



Gregory J. Nickels, Mayor

Seattle Department of Transportation

Grace Crunican, Director

November 4, 2008

Washington State Department of Transportation
Highway and Local Project Engineering
15700 Dayton Avenue North, MS-121
Seattle, Washington 98133

Attention: Ed Conyers

Subject: No Effect Letter
Burke Gilman Trail Extension
11th Avenue NW to the Hiram M. Chittenden Locks Segment
File No. 0129-128-00

INTRODUCTION

The Seattle Department of Transportation (SDOT) plans to construct an extension of the Burke Gilman Trail (BGT) from 11th Avenue NW to the Hiram M. Chittenden Locks in Seattle, Washington (Figure 1). This report is required to address Endangered Species Act (ESA) Section 7 requirements related to a Federal Highways Administration grant to the city of Seattle for a portion of this project.

Information on species listed under the ESA and potentially present in the project area, was obtained from the U.S. Fish and Wildlife Service (USFWS) list for King County (USFWS 2008), the National Marine Fisheries Service (NMFS) listing for Western Washington (NOAA 2008), and the Washington Department of Fish and Wildlife (WDFW) Priority Habitat and Species (PHS) maps and database (WDFW 2008). A Washington Department of Natural Resources (WDNR) search of their Natural Heritage Program revealed no records of any listed plants, high quality ecosystems or other significant natural features near the project site (WDNR 2007). USFWS, NMFS, and the WDFW indicate the presence of Puget Sound/Coastal Distinct Population Segment (DPS) bull trout (*Salvelinus confluentus*), Puget Sound Evolutionary Significant Unit Chinook salmon (*Oncorhynchus tshawytscha*), and Puget Sound DPS steelhead (*Oncorhynchus mykiss*) in the vicinity of the project. Habitat for other ESA-listed species reported to occur in King County is not present in the project vicinity; therefore, these species are not discussed in this letter.

PROJECT SETTING

The project corridor lies in a commercial and industrial urban setting north of Salmon Bay Waterway, between 11th Avenue NW and the Hiram M Chittenden Locks at 32nd Avenue NW, Township 25N, Range 3E, Sections 11 and 12 (Figure 1). The project footprint for the recommended route is located entirely within the publicly owned right-of-way (ROW), except between 26th Ave NW and 28th Ave NW, where a permanent easement will be required because the existing width of city property is too narrow. The project will run east to west along NW 45th Street, 17th Avenue NW, Ballard Avenue NW, NW Vernon Place, Shilshole Avenue NW, NW Market St, 28th Avenue NW, and NW 54th Street. The future final

Key Tower, 700 5th Avenue, Suite 3900, PO Box 34996 Seattle, WA 98124-4996
Tel: (206) 684-ROAD (684-7623), TTY/TDD (206) 684-4009, FAX: (206) 684-5180

Internet address: <http://www.seattle.gov/transportation>

An equal opportunity employer. Accommodations for people with disabilities provided on request.

project footprint will also include NW 54th Street between 24th Avenue NW and 28th Avenue NW (NW 54th Street strip parcel).

The project area has historically been used for industrial and commercial purposes since the late 1800s and is currently heavily developed for commercial, retail and industrial use. Salmon Bay Waterway connects to the Puget Sound via the Hiram M. Chittenden Locks. The project area is relatively flat and the topography slopes downward toward Salmon Bay to the south-southwest. The project ROW ranges in elevation between 5-feet and 15-feet above mean sea level. Surface water in the area also generally flows to the south-southwest, where it is not controlled by on-site storm water systems and/or municipal drains.

