Appendix D

# WDFW-Recommended Management Buffer Distances for Bald Eagles

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This information is summarized from the Washington Department of Fish and Wildlife (WDFW) Priority Habitat and Species Management Recommendations for Bald Eagles (Watson and Roderick, 2004).

## **Nest Area**

When developing site management plans, WDFW recommends buffering bald eagle nests with a two-zone management system that mimics a strategy designed by the U.S. Fish and Wildlife Service (USFWS, 1981). The following guidelines for these zones are based on the research cited in WDFW's Priority Habitat and Species Management Recommendations for bald eagles (Watson and Roderick, 2004):

- Protected Zone (Primary Zone). This zone protects and screens the nest tree and should extend at least 400 feet from the nest tree. Its size and shape will vary with site conditions such as topography, prevailing winds, and screening vegetation, as well as on the eagles' tolerance to human activities. In areas where vegetation and/or topography do not provide adequate screening within 400 feet of the nest, consider increasing the size of the protected zone. Retain all existing large trees and existing forest structure within the protected zone.
- Conditioned Zone (Secondary Zone). The conditioned zone further screens and protects nest sites in the protected zone and should extend from 330 to 800 feet beyond the edge of the protected zone. Alternate nest locations, perch trees, and feeding sites should be included in this zone and will influence its size and shape (Stalmaster, 1987). Depending on screening vegetation, prevailing winds, topography, and the sensitivity of the nesting eagles to human activities, this zone may need to be expanded up to 2,640 feet from the edge of the protected zone. Avoid constructing roads or trails within sight of the nest that would facilitate human or predator access to the nest. Construction activities (e.g., homes, roads, and power lines) that take place out of sight of the nest should be postponed until after the young eagles have fledged, as should forest practice activities.

## **Roosting Habitat (Communal Roosts)**

Activities that produce noise or visual effects within 400 feet of the edges of communal roost trees or staging trees should be conducted outside of the critical roosting period (November 15 to March 15). This corresponds to the time when most eagles begin to arrive in eastern and western Washington, with numbers peaking in December and January and declining rapidly by mid-March (Fielder and Starkey, 1980; Garrett, et al., 1988; Stalmaster, 1989). There are no known communal roosts in the project vicinity.

## Perching and Foraging Habitat

Perches along shorelines near winter roosts or in nesting territories are important to foraging eagles. Tree structure, and the distance between habitat alterations and shorelines should be considered when managing for bald eagle wintering habitat.

#### Perch Structure and Location

In Washington, protect known bald eagle perch trees and potential foraging perches greater than 20 inches diameter at breast height (dbh) and within 246 feet of the top of a bank or shoreline. Chandler et al. (1995) recommend protecting patches of shoreline forest, and specifically protecting live and dead trees over 8 inches dbh for future habitat.

#### **Human Disturbance**

Bald eagles often feed on the ground, in open areas where food resources are concentrated. They should be allowed a distance of at least 1,500 feet from human activity and permanent structures. Buffer zones of 800 to 1,000 feet have been recommended in perching areas where little screening cover is present (Stalmaster and Newman, 1978). Stalmaster and Newman (1979) found that 50 percent of wintering eagles in open areas flushed at 500 feet, but 98 percent would tolerate human activities at 1,000 feet. Activities that disturb eagles while feeding, especially during winter, can cause them to expend more energy, which increases their susceptibility to disease and poor health (Stalmaster, 1987).

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