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## 5.11 Wildlife and Vegetation

Wildlife presence within urban landscapes depends on the availability of suitable habitat. Habitat loss, along with increasing habitat fragmentation, is a primary reason for species decline in urban environments. Greater human access to wildlife habitat can also influence the presence and abundance of wildlife in urban environments. Most of the Renton to Bellevue project area is highly developed for residential, commercial, and industrial activities.



### **How did we identify and evaluate wildlife and vegetation within the Renton to Bellevue project area?**

WSDOT reviewed information provided by the Washington Department of Fish and Wildlife (WDFW) and the Washington Department of Natural Resources (WDNR), and conducted field surveys within the project area. WSDOT also contacted resource agencies to validate information and to target field studies.

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*Please refer to the Renton to Bellevue Project Wildlife and Vegetation Discipline Report in Appendix W (on CD) for a complete discussion of the wildlife and vegetation analysis.*

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The study area covered one mile on each side of the freeway (Exhibit 5.11-1) as well as the adjoining, disturbed mixed-forests<sup>1</sup>. Riparian<sup>2</sup> (streamside) areas were mapped along the major drainages within the project area, including May Creek and Coal Creek, to determine habitat characteristics.

A Biological Assessment (BA) has been prepared for the project to comply with the Endangered Species Act. The BA found that the project may affect, likely to adversely affect, endangered species.

### **What types of wildlife and vegetation are found in the project area?**

Approximately 70 percent of the project area has been developed as residential areas and commercial and industrial centers. These areas provide little or poor habitat for most animals, except those that have adapted to urban areas.

#### **DID YOU KNOW?**

A 1973 federal law, the **Endangered Species Act (ESA)**, amended in 1978 and 1982, was enacted to protect plant and animal species from extinction. The National Marine Fisheries Service and the U.S. Fish and Wildlife Service decide whether to list species as threatened or endangered. Federal agencies must avoid jeopardy to and aid in the recovery of listed species. Similar responsibilities apply to non-federal entities.

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<sup>1</sup> Forest of hardwood and softwood trees that has been disturbed from development activities.

<sup>2</sup> Land that occurs along or interacts with flowing water.

**Exhibit 5.11-1: Wildlife and vegetation study area**



Approximately 180 acres of weeds and non-native plants or landscaped land and 300 acres of forested land were identified within the right of way for the project. Two major drainage corridors cross the Renton to Bellevue Project, including May Creek and Coal Creek. The riparian habitats are primarily used by resident wildlife species.

**Wildlife Species**

The Renton to Bellevue project area is dominated by landscaped areas, patches of native vegetation, and maintained grasses. WSDOT manages vegetation within the right of way to discourage use by wildlife that can enter the roadway and cause accidents. With respect to wildlife habitat, these resources typically have low value and are generally highly disturbed (WSDOT, 2002).

Although habitat within the project area is generally of low value, the mowed right of way in the I-405 Project Corridor is used extensively as foraging habitat for red-tailed hawks. Other wildlife species also use these mowed areas for foraging. Given the extensive level of development that has eliminated large expanses of red-tailed hawk habitat, the grass-dominated portions of the right of way likely provide important habitat for them (WSDOT, 2002).

**Special Status Species**

Three osprey nests are located within one-quarter mile of I-405. All three nests are situated on artificial platforms, including a cell phone tower. Project biologists observed an active red-tailed hawk nest located on the north side of the Newport Hills Park-and-Ride lot (Witter, 2005). One hawk was observed at the nest and a few hawks were observed in the vicinity of the nest. WSDOT also identified three bald eagle nesting territories in the study area (Southeast Mercer Island, Central Mercer Island, and Chism Beach), but no nests were identified.

## Vegetation Species

Both landscaped and unlandscaped areas within the Renton to Bellevue project area are generally dominated by non-native blackberry, sword fern, crab grass, quackgrass, and domestic cherry, among many weed species. The vegetation along the roadway consists of mowed grasses and scattered trees. Approximately 180 acres of weedy and landscaped vegetation are within the right of way of the Renton to Bellevue project area.

A disturbed mixed forest is a forest comprised of both coniferous and deciduous tree species, including native and non-native species, whose structural and species composition has been altered due to past human activities. Western red cedar, western hemlock, Douglas fir, red alder, and big-leaf maple with an understory of sword fern, typically dominate these disturbed areas, with vine maple scattered throughout.