PROJECT DESCRIPTION

PROJECT OVERVIEW

This report discusses the portion of the project that will connect the existing terminus of the Burke Gilman Trail, at 11th Avenue NW and NW 45th Street to the Hiram M. Chittenden Locks, where the trail picks up again and ends at Golden Gardens Park. This portion of the project is located within the publicly owned ROW identified as the "Recommended Route" in the "Ballard Corridor Design Study (11th Avenue NW to Locks)" (SDOT 2003). The closest the project will be to the Salmon Bay Waterway is approximately 100-feet at the southern terminus of 28th Avenue NW. Construction of the trail will occur in two segments: 11th Ave NW to 17th Ave NW is scheduled to be constructed in 2009, the 17th Ave NW to Hiram M. Chittenden Locks is scheduled to begin construction in 2009, with the majority occurring in 2010.

The purpose of the project is to eventually extend the existing trail so that there is a continuous commuter and recreation route from Issaquah on the east side of Lake Sammamish to Golden Gardens Park on the west side of Seattle, adjacent to Puget Sound.

The primary construction elements of the project include:

- Constructing a connector trail between the existing trail terminus at the intersection of 11th Avenue NW and NW 45th Street and the trail segment beginning at the intersection of 30th Avenue NW and NW 54th Street;
- Along portions of the route, adding landscaping and/or a barrier walls between automobile traffic and the connector trail;
- Installing and relocating associated utilities (e.g., storm water conveyance, etc.); and
- Using existing city property, in coordination with railroad franchise easements and trail easement to accommodate the trail.

The typical width of the trail will be 10-12 foot-wide asphalt surface with a landscaping strip between the trail and motor vehicle travel lane. In most locations, the trail will replace existing asphalt or gravel shoulders or existing concrete sidewalks. Other portions of the trail consist of signed and striped bike routes only (no new construction).

EXISTING AND PROPOSED DRAINAGE PATTERNS

The existing stormwater conditions for the project area were defined by site visits, using background information provided by the city of Seattle, including the city's Geographic Information System (GIS) and sewer cards, and a field survey.

The city's GIS database shows three major drainage basins for the area between 11th Avenue NW to 32nd Avenue NW. The basin areas are defined by the storm water collection area being directed to the city of Seattle storm drain outfalls into Salmon Bay. The stormwater flows from the project site are generated primarily by pollution generating impervious surfaces. These surfaces include arterial and non arterial streets, paved and gravel parking areas, and impervious vehicular maneuvering areas. The existing stormwater flow patterns vary between basins and within each basin. Stormwater along the alignment follows one of the following flow characteristics; entering a formal storm system and discharging untreated to Salmon Bay through a public outfall; flowing overland to a point where it is discharged overland, or flowing overland and discharging through a private system. Currently there is no formal storm drainage treatment along this project corridor.

Storm drainage improvements will be included with the Burke Gilman Trail Project. The improvements include stormwater treatment, collection and conveyance. The project replaces over an acre of pollution generating impervious surface; therefore it triggers water quality requirements in certain locations per the city of Seattle DR 27-2000, *Stormwater Treatment Technical Requirements Manual*. The pollution generating impervious surface includes replaced roadway adjacent to the trail and the portion of the trail that is subject to vehicular use. The sections of trail not subject to vehicle use are considered "clean" and are not required to be treated.

New stormwater treatment facilities include bioengineered planters, rain gardens, and treatment catch basins. These facilities in conjunction with other landscaped areas will provide approximately 12,500 square feet of net new pervious area to the project. The majority of the proposed planting areas are located in areas which are currently pollution generating impervious surfaces (PGIS). The trail improvements immediately east of 24th Ave NW will include new and replaced PGIS and non-PGIS, both with stormwater treatment. Where grades permit, stormwater runoff from the right-of-way will be collected in natural and concrete swales, catch basins and trench drains. After construction, stormwater flows will continue to be conveyed to the public storm drain system and combined sewer overflow pipe that discharge to Salmon Bay. In the area of the Ballard Bridge, stormwater will continue to sheet flow eventually discharging to Salmon Bay matching existing flow patterns.

CONSTRUCTION ACTIVITIES AND EQUIPMENT

General construction activities will include relocation of utilities, jack hammering, saw cutting, pavement and sidewalk removal with a backhoe, grading, installation of pavement, and landscaping. Construction equipment that may be used for this project includes a backhoe, a dump truck, a jack hammer, a concrete-mixing truck, a vibratory roller, paving machinery, and a compaction device.

