

Plants and Wildlife

Studies and Coordination

This section is based on field investigations and a review of existing information that identified vegetation, wildlife, and fish resources in the project area. The County's consultant biologist conducted a site visit on August 15, 2007, to evaluate plants and wildlife habitat in the project area, and to record observations regarding vegetation communities and wildlife habitat along the roadway. In addition, a wetland delineation and rating was conducted in February and March 2007. Additional information relating to drainage basins, vegetation, wildlife, and fish in the project area was drawn from the following documents and sources:

- *20th Street Improvement Project Final Environmental Impact Statement (91st Avenue SE to S Lake Stevens Road)*, Snohomish County, November 2005.
- *Biological Assessment for the 20th Street SE Corridor Improvement - 91st Avenue SE to South Lake Stevens Road (Project # RC1319 and RC1261)*, Snohomish County, March 2007.
- *Priority Habitats and Species Data*, Washington Department of Fish and Wildlife, December 2006.
- *Salmonscape database (available online)*, Washington State Department of Fish and Wildlife, October 2007.

If the Preferred Alternative is selected, this project will require a permit from the U.S. Army Corps of Engineers (Corps). This federal permit requires the Corps to comply with Section 7 of the Endangered Species Act (ESA) to ensure that their actions do not jeopardize endangered or threatened species or their critical habitats. A Biological Assessment (BA) is required to determine potential effects of the project on federally threatened or endangered, proposed, and candidate species and their habitats. A BA will be prepared for this project for review and concurrence by the National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS) and the United States Fish and Wildlife Service (USFWS).

Affected Environment

Vegetation

The project area is located within the western hemlock (*Tsuga heterophylla*) vegetation zone, the most widespread zone in western Washington. The section of 20th Street SE between the US 2 Trestle and 91st Avenue SE is surrounded by a mixture of dense residential development, rural areas (small farms and pasture), and remnant patches of young, mixed coniferous-deciduous forests. Approximately 2,100 feet of the approximate 1.6 mile roadway segment borders forested habitats. Narrow riparian forests occur along portions of two streams, Fox Creek and Mosher Creek, crossed by the roadway. (Mosher Creek is just outside the eastern limits of the project

area. It is included in this section because it could be impacted due to its proximity to the project.) Two parcels were excluded from the investigation because they have proposed land use actions (permitted for construction or under construction). Snohomish County indicated the presence of a stream on one of those parcels. For this analysis, it is assumed there would be no impacts from the project on any streams on those parcels.

Species in the forested areas observed along the project alignment consist of varying densities of black cottonwood (*Populus balsamifera*), bigleaf maple (*Acer macrophyllum*), red alder (*Alnus rubra*), western hemlock, western red cedar (*Thuja plicata*), and Douglas fir (*Pseudotsuga menziesii*). Typical understory vegetation in these areas consists of a combination of western swordfern (*Polystichum munitum*), salmonberry (*Rubus spectabilis*), Himalayan blackberry (*R. armeniacus*), trailing blackberry (*R. ursinus*), Indian plum (*Oemleria cerasiformis*), snowberry (*Symphoricarpos albus*), and reed canarygrass (*Phalaris arundinacea*). Open, non-forested areas typically consist of Himalayan blackberry, reed canarygrass, bentgrass (*Agrostis spp.*), and thistle (*Cirsium spp.*), as well as grasses and forbs typical of western Washington pastures.

Forested wetland and riparian areas along the two streams that cross 20th Street SE, Fox Creek and Mosher Creek, typically consist of black cottonwood, red alder, and/or western red cedar, with varying understories of salmonberry, Himalayan blackberry, red-osier dogwood (*Cornus sericea*), and Douglas spirea (*Spiraea douglasii*). Dominant species in scrub-shrub wetlands include Himalayan blackberry, Douglas spirea, red-osier dogwood, and reed canarygrass. Dominant species in emergent wetlands are reed canarygrass, common rush (*Juncus effusus*), bentgrass, common cattail (*Typha latifolia*), and common velvetgrass (*Holcus lanatus*).

Urban lands in the project vicinity are made up of unmaintained tree, shrub, and grassy areas along roadways, and maintained areas including grassy roadside ditches and backyard landscaping.

Wildlife

In urbanizing areas similar to the project area, the abundance and diversity of wildlife species typically decline to a point where only those species tolerant of urban environments remain. The types of species currently likely to inhabit the area are directly related to the types of habitats available for breeding, foraging, rearing, denning, and hiding.

