

Lewis & Clark River Riparian Health

NOTE: This is an area where an in depth hydrological assessment needs to be conducted and stream bank stabilization needs to be discussed for further restoration.

Purpose

To enhance and control livestock access to riparian areas along the Lewis and Clark River. Riparian areas and controlling livestock access will help filter nutrients and other particles from entering streams and surface waterways. Riparian areas provide shade and cover over stream banks that help maintain low summer water temperatures for T&E salmonid species.

Goal & Objective

30 agricultural Landowners with a total of about 1,930 acres have been identified for potential estuarine habitat and off-channel/riparian restoration. For the two years of this project we will focus on the off-channel/riparian restoration aspect. Our goal is outreach to all 30 landowners and expected financial assistance to 50%.

Natural Resource Concerns:

Water Quality -Harmful temperatures of surface water, excessive; excessive suspended sediment & turbidity in surface water

Fish and wildlife- Inadequate cover/shelter T&E species

Implementation Proposed Solutions:

Education and Outreach about Agricultural Best Management Practices, pasture management, the importance of riparian areas on a farm and in the watershed.

Technical Assistance for farmer to install conservation practices

Financial Assistance for farmer to install conservation practices

Progress Evaluation & Monitoring

Evaluation will be conducted annually on outreach methods and willing landowners

Water Quality Monitoring can be conducted through the North Coast Watershed Association in partnership with Department of Environmental Quality and Clatsop SWCD. This monitoring system can be set up along waterways with high agricultural activity and landowners that are installing conservation practices.

FARMERS LOCATED IN FOCUS AREA CURRENTLY INTERESTED IN INSTALLING CONSERVATION PRACTICES: 7 LANDOWNERS, TOTAL ___ACRES

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PROPOSED SOLUTIONS OF CONSERVATION PRACTICES & Definitions:

Hardening Heavy Use Areas (Clatsop SWCD)

- The stabilization of areas frequently and intensively used by people, animals or vehicles by establishing vegetative cover, surfacing with suitable materials, and/or installing needed structures.

Installing Manure storage facilities (Clatsop SWCD)

- A waste storage impoundment made by constructing an embankment and/or excavating a pit or dugout, or by fabricating a structure

Nutrient Management Plans (NRCS/Clatsop SWCD)

- Managing the amount, source, placement, form and timing of the application of nutrients and soil amendments.

Installing gutter systems on existing barns/headquarters area (NRCS)

- Structures that collect, control, and transport precipitation from roofs.

Rain Water Catchment Tanks (pumps, pipelines to troughs) (NRCS/Clatsop SWCD)

- A facility for collecting and storing runoff from precipitation.

Fencing (NRCS/Clatsop SWCD)

- A constructed barrier to animals or people.

Riparian Planting/Filter Strip (Clatsop SWCD/Freshwater Trust)

- An area predominantly trees and/or shrubs located adjacent to and up-gradient from watercourses or water bodies. A Filter strip is a strip or area of herbaceous vegetation situated between cropland, grazing land, or disturbed land (including forestland) and environmentally sensitive areas.

Troughs/Nosepumps (NRCS/Clatsop SWCD)

- Any permanent or portable device to provide an adequate amount and quality of drinking water for livestock and or wildlife.

Animal Trails/walkways/access road (NRCS/Clatsop SWCD)

- Established lanes or travel ways that facilitate animal, equipment and vehicles movement constructed as part of a conservation plan.

Weed/brush control pastures/pasture management/Pasture Planting (NRCS)

- The removal or control of herbaceous weeds or woody plants including invasive, noxious, and prohibited plants. Managing the harvest of vegetation with grazing and/or browsing animals.

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RANKING (PRIORITIZING APPLICATIONS)

High

- Farm is located in Focus Area
- Implementation results in livestock being 100% fenced out of riparian areas and waterways and installing permanent riparian areas.
- Implementation results in eliminating runoff from headquarters areas that carry nutrients directly into sloughs.
- Implementation results in improving pasture health to meet quality criteria.

Medium

- Farm is located in close proximity (20 miles to boundary) to focus area or on same waterbody not inside focus area
- Implementation results in livestock being 100% fenced out of riparian areas and waterways and installing permanent riparian areas.
- Implementation results in eliminating runoff from headquarters areas that carry nutrients directly into sloughs.
- Implementation results in improving pasture health to meet quality criteria.

