



# Wildlife Crossing Guidelines and Considerations

Achieving Landscape Permeability in an  
Urban Environment

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# Purpose

- Provide tools to ensure roads in the Portland metropolitan area allow for the greatest movement of native fish and wildlife



# Audience

- Transportation planners and engineers
- Developers
- Wildlife biologists and environmental planners
- Citizens



# Background

- Literature Review of 400+ publications on landscape permeability, wildlife crossing structures, and urban planning
- Update of first edition



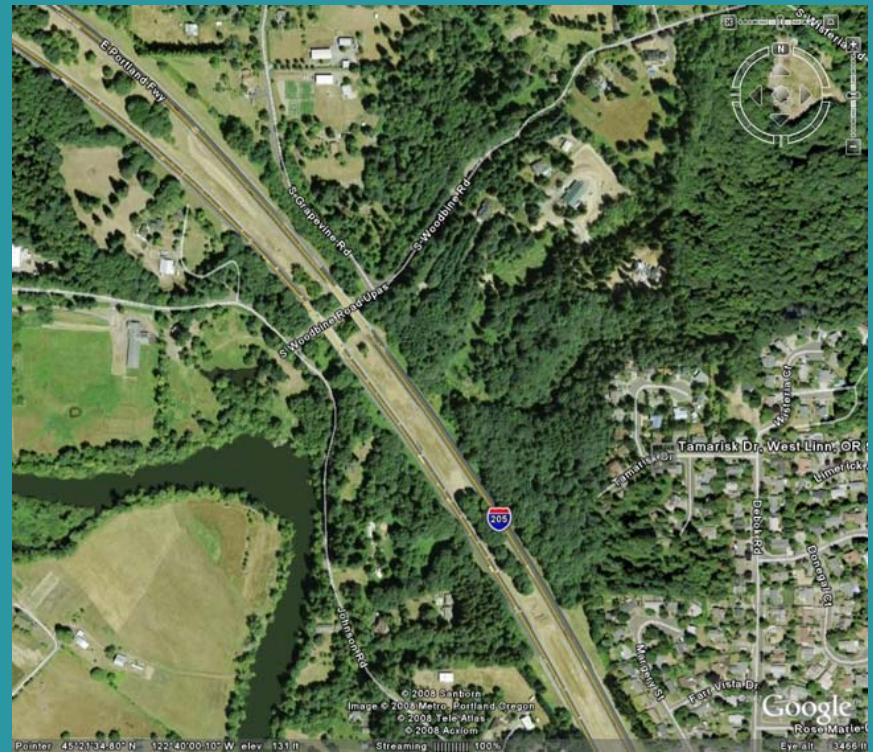
An illustration on the left side of the slide shows a woman with red hair, wearing a blue shirt, sitting on a wooden bench. She is holding a sketchbook and a yellow mug, appearing to be sketching a landscape. The background of the illustration includes a large green tree, a small orange house, a purple fence, and a blue river with a black swan and a red fish. The scene is set in a lush, green environment with a yellow arrow pointing upwards on the left.

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# Introduction

- Landscape permeability
- How the metropolitan area is changing
- How the guidebook complements other key initiatives



# Road Ecology

- The ecological effects of roads
- Wildlife-vehicle collisions
  - Road type
  - Traffic volume
  - Traffic speed
  - Safety/cost
  - Lighting
  - Noise



# Corridors

- Wildlife movement corridors
- Loss and fragmentation of habitat
- Different species, different needs
  - How much habitat is enough?
- Datasets and policy
- Forest canopy cover and habitat
- The art and science of prioritizing wildlife corridors
- Examples







# Decision Guide

- Bissonette and Cramer (2007)
  - [wildlifeandroads.org](http://wildlifeandroads.org)
  - Planning
  - Implementation
  - Adaptive management
- Examples
- Best management practices
- Damascus

# Crossing Structures

- Characteristics
- Types
- Common myths
- Costs
- Lessons learned





# Funding a Vision

- Federal programs
- State programs
- Regional programs
- Partnerships
- Cost-sharing opportunities



# Monitoring

- Monitoring
- Maintenance
- Land Use Goals
- Datasets
- Technology



# Reducing Wildlife Vehicle Collisions

- Public Outreach
- Road Signs
- Animal Detection Systems
- Planning and Design Approaches
- Fencing
- Cost





# Healthy Urban Wildlife

- Invasive Species
- Protect riparian buffers
- Landscape with natives
- Incorporate habitat features into built environment
- Manage for suites of species



# Next Steps

- Draft document is available for review

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