratum 100

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

✓ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ 5 - Wetland Non-Vascular Plants[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No ____

Remarks:

SOIL

Sampling Point: TP-2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
2-7	10YR 2/2	100					Sandy loam w/ organic debris & gravel	
7-14+	2.5Y 4/3	100					Silty sand & gravel/cobble	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (**except MLRA 1**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ✓ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) (**LRR A**)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) (**LRR A**)
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes ✓ No _____ Depth (inches): 12"

Saturation Present? (includes capillary fringe) Yes ✓ No _____ Depth (inches): 0

Wetland Hydrology Present? Yes ✓ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Recent snow melt + heavy rains likely cause of hydro. indicators observed + not actually WL hydrology based on soils + veg

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Cedar Terrace City/County: Bellevue, King Sampling Date: 11/1/22

Applicant/Owner: City of Bellevue State: WA Sampling Point: TP-3

Investigator(s): KAM/SRV Section, Township, Range: S20, T25N, R05E

Landform (hillslope, terrace, etc.): — Local relief (concave, convex, none): none Slope (%): 2%

Subregion (LRR): A Lat: 47.6456°N Long: 122.1905°W Datum: WGS84

Soil Map Unit Name: Everett very gravelly sandy loam NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No ____	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ✓	No ____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 10')	Absolute % Cover	Dominant Species?	Indicator Status
1. red alder	10	✓	FAC
2.			
3.			
4.			
	10 = Total Cover		

Sapling/Shrub Stratum (Plot size: 10')			
1. H. Gaultheria	20	✓	FAC
2.			
3.			
4.			
5.			
	20 = Total Cover		

Herb Stratum (Plot size: 10')			
1. creeping buttercup	50	✓	FAC
2. mowed lawn	20	✓	FAC
3. mid herb	10		FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	80 = Total Cover		

Woody Vine Stratum (Plot size: 10')			
1.			
2.			
	~~3~~ = Total Cover		

% Bare Ground in Herb Stratum ~~0~~

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

__ 1 - Rapid Test for Hydrophytic Vegetation

__ 2 - Dominance Test is >50%

__ 3 - Prevalence Index is ≤3.0[1]

__ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

__ 5 - Wetland Non-Vascular Plants[1]

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No ____

Remarks:

SOIL

Sampling Point: TP-3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/2	100					loamy sand	
6-9	2.5Y 4/2	99	10YR 5/6	1	C	M	sand	w/ gravel

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (**except MLRA 1**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Spodic

Depth (inches): 9

Hydric Soil Present? Yes _____ No ✓

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ✓ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) (**LRR A**)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) (**LRR A**)
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes ✓ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ✓ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes ✓ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Recent snow melt + heavy rains likely cause of hydro indicators observed + not actually wetland hydrology based on soils + veg.

Monthly Total Precipitation for SEATTLE SAND POINT WFO, WA

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
2000	3.65	4.57	2.86	1.52	3.52	0.89	0.22	0.38	1.59	3.60	3.53	2.43	28.76
2001	3.05	2.47	2.82	2.55	1.34	2.69	0.74	1.98	0.43	4.25	9.40	5.10	36.82
2002	5.68	4.43	2.68	2.79	1.34	1.36	0.70	0.18	0.65	0.51	2.86	5.24	28.42
2003	6.74	1.68	5.11	2.72	1.32	0.95	T	0.30	1.62	6.98	5.65	M	M
2004	7.14	2.45	1.80	0.64	2.23	0.62	0.40	3.05	1.94	2.67	3.26	5.01	31.21
2005	3.28	1.37	3.63	3.19	2.87	2.41	0.99	0.33	1.67	2.66	4.74	7.39	34.53
2006	10.12	3.07	1.63	2.10	2.65	1.81	0.08	0.19	1.81	2.03	11.56	8.00	45.05
2007	3.29	2.14	3.28	1.54	1.41	1.03	1.52	1.20	2.00	2.52	2.80	9.10	31.83
2008	4.17	1.59	3.59	2.33	0.87	2.07	0.58	2.64	0.79	2.34	4.91	4.58	30.46
2009	3.42	1.74	3.87	2.94	3.79	0.27	0.16	0.79	2.35	5.60	8.53	2.29	35.75
2010	6.28	2.79	3.16	2.75	3.66	2.34	0.13	0.93	3.90	3.82	4.87	7.94	42.57
2011	4.85	3.33	6.00	3.36	2.95	1.53	0.61	0.11	0.91	2.97	6.14	1.49	34.25
2012	5.26	3.21	5.96	2.31	2.87	3.39	1.70	0.00	0.24	5.77	9.17	7.03	46.91
2013	5.27	1.76	2.99	4.60	1.27	1.91	0.03	1.07	5.01	1.11	3.07	1.67	29.76
2014	4.02	5.13	8.42	3.45	2.30	1.25	1.25	1.38	3.01	6.77	4.41	5.38	46.77
2015	2.66	4.40	4.46	1.52	0.91	0.15	1.04	2.70	1.11	3.83	7.16	9.41	39.35
2016	7.19	4.07	5.22	1.57	1.63	1.52	0.53	0.05	1.53	10.30	7.71	3.71	45.03
2017	3.70	8.16	6.49	4.05	3.15	1.07	0.03	0.21	1.10	3.72	8.32	4.83	44.83
2018	8.42	3.44	2.49	5.75	0.30	1.76	0.02	0.28	1.41	3.43	4.33	5.63	37.26
2019	2.87	3.98	1.60	2.21	1.45	0.78	1.50	1.33	3.86	2.61	1.77	7.31	31.27
2020	7.96	5.01	3.38	1.73	4.21	3.06	0.16	0.58	4.16	2.98	5.38	5.96	44.57
2021	7.61	4.41	3.22	0.96	1.37	2.09	0.06	0.28	2.97	4.60	7.72	4.71	40.00
2022	6.50	M	M	M	M	M	M	M	M	M	M	M	M
Mean	5.35	3.42	3.85	2.57	2.15	1.59	0.57	0.91	2.00	3.87	5.79	5.44	37.40

