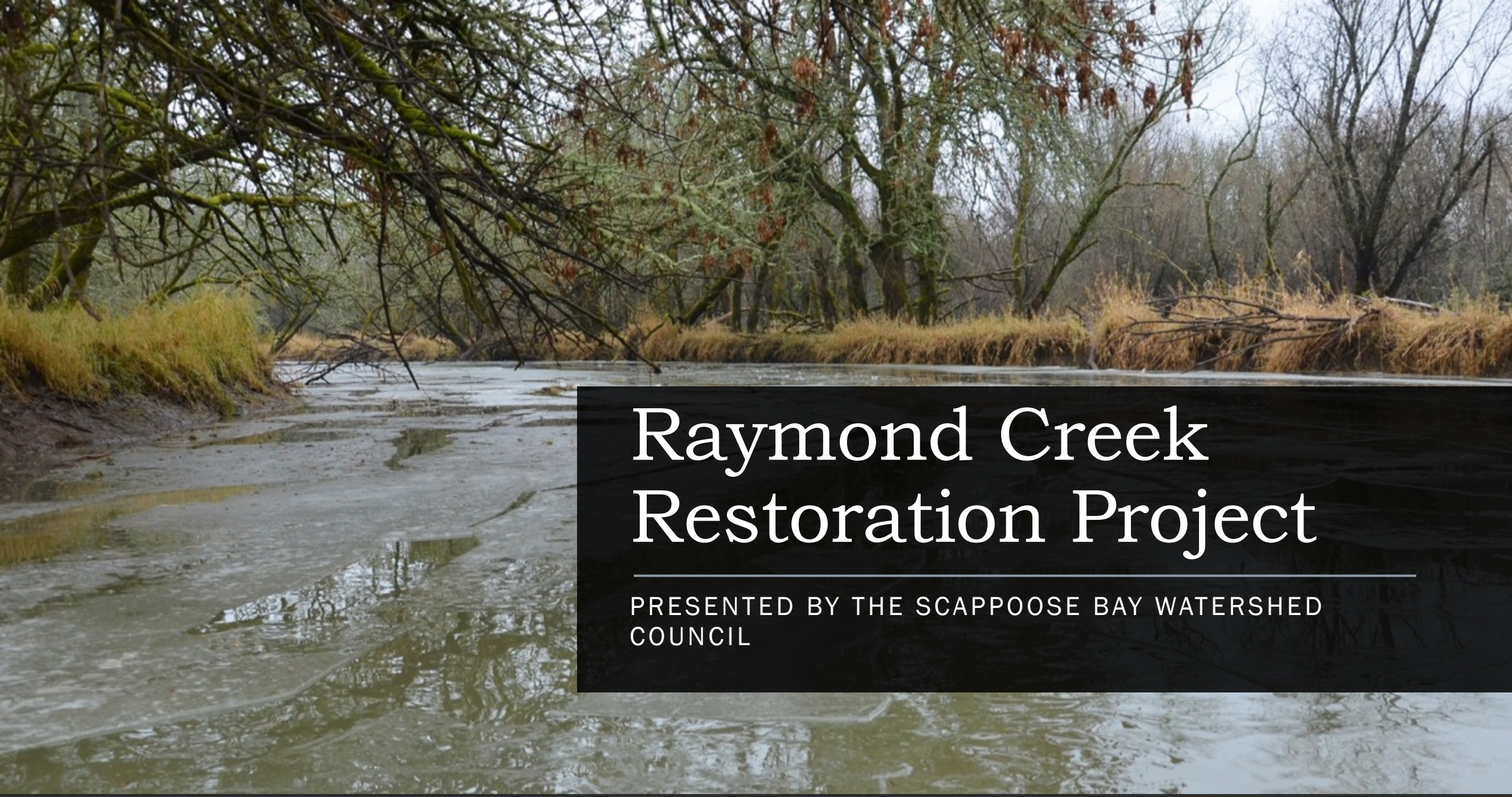
