

The Art, Science, and Humility of Restoration

Region 6 Restoration Services Team

Lee Riley

Horticulturist/Restoration Specialist

Dorena Genetic Resource Center

Lynda Moore

Botanist/Restoration Specialist

Regional Office





Scott Riley
Botany (RO-DES)



Lee Riley
*Plant Materials
(DGRC)*



Lynda Moore
Botany (RO)

R6 Restoration Services Team and Training Cadre



**Lisa
Winn**
*Silviculture
(DGRC)*



Vicky Erickson
Genetics (RO)

Kelly Evans
Botany (RO-OKAWEN)



**Matt
Horning**
Genetics (DES)



Helen Lau
Botany (OKAWEN)

Interdisciplinary Reveg Projects



Road Construction



Invasive Plant Management



Road Decommissioning



Pollinator Forage/Habitat



Energy



Habitat Improvement





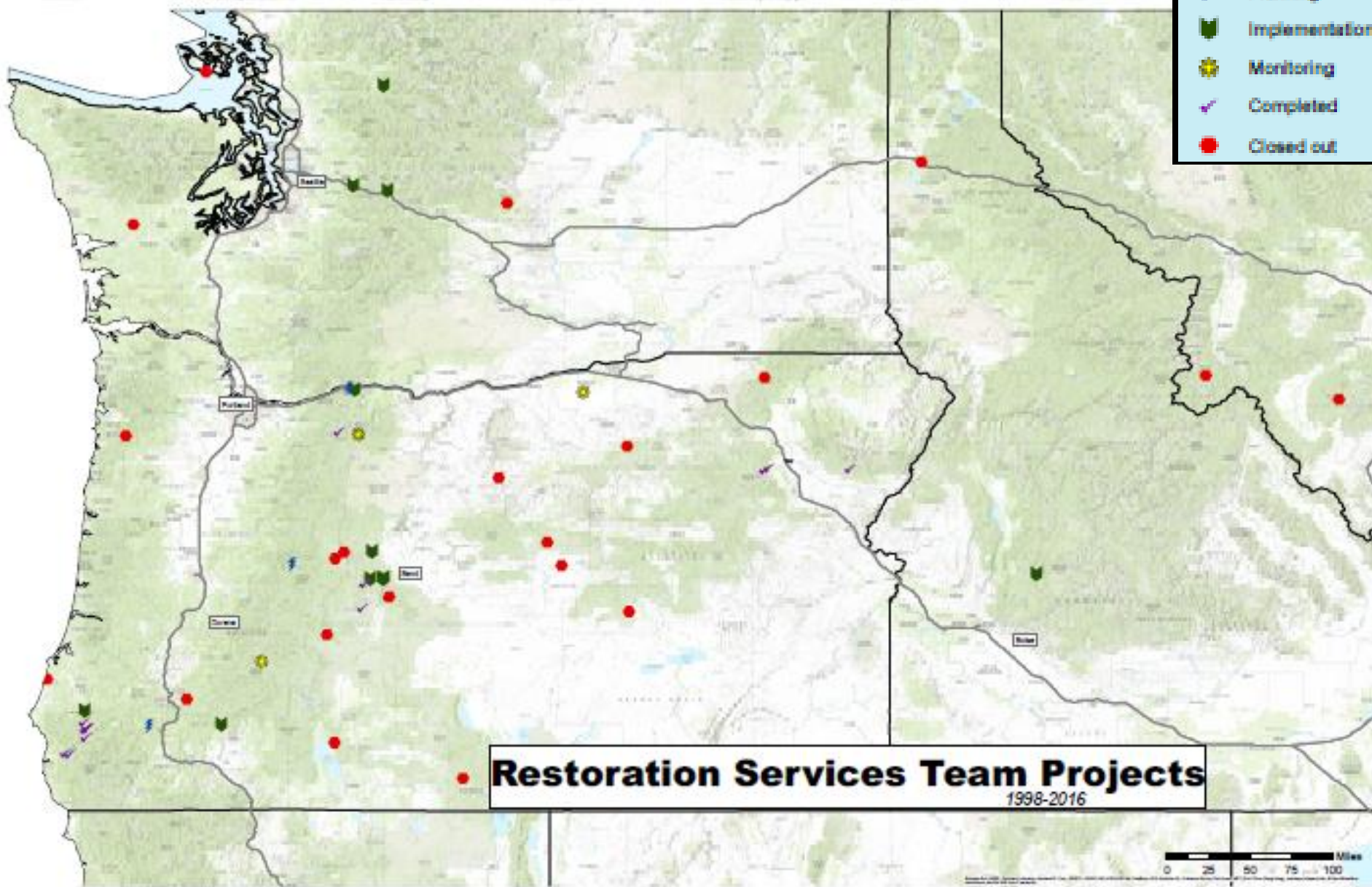
Recreation Development & Mitigation



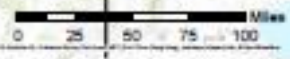
Dam Removal

R&T Project Status

-  Planning
