

Funding Opportunities for Source Water Restoration and Protection

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Washington State Department of
Health
Environmental Public Health
Office of Drinking Water



Drinking Water Providers Partnership

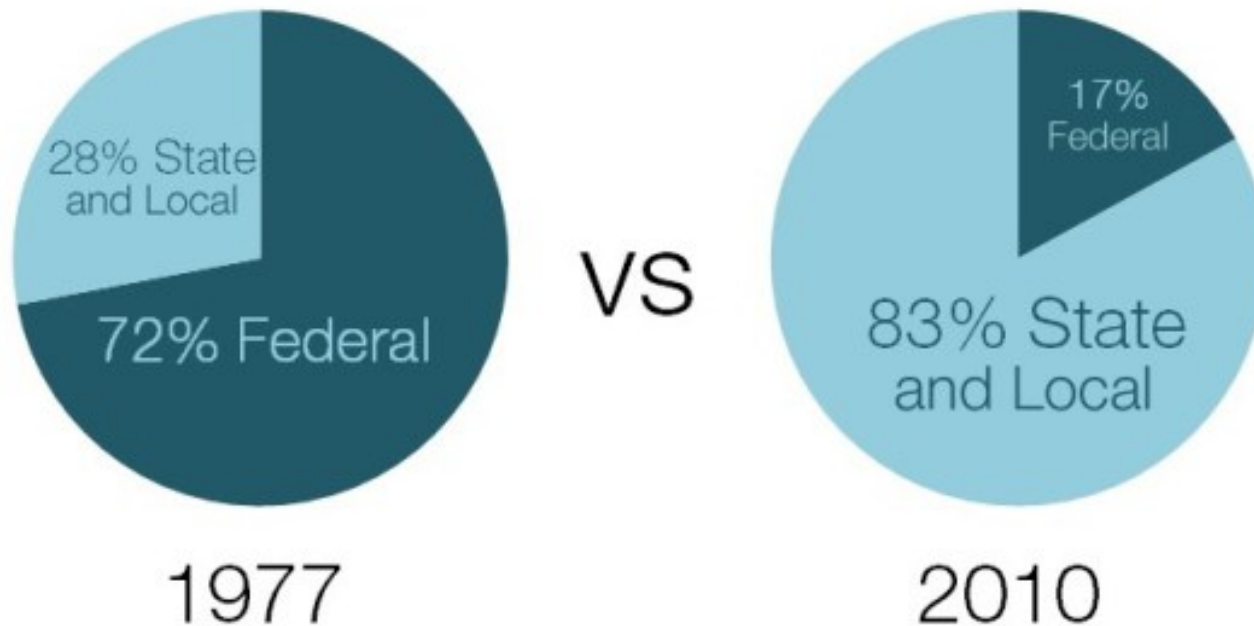
Julie Harvey - Oregon DEQ

Marlies Wierenga – WildEarth Guardians

Cathy Kellon – Geos Institute

Traditional water infrastructure funding comes from federal, state, and local government

Capital Investment in Water and Wastewater Infrastructure





Source Water Conservation & Restoration Financing Sources

- Local, public funding
- State and federal funding
 - Private funding





Source water financing – Questions to consider

What's the money for?

BMPs vs education campaign
vs habitat project vs easement
acquisition

When do you need the money?

One-time or restricted payment
vs continuous or recurring
revenue stream?

Who pays?

Beneficiary (ratepayer) or
others?

How much control do you want/need?

Who sets financing terms?
Liability? Ownership?

Who can receive these funds and has the capacity to secure & manage them?

Eligibility criteria?
Transaction costs? Ability to
repay debt?



Sample Funding Sources

LOCAL

- Utility rates, surcharges, fees
- Budget appropriation
- Taxes (sales, property, income, etc.)
- Fines
- Special Districts
- Bonds (borrowing)

STATE & FED

State Revolving Loan Funds + many other **grant and loan** options (DoC, USDA, HUD, FEMA, etc.)

