August 3, 2006

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

Subject: Endangered Species Act determination of effect for the Burke Gilman trail extension: NW 60th Street to Golden Gardens Park segment

Dear Mr. Conyers:
The Seattle Department of Transportation plans to construct the terminal segment of the Burke Gilman trail extension, from NW 60th Street to Golden Gardens Park (Figure 1 in Attachment 1). This segment of the trail is one of three connected trail extension projects for the Burke Gilman corridor between 11th Avenue NW, just east of the Ballard Bridge and Golden Gardens Park. This no effect letter addresses only the NW 60th Street to Golden Gardens Park segment of the Burke Gilman trail extension (proposed project).

For assistance in complying with the Endangered Species Act section (7), the Seattle Department of Transportation (SDOT) retained Herrera Environmental Consultants, Inc. (Herrera) to assess the effect of the project on proposed, threatened, and endangered species and their habitat. This no effect letter was prepared by Herrera in response to listings of threatened and endangered species.

Species and habitat information was obtained from the U.S. Fish and Wildlife Service (USFWS 2006) and the National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries 2006). Additional species information was obtained from the Priority Habitats and Species database, provided by the Washington Department of Fish and Wildlife (WDFW 2005). A search of the Washington State Department of Natural Resources' Natural Heritage Information System did not identify any state of federally listed plant species as occurring in the project vicinity (Moody 2005).

The USFWS (2006) identifies the following critical habitat and threatened or endangered animal and plant species as potentially occurring in King County:

- Bald eagle (*Haliaeetus leucocephalus*)
- Coastal/Puget Sound Bull trout (*Salvelinus confluentus*)

- Coastal/Puget Sound Bull trout critical habitat
- Marbled murrelet (*Brachyramphus marmoratus*)
- Golden paintbrush (Castilleja levisecta)
- Marsh sandwort (*Arenaria paludicola*).

Although marbled murrelet is listed as potentially occurring in King County, this species is not likely to occur within the project action area because of the presence of the Shilshole Bay Marina and the degree of associated human activity. Marbled murrelet could occur outside the action area foraging in the vicinity of Discovery Park. Similarly, although the golden paintbrush and the marsh sandwort are listed as potentially occurring in King County, neither of these species is likely to be present in the vicinity of the project corridor because of a lack of suitable habitats. Consequently, **marbled murrelet, golden paintbrush, and the marsh sandwort** are not discussed further in this letter.

Information from NOAA Fisheries (2006) indicates that the following critical habitat and species may also occur in King County:

- Puget Sound chinook salmon (*Oncorhynchus tshawytscha*)
- Puget Sound chinook salmon critical habitat
- Steller sea lion (*Eumetopias jubatus*)
- Leatherback sea turtle (*Dermochelys coriacea*)
- Humpback whale (*Megaptera novaeangliae*)
- Killer whale, southern resident (*Orcinus orca*).

Leatherback sea turtles and humpback whale generally occur only on the outer coast, rather than in Puget Sound where the project corridor is located. Leatherback sea turtles and Humpback whale will not likely occur in the nearshore Puget Sound area in the vicinity of the project corridor, which is adjacent to the Shilshole Bay Marina. The Shilshole Bay Marina is an area with high levels of human and industrial activity.

Based on a review of killer whale sightings data compiled from October to February 1990 to 2003 by the Whale Museum, southern residents have only been sighted in the area for one to five days over the 13 year period. The only other time whales were sighted was in May and that also amounted to only one to five days over the 13 year data set (Hopper 2006). Therefore, killer whale, southern residents are highly unlikely to be present within the project action area (see the Action Area section later in this document). Furthermore, killer whale habitat or prey base will not be affected by the construction or operation of the proposed project.

Consequently, **leatherback sea turtles and humpback and killer whales** are not discussed further in this report.

In addition, the NOAA Fisheries (2006) identifies the following proposed species and critical habitat:

- Puget Sound steelhead (*Oncorhynchus mykiss*)
- Killer whale (southern resident) critical habitat

On June 15, 2006 NOAA Fisheries proposed critical habitat for southern resident killer whales (71 FR 43571). This proposal includes approximately 2,500 square miles of Puget Sound. However, areas with water less than 20 feet deep are not proposed. The portion of Shilshole Bay within the action area is mostly contained within the Shilshole Bay Marina's breakwater, and is less than 20 feet deep in most areas. Hence, the action area portion of Shilshole Bay is not included within the proposed critical habitat for southern resident killer whales. Consequently, **critical habitat for southern resident killer whales** is not discussed further in this report.