-  Implementation
-  Monitoring
-  Completed
-  Closed out



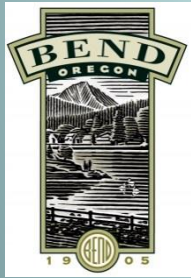
Restoration Services Team Projects
1998-2016



A Collaborative Approach



U.S. Department
of Transportation
**Federal Highway
Administration**



**Washington State
Department of Transportation**



A photograph of several pink flowers with five petals and yellow centers, growing on green stems with serrated leaves. The background is a soft-focus natural setting with green foliage and a light-colored branch. The text "Services Offered" is overlaid in the center in a bold, black, sans-serif font.

Services Offered

Planning

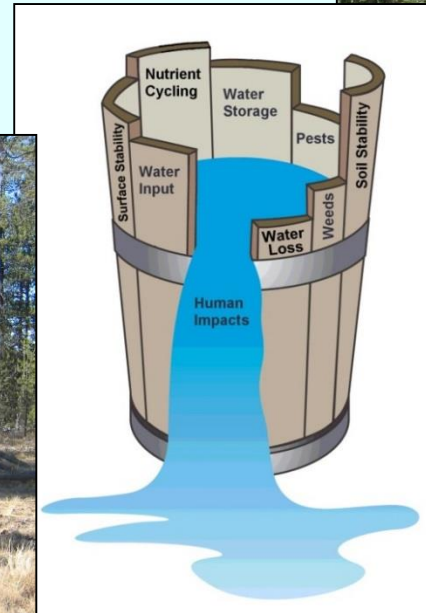
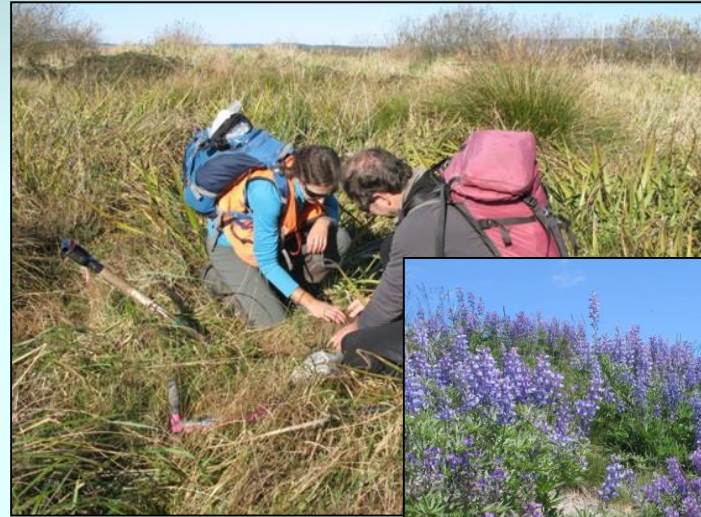
Soil Surveys

Vegetation Surveys

Limiting Factors

Site Resources

Plant Material Needs



Revegetation Services Team: Big Sky Forest Service
4300 Deshaire Market Rd, Boz, OR 97704