Monthly Mean Avg Temperature for SEATTLE SAND POINT WFO, WA

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
2000	41.0	44.2	45.0	51.5	54.1	61.3	65.1	64.5	61.3	53.4	43.5	41.2	52.2
2001	42.5	41.3	46.1	49.0	55.3	58.8	63.9	66.0	61.0	51.6	47.8	42.3	52.2
2002	41.7	42.6	42.8	48.9	53.7	61.8	65.4	66.0	61.2	52.1	48.2	43.9	52.4
2003	45.8	42.5	47.5	49.7	55.5	62.8	68.2	67.1	63.1	55.5	43.4	42.3	53.7
2004	41.1	44.8	48.2	53.4	57.8	63.4	68.6	68.8	60.1	54.3	46.2	43.3	54.3
2005	42.8	43.0	49.3	51.7	59.1	60.6	66.1	67.4	59.9	54.9	44.0	41.8	53.5
2006	44.6	41.3	46.0	50.1	56.3	62.7	67.3	65.4	62.3	52.6	45.1	41.5	53.0
2007	39.2	44.4	47.3	50.8	55.7	60.5	68.1	66.0	60.6	51.5	44.9	40.8	52.5
2008	39.5	44.1	44.0	47.0	55.7	58.1	64.6	66.5	60.9	52.2	49.7	38.0	51.7
2009	39.7	41.9	42.8	49.1	55.7	63.4	69.1	66.7	62.6	52.7	47.2	38.1	52.5
2010	46.1	46.6	47.7	50.3	53.6	59.2	64.4	65.3	62.3	54.7	44.7	43.9	53.3
2011	42.6	40.1	46.5	46.9	52.9	59.4	63.5	66.4	64.6	53.6	44.1	40.7	51.8
2012	40.3	43.9	44.4	51.7	55.2	58.7	64.6	67.7	62.8	54.2	47.4	42.3	52.8
2013	39.0	44.3	47.5	50.2	58.0	63.9	67.1	69.0	63.2	51.2	46.0	38.5	53.2
2014	42.9	40.7	47.9	52.5	59.6	62.1	69.0	69.5	64.7	58.6	46.2	45.1	55.0
2015	45.4	48.3	50.7	51.9	59.1	67.1	70.9	68.4	60.4	57.5	44.5	43.4	55.7
2016	43.5	47.7	49.4	56.3	59.2	63.6	67.0	68.6	61.4	55.4	51.3	38.5	55.1
2017	38.7	41.6	46.5	50.8	58.1	62.6	67.0	69.7	64.9	53.2	46.6	40.5	53.4
2018	44.9	41.4	46.2	50.6	60.8	62.0	70.0	68.5	62.3	53.4	48.2	43.5	54.4
2019	44.0	36.6	47.4	52.0	59.5	62.0	65.5	68.5	62.3	50.9	46.4	44.2	53.4
2020	44.2	43.6	44.6	51.8	58.7	61.5	65.8	67.2	65.4	54.1	46.6	44.1	54.0
2021	43.7	41.6	45.3	52.1	56.8	66.4	68.9	68.3	62.5	53.0	48.5	38.9	53.9
2022	41.4	M	M	M	M	M	M	M	M	M	M	M	M
Mean	42.4	43.0	46.5	50.8	56.8	61.9	66.8	67.3	62.3	53.7	46.4	41.7	53.4

Highest Precipitation by Day for MEDINA 0.6 ENE, WA (CoCoRaHS)