Wildlife species that use the open pastures and residential areas in the project vicinity include song sparrow (*Melospiza melodia*), American robin (*Turdus migratorius*), American crow (*Corvus brachyrhynchos*), and European starling (*Sturnus vulgaris*). The patches of forest and wetlands in the area provide habitat for chickadees (*Parus spp.*), spotted towhee (*Pipilo maculatus*), yellow warbler (*Dendroica petechia*), and northern flicker (*Colaptes auratus*). Mammals likely present in the project vicinity include raccoon (*Procyon lotor*), opossum (*Didelphis virginiana*), striped skunk (*Mephitis mephitis*), mice (*family Muridae*), rats (*Rattus spp.*), shrews (*Sorex spp.*), and voles (*Microtus spp.*).

The wetlands associated with Mosher and Fox Creeks and Wetlands 2 and 6 (see Water Resources section) have water that ponds during spring and potentially longer and may provide habitat for pond-breeding amphibians such as long-toed salamander (*Ambystoma macrodactylum*), rough-skinned newt (*Taricha granulosa*), western toad (*Bufo boreas*), Pacific tree frog (*Pseudacris regilla*), bullfrog (*Rana catesbeiana*), and northern red-legged frog (*Rana*

aurora). The riparian and upland forests next to the roadway may support adult pond-breeding species as well as terrestrial amphibians such as western red-backed salamanders (*Plethodon vehiculum*) and ensatina (*Ensatina eschscholtzii*). Reptilian species that may occur in the project area include northern alligator lizard (*Elgaria coerulea*), northwestern garter snake (*Thamnophis ordinoides*), and western terrestrial garter snake (*Thamnophis elegans*).

Fish

Many fish species inhabit the Snohomish River and its tributaries. Although there are no known records of fish use in Mosher Creek or Fox Creek where 20th Street SE crosses these streams, most of these species are likely to occur at least occasionally in Ebey Slough. The more common of these species that occur in the Ebey Slough are listed in Table 16 which also provides information on the ecological roles of the species of greatest concern within the watershed. Salmonid populations in the Snohomish River watershed are a mix of native and introduced stocks.

In general, the headwater sections of Mosher and Fox Creeks have significantly reduced habitat due to factors such as altered hydrology, excessive fines in the streambed, and unstable streambanks. No fish use of Fox Creek has been reported and the only reach of the stream that contains fish habitat above the floodplain is the section between SR 204 and Sunnyside Boulevard (approximately 1 mile from the project area), which was rated as fair to good by Snohomish County. Upstream of SR 204, existing habitat was rated very poor to non-existent.

WDFW indicates that coho salmon occur in the lower mile of Mosher Creek, with documented coho presence extending to only about 0.3 mile upstream of US 2 (more than 1.6 miles downstream of 20th Street SE). No other fish species are known to occur in Mosher Creek.

Special Status Wildlife and Plant Species

None of the federally listed wildlife species identified by the USFWS as potentially occurring in Snohomish County—grizzly bear (*Ursus arctos* = *U. a. horribilis*), gray wolf (*Canis lupus*), Canada lynx (*Lynx canadensis*), marbled murrelet (*Brachyramphus marmoratus*), or northern spotted owl (*Strix occidentalis caurina*)—occurs near the project vicinity due to the high level of development and lack of suitable habitat. Designated critical habitat for northern spotted owl or marbled murrelet does not occur within or adjacent to the project site. Similarly, the three species proposed for listing under the ESA that may occur in Snohomish County—Fisher (*Martes pennanti*) (West Coast distinct population segment), Oregon spotted frog (*Rana pretiosa*), and yellow-billed cuckoo (*Coccyzus americanus*)—do not occur in the project vicinity.