IMPACT AVOIDANCE, MINIMIZATION MEASURES, AND BEST MANAGEMENT PRACTICES

The contractor will be required to follow the 2008 edition of *Seattle Standard Plans and Standard Specifications for Road, Bridge, and Municipal Construction*. The Seattle standard specifications, special

provisions in the project manual, and the contract drawings constitute the legal contract documents for city capital projects. Section 1-07.5 (Prevention of Environmental Pollution and Preservation of Public Natural Resources), along with Section 1-07.15 (Temporary Water Pollution, Erosion, and Sedimentation Control), apply to this project. The contractor will also be required to follow the requirements in Section 1-07.13 (Contractor's Responsibility for Work and Damage) and Sections 1-07.23 and 1-07.25 pertaining to construction under traffic. Section 2-03.3 (Construction Requirements) also applies to this project, specifically Section 2-03.10 for selected materials.

In addition, the contractor will be required to comply with the Stormwater, Grading, and Drainage Control Code (Seattle Municipal Code 22.800); Directors Rule 16-2000, *Construction Stormwater Control Technical Requirements Manual*; Directors Rule 27-2000, *Stormwater Treatment Technical Requirements Manual*; as well as the approved exceptions and flow control methods prescribed in Directors Rule 26-2000, *Flow Control Technical Requirements Manual*.

In addition, all applicable best management practices (BMPs) will be implemented as described in *Regional Road Maintenance Endangered Species Act (ESA) Program Guidelines* (Regional Road Maintenance Technical Working Group 2002) to assure protection of the environment and species of concern. This includes requiring the contractor to provide a Construction Plan, a Spill Prevention Plan, and an Emergency Spill Cleanup Plan before the start of construction. It also includes the use of catch basin filters, in catch basins located downgradient of the construction site, to prevent sediments and construction-related pollutants from entering the storm drainage system, in accordance with city erosion and sedimentation control practices. Furthermore, grading activities will be limited to dry days between April and October. During construction, the project will be covered under a National Pollution Discharge Elimination System (NPDES) Construction Stormwater General Permit issued by the Washington Department of Ecology. The contractor will produce a Surface Water Pollution Prevention Plan that will address spill prevention, fuel storage, erosion control and dewatering due to rainwater entering trenches.

ACTION AREA

The project *action area* is defined as all areas within the project construction limits (i.e., all areas used for staging and mobilization, all construction areas, and all other areas specifically related to the project activities), as well as adjacent areas where direct and indirect effects and effects due to interrelated and interdependent activities may occur during and after construction. Hence, the action area for the Burke Gilman trail extension (11th Avenue NW to Hiram M. Chittenden Locks segment) includes all areas that may be affected by the actions associated with the proposed project, including but not limited to, the actual work site (Figure 2).

Activities associated with the proposed project will include relocation of utilities, jack hammering, saw cutting, pavement and sidewalk removal, grading, installation of pavement, and landscaping. During construction, the existing ambient noise levels will be temporarily increased. The construction equipment used for the project will generate noise that is expected to carry up to 0.25 mile from the project site. Hence, the action area extends 0.25 miles (approximately 400 meters) from the project corridor to encompass the area of anticipated construction-related noise impacts (Figure 2). Considering the amount of urban traffic and construction noise commonly occurring in the area, it is anticipated that construction noise would attenuate to background noise even before reaching this point.

The proposed project does not include any in-water work. Aquatic effects are not expected to occur due to the project characteristics, setting, and distance from any body of water. Any potential effects related to stormwater runoff will be avoided with the installation of stormwater treatment systems including natural drainage swales, raingardens and Stormfilter catchbasins, and there will be a net decrease in impervious surface as a result of this project of approximately 12,500 square feet. Thus, although the action area shown in Figure 2 extends over the Salmon Bay Waterway and over marine waters west (downstream) of the Hiram M. Chittenden Locks, these areas would be affected only by terrestrial noise. Since the project is expected to have no effect on any freshwaters or marine waters, these portions of the action area are excluded from any water quality, underwater noise, or any other effects on aquatic species or their habitat.