Low

- Implementation results in livestock being fenced out of riparian areas and waterways and installing permanent riparian areas.
- Implementation results in eliminating runoff from headquarters areas that carry nutrients directly into sloughs.
- Implementation results in improving pasture health to meet quality criteria.

Lewis and Clark Riparian Health Group Discussion notes:

Problem statements:

- Land alteration
- Historic practices ag & timber
- 2007 storm flash flooding
- Water quality-sediment, temperature, habitat, nitrogen (manure), lack of complexity, large wood, monoculture, decreased pasture health
- Dikes degrading over time, turn of the century before 1930. Tidegates, culverts, channels altered overtime.

Goals/Objectives:

- Need a study
- Upper/lower-infrastructure
- Fish friendly tidegates/culverts
- Increase fish habitat, enough to make a change.
- Meet TMDL
- Lower stream temp
- Increase channel complexity
- Improve pasture conditions
- Upper L&C-look at whole section. Comprehensive plan to reduce erosion. Looking at the big picture

Alternatives

- Focus on infrastructure
- Working on pastures in lowlands
- Full assessment with many options
- Work with individual landowners
- Lower might help ESA fish more because it's closer to the Columbia

Partnerships and other funding sources

- Landowners, ODFW, local watershed councils
- OWEB
- NMFS
- USFW
- County ODF
- NRCS
- Clatsop SWCD
- Other grants

Implementation

- Should be done in stages because projects would take a long time.
- Start with infrastructure
- Learning curve. Takes time to earn trust
- Start with baseline monitoring
- Hydrologic study done with landowners so that learning can be together

Progress Evaluation and Monitoring

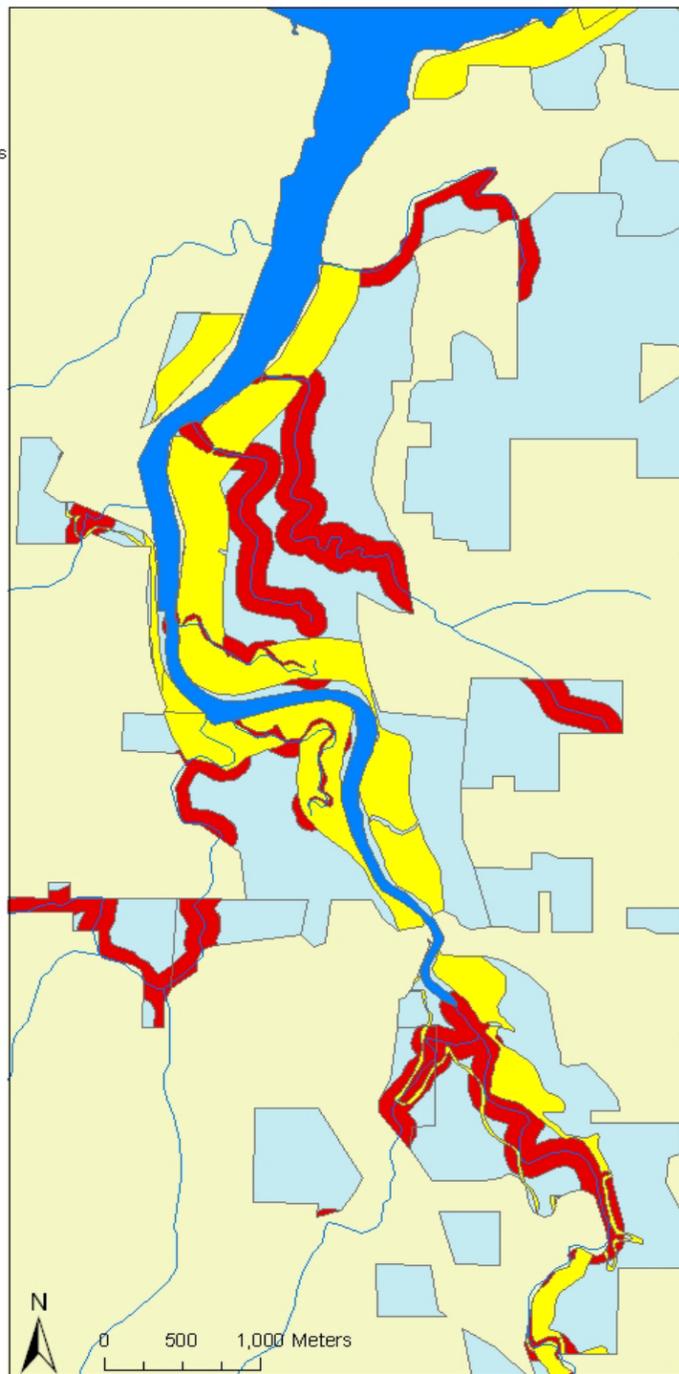
- # of landowners
- Acres
- Stream miles treated
- Planting trees with fence