Although no federally listed fish species are known to occupy Fox Creek or Mosher Creek, Ebey Slough supports Chinook salmon from the Puget Sound evolutionary significant unit (ESU), steelhead from the Puget Sound distinct population segment (DPS), and bull trout from the Coastal/Puget Sound DPS, all listed under the ESA as threatened. Additionally, Ebey Slough is designated as critical habitat for bull trout and Chinook salmon. Critical habitat has not yet been designated for steelhead. Other fish species with federal status that potentially occur within the project vicinity include Pacific and river lamprey, which are federal species of concern. The Puget Sound/Strait of Georgia population of coho salmon was previously listed as a candidate

Table 16. Native Fish Species Prevalent in the Snohomish River and Their Ecological Roles (WDFW 2003; Wydoski and Whitney 2003)

Species Scientific Name	Federal and State Status^a	Ecological Role
River lamprey <i>Lampetra ayresi</i>	FCo, SC	Salmonid predator.
Bull trout <i>Salvelinus confluentus</i>	FT, SC	Overlapping habitat with other salmonids, but relatively low numbers in the lower watershed. Major fish predator.
Cutthroat trout <i>Oncorhynchus clarki</i>	None for Puget Sound ESU	Young compete with other salmonids for habitat and prey. Adult cutthroat consume fish, including Chinook salmon.
Steelhead/resident rainbow trout <i>Oncorhynchus mykiss</i>	FT (only steelhead)	Overlapping habitat with other salmonids, consume similar prey. Some predation on young salmonids probable.
Chinook salmon <i>Oncorhynchus tshawytscha</i>	FT, SC	Wild and hatchery origin compete with other salmonids for habitat and prey.
Coho salmon <i>Oncorhynchus kisutch</i>	FCo	Wild and hatchery origin compete with other salmonids for habitat and prey.
Reticulate sculpin <i>Cottus perplexus</i>	None	Inhabits rubble and gravel-bottomed pools and riffles of headwaters, creeks and small rivers.
Shorthead sculpin <i>Cottus confusus</i>	None	Some overlap in prey with young salmonids.
Prickly sculpin <i>Cottus asper</i>	None	Benthic habitat from shorelines to deep water. Prey competition with young salmonids. Larger sculpins prey on small fish.
Largescale sucker <i>Catostomus macrocheilus</i>	None	May compete for food with salmonids, but fry also provide forage for salmonids.
Speckled dace <i>Rhinichthys osculus</i>	None	Prefers colder, shallow (< 3 feet deep) water. A bottom feeder
Longnose dace <i>Rhinichthys cataractae</i>	None	Associate with swift-running water (riffles). Prey base in predominately aquatic insect larvae.

^a FCo = Federal Species of Concern, FT = Federally Threatened, SC = State Candidate Species, ESU = evolutionarily significant unit.

species (NMFS 1995) but its status has recently been downgraded to a species of concern. Life history and distribution information for these species is presented below.

Priority fish species include all state endangered, threatened, sensitive, and candidate species and species of recreational, commercial, or tribal importance that are considered vulnerable. All fish species with state candidate status that occur in the study area also hold a federal designation and have been discussed previously. No state sensitive, threatened, or endangered fish species occur within the study area. The only priority fish species documented to occur in the study area is the coastal cutthroat trout.

Eight wildlife species and one plant species that are federal species of concern have ranges that overlap the project area and could occur in the project vicinity (Table 17).

A query of WDFW Priority Habitats and Species (PHS) documented the presence of a bald eagle (*Haliaeetus leucocephalus*) nesting territory near Ebey Slough. No other federally listed, proposed, or candidate species, or state-listed or state-sensitive species have been documented in the area.

The bald eagle, which was removed from the federal list of threatened and endangered species on August 8, 2007, is a species of concern to the USFWS, a Washington State threatened species, and is federally protected under the Bald and Golden Eagle Protection Act passed in 1940 and amended in 1967. In addition, Snohomish County Code (SCC) 30.62A.110 protects stream, wetland, and riparian habitats that contain critical species listed as endangered or threatened by the state or federal governments. Under the SCC, Fish and Wildlife Habitat Conservation Areas and Habitat Management Plans are used to protect bald eagles. Any development activity including clearing of vegetation, grading or external construction within 800 feet of a nest tree or roost habitat requires a Habitat Management Plan. The nearest known bald eagle nest is more than 1 mile southwest of the project area near Ebey Slough. Potential bald eagle wintering, perching and foraging habitat does not exist in the project corridor, but does occur near Ebey Slough, the Pilchuck River, and Lake Stevens, as well as several smaller lakes and ponds outside of the project vicinity that provide potential waterfowl habitat.