PRIVATE

- Grants: Foundations, Corporations etc.
- Borrowing: PRI

OTHER

Asset management. E.g., diversify revenue streams if town/district owns forestland:

- Carbon credits
- Timber & special-forest products
- Water quality trading market
- Leasing in-stream water rights
- Easements



Sample Financing Mechanisms

LOCAL Who pays?

- Utility rates, surcharges, fees
 - Budget appropriation
 - Taxes (sales, property, income, etc.)
 - Fines
 - Special Districts
 - Bonds (borrowing)
- Local + Debt financing = Beneficiaries, users, residents**

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One-time or recurring income?

OTHER

Asset management (E.g., diversify revenue streams if town/district owns forestland)

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One-time or limited duration Grants and Loans =



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State Revolving Fund Grants and Loans



Lebanon/Albany South Santiam McDowell Creek Bates Site: Pre-project 2010

- Drinking Water Source Protection Grants/Loans
 - ✓ part of DW SRF – search for OHA Source Protection Fund
 - ✓ PWS must be applicant

McDowell Creek Bates Site: Post-project



- ✓ Grants: Up to \$30,000 per public water system to reduce risk in source area - no match required
- ✓ Loans: Up to \$100,000, low interest. i.e. land acquisition or incentive based protection measures

DW Source Protection Grant Examples

Road Assessment and Engineering Design

(Lincoln City Water District, Glide Water Association)

Turbidity Monitoring, Erosion Assessment & Riparian Restoration

(Siletz Watershed, Umpqua Basin, Santiam Watershed)

Rural Landowner Assistance for septic systems, animal management, private wells

(Clackamas, McKenzie, Irrigon, Rivergrove)

Pesticide Stewardship and Waste Collection

(Clackamas, Island City, Enterprise and Haines)

Algal Blooms

(Lowell, Cottage Grove, Salem, Springfield, South Coast lakes)

Enhanced Assessment, GIS risk analysis

(Medford/Grants Pass, Clackamas, Bend, Prineville, Creswell, Cottage Grove, Langlois)

Watershed Management Planning

(Seaside, Cottage Grove, Coburg,)

Other:

Signs, cameras and security fencing
(Baker City)

Wetland Treatment of Stormwater Runoff
(Eugene/Springfield)

State Revolving Fund Grants and Loans

- Watershed protection projects through Clean Water State Revolving Fund
 - ✓ Aligned with DEQ's "Nonpoint Source Management Program Plan"
 - ✓ Sponsorship Option to combine nonpoint source control project with wastewater facility project financing - sponsored project done at no cost or substantially reduced cost due to low interest rate
 - ✓ Low interest loans available for land purchase or nonpoint source work
 - ✓ Local Community Loan – use funds to establish a local loan fund for citizens



*Eugene Springfield Metropolitan Wastewater Management Commission
Riparian shading linked (financially) to treatment system improvements
Partnership with MWMC and The Freshwater Trust*

Other State Funding Sources

- Clean Water Act Nonpoint Source Grants (§ 319)
 - ✓ Generally < \$30K
 - ✓ Must have 9-key elements watershed plan and address priorities in RFP – contact DEQ Basin Coordinators
 - ✓ Match required (40%)
- Supplemental Environmental Projects
 - ✓ Respondents to DEQ compliance and enforcement orders
 - ✓ SEP Option for up to 80% of monetary penalty to improve Oregon's environment



Rowdy Creek – Siuslaw National Forest



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STATE & FED

- State Revolving Loan Funds (grant and loan financing)

- **Grants: Government, Foundations, Corporations etc.**

OTHER

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GRANT SOURCES

- **Federal***: USDA, NRCS, Forest Service, NOAA, EPA, Fish & Wildlife Service, Bureau of Reclamation, etc.
- **State**: OWEB, DEQ, ODFW, OWRD, ODA, OLCD, etc.
- **Private**: foundations and corporations

See also: Catalog of Federal Funding Source Watershed Protection

<https://ofmpub.epa.gov/apex/watershedfunding/f?p=fedfund:1>

Drinking Water Providers Partnership

- Goal 1:
 - Restore and protect the health of watersheds which communities depend upon for drinking water while also benefiting aquatic and riparian ecosystems, including the native fish that inhabit them.