Revegetation Plan

HISTORIC COLUMBIA RIVER HIGHWAY STATE TRAIL-SEGMENT D REVEGETATION PLAN

MAY 2015

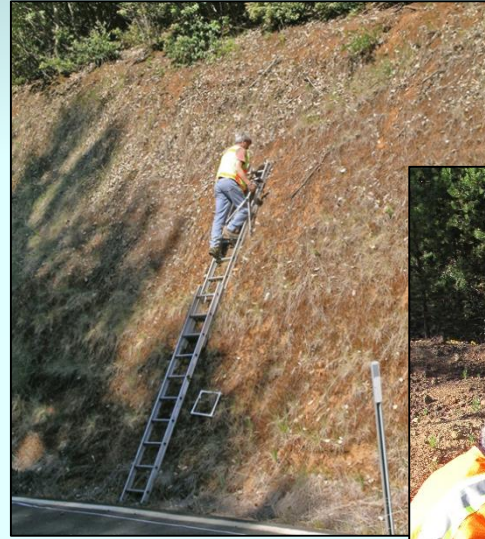
Western Federal Lands Highway Division
438 East Footh Street, Vancouver, WA 98661

Implementation

Seed and Vegetation Collection
Plant Materials
Outplanting Assistance



Monitoring Transect Fixed Photo Point



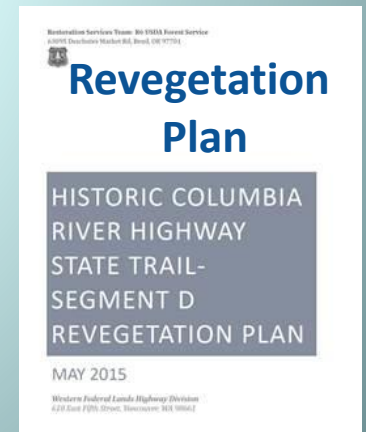
Year 0



Year 1



Year 3



Studies

Design

Implementation

Measurements/Reports



A photograph of several pink flowers with yellow centers, growing on green stems with leaves. The background is a soft-focus natural setting with green foliage and a tree trunk. The text "Supporting Facilities and Contracts" is overlaid in the center in a bold, black, sans-serif font.

Supporting Facilities and Contracts



Dorena Genetic Resource Center

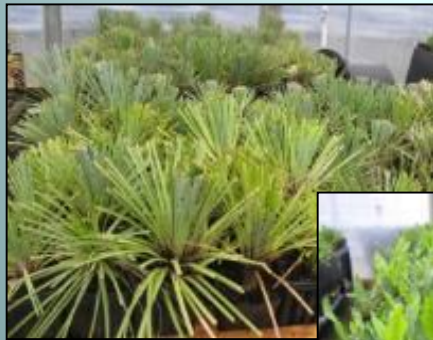
Lisa Winn, Manager



**Blister rust
screening**



**Port-orford
cedar
seed orchard**



**Native Plant
Materials**



Tree Climbing



Dorena Genetic Resource Center

Lee Riley, Horticulturist



**Plant
Materials**



**Propagation
Protocols**

Collection and Outplanting

R6 Bend Seed Extractory

Kayla Herriman, Manager

Seed Extraction

Freezer & granary seed storage

Seed inventory database

Seed testing & shipping

Training and consultations

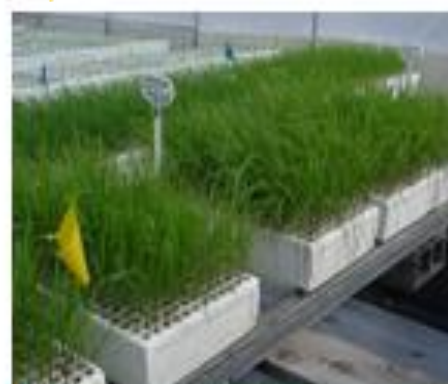


Native Seed and Plant Production at Forest Service Nurseries



**Lucky Peak Nursery
(Boise, ID)**

**J. Herbert Stone Nursery
(Medford, OR)**



**Coeur d'Alene Nursery
(Coeur d'Alene, ID)**

Regional IDIQ Contracts



- Large pool of pre-qualified contractors
- Includes
 - Restoration Services
 - Plant Materials
 - Plant propagation
 - Seed collection