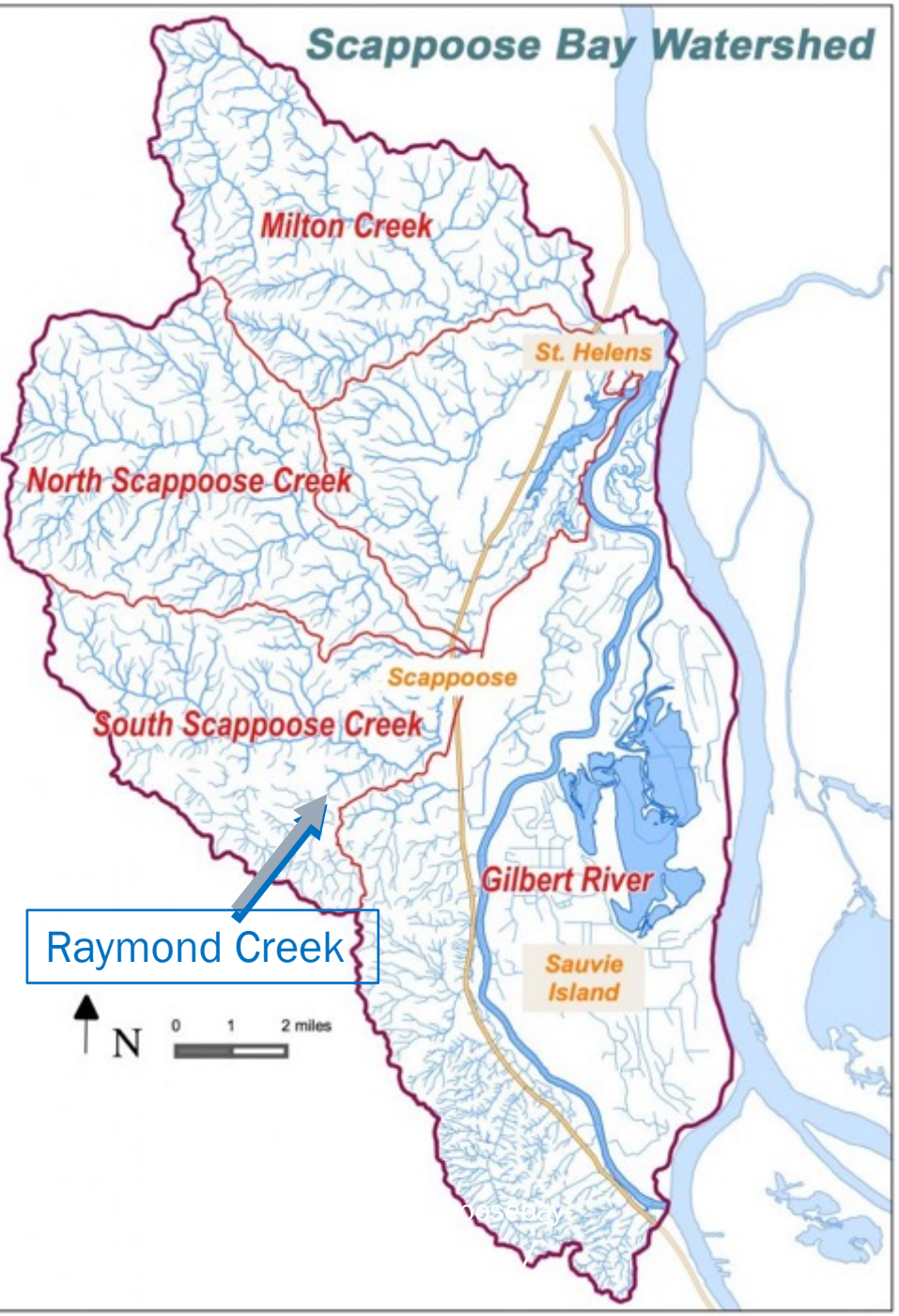


