

Forest Service Projects

Muddy River Brushing and Thinning

Muddy River Brushing and Thinning

- Goal of project is to enhance growth and vigor of conifers and dominant hardwoods in floodplains and riparian areas to provide shading to cool summer water temperatures in the River, and to provide a long term source of Large Woody Material

Background

- Lahar flows in 1980 stripped floodplains and riparian areas of vegetation. Stands of Alder and brush colonized these areas. A few conifers also established themselves sparsely scattered in the alder or brush stands.
- A few areas near Muddy River Picnic site were planted with conifers, and have since developed into thick, overstocked stands.

Result

- The end result is unhealthy stands of skinny alders with few conifers, and areas of thick brush with few conifers.
- The planted stands are overstocked with conifers resulting in unhealthy stands of saplings and small trees.

Project treatments

- **Brushing**- Alder and brush would be cut around existing conifers to reduce competition for sunlight, nutrients, and water. This would result in healthier, faster growing conifers. Dominant hardwoods would also be released in the same manner to promote healthier hardwoods within the stand.
- **Thinning**- Planted stands near the Muddy River Picnic site would be thinned of smaller conifers reducing competition for sunlight, nutrients, and water for dominant conifers.
- **Planting**- In alder or brush thickets with no natural conifers, conifers would be planted after clearing an area of brush to promote growth.

Unhealthy Stand of Trees



Dense Stand of Unhealthy Conifers



Thinned Stand of Conifers

Dominant Conifers were Released



Thinned Sapling Unit



Dense Stand of Unhealthy Alders



Thinned Stand of Alders

Dominant Alders were Released



Thinned on right side of road,
untouched on left side.



Example of thinned stands on Weyerhaeuser land



Example of Conifers in Alder stand on Pine Creek



Near Muddy River Acclimation Site



Muddy River



Budget

- Matching Funds

- Forest Service \$10,000 (IK)

- ACC \$75,000 (C)

- TOTAL \$85,000

Budget

■ NEPA-Planning and identification of stands	\$15,000
■ Contract administration & implementation	\$10,000
■ Contract	\$55,000
■ <u>Monitoring</u>	<u>\$5,000</u>
■ Total	\$85,000

Muddy River Riparian/Floodplain Improvement

Muddy River Riparian/Floodplain Improvement

- Goal of project is to remove invasive non-native plants from immediate riparian areas and gravels bars to promote native tree growth, and establish large wood on floodplain areas. The large wood would act as nurse logs to promoting seedling growth by preventing deer and elk browse, retaining water and nutrients, and to provide shade.

Background

- Lahar flows in 1980 stripped floodplains and riparian areas of vegetation. Over time as areas were naturally revegetated, non-native invasive species also established colonies. Some of the more persistent species are Scotch Broom and Canadian thistle.

Result

- As a result of non-native colonization riparian ecosystem function has been lost in heavily colonized areas. An example is Scotch Broom becoming some dominant it prohibits native trees from establishing themselves.

Project treatments

- **Eradication**- Invasive plants would be pulled from the ground and bagged for removal or piled for burning.
- **Planting**-Native trees would be planted and protected by in areas where invasives were removed.
- **Nurse logs**- Nurse logs would be placed near seedlings .
- This would be a multi year project because a seed bank exists in the soil.