SPECIES AND HABITAT INFORMATION

Available public information sources regarding fish distribution and use in the project area was reviewed. These sources include StreamNet Pacific Northwest Interactive Mapper, administered by the Pacific States Marine Fisheries Commission, and WDFW's PHS report and SalmonScape mapper. Each of these data sources provides information about distribution and use of Chinook salmon as well as steelhead and bull trout. StreamNet, SalmonScape, and the PHS data indicate that fall Chinook, bull trout, and winter steelhead utilize Salmon Bay Waterway.

Coastal/Puget Sound Bull Trout Status

The Coastal/Puget Sound bull trout DPS is listed as a threatened species under the Endangered Species Act. On September 26, 2005, the USFWS designated critical habitat for the Coastal/Puget Sound DPS of bull trout that includes nearshore areas of Puget Sound (USFWS 2005). Critical habitat is included within the project action area in Salmon Bay Waterway and marine waters west (downstream) of the Hiram M. Chittenden Locks.

Puget Sound Chinook Salmon Status

The Puget Sound Chinook salmon was listed as a threatened species by NMFS on March 24, 1999. The identified evolutionarily significant unit (ESU) includes all naturally spawned populations of Chinook salmon from rivers and streams flowing into Puget Sound (NOAA Fisheries 2008). Critical habitat for Puget Sound Chinook salmon was re-designated on January 2, 2006 and includes nearshore areas (NOAA Fisheries 2005). Critical habitat is included within the project action area in Salmon Bay Waterway and marine waters west (downstream) of the Hiram M. Chittenden Locks.

Puget Sound Steelhead Status

On March 29, 2006 NMFS proposed to list Puget Sound steelhead as threatened on May 11, 2007. This listing action includes only the anadromous form of *Oncorhynchus mykiss* (71 FR 15666-15680).

POTENTIAL EFFECTS OF THE ACTION

Potential direct effects resulting from construction activities in the vicinity of the project corridor include the following:

- Increased terrestrial noise during construction could occur. However, construction noise is expected to be within the baseline level currently experienced along the 11th Avenue NW to Hiram M. Chittenden Locks segment.
- Accidental spills of fuel, oils, chemicals, and concrete leachate could occur during construction. However, the project will include the implementation of impact avoidance, minimization measures, and BMPs (e.g. use of catch basin filters), which are expected to prevent such spills and stormwater runoff emanating from the project corridor from reaching Salmon Bay Waterway during construction.

EFFECT DETERMINATIONS

The project will have **no effect** on bull trout, Chinook salmon and Puget Sound steelhead for the following reasons:

- No in-water work will occur.
- The proposed project will not result in a net increase of pollutant generating surfaces and will not increase pollution generating activities (e.g., vehicular traffic over the project area).
- All applicable BMPs will be implemented as described in *Regional Road Maintenance Endangered Species Act (ESA) Program Guidelines* (Regional Road Maintenance Technical Working Group 2002) to assure protection of the environment and species of concern.
- No habitat Primary Constituent Elements of designated bull trout or Chinook salmon critical habitat will be impacted.

ESSENTIAL FISH HABITAT

The federal Magnuson-Stevens Act, as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), requires federal agencies to consult with NOAA Fisheries regarding activities that may adversely affect *essential fish habitat*. In addition, the statute requires fishery management councils to include descriptions of essential fish habitat in all federal fishery management plans.