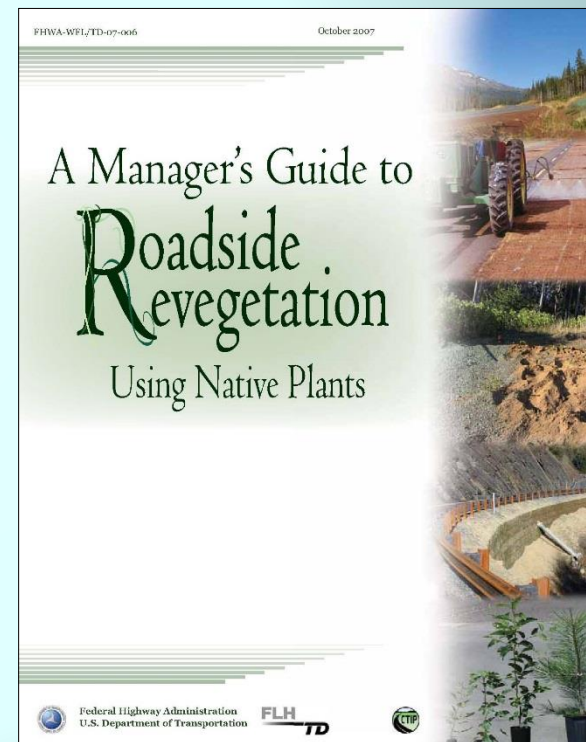
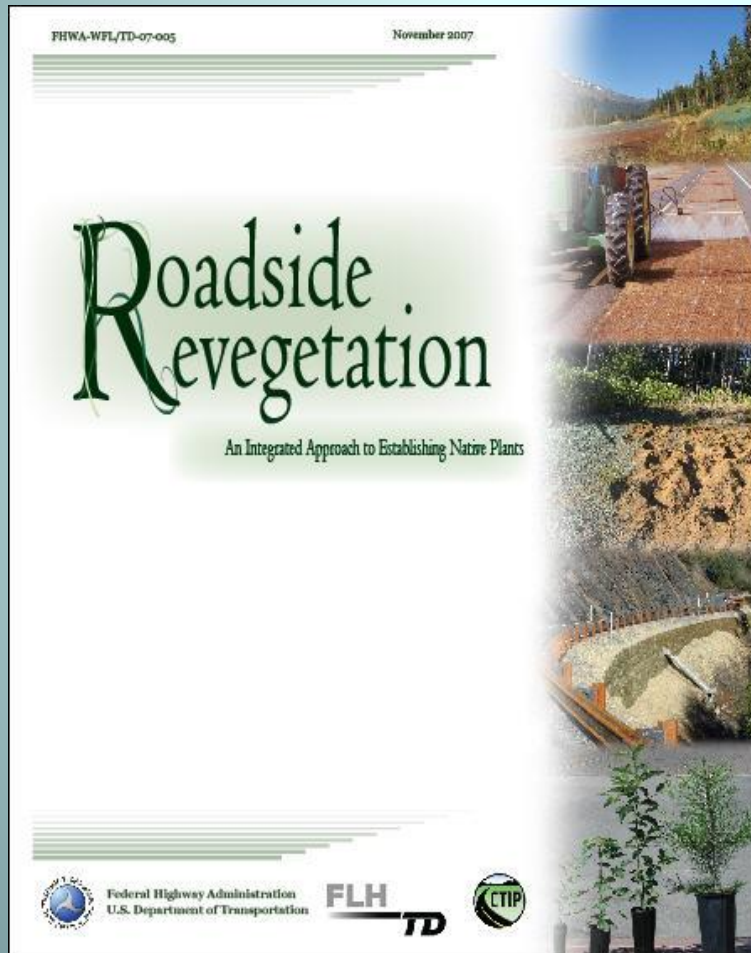


A photograph of several pink flowers with yellow centers, growing on green stems with leaves. The background is a soft-focus natural setting with green foliage and a light-colored branch. The text "Innovative Approaches and Solutions" is overlaid in the center in a bold, black, sans-serif font.