Participants:

Nadia Gardner-Columbia Land Trust
Jim Brick-ODFW
Ann Rogers-NRCS
Rebecca Pederson-NRCS

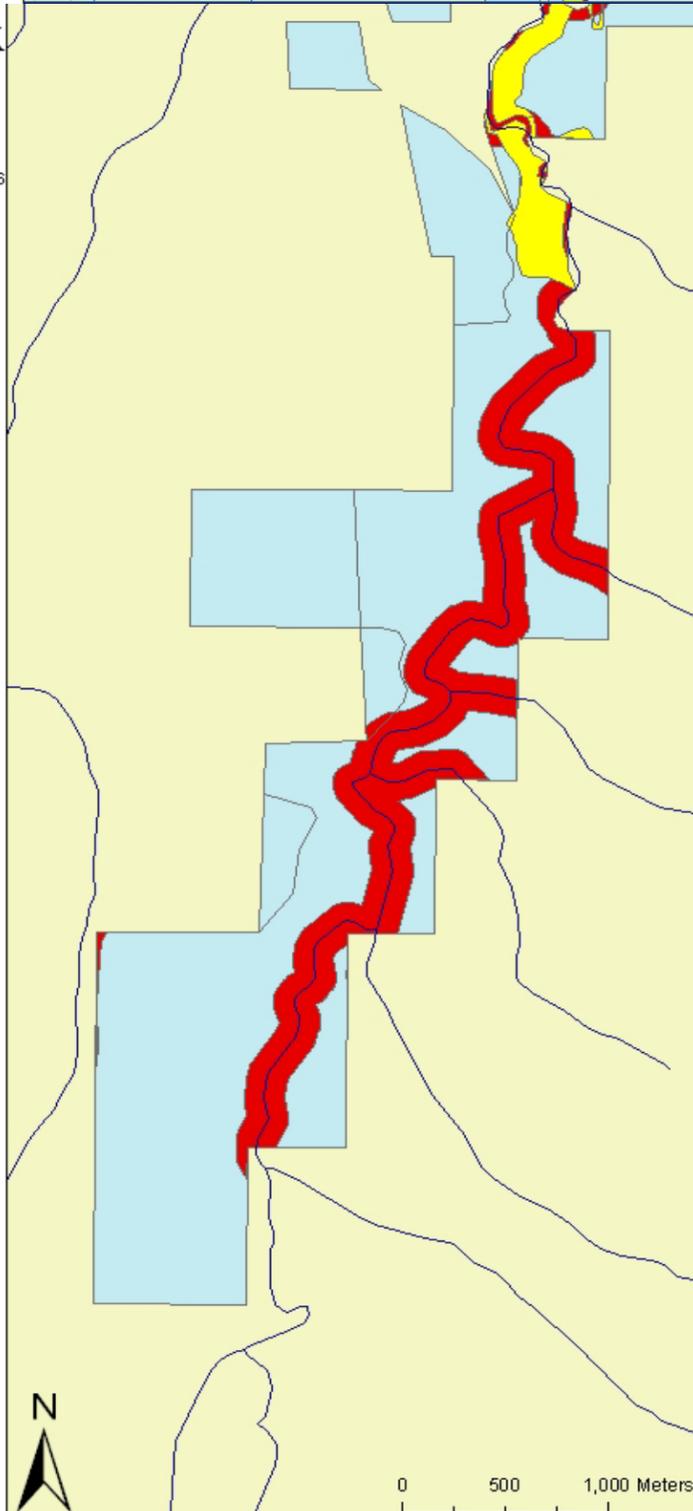
Lower Lewis and Clark

- Lewis and Clark River
- Potential Estuarine Habitat Restoration Area
- Potential Off-Channel/Riparian Restoration Areas
- Zoned Agriculture Land
- Youngs River Watershed (134,810 acres)