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Drinking Water Providers Partnership

- Goal 2:
 - Support local partnerships between drinking water providers, landowners, and restoration practitioners.
- » Provide annual grants

“Watershed restoration is an important and effective way to provide clean, inexpensive drinking water to communities and protect native fish populations, particularly when downstream and upstream users work together.”

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State of Oregon
Department of
Environmental
Quality



<https://www.workingwatersgeos.org/drinking-water-providers-partnership>

Drinking Water Providers Partnership Funding:

- Public and private organizations pooling funds to improve health of drinking water watersheds and benefit aquatic life
- Locations: a drinking water source area with a federal (USFS/BLM) nexus
- Funding: up to \$650,000/year total available;
 - grant awards of \$10k-\$50k
- Types of projects: environmental conservation and restoration
- Applicants: NGO's, tribes, municipalities,...federal \$ can go to most any org
- Request for Proposals just released with applications due **Jan. 29, 2019**
- Review: Projects submitted from Oregon and Washington are reviewed and ranked by nonprofit and agency representatives

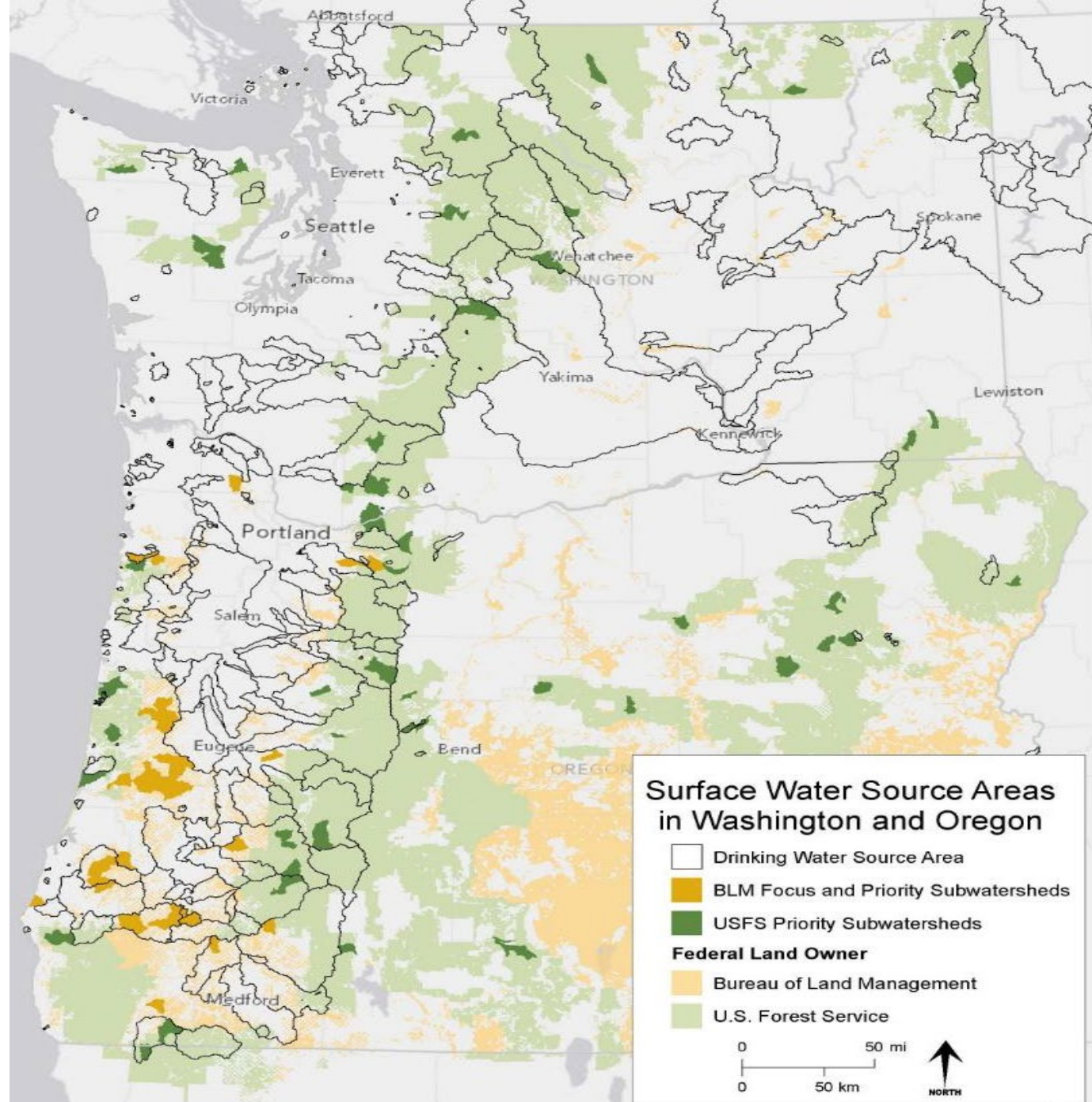
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DWPP Grants – Surface Water Source Areas