Raymond Creek Restoration Project

PRESENTED BY THE SCAPPOOSE BAY WATERSHED COUNCIL

Image: Scappoose Bay, https://www.outdoorproject.com/united-states/oregon/scappoose-bay



Raymond Creek

- A small tributary that feeds into the South Scappoose Creek, Scappoose Bay and eventually, Lower Columbia River
- Approximately 3.5 miles up from the city of Scappoose in Southern Columbia County

Image: Scappoose Bay Watershed, http://www.scappoosebay-wc.org/resources/landowners/

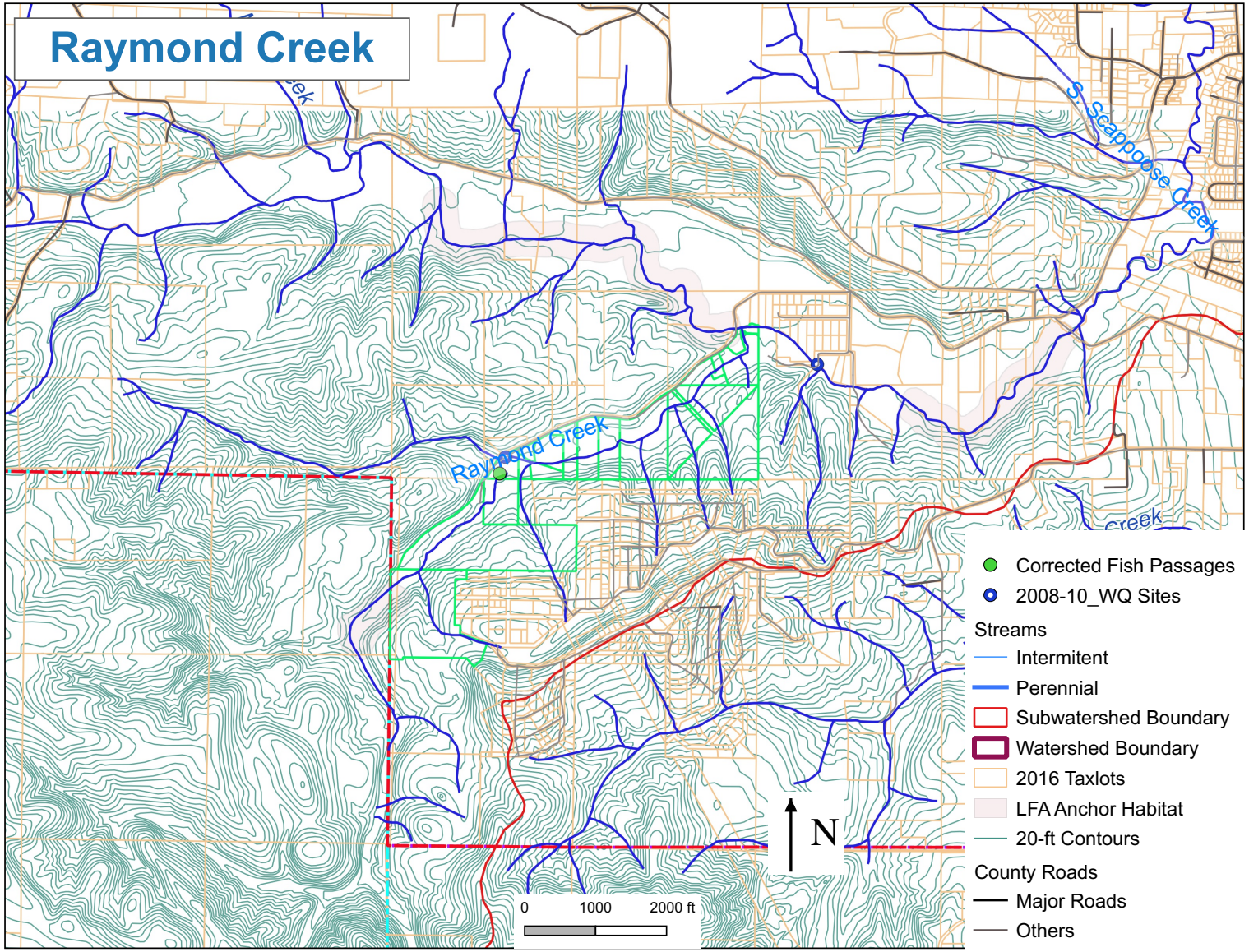
Raymond Creek Project Area

There are approximately 22 landowners adjacent to the Creek

Land in 3 counties

Includes BLM land in Washington County

Note: Anchor Habitat Areas up and downstream on S Scappoose and also on the BLM property in upper watershed



Background - How did we get here?

Winter 2018/2019 Severe winter rains resulted in high water that damaged bridges, significantly eroded banks threatening structures, and flooded wells. The landowners reached out to State and County representatives to help find a solution. They contacted Lower Columbia Engineer and Scappoose Bay Watershed Council.

Fall of 2019 application was submitted to Oregon Watershed Enhancement Board to fund outreach and assessment work.

June 2020 application was selected for funding.

Image: Raymond's Creek, Chris Vanderzanden

Who is Participating?