Day	Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec	
1	0.00	2022	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
2	0.00	2022	0.04	2022	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
3	1.50	2022	0.05	2022	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
4	0.33	2022	0.03	2022	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
5	0.13	2022	0.01	2022	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
6	0.85	2022	0.00	2022	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
7	1.56	2022	0.00	2022	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
8	0.72	2022	0.03	2022	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
9	0.00	2022	0.02	2022	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
10	0.00	2022	0.03	2022	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
11	0.82	2022	0.03	2022	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
12	0.52	2022	0.00	2022	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
13	0.27	2022	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
14	0.02	2022	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
15	0.00	2022	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
16	0.00	2022	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
17	0.00	2022	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
18	0.04	2022	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
19	0.03	2022	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
20	0.10	2022	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
21	0.21	2022	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
22	0.00	2022	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
23	0.00	2022	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
24	0.00	2022	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
25	0.00	2022	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
26	0.00	2022	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
27	0.00	2022	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
28	0.00	2022	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
29	0.00	2022	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
30	M	M	-	-	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
31	0.27	2022	-	-	M	M	-	-	M	M	-	-	M	M	M	M	-	-	M	M	-	-	M	M

Mean Snowfall by Day for SEATTLE 5.0 NE, WA (CoCoRaHS)

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	M	0.0	0.0	M	0.0	0.0	0.0	0.0	M	0.0	M
2	0.0	M	M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	M
3	M	0.0	M	0.0	M	0.0	0.0	0.0	0.0	M	M	M
4	M	M	0.0	M	M	0.0	0.0	0.0	0.0	M	M	M
5	M	M	M	M	0.0	0.0	0.0	0.0	0.0	M	M	M
6	M	M	M	0.0	0.0	0.0	0.0	M	0.0	M	M	M
7	M	M	M	0.0	0.0	M	0.0	M	0.0	M	M	M
8	M	M	M	M	M	0.0	0.0	M	0.0	M	M	M
9	M	M	M	0.0	M	M	0.0	0.0	0.0	M	M	M
10	M	0.0	M	M	0.0	M	0.0	0.0	0.0	M	M	M
11	M	0.0	0.0	0.0	M	M	0.0	0.0	0.0	M	M	M
12	M	0.6	0.0	0.0	M	M	0.0	0.0	0.0	M	M	M
13	M	4.3	0.0	0.0	M	M	0.0	0.0	0.0	M	M	M
14	0.0	3.3	0.0	0.0	M	M	0.0	0.0	0.0	M	M	M
15	M	M	M	0.0	0.0	M	0.0	0.0	M	M	0.0	M
16	M	M	M	0.0	0.0	0.0	0.0	0.0	M	M	M	M
17	0.0	M	0.0	0.0	0.0	0.0	0.0	0.0	M	0.0	M	M
18	0.0	M	0.0	0.0	M	0.0	0.0	0.0	M	M	0.0	M
19	0.0	M	M	0.0	M	0.0	0.0	0.0	M	0.0	M	M
20	0.0	M	M	0.0	M	0.0	M	0.0	M	M	M	M
21	M	M	M	0.0	0.0	0.0	M	0.0	0.0	M	M	M
22	0.0	M	M	0.0	0.0	0.0	0.0	0.0	0.0	M	M	M
23	0.0	0.0	M	0.0	0.0	0.0	0.0	0.0	0.0	M	M	M
24	M	M	M	M	M	0.0	0.0	0.0	M	M	M	M
25	0.0	M	M	M	M	0.0	0.0	0.0	M	M	M	M
26	0.0	M	M	M	0.0	0.0	0.0	0.0	M	M	M	4.2
27	0.0	M	0.0	0.0	M	0.0	0.0	M	M	M	M	1.5
28	0.0	M	0.0	0.0	M	0.0	0.0	0.0	M	M	M	0.6
29	0.0	M	M	0.0	0.0	0.0	0.0	0.0	M	M	M	0.0
30	0.0	-	M	M	0.0	0.0	0.0	0.0	M	0.0	M	2.0
31	M	-	0.0	-	M	-	0.0	0.0	-	0.0	-	0.1

Mean Snowfall by Day for BELLEVUE 1.8 W, WA (CoCoRaHS)