Coastal pelagic and groundfish species are not found within the action area. Their distribution is limited to marine environments downstream of the Hiram M. Chittenden Locks. Within Salmon Bay Waterway, the nearshore habitats used by Chinook, coho, and pink salmon are considered essential fish habitat. The project will have **no effect** on essential fish habitat for Pacific salmon, coastal pelagic fish species or groundfish species for the following reasons:

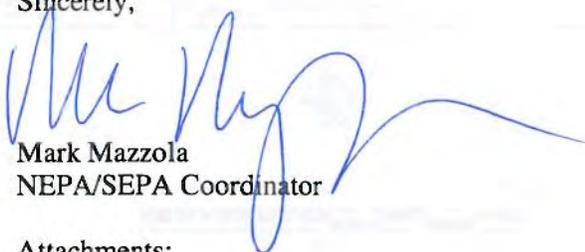
- Coastal pelagic and groundfish species are not found within the action area.
- No in-water work will occur.
- The proposed project will not increase pollutant generating surfaces and will not increase pollution generating activities (e.g. vehicular traffic over the project area).

REFERENCES

- NOAA Fisheries. 2005. Designation of Critical Habitat for 12 Evolutionarily Significant Units of West Coast Salmon and Steelhead in Washington, Oregon, and Idaho (Final rule). Federal Register 70, page 52630. National Oceanic and Atmospheric Administration, National Marine Fisheries Service. Obtained from agency website: <<http://www.nwr.noaa.gov/Publications/FR-Notices/2005/upload/70FR52630.pdf>>.
- NOAA Fisheries. 2008. Listing on Endangered Species. National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Environmental and Technical Services Division, Habitat Conservation Division, Seattle, Washington. Obtained from agency website: <<http://www.nwr.noaa.gov/ESA-Salmon-Listings/Salmon-Populations/Index.cfm>>.
- Regional Road Maintenance Technical Working Group. 2002. Regional Road Maintenance Endangered Species Act (ESA) Program Guidelines – Regional Guidelines. Developed by the Regional Road Maintenance Technical Working Group, Seattle, Washington. Obtained from King County website: <<http://www.metrokc.gov/kcdot/roads/esa/regionalprogram/index.cfm>>.
- United States Fish and Wildlife Service. 2008. Listed and Proposed Endangered and Threatened Species and Critical Habitat; Candidate Species; and Species of Concern in Snohomish County as Prepared by the U.S. Fish and Wildlife Service Western Washington Fish and Wildlife Office. Revised November 2007. <<http://www.fws.gov/westwafwo/speciesmap/KING.html>> (Accessed July 12, 2008).
- WDFW. 2008. Priority habitat and species data. Washington Department of Fish and Wildlife, Olympia, Washington. June 21, 2007
- WDNR. 2007. Sections that Contain Natural Heritage Features. Washington Natural Heritage Program. Current as of October 31, 2007. <http://www.dnr.wa.gov/Publications/amp_nh_trs.pdf> Accessed March 3, 2008.

This no effect letter was prepared to fulfill the responsibility of the city of Seattle under the Section 7(c) of the Endangered Species Act and the Magnuson-Stevens Act. If you have questions or comments regarding this biological evaluation, please call Mark Mazzola at (206) 733-9117.