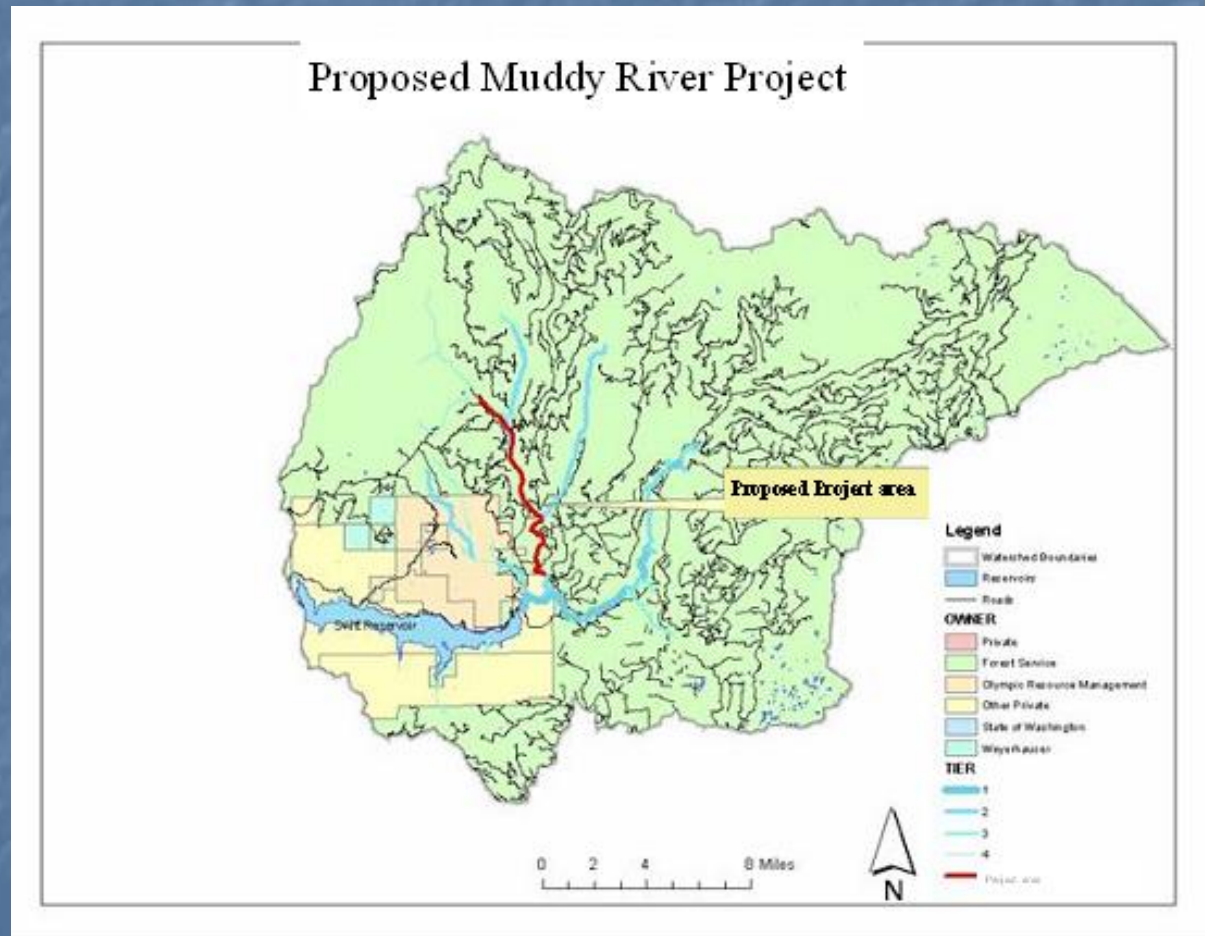
Weed Wrench Removing Scotch Broom



Nurse Log



Muddy Map



Budget

■ Matching Funds	
■ MSHI	\$2,000 (IK)
■ Title II Funds (P)	\$10,000 (C)
■ Forest Service	\$5,000 (IK)
■ Forest Service Regional Challenge Cost Share (P)	\$15,000 (C)
■ Watershed Stewards	\$3,000 (IK)
■ <u>ACC</u>	<u>\$48,000 (C)</u>
■ TOTAL	\$83,000

Budget

■ NEPA- and planning	\$10,000
■ Project admin & Implementation	\$10,000
■ Contract	\$58,000
■ <u>Monitoring</u>	<u>\$5,000</u>
■ <u>Total</u>	<u>\$83,000</u>

Saving \$\$\$\$\$\$

- We could combine this project with the brushing and thinning projects and save NEPA, Monitoring and Administrative costs of \$25,000. Also this project has similar components to it as the thinning project and additional savings of \$5,000 to \$10,000 in contract costs could be expected by having this contract awarded with the other one.
- TOTAL SAVINGS \$30,000 – \$35,000 !!!

Clear Creek Road Decommissioning

Clear Creek Road Decommissioning

- Goal of project is to decommission road by removing culverts, stabilizing erosional areas, and eliminating access. Removing culverts will reduce risk of culvert failure and sediment delivery to Clear Creek.