Scappoose Bay Watershed Council – Dana Pricher, Emily Martin

Columbia County – Margaret Magruder, Nathan Woodward

Columbia Soil and Water Conservation District – Crystalyn Bush

Lower Columbia Engineering – Tyler Joki

Oregon Department of Fish and Wildlife – Dave Stewart

Several landowners

Fish History and Needs

- Written and oral history show that Raymond Creek supported a diversity of Salmonid species
  - Lower Columbia River Coho
  - Steelhead
  - Cutthroat
- Fish populations have declined dramatically over the last half century
- 2012 Limiting Factor Analysis Scappoose Creek identified the following limitations for Raymond Creek:
  - Migrations Barriers
  - Temperature
  - Summer and winter cover and lack of large wood
  - Limited Channel Complexity

Image: Oregon coho migration in the fall of 2009
https://www.flickr.com/photos/odfw/4455546746/in/photostream/

Raymond Creek Restoration Technical Assistance Grant: Goals and Objectives

1) Analyze Current Conditions
2) Consider Design Alternatives
3) Develop designs, Habitat Restoration Plan, prepare permit applications
4) Pursue Construction Funding

Desired Outcome: Project plans that will improve habitat conditions for salmonids and reduce flooding impacts for landowners

Analyze Current Conditions

1. Stream Survey
2. 2-D Model
3. Landowner meetings and site visits
4. Connect with professionals

Image: California Conservation Corp, https://ccc.ca.gov/what-we-do/natural-resource-management/riparian-and-watershed-restoration/

Consider Design Alternatives

1. Do Nothing
2. Plant trees, control weeds
3. Bank Stabilization
4. Off-Channel Reconnections
5. Floodplain reconnections
6. Large Wood Structures
7. Bridge Consolidation
8. Fencing and grazing Management
9. Manure and mud

Develop Designs, Habitat Restoration Plan, Prepare Permit Applications

- Goal is a “shovel-ready” project
- Develop engineering designs to reduce the number of crossings and restoration designs to improve instream/riparian conditions.
- Prepare permit applications

- Habitat enhancement will:
  - Retain cooler winter flows to decrease summer water temperatures
  - Increased floodplain and hypothetic exchange
  - Retain spawning gravels and crease pool development
  - Increase off-channel habitat with reconnections to historical floodplain areas
  - Provide full access to upstream reaches.

Pursue Construction Funding

Several possible funding sources for construction exist. SBWC and partners will work with landowners to determine which programs might work for them and will write grant applications using designs developed as part of the Technical Assistance Grant

1. OWEB Restoration Grants – https://www.oregon.gov/oweb/grants/Pages/restoration.aspx
2. OWEB Small Grants - https://www.oregon.gov/oweb/grants/small-grants/Pages/small-grants.aspx
3. NRCS Funding - https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/programs/
4. Weed Board Grants - https://www.oregon.gov/oda/programs/Weeds/Pages/GrantProgram.aspx
5. ODFW funding - https://www.dfw.state.or.us/lands/AH/grants/index.asp
6. Other sources…

Benefits and Costs

BENEFITS

More stable stream system

Safe crossings and protected infrastructure

Improved fish habitat

Access to professional knowledge

Cost of design work and permits applications covered

“Shovel-ready” plans

Assistance with funding for construction

COSTS

Match Requirements

- All match requirements for this TA grant provided by partners
- Constructions grants will likely need some landowner input of time, materials, or money. Ex. OWEB requires 25%

Potential risks of future impacts

- Trees falling, banks failing, logs moving, stream being streams…
  - Past experience
  - Landowner’s Liability

What's Next?

- Survey Crews in the stream
- Visit from partner staff – Call or email Emily Martin SBWC to schedule
- More information and requests for input
  - SBWC Website
  - Email updates
  - Future meetings

Image: The Wildlife Society, https://wildlife.org/outreach-enhances-landowners-views-of-conservation-programs/

Summary

- Restoration of Raymond Creek will provide invaluable habitat for salmonid species and more stable stream system for landowners
- Restoration design can be used to pursue funding and Implement future restoration projects along Raymond Creek
- Partnerships formed can lead to future restoration activities

Special Thanks to Our Partners:

Thank You

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Scappoose Bay Watershed Council
Phone: (503) 397-7904
http://www.scappoosebay-wc.org/

Image: Salmon Spawning, Jason Ching
https://salmonstate.org/2019/01/10/the-international-year-of-the-salmon-brings-people-together-across-the-atlantic-and-the-pacific/