No federally listed plant species occur in Snohomish County. One Washington state threatened plant species, water lobelia (*Lobelia dortmanna*), has been documented in western Snohomish County but not near the project area. Water lobelia has been observed in nine lakes in Whatcom, Snohomish, Clallam, King, Skagit, San Juan, and Mason counties. The species occurs in shallow water at the margins of lakes and ponds.

Table 17. Species of Concern Potentially Occurring in the Project Vicinity

Species	Range and Habitat ¹	Likely Occurrence in Project Area
Bald eagle (<i>Haliaeetus leucocephalus</i>)	Occurs in western Snohomish Co.; nests in large trees near water, forages in marine waters, lakes, wetlands and open uplands	Documented nest site over 1 mile away from project area. May rarely forage in the project area.
Long-eared myotis (<i>Myotis evotis</i>)	Forested habitats throughout Washington	May occur in patches of forest near roadway
Long-legged myotis (<i>Myotis volans</i>)	Forested habitats throughout Washington	May occur in patches of forest near roadway
Northern goshawk (<i>Accipiter gentilis</i>)	Rare non-breeding occurrence in western Snohomish County. Mature coniferous forests and mixed coniferous and deciduous forests	May rarely occur in forests surrounding the project but only outside of the breeding season
Olive-sided flycatcher (<i>Contopus cooperi</i>)	Breeds in western Snohomish County. Uses areas that have been logged, as well as other clearings and edges, which are superficially similar to post-fire stands.	May breed along the forest edges in the project area
Pacific Townsend's big-eared bat (<i>Corynorhinus townsendii townsendii</i>)	Range covers western Snohomish Co. Uses caves, mines, and buildings for hibernacula	May forage in project vicinity but no known hibernacula exist.
Peregrine falcon (<i>Falco peregrinus</i>)	Year-round in western Snohomish Co. Forages in open areas	No breeding or suitable foraging habitat within 0.5 mile of the project area
Western toad (<i>Bufo boreas</i>)	Variety of terrestrial habitats including prairies, forests, canyon grasslands	May breed in wetlands in the project area
Stalked moonwort (<i>Botrychium pedunculosum</i>)	Brushy secondary-growth habitats along streams and roadsides; approximately 1,000 to 3,300 feet elevation	Project area is likely at an elevation that is too low for this species

¹ Sources: **Birds**—<http://www.birdweb.org/birdweb/index.aspx>

Mammals—<http://www.washington.edu/burkemuseum/collections/mammalogy/mamwash/mamwash.html>

Amphibians—<http://www.dnr.wa.gov/nhp/refdesk/herp/speciesmain.html>

Plants—<http://plants.usda.gov/>

Impacts – Plants and Wildlife

During Construction

Preferred Alternative

The project would directly eliminate vegetation consisting mostly of invasive roadside herbaceous and shrub species. Approximately 0.6 acre of forested habitat would be affected by permanent clearing for construction of the roadway and stormwater detention facilities, and an additional 0.4 acre would be affected by temporary clearing. Approximately 93 coniferous and deciduous trees greater than 12 inches diameter at breast height (dbh) would be eliminated. Loss

of forested habitat would contribute to the ongoing fragmentation of habitat for species that require forested habitats. However, the impacts would not be significant due to the already developed and fragmented nature of the corridor (which is immediately adjacent to an existing road) and the relatively small amount of impacted habitat.

A preliminary analysis indicates approximately 0.35 acre of wetland and 0.64 acre of wetland/stream buffer would be permanently eliminated (to avoid double-counting, where wetland and stream buffers overlap, only impacts to wetland buffers will be calculated). In addition, 0.16 acre of wetlands and 0.21 acre of buffers would be temporarily disturbed (see Table 13 in the Water Resources section). These direct impacts would reduce habitat for amphibians, birds, and small mammals. However, given the highly developed landscape along the existing roadway, the impacts would be minor.

Direct wildlife mortality may occur in the case of less-mobile species. Construction could result in destruction of active bird nests if construction takes place during the breeding season (generally, April through August). Noise from construction may cause some disturbance of wildlife immediately along the roadway.

The existing stream culvert at Fox Creek will be extended at its south end under this project; the culvert at Mosher Creek will not be impacted. Therefore, functional stream habitat impacts would be limited to a small amount of instream loss in Fox Creek, a seasonal non-fish bearing stream, and minor permanent impacts to the riparian zone of Fox Creek, immediately adjacent to the roadway. The magnitude of the clearing within the riparian area of this non-fish bearing reach of the stream would be extremely minor, and would not appreciably impact overall riparian functions, such as large woody debris recruitment, stream shading, or nutrient input. Mosher Creek will only receive some project area stormwater, and road widening activities do not extend as far east as the location of the stream crossing.