Project Setting

The project corridor lies in an urban setting near the Puget Sound shoreline of Shilshole Bay, along the east side of Seaview Avenue NW, north of where the Lake Washington Ship Canal connects with Shilshole Bay (Figure 1 in Attachment 1). For most of its extent, the project corridor lies adjacent to a vegetated/forested strip that was likely fragmented from the adjoining steep slope many years ago when the Burlington Northern Santa Fe (BNSF) railway was constructed (see Key Photo and Photos 1 and 2 in Attachment 2).

Two wetlands have been identified and delineated within the project site (Figure 2a in Attachment 1). Wetland A is situated in the southern section of the project site, between the BNSF and Port of Seattle railroad tracks and south of NW 65th Street (Figure 2b in Attachment 1). Wetland B is located at the northern end of the project site, adjacent to Seaview Avenue NW (Figure 2c in Attachment 1; Herrera 2006a).

In addition, five surface water ditches have been identified and delineated within the project site. Seeps discharging from the hillslope east of the BNSF railroad tracks are the water sources for these ditches, which flow perpendicular to the project site corridor. Four of the ditches empty into storm drains located along Seaview Avenue NW and discharge to Shilshole Bay. The fifth ditch infiltrates into the ground and subsequently does not discharge to Shilshole Bay (Herrera 2006b).

Land uses along the corridor include multi- and single-family residences and commercial buildings towards the mid- and southern portions of the project corridor. Towards the northern portion of the project corridor, adjoining land uses include the Shilshole Bay Marina (to the west) and associated parking areas and steep slopes (to the east) which are included in the City of Seattle critical areas (Key Photo in Attachment 2).

Project Description

This project will construct a multi-use pedestrian and bicycle trail, on what is referred herein as the project corridor. The project corridor is located in Township 25 North, Range 3 East, Sections 2 and 11 (USGS 1983). The project corridor begins just north of the three-way intersection of Seaview Ave NW, 37th Place NW, and 38th Ave NW and continues to the

entrance at Golden Gardens Park. The proposed project does not include any in-water work. Construction is anticipated to start in Spring/Summer 2007 and to continue for one year for project completion.

For reference, the project corridor has been divided into three sections:

1. South section – the trail will run on the east side of railroad track from NW 60th Street to approximately 260 feet north of NW 65th Street. Total length of the south section will be approximately 1250 feet. The majority of this portion (950 feet) will have shared use by BNSF maintenance vehicles, which use this section infrequently.

2. Middle section – the trail will cross over the railroad track and then proceed north on a downward slope until it reaches the existing curb grade at approximately NW 67th Street. Total length of middle section will be approximately 600 feet. The majority of this section will be on new fill retained by a masonry retaining wall.

3. North section - the trail will run parallel to the Seaview Ave NW curb line at existing grade and will end across from the Golden Gardens Park entrance, at Seaview Place NW. The total length of the north section will be approximately 4,000 feet.

The typical widths of the trail will be 12-feet wide asphalt surface with 2-feet wide gravel shoulders for the south and middle sections. There will be a 5 feet wide landscaping strip in the north section between the Seaview Ave NW curb line and the edge of trail in lieu of the 2 feet gravel shoulder, the width of trail in the north section will be 11 feet (see Photo 0 in Attachment 2).

In addition, the project will have five retaining walls. Two of the retaining walls will be taller than four feet and will have a geogrid reinforcement. The remaining three walls will be shorter than four feet and are not considered structural walls. In the south section, there will be a keystone retaining wall on the east side of the bike trail between NW 65th Street and the location of the railroad crossover. The approximate length of wall in this section will be 230 feet. The average height will be 5 feet. The depth of excavation for the trail will be approximately. 1.5 feet below the top of the bike trail surface, and for the retaining wall the approximate excavation depth will be 7 feet. The minimum width of excavation will be 4.5 feet. The second structural retaining wall will be located in the Middle section. Here, a keystone retaining wall will be built along the west edge of the bike trail from the railroad crossover to the bike trail touch-down point. The total length of wall will be approximately 300 feet. The average height will be 5 feet. The approximate excavation depth for this retaining wall will be 3-4 feet. The purpose of this wall is to retain new fill. The footing for the wall will be built at least 1 foot below the existing embankment.