**Innovative Approaches
and
Solutions**

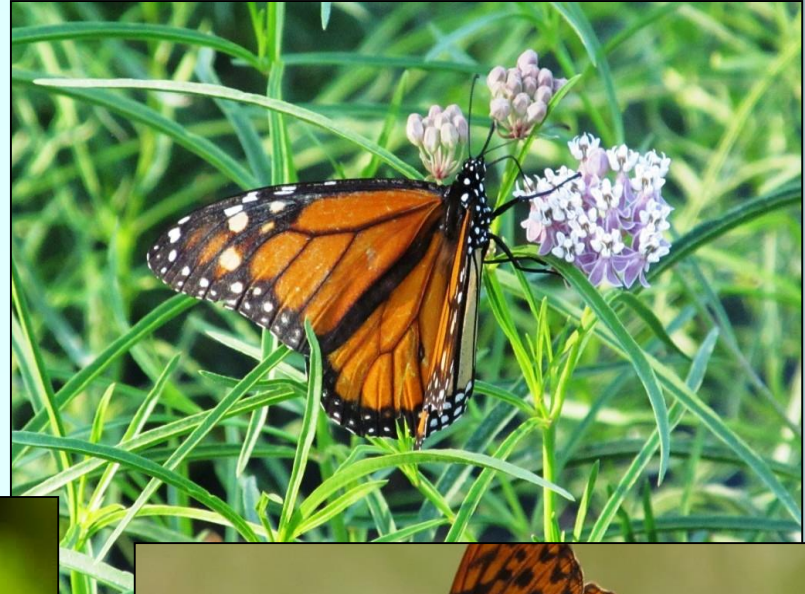
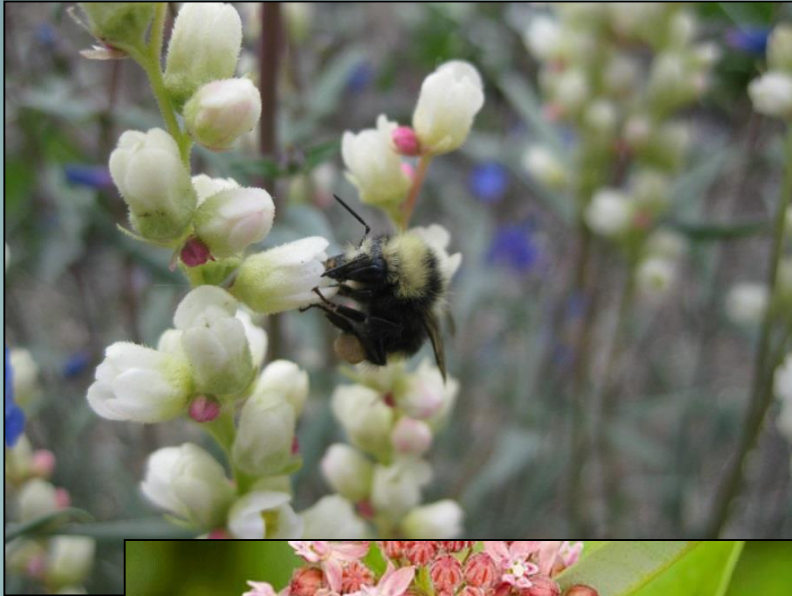
Roadside Revegetation: An Integrated Approach to Establishing Native Plants