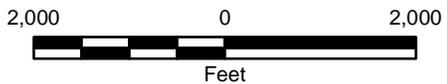
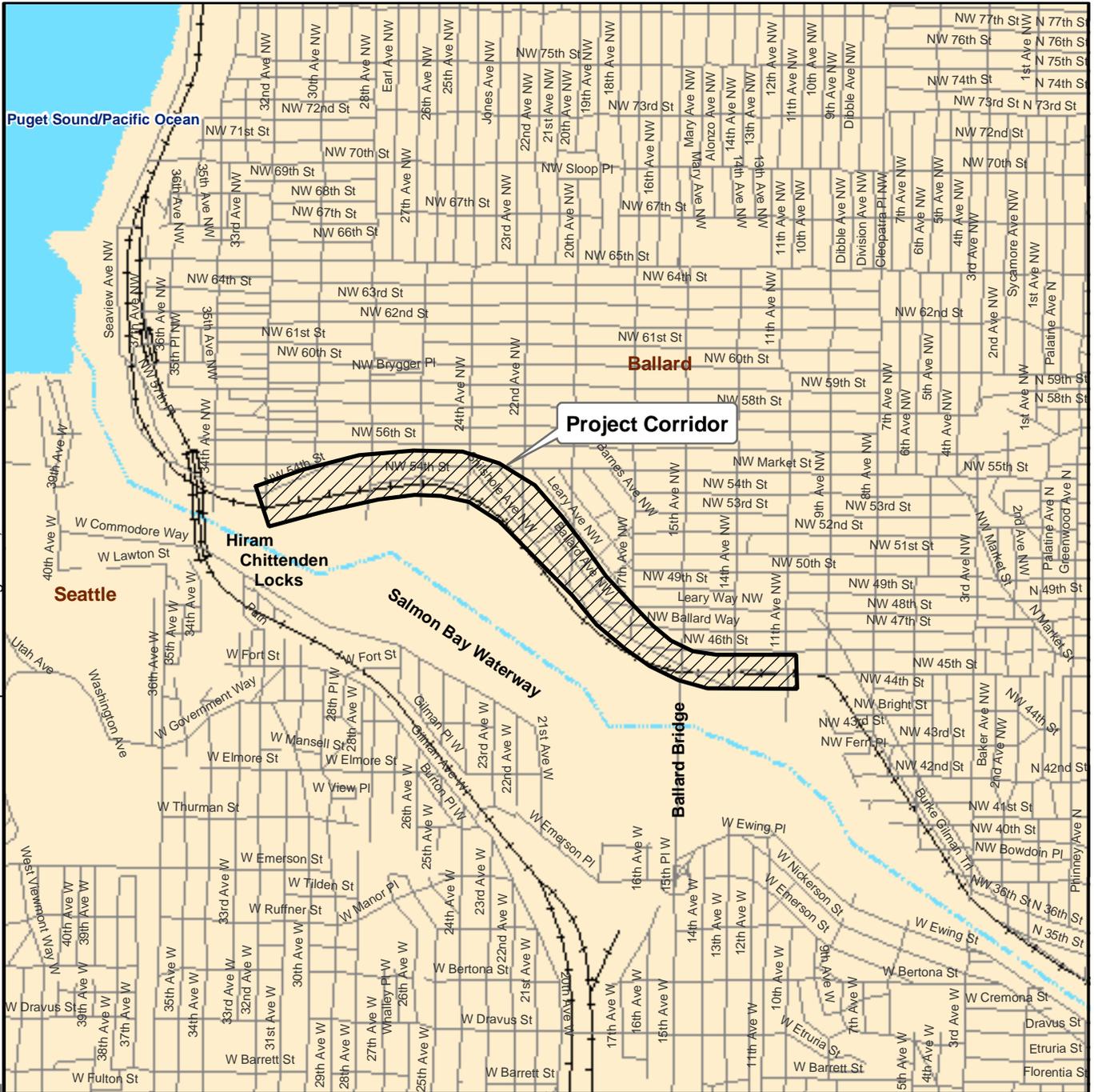
Sincerely,



Mark Mazzola
NEPA/SEPA Coordinator

Attachments:

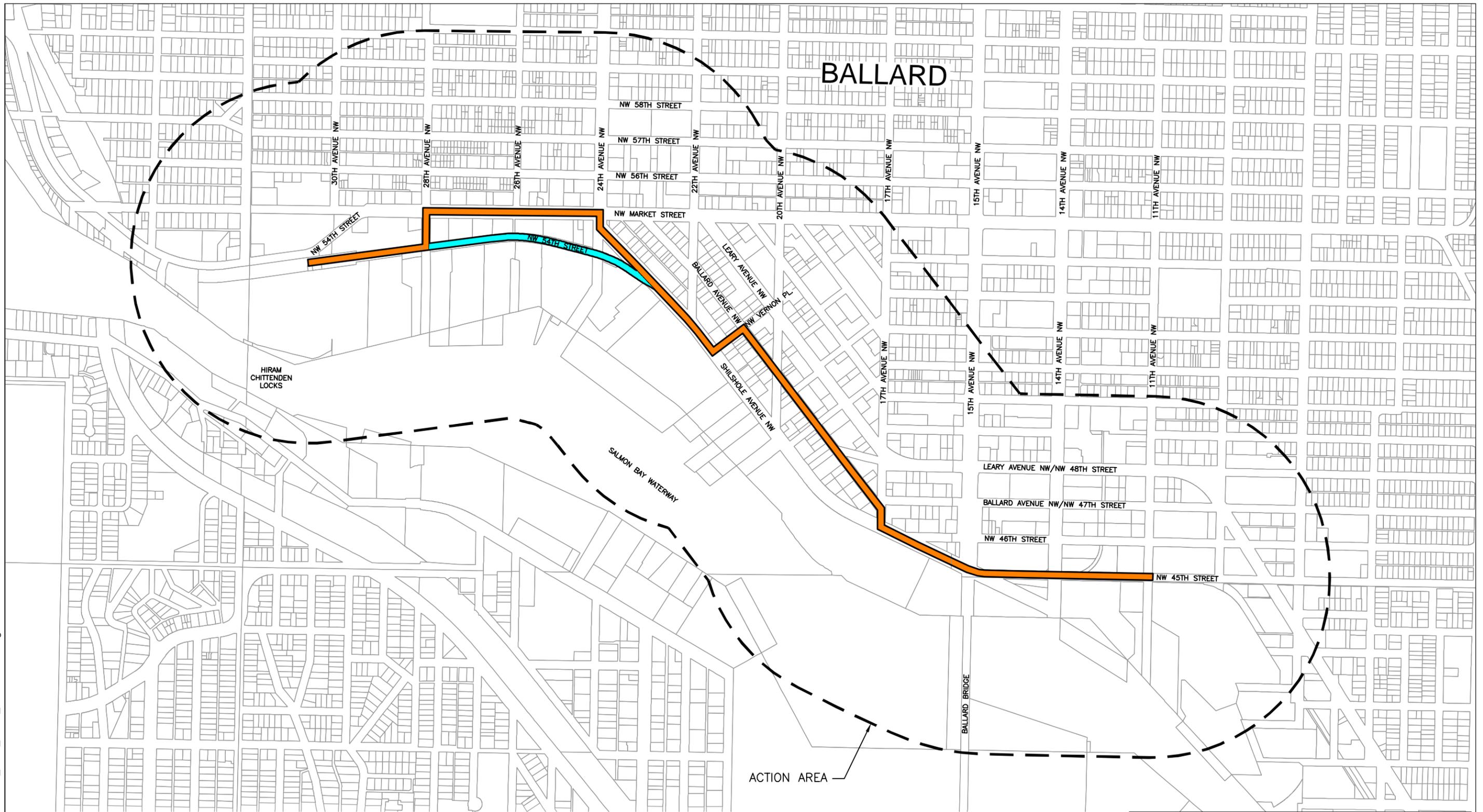
- Figure 1. Vicinity Map
- Figure 2. Action Area



- Notes:
1. The locations of all features shown are approximate.
 2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.
 3. It is unlawful to copy or reproduce all or any part thereof, whether for personal use or resale, without permission.

Data Sources: Interstates, state routes, and roads from TIGER 2000.
 County boundaries, cities, and waterbodies from Department of Ecology.
 USGS topo map provided by TerraServer (DRG-Scale4m).
 Lambert Conformal Conic, Washington State Plane North, North American Datum 1983

Vicinity Map	
Burke Gilman Trail Corridor - 11th Avenue NW to the Ballard Locks King County, Washington	
GEOENGINEERS 	Figure 1



Notes:
 1. The locations of all features shown are approximate.
 2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.
 Reference: Data parcels provided by King County GIS data.

Legend

- Recommended route
- Future portion of recommended route

700 0 700
Feet

Action Area	
Burke Gilman Trail Corridor - 11th Avenue NW to the Ballard Locks King County, Washington	
GEOENGINEERS	Figure 2