Clear Creek Road Decommissioning

- It is proposed to close the lower section of road 2575000 instead of road 2575200 for the following reasons:
 1. A timber sale unit is proposed in the future using the 2575200 road- the timber sale will be able to pay for the decommissioning of the 2575200 road when it is completed.
 2. The 2575000 road is in equally bad condition and is in the same road system and the same drainage as the 2575200 road.
 3. It will complement the closure of the 2575200 road, resulting in a more thorough closure of roads in the Clear Creek Drainage

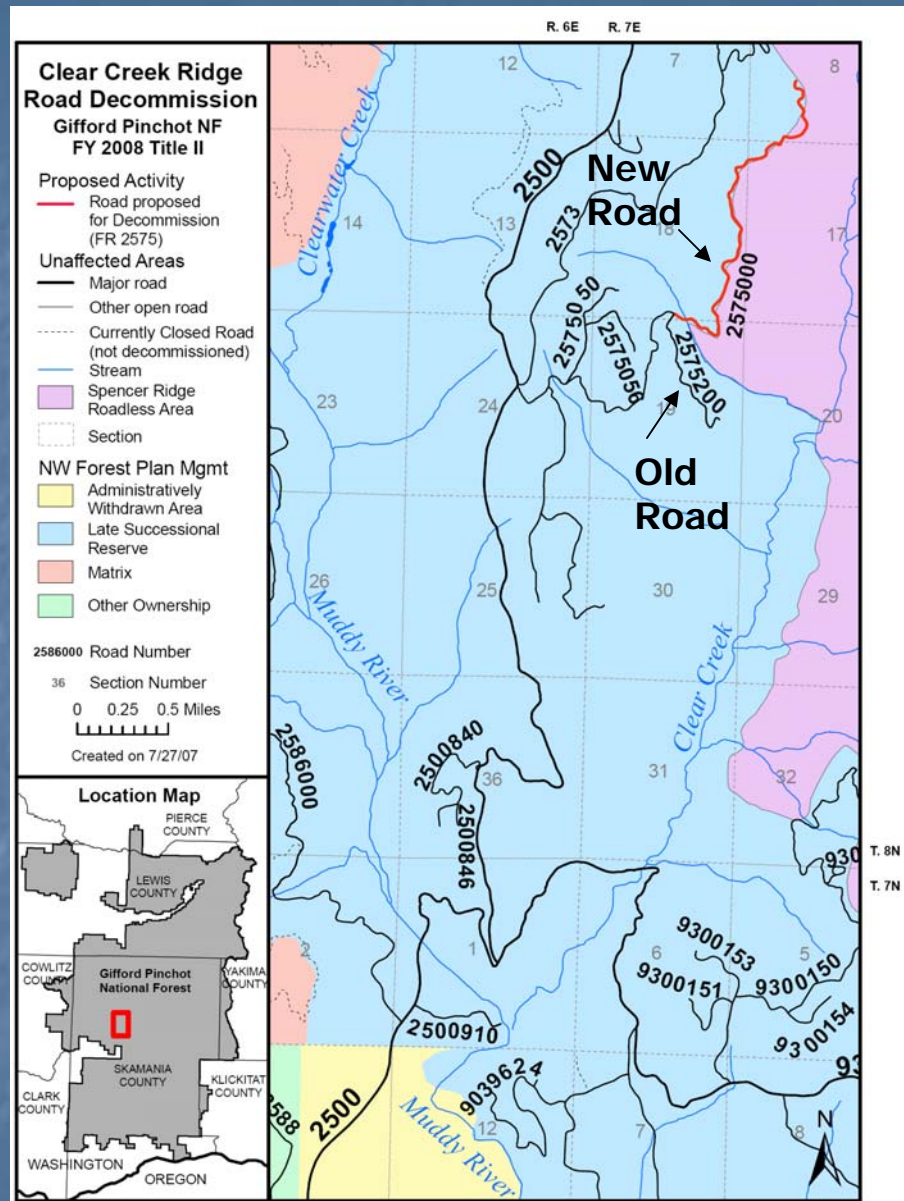
Project Background

- The Gifford Pinchot National Forest would like to address the problem of the risk of sediment delivery from the failure of a 3 foot blocked culvert at milepost 2.7 along Forest Road 2575 (Figure 1). Two other 4 foot culverts crossing small streams also pose the risk of sediment delivery due to potential culvert blockages and consequential failures.
- The Gifford Pinchot Roads Analysis recommends this road to be decommissioned due to discontinued access needs. The Roads Analysis rated the section from milepost 1.9-3.9 as High Aquatic Risk due to greater than 2.5 stream crossings per mile of road and 25% of the road within riparian reserves. The Gifford Pinchot Maintenance Plan designates this road as a Level II road which results in maintenance only when resource concerns are identified.