The proposed footprint of the trail will not be situated in either Wetlands A or B, and none of the project elements will include the addition of any fill material within these wetlands. However, the proposed footprint will lie within the buffers of Wetlands A and B (see Figures 2b and 2c in Attachment 1). In addition, 30 trees between six and eight inches in diameter will be removed as part of the project.

To compensate for buffer impacts the project will include the installation of a landscaping strip in the north section between the Seaview Ave NW curb line and the edge of the trail. In addition, 230 trees will be planted adjacent to the trail to compensate for those trees that will be removed as part of this project.

Impervious Surface Areas

Table 1 summarizes the existing, proposed, and anticipated changes in impervious and pervious surface area within the project corridor. The project will increase impervious surface area by 54,910 square feet. These impervious areas, however, will not be pollutant generating surfaces. Bicycle/pedestrian trails are considered non-pollutant generating impervious surfaces by the Washington State Department of Ecology (Ecology 2005).

Table 1. Existing and proposed impervious surface within the project corridor.

Project Corridor	Existing	Proposed	Net Increase or (Decrease)
Impervious area in square feet	31,915	86,825	54,910
Pervious area in square feet	120,650	65,740	(54,910)

Existing Drainage Configuration

The project corridor is located approximately 400 feet east of the Puget Sound shoreline of Shilshole Bay, along the east side of Seaview Avenue NW, north of where the Lake Washington Ship Canal connects with Shilshole Bay (Figure 1). The *Catalog of Washington Streams and Salmon Utilization* identifies no streams within the project corridor (Williams et al. 1975). The confluence of the Lake Washington Ship Canal (designated as water resource inventory area 08-0028) and Puget Sound (Shilshole Bay) is located approximately 150 feet south of the southern end of the trail extension, near NW 60th Street (Figure 1). However, as described above, there are five ditches that convey surface water on the project site. The water in these ditches originates as ground water springs and wetlands on the steep slope east of the project site and flows through incised ravines to the BNSF right-of-way, where it is collected in ditches. These ditches flow through culverts beneath the railroad tracks and Seaview Ave NW before eventually discharging into Puget Sound near the Shilshole Bay Marina (Herrera 2006a and 2006b).

South Section

The southern boundary of the project area begins just north of the three-way intersection of Seaview Ave NW, 37th Place NW, and 38th Ave NW. An existing gravel road (used infrequently for railroad maintenance by BNSF maintenance vehicles) parallels the tracks for approximately 950 feet (Photo 1). There are no evident drainage features along this section of the project corridor. The corridor then transitions to the area between the railroad tracks to the west and a heavily vegetated hillside to the east. There is an existing drainage ditch that parallels the railroad tracks at the base of the hillslope. The ditch conveys runoff from the hillside and the railroad right-of-way into an existing sand box structure on public property (just south of the terminus of NW 67th Street) that overflows into the Seattle Public Utilities (SPU) storm drainage lines in Seaview Avenue NW.

Middle Section

The short (600 foot) middle section of the project corridor consists of an existing concrete walk with a five-foot planting strip. Runoff from the concrete walk drains from east to west over the planter strip and onto Seaview Avenue for drainage to catch basins. SPU owns all catch basins and inlets that receive stormwater runoff within the project area according to available City of Seattle data.

North Section

The right-of-way east of the existing curb is vegetated with grasses, shrubs, and small diameter trees. Drainage from the adjacent heavily forested hillside is conveyed to ditches, a wetland, and catch basins along Seaview Avenue NW. All runoff either infiltrates into the vegetation or is conveyed directly to existing stormwater outfalls in Shilshole Bay.

Proposed Drainage Configuration

The proposed footprint of the trail will be located within the alignment the five ditches that occur along the project corridor. The existing functions of the these ditches includes limited water quantity treatment, although these ditches primarily function to convey water from upgradient sources past existing railroad grades to storm drains adjacent to Seaview Avenue NW. Following construction, these ditches will be replaced by conveying the existing flow in pipes or by installing new ditches outside of the footprint of the proposed trail extension. Overall, no functional impact to the existing ditch operations will occur.

South Section

The south section of the proposed trail will be constructed over the existing compacted dirt and gravel access road, transitioning into a cut section into the existing vegetated hillside and up the slope to the railroad crossing. After crossing over the railroad track, the trail cuts into the existing vegetated hillside in order to maintain the minimum separation between it and the existing railroad tracks. New drainage features created in this section of the project area will be integrated with existing drainage features. The trail surface will be configured with a two percent slope east to west for positive drainage perpendicular to (i.e., across) the path. The section of the proposed trail constructed on the existing access road will drain to the existing ditch and adjacent vegetation for infiltration. North of the railroad crossing, runoff will drain

across the path and along the base of a retaining wall through a culvert into a proposed catch basin that will replace the existing sand box referenced above. Runoff will be conveyed from the catch basin into existing 12-inch SPU storm drainage lines in Seaview Avenue NW.