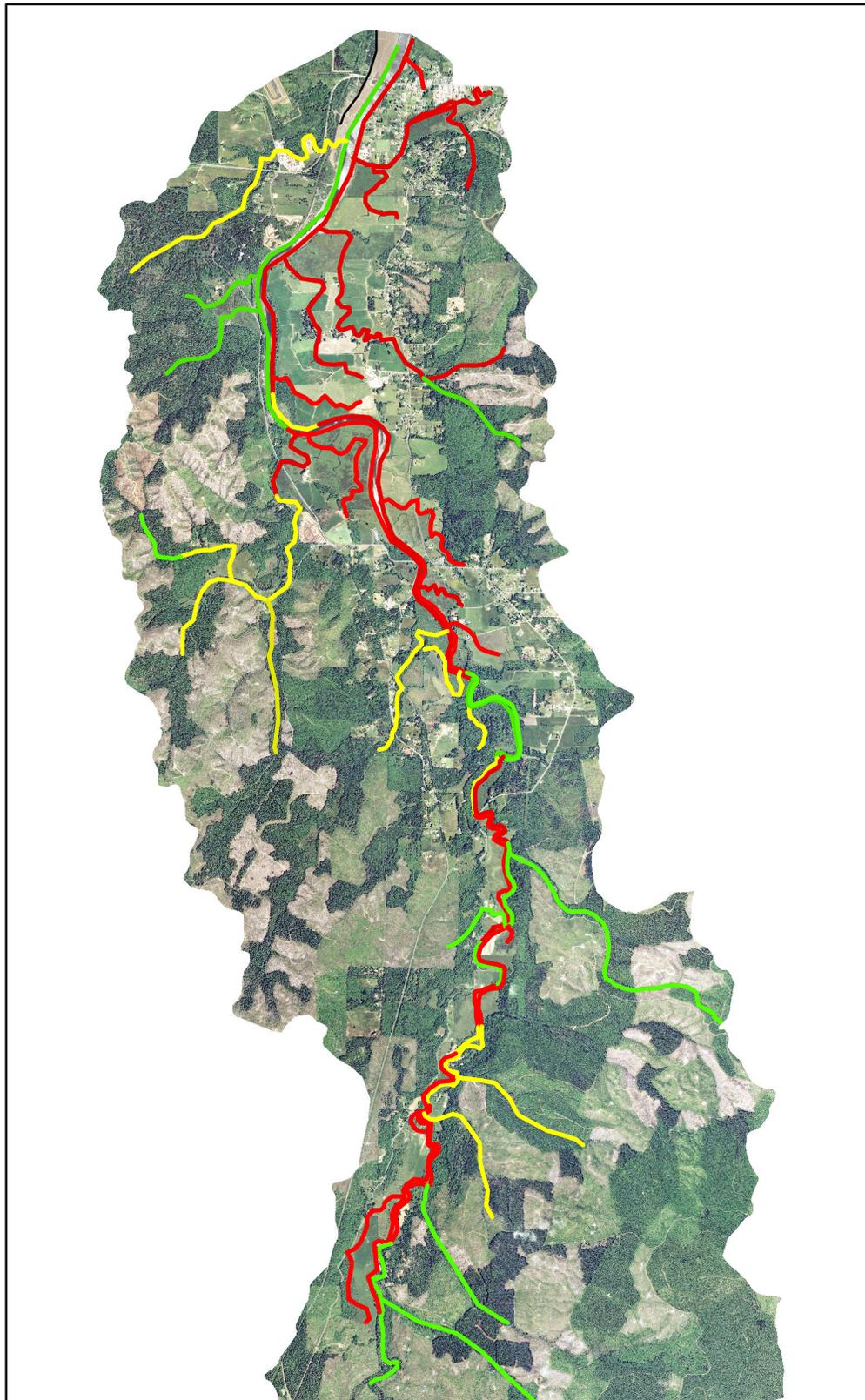


Upper Lewis and Clark

- Lewis and Clark River
- Potential Estuarine Habitat Restoration Area
- Potential Off-Channel/Riparian Restoration Areas
- Zoned Agriculture Land
- Youngs River Watershed (134,810 acres)



Lower Lewis and Clark Focus Area 2012-2015



0 0.4 0.8 1.6 Miles
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Legend

- Riparian Condition Class 1
- Riparian Condition Class 2
- Riparian Condition Class 3