Expected Results

- This two mile road decommission will eliminate the risk of sediment delivery from the failure of the blocked culvert to one tributary crossing and reduce the risk of similar sediment delivery of two other culvert failures from this non-maintained road.
- The quantity of potential sediment directly delivered to live streams could be estimated as the amount of road fill to be removed at the three stream/culvert crossings. The total quantity of sediment that would be removed from the three stream crossing is approximately 5500 cubic yards.

Map of area



Project Treatments

- Remove four culverts
- Stabilize erosional areas
- Revegetate disturbed areas
- Eliminate vehicle access

Culvert Failure on 8322700 (project funded with ACC funds)



Budget

- Matching funds
 - Gifford Pinchot task Force \$40,000 (C)
 - Gifford Pinchot national Forest \$20,000 (IK)
 - ACC \$30,000 (C)

- TOTAL \$90,000

Budget

■ NEPA, Permit, compliance	\$10,000
■ Project design, admin and Imp.	\$20,000
■ Contract	\$57,500
■ <u>Monitoring</u>	<u>\$2,500</u>
■ TOTAL	\$90,000

East Fork Lewis River Habitat Restoration

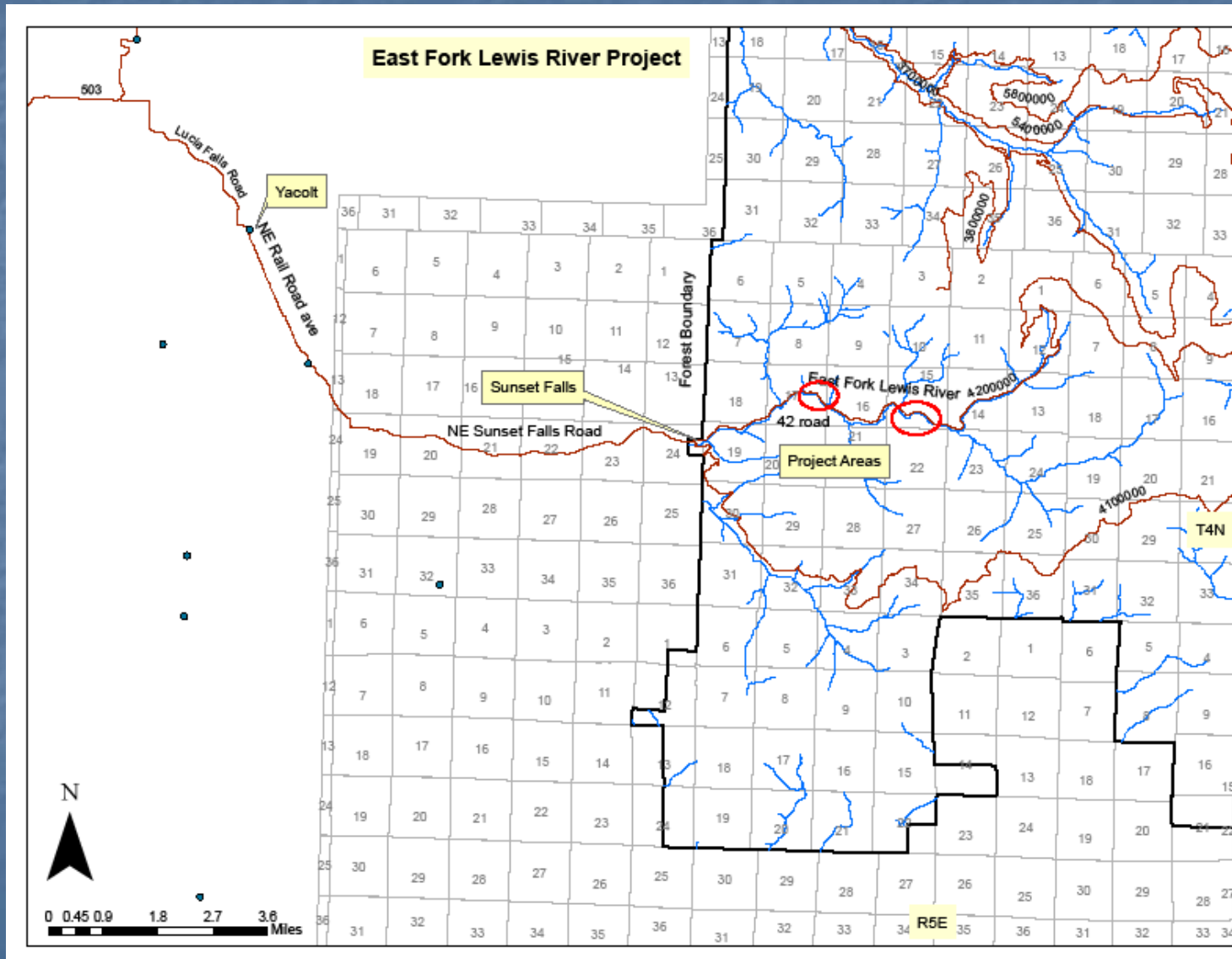
East Fork Lewis

- Goal of project to create spawning areas for steelhead by building gravel holding cross vanes with large boulders and using LWD for cover in pools created by cross vanes.

Background

- Forest Service Lands on the East Fork Lewis are some of the most important areas for steelhead in the Lewis River Basin.
- There is a shortage of spawning gravel and LWD structure in the Upper East Fork Lewis. Because of roads, past stream cleanout activities, and flood events.
- Increasing numbers of steelhead will ultimately benefit steelhead in the North Fork.