As discussed before, the total length of south section will be approximately 1250 feet. The majority of this portion (950 feet) will have shared use by BNSF maintenance vehicles, which use this section infrequently. According to WSDOT (WSDOT 2006) and the Washington State Department of Ecology (Ecology 2005) guidelines, stormwater runoff treatment would not be required for this project.

Middle Section

The middle section of the proposed trail will be configured with a two percent slope east to west for positive drainage of runoff across the path into a five-foot wide planter strip. Runoff will filter through the planter strip onto Seaview Avenue NW where it will flow along the curb/gutter line to existing catch basins.

North Section

As with the middle section of the project area, the north section of the proposed trail will be configured with a two percent slope east to west for positive drainage of runoff from the path into a five-foot planter strip. Runoff from the trail will flow across the path, into the planter strip and onto Seaview Avenue NW, where it will then flow along the existing curb/gutter line and into existing catch basins.

In summary, because the project does not change the existing stormwater discharge location; does not modify stormwater runoff rates, volumes, or durations; and runoff from the project area drains directly into a large receiving water body (which is exempt from flow control requirements), flow control is not required. In addition, the proposed project does not result in any increase in pollution generating surfaces and will not increase pollution generating activities (e.g., vehicular traffic over the project area). Furthermore, runoff from the trail at any of the three sections will not flow across Seaview Avenue NW, and therefore will not mobilize any off-site roadway pollutants.

Consequently, the project will meet the WSDOT/Federal Highways Administration (FHWA) stormwater criteria for Level One Consultations. Level One Consultations are for projects that will result in no net increase in pollutant loading and will not result in base flow duration and peak flow alterations.

Construction 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, and a compaction device.

Impact Avoidance, Minimization Measures, and Best Management Practices

Specific Measures
By design, the proposed project avoids and minimizes impacts by aligning the corridor away from adjacent wetlands and most of their buffers. The proposed corridor alignment also minimizes the number of trees that will need to be removed.

General Measures and BMPs
The contractor will be required to follow the 2003 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 2-03.3(5) for slope treatment and 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 BMPs 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.

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 (NW 60th Street to Golden Gardens Park 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 (see Figure 1 in Attachment 1).

The action area associated with the proposed project consists only of the area of potential terrestrial effects. 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. 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. Hence, the action area extends 0.25 miles (400 meters) from the project corridor to encompass the area of anticipated construction-related noise impacts (see Figure 1 in Attachment 1).

Species and Habitat Information

The results of the literature review and agency contacts regarding federally listed and proposed species and critical habitat in the vicinity of the proposed project, including their status and documented occurrence in the project action area, are discussed below.

Bald eagle Status

The bald eagle is currently listed as a threatened species under the Endangered Species Act. However, recovery of this species continues to progress at an impressive rate.

Species Occurrence in the Project Action Area

Nesting bald eagles in the project vicinity forage primarily on the open marine waters, often perching on the breakwater at Shilshole Bay marina and in suitable trees on the steep slopes above the shoreline at Golden Gardens Park, just outside of the action area. Bald eagles may forage along the Discovery Park and the Golden Gardens Park shoreline if there are dead fish present. However, dead fish are not a common food source for bald eagles at this location (Peterson 2002).

The WDFW (2005) identifies one bald eagle pair nesting and wintering near the project area. These bald eagles use the Discovery Park area (out of the action area for this project) for nesting, foraging, perching, and roosting (Peterson 2002). They are year-round residents of the Discovery Park area and have been reported to nest in this area every year since 1988 (WDFW 2005). Their nest is located near the northern tip of Discovery Park, approximately 1,550 feet (0.3 miles) southwest of the project corridor. The project corridor is not in a direct line of sight of the nest because a strip of large trees obstructs the view.

This nesting eagle pair has been documented to be highly tolerant to noise and other human disturbance, showing a high degree of acclimation. For example, the nest is near 42nd Avenue West in a busy, densely populated neighborhood, adjacent to the busy Lake Washington Ship Canal. In addition, the pair was not significantly disturbed by a major remodel of the adjacent house, or by parties and basketball games on the private basketball court that is located immediately under the nest (Stofel 2006).