Construction of the project, including road widening, culvert lengthening, and construction of stormwater facility discharges, could introduce fine sediments into project area streams, primarily through erosion and runoff processes. Fine sediments can negatively affect fish and fish habitat within streams. The potential for erosion and sedimentation would be highest where construction activities occur within or directly adjacent to streams. Only two streams, Fox Creek and Ebey Slough, could potentially be affected by sedimentation. No fish are present in the upper reaches of Fox Creek. In addition, any in-water work associated with the stormwater discharge into Ebey Slough or culvert lengthening in Fox Creek, would be conducted primarily during the dry summer months and appropriate sediment and erosion control BMPs will be implemented to reduce or eliminate downstream sedimentation. Furthermore, all terms and conditions of the HPA, including timing restrictions, will be strictly adhered to. Therefore, the potential for sedimentation effects on fish, amphibians, and other aquatic species within project area streams would be insignificant.

No Action Alternative

The road would not be widened and expanded under the No Action Alternative. Construction-related impacts, therefore, would not occur. The habitat along the roadway would continue to be relatively low-quality for most wildlife species due to the existing noise, invasive plant species, traffic, and pollutants. The current levels of stormwater runoff would persist, maintaining aquatic habitat at current conditions.

During Operation

Preferred Alternative

After construction is complete, potential long-term impacts to vegetation, fish, and wildlife from the Preferred Alternative could include the following:

- Changes in stream and wetland hydrology that could affect wetland and riparian plants and amphibian breeding habitat downstream.
- Increased rates of pollutant discharge into wetlands and streams from oil, grease, metals, and sediments associated with urban roadways. This could adversely affect species that breed or forage in the wetlands, streams, and riparian habitat.
- Loss of vegetative structure and diversity due to increased human access and resultant trampling and erosion, increased probability of invasion by weeds and invasive vegetation, and loss of plant species intolerant of pollutants and unstable hydrology.
- Increased risk of wildlife mortality due to increased traffic volumes and speeds.
- Increased risk of fish and wildlife disturbance due to increased light and noise along the proposed alignment.

The project would result in a total net increase of 6.0 acres of impervious surface within the project area, located over a total of three threshold drainage areas (TDAs) (see Water Resources Section). Per Ecology guidance, the project would retrofit all of the new and existing impervious surface (12.9 acres combined) within the project area. Stormwater from all existing impervious surfaces within the project site currently receives no treatment or detention. Under the preferred alternative, Snohomish County would provide treatment to the stormwater generated by all existing and newly created impervious surfaces within the project area. As discussed in the Water Resources Section, overall pollutant loading and concentrations would undergo a net decrease, although dissolved copper and dissolved zinc loading may slightly increase in the Fox Creek basin. However, pollutant concentrations entering project area water bodies would show an overall decrease due to project stormwater treatment. Therefore, stormwater would have minimal capacity to cause negative effects on aquatic life within project area streams.

No effects on fish or other aquatic species would be expected due to changes in streamflow, as stormwater detention would be provided for Fox and Mosher Creeks, and Ebey Slough is a flow exempt waterbody. As discussed in the Water Resources Section, significant alterations to peakflows, baseflows, and the natural hydrograph would not be expected to occur and, therefore, would have no adverse negative effects on aquatic species.

Any increase in human access would be minor or nonexistent, since the Preferred Alternative involves widening of an existing roadway and no additional feeder or arterial roads would be affected. Because the Preferred Alternative involves widening of the existing road with additional lanes and potentially higher average vehicle speeds, some increases in the rate of mortality to wildlife crossing the roadway may occur. Based on existing levels of disturbance and the lack of high-quality wildlife habitat on either side of the roadway, however, any such increases should be relatively minor. Potential effects on fish and wildlife from increased noise and light along the corridor would not likely be significant, because traffic volumes would increase only slightly.

No-Action Alternative

The road would not be widened and expanded under the No Action Alternative and the full retrofit stormwater treatment facilities would not be built, resulting in continued runoff from 20th Street SE into streams and wetlands. Operation-related impacts similar to those described above would continue to occur, but likely at a lower rate due to lower surface traffic volumes.