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	M	M	0.0	0.0	M	0.0	0.0	0.0	0.0	M	0.0	M
2	M	M	M	M	M	M	0.0	0.0	0.0	M	M	M
3	M	M	M	0.0	M	0.0	0.0	0.0	0.0	0.0	M	M
4	M	M	0.0	M	M	0.0	0.0	0.0	0.0	M	M	M
5	M	M	M	0.0	M	M	0.0	0.0	0.0	M	M	M
6	M	0.0	M	0.0	0.0	0.0	0.0	M	0.0	M	M	M
7	M	0.0	M	0.0	0.0	M	0.0	M	0.0	M	M	M
8	M	T	M	M	M	0.0	0.0	M	0.0	0.0	M	M
9	0.0	M	M	0.0	M	0.0	0.0	0.0	0.0	0.0	M	M
10	0.0	0.0	M	M	0.0	0.0	M	0.0	0.0	M	M	M
11	M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	M	M	M	M
12	M	T	0.0	0.0	0.0	M	0.0	0.0	0.0	M	M	M
13	M	8.0	0.0	0.0	0.0	M	0.0	0.0	M	M	M	M
14	0.0	M	0.0	0.0	0.0	M	0.0	M	0.0	M	M	M
15	0.0	M	M	0.0	0.0	M	0.0	0.0	M	M	M	M
16	0.0	M	M	0.0	0.0	0.0	M	0.0	0.0	M	M	M
17	0.0	M	0.0	0.0	M	0.0	0.0	0.0	M	0.0	M	M
18	M	M	M	0.0	M	0.0	0.0	0.0	M	M	0.0	M
19	0.0	M	M	0.0	M	0.0	0.0	0.0	M	0.0	M	M
20	0.0	M	M	0.0	M	0.0	0.0	0.0	M	M	M	M
21	M	M	M	0.0	0.0	0.0	M	0.0	0.0	M	0.0	M
22	0.0	M	M	0.0	0.0	0.0	0.0	0.0	0.0	M	0.0	M
23	0.0	M	M	M	0.0	0.0	M	0.0	0.0	M	M	M
24	0.0	M	M	M	M	0.0	M	0.0	0.0	M	M	M
25	0.0	M	M	M	M	0.0	0.0	0.0	0.0	M	M	M
26	0.0	M	M	M	M	0.0	0.0	0.0	M	M	M	2.5
27	0.0	M	0.0	0.0	M	0.0	0.0	M	M	M	M	2.3
28	0.0	M	0.0	0.0	M	0.0	0.0	0.0	M	M	M	M
29	0.0	M	M	0.0	0.0	0.0	0.0	0.0	M	M	M	0.0
30	0.0	-	0.0	M	0.0	0.0	0.0	0.0	M	M	M	M
31	M	-	0.0	-	0.0	-	0.0	M	-	0.0	-	M

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Appendix C. Photos

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Photo 1—View to north from the Cedar Terrace Pump Station.

Photo 2—View of Cedar Terrace stormwater pond, looking northeast from the western property boundary.

Photo 3—View of access trail along Cedar Terrace western property boundary, looking north.

Photo 4—View of soils and hydrology at Test Plot (TP)-1.

Photo 5—View from TP-1, looking north.

Photo 6—View from TP-1, looking east.

Photo 7—View from TP-1, looking south.

Photo 8—View from TP-1, looking west.

Photo 9—Catch basin inlet to the culvert that conveys the unnamed tributary near TP-1.

Photo 10—Soil profile at TP-2.

Photo 11—View from TP-2, looking north.

Photo 12— View from TP-2, looking east.

Photo 13— View from TP-2, looking south.

Photo 14— View from TP-2, looking west.

Photo 15—Hydrology at TP-2.

Photo 16—Second catch basin inlet to the culvert that conveys the unnamed tributary, east of TP-1 and TP-2.

Photo 17—Third catch basin inlet to the culvert that conveys the unnamed tributary.

Photo 18—Steeply sloped area to north of the Cedar Terrace property.

Photo 19—Stormwater pond to the northwest of the Cedar Terrace property.

Photo 20—Soils at TP-3.

Photo 21—View from TP-3, looking north.

Photo 22—View from TP-3, looking east.

Photo 23—View from TP-3, looking south.

Photo 24—View from TP-3, looking west.

Photo 25—Cedar Terrace access trail, looking south.

Photo 26—Northwestern portion of the Cedar Terrace property.

Photo 27—Unnamed tributary culvert outlet and stand pipe inlet on the SW Bel-Kirk LLC (parcel 2025059102).

Photo 28—View of the flowing unnamed tributary at the culvert outlet/standpipe inlet.

Photo 29—view of the SW Bel-Kirk LLC property, looking northwest.

Photo 30—Unnamed tributary outlet and open channel along NE 33rd Place, looking northwest.

Photo 31—NE 33rd Place, looking northwest towards the unnamed tributary outlet.

Photo 32—NE 33rd Place at the driveway access to the Evergreen Office Park (parcel 2025059101), looking southeast. Unnamed tributary is culverted under the driveway.

Photo 33—SW Bel-Kirk LLC parking lot at the northeastern area, looking north.

Photo 34— SW Bel-Kirk LLC parking lot at the northwestern area, looking west.

Photo 35—Eastrail Multi-Use Corridor trail, looking south.

Photo 36—View of the Cedar Terrace parcel from the Eastrail Multi-Use Corridor trail.

Photo 37—Potential wetlands along the Eastrail Multi-Use Corridor trail to the north of the Project site.

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