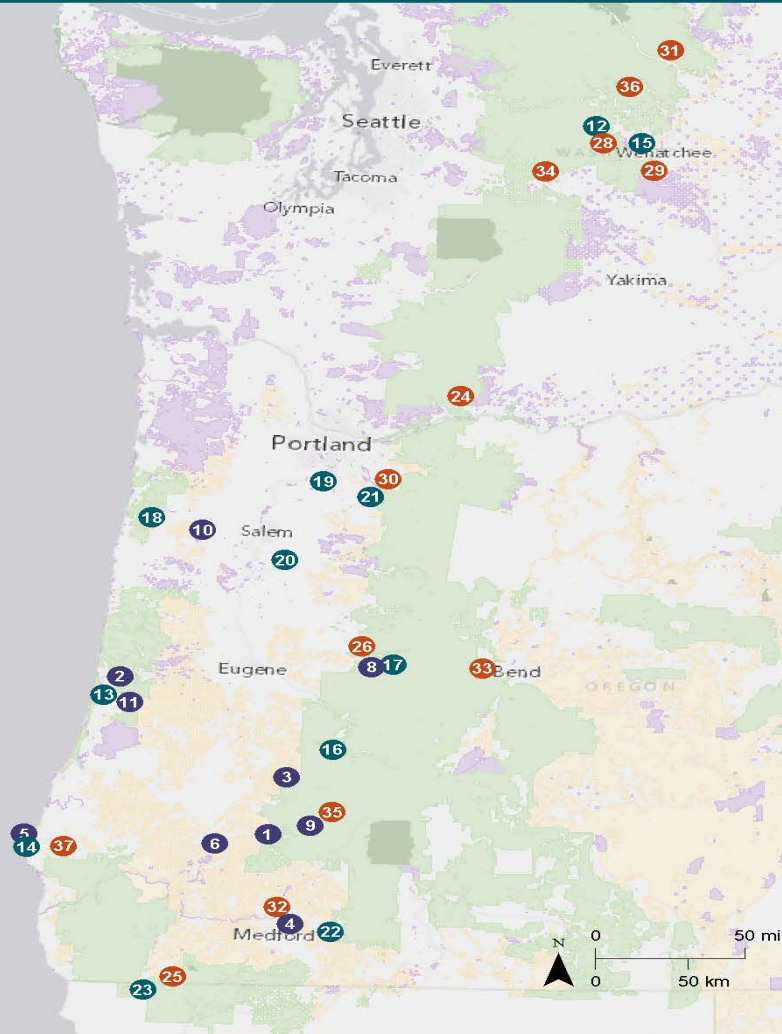
Data sources: Washington Department of Health, Oregon Department of Environmental Quality, USDA-FS, Esri, Geos Institute