Mitigation – Plants and Wildlife

During Construction

Preferred Alternative

The following mitigation measures would be implemented to protect wetlands, vegetation, and wildlife. Any in-water work will follow all restriction and provisions of the HPA permit, including any seasonal timing restrictions. All work will be done in accordance with applicable environmental permit conditions. BMPs and erosion control measures, including silt fences, straw wattles, and temporary detention facilities, will be used during construction to minimize the amount of sediment and contaminants carried to wetlands and streams such as Mosher Creek and Fox Creek. Any potential sedimentation effects would be minimized by the following measures:

- **Avoidance**—The proposed action would use retaining walls to minimize effects on streams, wetlands, and their buffers. Except where absolutely necessary, construction equipment would not enter below the OHWM of Fox Creek. Staging areas and stockpiling areas would be located well away from streams.
- **Construction Methods**—Any in-water work would strictly adhere to all conditions of the WDFW Hydraulic Project Approval (HPA) and other approvals, including seasonal timing restrictions.
- **Prevention**—Appropriate BMPs would reduce the risk of erosion and reduce or minimize the chance of sediments entering project waters. Erosion and sediment control measures could include mulching, matting, and netting; filter fabric fencing; quarry rock entrance mats; sediment traps and ponds; surface water interceptor swales and ditches; and the placement of construction material stockpiles away from streams. In addition, a temporary sediment and erosion control plan (TESC) plan would be prepared and implemented to minimize and control pollution and erosion from stormwater. Erosion and sediment control BMPs would be properly implemented, monitored, and maintained during construction, so no long-term water quality effects would occur. Even with BMPs, some temporary short-term water quality effects on sediment (such as increases in stream turbidity) are possible, particularly during large storms. However, the magnitude of these effects would be small.

Significant long-term water quality impacts are not expected if erosion control BMPs, stormwater quantity and water quality treatment facilities, and spill containment measures are properly implemented, monitored, and maintained during construction. Concrete will be sufficiently cured prior to contact with water to avoid leaching. Fresh concrete will not come in contact with waters of the state. The use of BMPs should eliminate or reduce any direct impacts

to aquatic species. Lastly, construction activities associated with the 20th Street SE corridor improvement project are likely to generate little or no sound in the aquatic environment, particularly within fish bearing stream reaches.

Vegetation removal will be minimized to the greatest extent possible, and exposed soils will be stabilized throughout the construction corridor to minimize erosion and sedimentation.

Following construction, temporarily disturbed wetland and buffer areas will be planted with native vegetation. Where possible, additional mitigation for wildlife would include retaining large trees and snags. To the extent feasible, initial vegetation clearing should be conducted before the nesting season to avoid potential take of species protected under the Migratory Bird Treaty Act.

No Action Alternative

No construction activities would take place under this alternative. Therefore, no impacts to vegetation, wildlife, or fish resources would occur that require mitigation.

During Operation

Preferred Alternative

To ensure the success of replanted areas, mitigation sites and temporarily impacted wetland and buffer areas will be monitored and maintained. Contingency plans will be developed and implemented to address problems should they arise.

Potential impacts from additional impervious surface on the operation of the roadway will be minimized or avoided through the full retrofit of stormwater quantity and water quality treatment facilities. The design guidance outlined in Ecology's 2005 Stormwater Management Manual for Western Washington is proposed for the 20th Street improvements in conjunction with the guidance in Snohomish County Code (Title 30). The full retrofit would provide detention for all existing and additional impervious surface, as required by the Ecology Manual. Enhanced water quality treatment systems will also be installed to treat runoff from all existing and added impervious surface, as required for runoff that discharges to fish-bearing waters. The result of this retrofit will be a substantial improvement over current runoff rates, erosion, and pollutant loading within adjacent streams and wetlands.

The mitigation sites will also provide mitigation for wildlife habitat impacts.

No Action Alternative

Under this alternative, the proposed project would not take place. Therefore, no impacts to vegetation, wildlife, or fish resources would occur that require mitigation.

Significant Unavoidable Adverse Impacts

Approximately 0.6 acre of forested habitat would be affected by permanent clearing, and an additional 0.4 acre would be affected by temporary clearing. Small areas of wetland and Fox Creek will be impacted, but given the highly developed landscape along the roadway, the impacts to fish and wildlife habitat would not be significant.