

UC Davis

Recent Work

Title

Limitations to Wildlife Habitat Connectivity in Urban Areas

Permalink

<https://escholarship.org/uc/item/0sf780k9>

Author

Trask, Melinda

Publication Date

2007-05-20

LIMITATIONS TO WILDLIFE HABITAT CONNECTIVITY IN URBAN AREAS

Melinda Trask (503-986-3504, melinda.trask@odot.state.or.us), Environmental Project Manager, Oregon Department of Transportation, Geo-Environmental Section, 355 Capitol Street N.E., Salem, OR 97301, Fax: 503-986-3407 USA

Abstract

The Oregon Department of Transportation (ODOT) conducted an evaluation of existing wildlife habitat and movement corridors within southeast Portland, where a new section of highway (the Sunrise Corridor) is proposed. The purpose was to develop a comprehensive strategy to preserve and enhance connections for wildlife passage potentially impacted by the Sunrise Corridor project. The evaluation illustrates limitations to urban wildlife protection that are not typically considered. The proposed alignment and alternatives for Sunrise Corridor project are located in an area that is rapidly growing with urban development but still retains some relatively large natural habitat areas. According to local naturalists, wildlife use of both areas is still fairly high within the context of the urban surroundings. We identified key wildlife movement corridors between the remaining large habitat patches as well as existing and potential barriers to wildlife passage. Larger mammals (e.g., coyote and deer) and migratory song birds were the focal species. We found that approximately 50% of existing wildlife habitat and movement corridors is vulnerable to future planned and potential development as a result of current zoning and land use ordinances. Existing commercial and residential development already constricts the main wildlife corridor, and wildlife access between the remaining habitat patches in the area will be severed if further zoned development occurs.

Comprehensive Plans for many urban areas have provisions for preservation of large tracts of open space, greenways, and parks, with an interest in maintaining habitat for birds and urban wildlife. However, few Plans identify the need for connections between the habitat patches for wildlife movement, an important component of population fitness. Although ODOT's proposed highway project is being designed to avoid blocking wildlife passage, wildlife movement corridors will continue to be threatened by urban development unless organizations or individuals outside of ODOT protect key parcels from future development. As the Sunrise Corridor wildlife evaluation demonstrates, if wildlife on the urban interface are to be protected, early identification and conservation of movement corridors are as essential as conservation of habitat patches.

Biographical Sketch: Melinda Trask is an Environmental Project Manager for the Oregon Department of Transportation, with a Master of Science in Plant Ecology from Oregon State University and a Master of Environmental and Regional Planning from Washington State University. Melinda has a broad educational and professional background in ecology of the western United States. She has taught ecology and botany laboratory classes, organized and led field surveys crews for rare plant studies, conducted desert tortoise and peregrine falcon surveys, assisted with fish salvage operations, delineated wetlands, prepared numerous Biological Assessments for Section 7 Endangered Species Act consultations, monitored environmental protection measures during various types of construction projects, and developed site restoration plans. Melinda is currently the co-chair of the Oregon Wildlife Movement Strategy, an interagency working group to address wildlife passage in Oregon.