David Steinfeld, Scott Riley, Kim Wilkinson, Tom Landis, Lee Riley



Improving Best Management Practices

Native Species for Pollinators





Application to seeds and soil



Amended planting areas



Incorporate into treated or amended ditches



Design into bioswales

Improving Best Management Practices

Planting Techniques



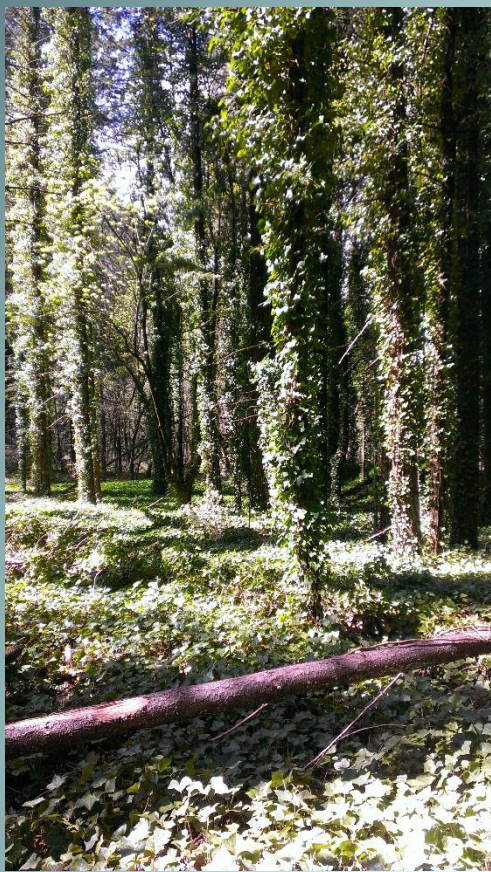
Expandable Stinger



Waterjet planter

A photograph of several pink flowers with yellow centers, growing on green stems with serrated leaves. The background is a soft-focus natural setting with green foliage and a light-colored branch. The word "Projects" is written in a bold, black, sans-serif font across the middle of the image.

Projects



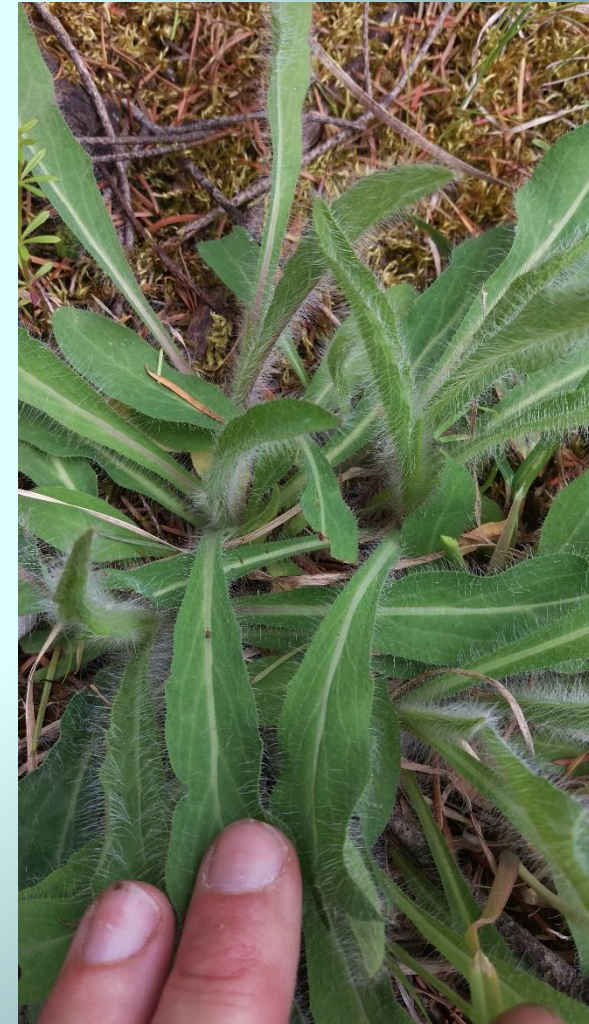
**Historic Columbia
River Highway
State Trail 'D'**