Examples of eligible DWPP projects

- **Culvert removal and traditional culvert replacement with streambed simulation type culverts or bridges**
- **Addition of road drainage culverts to route road runoff**
- **Removal of dams or other large obstructions (not for permitting); breaching or removal of levees and tide gates**
- **Road decommissioning, road modification, storm-proofing**
- **Reestablishing river flow patterns, meanders, and channels that have been previously altered**
- **Restoring stream complexity and roughness, increasing streamflow travel times**
- **Reducing pesticide application rates and loadings in source area**
- **Installation of fencing**
- **Reforestation or replanting**
- **Development of educational flyers/brochures for purposes of public education**
- **Implementation of educational outreach projects emphasizing watershed resource conservation**
- **Planning and preparation for the purchase of lands within the drinking water source area**
- **Planning and preparation for the purchase of water for instream flow purposes**
- **Installation of signs at boundaries of zones or protection areas**
- **Development of an Ecosystem Services project in watershed to fund preservation areas**

Drinking Water Provider Partnership: 2016 - 2018 Funded Projects



ID	Project Sites by Year
2016 Funded Projects	
1	Stouts Fire Salmon and Watershed Restoration
2	Grant Creek Stream and Wetland Restoration
3	Glide Water Association Partnership Eagle Point Lagoon Floodplain Rehabilitation
5	Floras Creek Drinking Water Protection
6	West Fork Canyon Creek
7	Baker City Fence Rehabilitation
8	Lower South Fork McKenzie Floodplain Enhancement
9	Emerson Bridge Replacement
10	Upper Rickreall Habitat Enhancement
11	Fiddle and Billy Moore Creeks Riparian Enhancement
2017 Funded Projects	
12	Icicle Creek Education & Outreach
13	Bear Creek Habitat Enhancement Phase 1
14	Floras Creek Drinking Water Protection
15	Poison Canyon Restoration
16	Steamboat Creek Roads- GRAIP
17	Lower South Fork McKenzie River Enhancement
18	Schooner Creek Sediment Reduction
19	Milk Creek Stream and Riparian Restoration Project
20	North Santiam Basin Resiliency Action Plan
21	North Fork Clackamas River Restoration
22	Little Butte Creek Watershed Erosion Mapping
23	Dunn Creek Restoration Project (CA-OR)
2018 Funded Projects	
24	Bear Creek Road Drainage Improvement
25	Dunn Creek Restoration Project IÇö Phase 3
26	Lower South Fork McKenzie Floodplain Enhancement
27	Baker City Fence Rehabilitation
28	Icicle Watershed Source Water Protection
29	East Fork Mission Creek Restoration Coordination
30	Custom Clackamas River Watershed Display
31	Lake Chelan: Keep It Blue Water Quality Campaign
32	Little Butte Creek Floodplain Rehabilitation
33	Bend Municipal Watershed Sign Project
34	Domerie Creek Reservoir and Conveyance
35	Emerson Cr Fish Passage and Road Removal
36	Clear Creek Fish Passage and Flow Enhancement
37	Floras Creek Drinking Water Protection

Land management agency

- Bureau of Land Management
- National Park Service
- U.S. Forest Service
- State Agency

Data sources: Esri, BLM, USFS, WA DOH, OR DEQ.
Cartography: Geos Institute



Example: GLIDE, OR

- **Problem:** High risk of sediment delivery to the North Umpqua River (drinking water source for Glide) due to deteriorating culverts on Forest Service roads.
- **Solution:** Identify highest risk locations and restore roads to reduce hydrologic risk.
- DWPP funds were used to remove 8 crossdrain pipes; remove 4 old culverts at stream crossings and 8,000 cubic yards of fill; pull back steep road fill; prevent erosion with native straw, seed and slash.



Sample Foundation & Corporate Grant Sources



The Burning Foundation





Things to consider about private foundation grants

- Typically one-time awards
 - Multi-year awards less common
- Match usually required
 - Grants customarily used to leverage other funding
- Usually for assessment/planning processes, outreach/education, or project implementation (habitat work)
 - Not typically for capital expenses
- Administrative burden highly variable by source
- Municipalities/utilities may not be eligible recipients
 - Nonprofit and grassroots partner groups are good partners for securing/managing funding, leading on-the-ground work, etc.