Riparian vegetation within the project area is associated with the major drainage corridors, May Creek and Coal Creek. Coal Creek lacks a riparian corridor within the right of way; the corridor consists of sparse deciduous trees, shrubs, and non-native blackberry (Buchanan 2003). Unlike Coal Creek, May Creek has a more developed riparian corridor where vegetation includes cottonwood, red alder, willow, red-osier dogwood, salmonberry, ferns, and non-native blackberry (Buchanan 2003). Riparian resources for May Creek, Coal Creek, and other drainage corridors in the project area, are more fully addressed in the Wetlands and the Fish and Aquatic Resources discipline reports in Appendices V and X, respectively.

## How will the project affect wildlife and vegetation?

### Wildlife

The permanent loss of approximately 130 acres of vegetation will eliminate habitat in the project area currently used by urban wildlife. Urban wildlife, therefore, will have to move elsewhere in the project area to find available replacement habitat.

Temporary construction effects on resident wildlife can be caused by noise associated with construction activities (such as clearing and grading, and excavation). General construction activities will generate a noticeable increase



*Riparian vegetation along May Creek*



*Red-tailed hawks use the project right of way for foraging*



***Bald eagles nesting near the project will not be affected***

(roughly 10 decibels over ambient levels) in noise levels within 400 feet of the localized activity during construction. At 0.25 miles from the localized activity, noise levels from construction decrease to below ambient conditions.

Although more adapted to urban environments and associated noise levels, resident wildlife can be affected during localized construction activities when noise levels increase. Resident wildlife may disperse to other locations away from higher noise levels. Upon completion of construction, wildlife will return to these habitats without further effects. Wildlife may also disperse to other locations if their habitat is used as a staging area for construction equipment. However, this effect is temporary as wildlife will return upon removal of the equipment and associated activity and following revegetation. Outside of these localized construction areas and activities, the effects of construction on wildlife will be minimal.

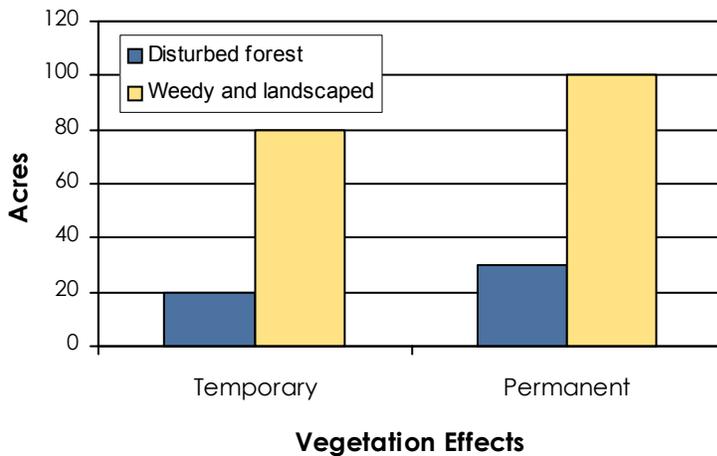
The effects on bald eagles from construction are similar to those on resident wildlife. Nesting bald eagles are far from this zone of elevated noise levels from general construction activities, and they will not be affected. Eagles forage along Lake Washington, particularly the eastern shoreline, between 0.3 and 0.5 miles from the project. This distance is at and beyond where elevated noise levels drop to below ambient conditions; therefore, foraging eagles in this zone will not be affected by elevated noise levels from general construction activities.

### **Vegetation**

Approximately 230 acres of vegetation will be removed with the Build Alternative (Exhibit 5.11-2). Removal of this vegetation will not occur all at once. Vegetation removal will be phased coinciding with construction activities (such as clearing and grading) occurring at specific locations (generally small areas) and times for the duration of the project.

Approximately 130 acres of vegetation will be permanently removed and converted to paved surfaces. The weedy or landscaped vegetation is located along the entire Renton to Bellevue corridor adjacent to and between the existing freeway lanes and surrounding the interchanges.

**Exhibit 5.11-2: Temporary and permanent vegetation removal**



Approximately 100 acres of vegetation will be removed for construction activities (such as staging areas), but will be replaced with landscaping or other natural materials if cleared. The weedy or landscaped vegetation occurs primarily within medians and existing interchanges.

**What measures are proposed to avoid or minimize effects to wildlife and vegetation during construction?**

- WSDOT will prepare and implement a revegetation plan. If WSDOT must permanently remove vegetation for roadway construction, it will be replaced with native vegetation within or in the vicinity of the project area.
- WSDOT will adhere to project conditions identified in the Biological Assessment and agency concurrence letters.

**What measures are proposed to avoid or minimize effects to wildlife and vegetation during operation?**

- WSDOT will revegetate areas in which vegetation removal will occur (except for areas of new impervious surface).
- WSDOT will leave large woody debris found in any landslide material in riparian areas and retain it for future restoration use by WSDOT or donate it to a local watershed group if there is a need for the material.