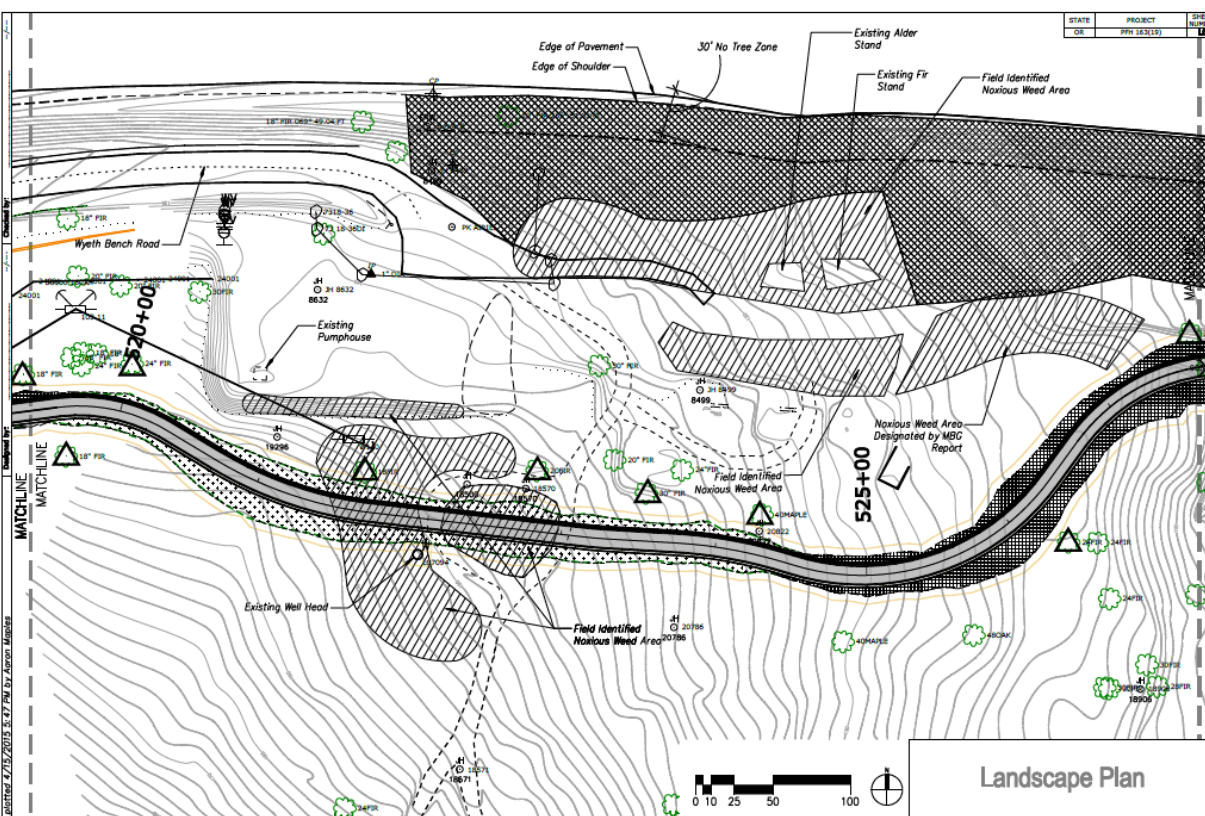
**Historic Columbia
River Highway
State Trail 'D'**



Historic Columbia River Highway State Trail 'A-C'