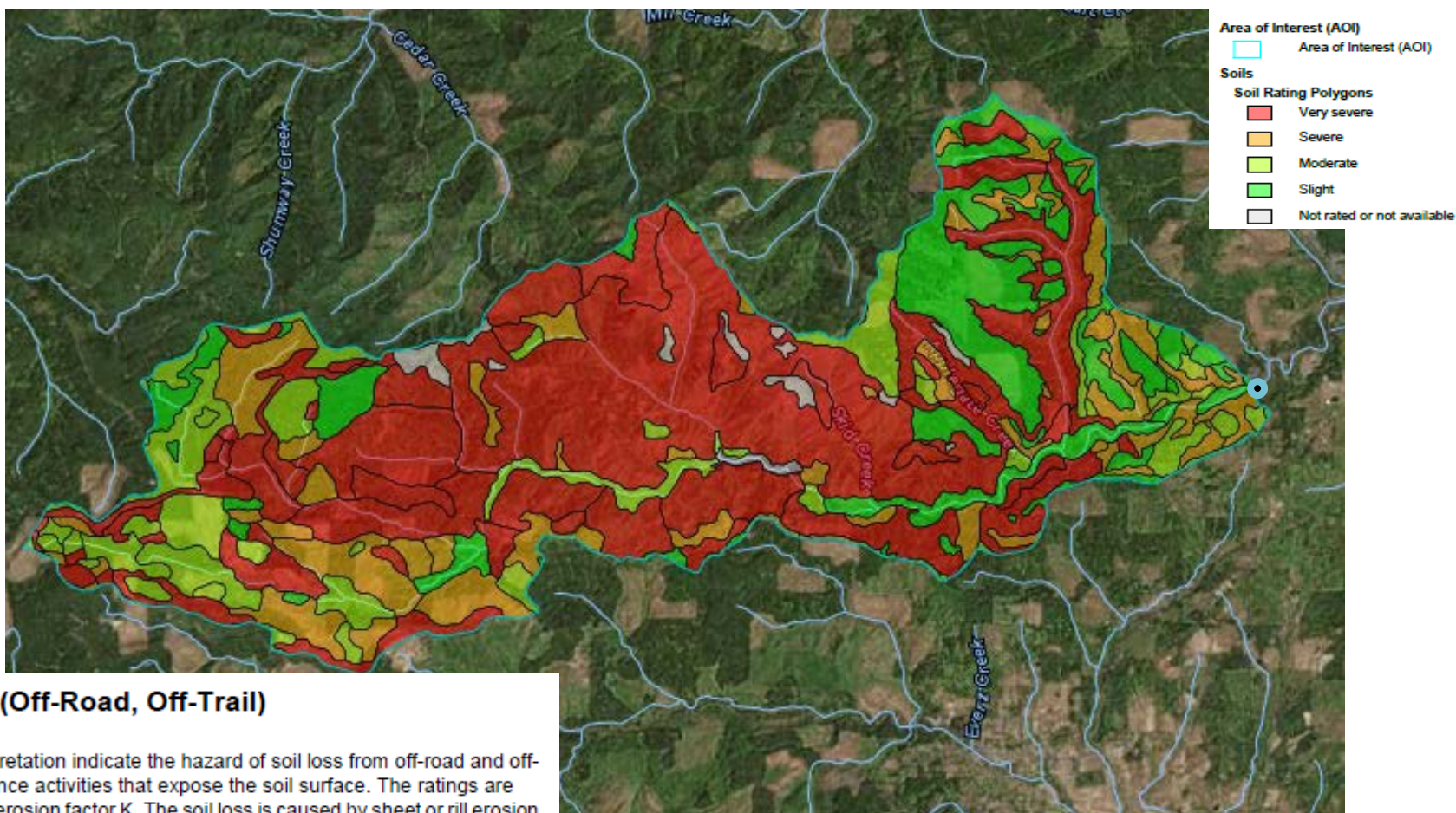
Questions?