The nesting eagle pair also winters in the project vicinity, displaying similar foraging habits to those observed during the nesting season and using similar perch sites (outside of the project action area). In general, wintering bald eagles avoid areas where human activity is significant, and their sensitivity appears greatest during feeding. Finally, wintering bald eagles appear to be more tolerant of auditory disturbances when the sources are partially or totally concealed from their view (Stalmaster and Newman 1979).

The nesting activity starts in January, with egg laying in February, and fledging by mid-August (Watson and Anthony 1986, Peterson 2000). Bald eagles are known to range widely in search of food (Stalmaster 1987), and are opportunistic hunters. Foraging areas for this nesting pair have been reported to range from Bainbridge Island to the west, Elliott Bay to the south, and Carkeek Park to the north (Peterson 2002).

The Coastal/Puget Sound Bull trout Status

The Coastal/Puget Sound bull trout distinct population segment (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 Shilshole Bay (USFWS 2005).

Species Occurrence in the Project Action Area

Bull trout (native char) have been collected at the Hiram Chittenden locks, which indicates use of the Lake Washington ship canal as a migration corridor for coastal anadromous population of this species (WDF 1993, King County Department of Natural Resources 2000; USFWS 2004). Adults pass through the Ballard locks between mid-May and June (WDFW 1998). Native char have reportedly been observed in the viewing chamber of the locks on June 21, 1996 (King County Department of Natural Resources 2000). However, there are no data on the number of char passing through this facility to and from Lake Washington. A native char was caught and released on May 3, 2000 during a beach seine in Shilshole Bay near the outlet of the Ballard Locks. In addition, native char have also been known to congregate in Shilshole Bay to feed on smolts during the spring outmigration period (King County Department of Natural Resources 2000).

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 2006). Critical habitat for Puget Sound Chinook salmon was re-designated on January 2, 2006 and includes nearshore areas of Shilshole Bay (NOAA Fisheries 2005).

Species Occurrence in the Project Action Area

Adult fall chinook salmon enter the Lake Washington drainage basin at the Ballard Locks between mid-July and September (Seiler 2000). Adult chinook salmon use the Lake Washington ship canal as a migration corridor to reach spawning grounds in river tributaries, particularly in the Sammamish and Cedar River subbasins. Adult fall chinook salmon congregating at the base

of the fish ladder at the Ballard Locks are preyed upon by California sea lions (*Zalophus californianus*), so they move quickly through the area (Fresh 1999).

Juvenile chinook salmon pass through the Ballard Locks and use the Puget Sound shoreline adjacent to the project area as a migration corridor when out-migrating to the ocean from May to July (Chan 2000). Chinook salmon smolts use the Puget Sound shoreline when out-migrating to the ocean. This is especially true for ocean-type chinook, which spend as long as two months in shallow Puget Sound before moving to deeper waters. However, the numerous docks and moorages located along the Shilshole Bay shoreline are expected to harbor predatory fishes, which may limit the use of this area by smolts.

Steller sea lion Status

The steller sea lion, eastern stock, was listed in 1990 by NOAA Fisheries as a threatened species under the Endangered Species Act. Critical habitat was designated by NOAA Fisheries in Oregon and California for the steller sea lion in 1993. There is no designated critical habitat for steller sea lion within the project vicinity.

Species Occurrence in the Project Action Area

Steller sea lions are considered occasional users of Shilshole Bay with 1-3 animals present from October through June. They typically use navigation buoys or the National Marine Fisheries Service/National Marine Mammal Lab sea lion capture float west of the Shilshole Bay Marina breakwater as haul-out sites (Jeffries 2006).

Puget Sound steelhead Status

On March 29, 2006, NOAA Fisheries (2006) proposed the listing of Puget Sound steelhead DPS as threatened under the Endangered Species Act. This DPS includes all naturally spawned populations of steelhead from rivers and streams flowing into Puget Sound.

Species Occurrence in the Project Action Area

Juvenile steelhead migrants likely utilize Shilshole Bay as a migration corridor. Schools of juvenile salmon are consistently found in marinas Throughout Puget Sound including the Shilshole Bay Marina (Weitkamp et al. 1981). Adult steelhead could also be present migrating within the marine nearshore environment of the project action area.

Potential Effects of the Action

Direct Effects Resulting from Construction Activities

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

- Increased noise during construction could occur. However, construction noise is expected to be within the baseline level currently experienced along Seaview Ave NW and within the Shilshole Bay Marina.