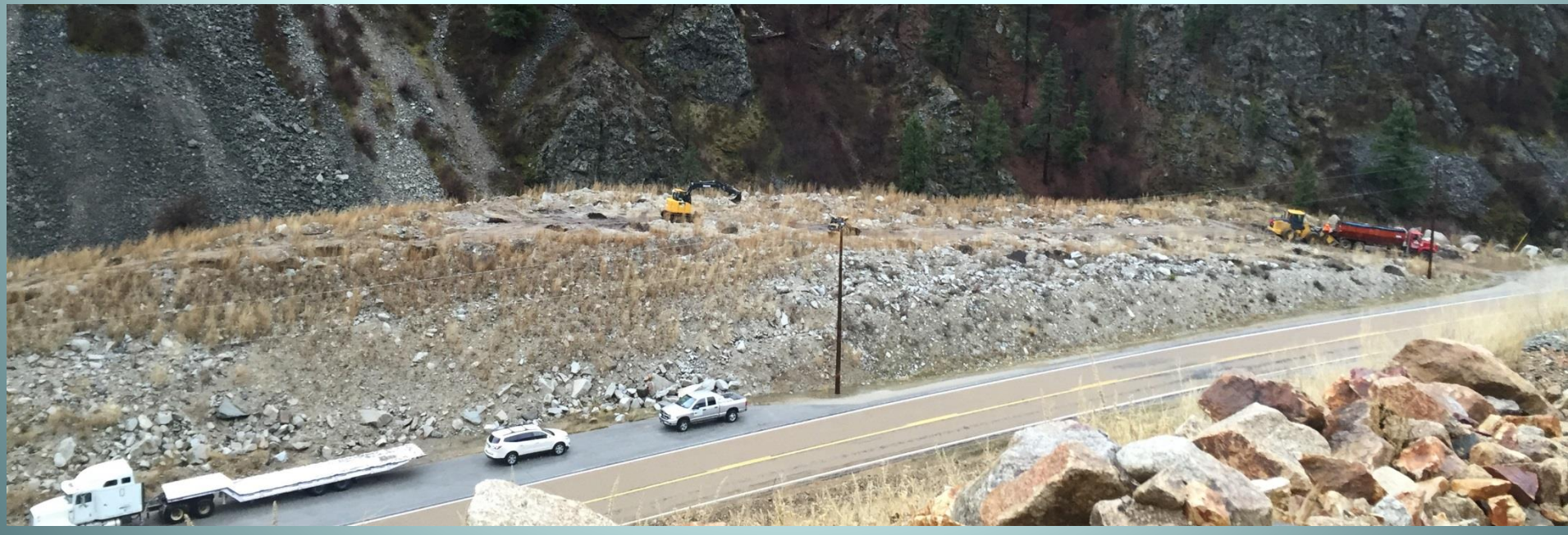
- Early involvement
- Agency insight
- Suite of plants to support pollinators
- Endemic hawkweed (*Hieracium longiberbe*)



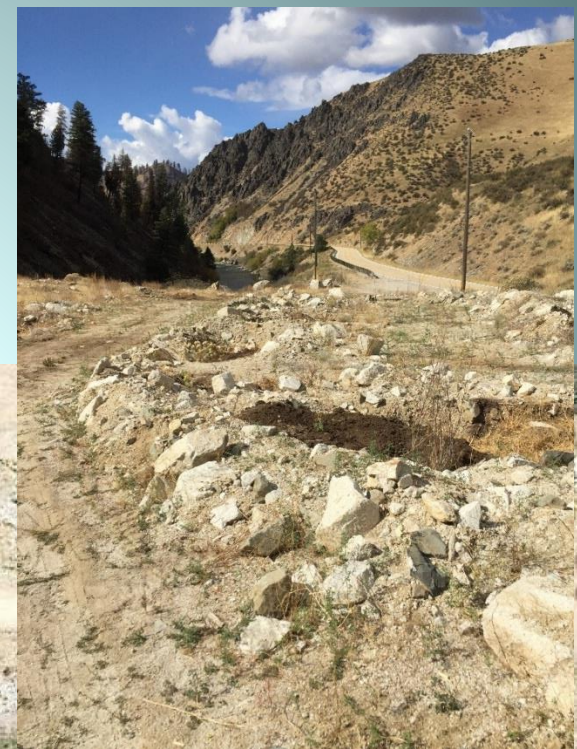
Historic Columbia River Highway State Trail 'A-C'



Banks to Lowman Rockfall Mitigation Project



Banks to Lowman Rockfall Mitigation Project



WADOT I-90 Restoration



I-90 Post Restoration



City of Bend

Water Pipeline Project

Riparian and Wetland Restoration



**Construction under Tumalo
Creek and through associated
wetland**



City of Bend

Water Pipeline Project

Riparian and Wetland Restoration



Wetland plant salvage



City of Bend

Water Pipeline Project

Riparian and Wetland Restoration



One year post-construction



Lynda Moore

Botanist/Restoration Specialist

Regional Office

lyndamoore@fs.fed.us

Lee Riley

Horticulturist/Restoration Specialist

Dorena Genetic Resource Center

leriley@fs.fed.us

Region 6 Restoration Services Team





The preceding presentation was delivered at the

2017 National Native Seed Conference

Washington, D.C. February 13-16, 2017

This and additional presentations available at <http://nativeseed.info>