City of Dallas – The Challenge

1987 Rockhouse Creek fire lead to increased sediment in creek, Mercer Reservoir and severe erosion.

Drinking Water Source Area & NRCS Erosion Hazard (Off-Road, Off-Trail)



Erosion Hazard (Off-Road, Off-Trail)

The ratings in this interpretation indicate the hazard of soil loss from off-road and off-trail areas after disturbance activities that expose the soil surface. The ratings are based on slope and soil erosion factor K. The soil loss is caused by sheet or rill erosion in off-road or off-trail areas where 50 to 75 percent of the surface has been exposed by logging, grazing, mining, or other kinds of disturbance.

City of Dallas – The Solution

Drinking Water Supply Upper Rickreall Habitat Enhancement

Mutual goals and objectives met in drinking water watershed

- Air-lifted 522 logs for 34 new instream structures placed in 2016
- Improves fish passage and increases woody debris to slow flows in key *salmon habitat* watershed
- Significantly contributes toward cleaner and more sustainable *drinking water supply* downstream



Dallas/Rickreall

- Partners:
 - ✓ Polk SWCD
 - ✓ BLM
 - ✓ City of Dallas
 - ✓ Rickreall Watershed Council
 - ✓ Hancock Forest Management
 - ✓ ...and more
- BLM, DWPP + multiple funding sources
- Strong partnerships led to successful DEQ CWSRF loan for City of Dallas land acquisition in drinking water source area

Earl Brown & Sons sells to Washington fruit grower

Family members remain in place at business

By GEORGE PLAIVEN
EO Media Group

MILTON-FREEWATER, Ore. — Earl Brown & Sons, Oregon's largest grower and packer of fresh apples, has sold to another family-owned fruit enterprise in Wenatchee, Wash.

Timber companies partner to improve water sources

By GAIL OBERST
For the Capital Press

DALLAS, Ore. — A distant helicopter rises suddenly from a Coast Range forest above Dallas. A log dangles beneath it, hanging from a cable.

"It's a bonus!" says Lucas Hunt, project manager for the Rickreall Watershed Council and the Polk Soil and Water Conservation District. "There are two logs in that load!"

Hunt has reason to be excited. This project will help control sediment that is slowly filling Mercer Reservoir, the source of the City of Dallas' drinking water. To accomplish improvements to nearly five miles of upper Rickreall Creek, Hunt has enlisted help from nearly a dozen



Polk Soil and Water Conservation District staff tour a helicopter log placement project on private and public forest lands that will help improve Dallas drinking water.

is an opportunity to show the public that managed forests are entirely compatible with clean drinking water, fish habitat and stream health."

The Rickreall project was one of 11 launched in Oregon in 2016, the first year of the unique Drinking Water Providers Partnership, a public-private collaboration aimed at funding municipal water improvements. Other projects included agricultural fencing, culvert repairs and riparian improvements to Fiddle and Billy Moore creeks in Lane County, and plans to build cattle fencing to protect Baker City's municipal watershed.

All of those projects were made possible by voluntary cooperation between private landowners, public managers and nonprofit agencies, according to Cathy Kellom of the Greco Institute. Kellom helps coordinate the Partnership, which includes the U.S. Forest Service, U.S. Bureau of Land Management, Oregon Department of Environmental Quality, Washington Department of Health, U.S. Environmental Protection Agency and WildEarth Guardians.

statesman journal

HOME NEWS POLITICS SPORTS LIFE OUTDOORS THINGS TO DO

Protect, keep a reliable, clean drinking water supply

Lucas Hunt Published 9:17 a.m. PT Jan. 10, 2017



(Photo: Special to the Statesman Journal)

Rivers and streams are the source for more than one-half of all drinking water in Oregon. Restoring and protecting these water sources is more important than ever as cities are growing and, in some cases, providers must balance water demands with more demands on the land.

And there's a cost to keeping these water sources over the next 20 years. It's a billion investment in water infrastructure.

In the Rickreall watershed, which supplies drinking water to the City of Dallas, community groups, landowners and government agencies are working to improve nature's ability to help provide clean drinking water.

Rickreall Creek has provided a reliable supply of drinking water for over 100 years but the creek is often clouded with sediment. Treatment challenges and has been slowly filling its useful storage life for downstream ratepayers. One of the upper Rickreall Creek is a proven method for reducing sediment and improving water quality.