- Loss of 30 trees (six to fourteen-inch diameter) along the proposed project corridor.

- Accidental spills of fuel, oils, chemicals, and concrete leachate used during construction could enter surface water runoff and potentially reach Shilshole Bay via existing stormwater conveyance systems, potentially harming aquatic organisms and habitat. 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 stormwater runoff from the project corridor from reaching Shilshole Bay during construction.

Indirect Effects Resulting from Long-Term Operations

Currently, the levels of human activity, disturbance, and traffic in the area surrounding the project corridor are high. The proposed project will not alter these activity or disturbance levels.

Interrelated and Interdependent Activities

Interdependent activities are those that have no independent utility apart from the proposed action. *Interrelated activities* are those that are a part of the primary action and are dependent upon that action for their justification.

There are no known interrelated or interdependent activities scheduled to occur in the vicinity of the project site during the construction period for the proposed project nor are any such activities expected to occur as a result of the operation of the Burke Gilman trail extension (NW 60th Street to Golden Gardens Park segment).

Effect Determinations

Bald Eagle

The project will have **no effect on bald eagles** for the following reasons:

- The bald eagle nest that is present near the northern tip of Discovery Park is located approximately 0.3 mile from the project corridor at its nearest point. The project corridor is not in a direct line of sight of the nest. This bald eagle nesting pair has been documented to be highly habituated to noise and other human disturbance (Stofel 2006).

- The project will not affect bald eagle habitat, prey, or foraging activities. The foraging areas for the Discovery Park nesting pair have been reported to range from Bainbridge Island to the west, Elliott Bay to the south, and Carkeek Park to the north of the project corridor. Hence, there are many suitable foraging areas available to this bald eagle nesting pair.

- The 30 trees along the project corridor that are proposed for removal are not suitable for bald eagle perching or roosting.

Coastal/Puget Sound Bull Trout

The project will have **no effect on bull trout** for the following reasons:

- The action area associated with the proposed project consists only of areas of potential terrestrial effects; no in-water work will occur. Aquatic effects are not expected to occur due to the project characteristics, setting, and distance from Shilshole Bay.

- The proposed project is not creating pollutant generating surfaces and will not increase pollution generating activities (e.g., vehicular traffic over the project area). The project will meet the WSDOT/Federal Highways Administration (FHWA) stormwater criteria for Level One Consultations. Level One Consultations are for projects that will result in no net increase in pollutant loading and will not result in base flow duration and peak flow alterations.

- 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. This includes requiring 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.

Coastal/Puget Sound Bull Trout Critical Habitat

The project will have **no effect on bull trout critical habitat** for the same reasons listed for bull trout.

Puget Sound Chinook Salmon

The project will have **no effect on chinook salmon** for the same reasons listed for bull trout.

Puget Sound Chinook Salmon Critical Habitat

The project will have **no effect on chinook salmon critical habitat** for the same reasons listed for bull trout.

Steller Sea Lion

The project will have **no effect on steller sea lions** for the reasons listed for bull trout. In addition, steller sea lions use of the action area is limited and they are considered only occasional users of Shilshole Bay with 1-3 animals present from October through June.

Puget Sound Steelhead

The project **will not jeopardize the continued existence of Puget Sound steelhead trout**. Should this species be listed under the ESA before the completion of the proposed project, then the project would have **no effect on Puget Sound steelhead trout**.

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.

In Shilshole Bay, the nearshore habitats used by chinook, coho, and pink salmon and coastal pelagic fish species and groundfish species 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 reasons listed above for bull trout.

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. We are sending you this copy of our assessment for your files.

If you have any questions or comments regarding this project, please contact me at (206) 684-5150. If you have questions or comments regarding this biological assessment, please contact José Carrasquero of Herrera Environmental Consultants at (206) 441-9080.

Sincerely,

(signature on file)

Urania Pérez
Senior Environmental Specialist
Seattle Department of Transportation

Attachments:

1 – Map of Project Corridor and Action Area
2 – Site Photographs
3 – References

ATTACHMENTS

References

Chan, Jeff. April 24, 2000. Personal communication (telephone conversation with Doug Gresham, Herrera Environmental Consultants, regarding bull trout occurrence at the project site). Washington Department of Fish and Wildlife, Olympia office.

Ecology. 2005. Stormwater Management Manual for Western Washington. Washington State Department of Ecology, Water Quality Program, Lacey, Washington.

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