Map of Project Area



Cross Vane



Boulder with LWD & Fish



Fish First LWD Cedar Creek



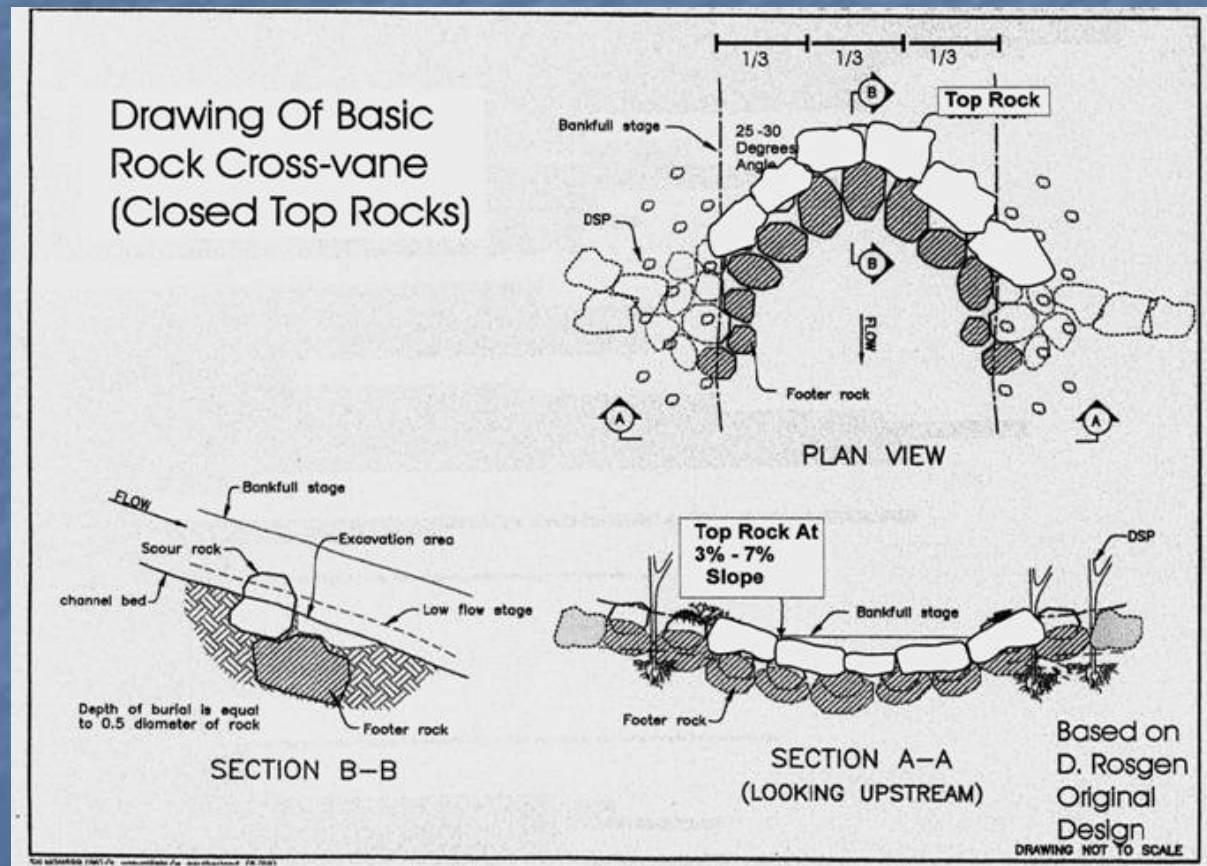
Fish First Cross Vane



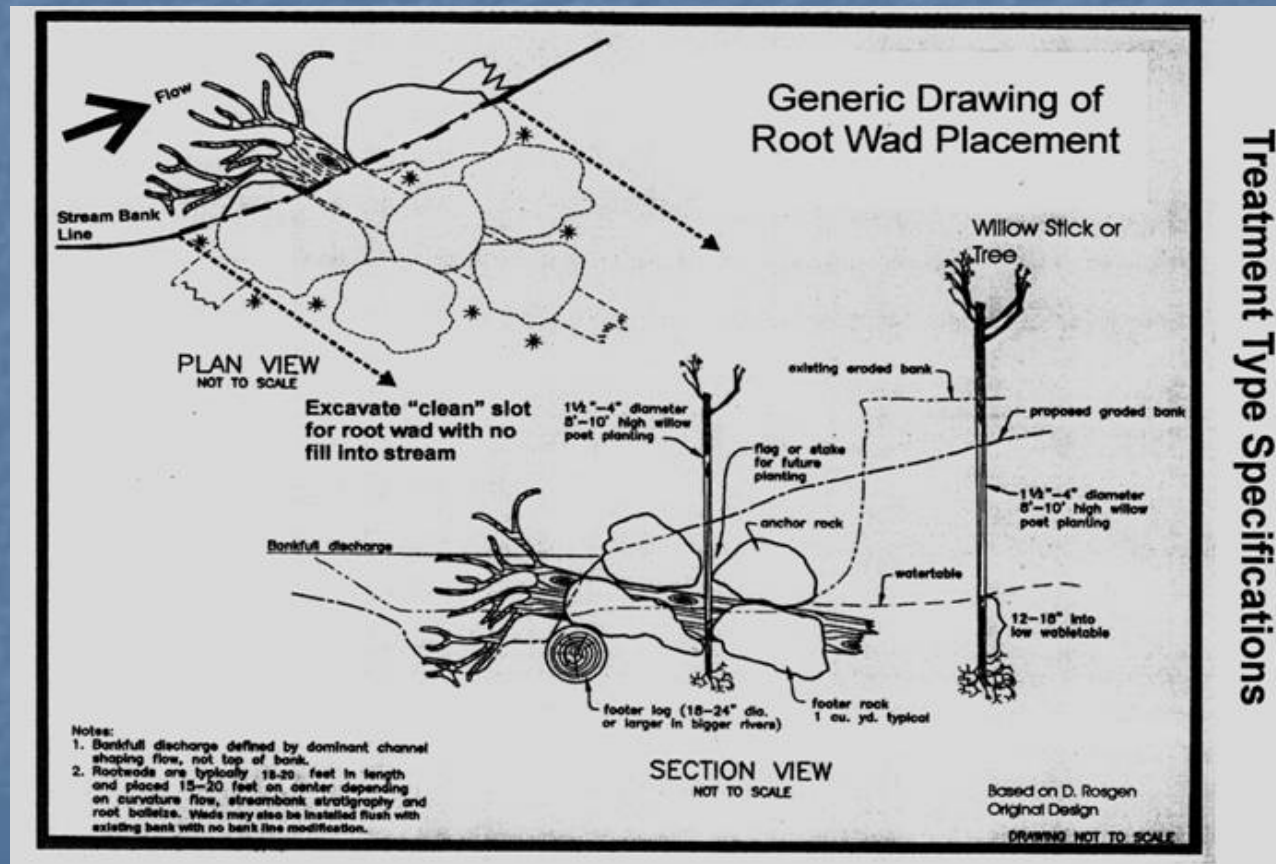
Fish First Cross Vane



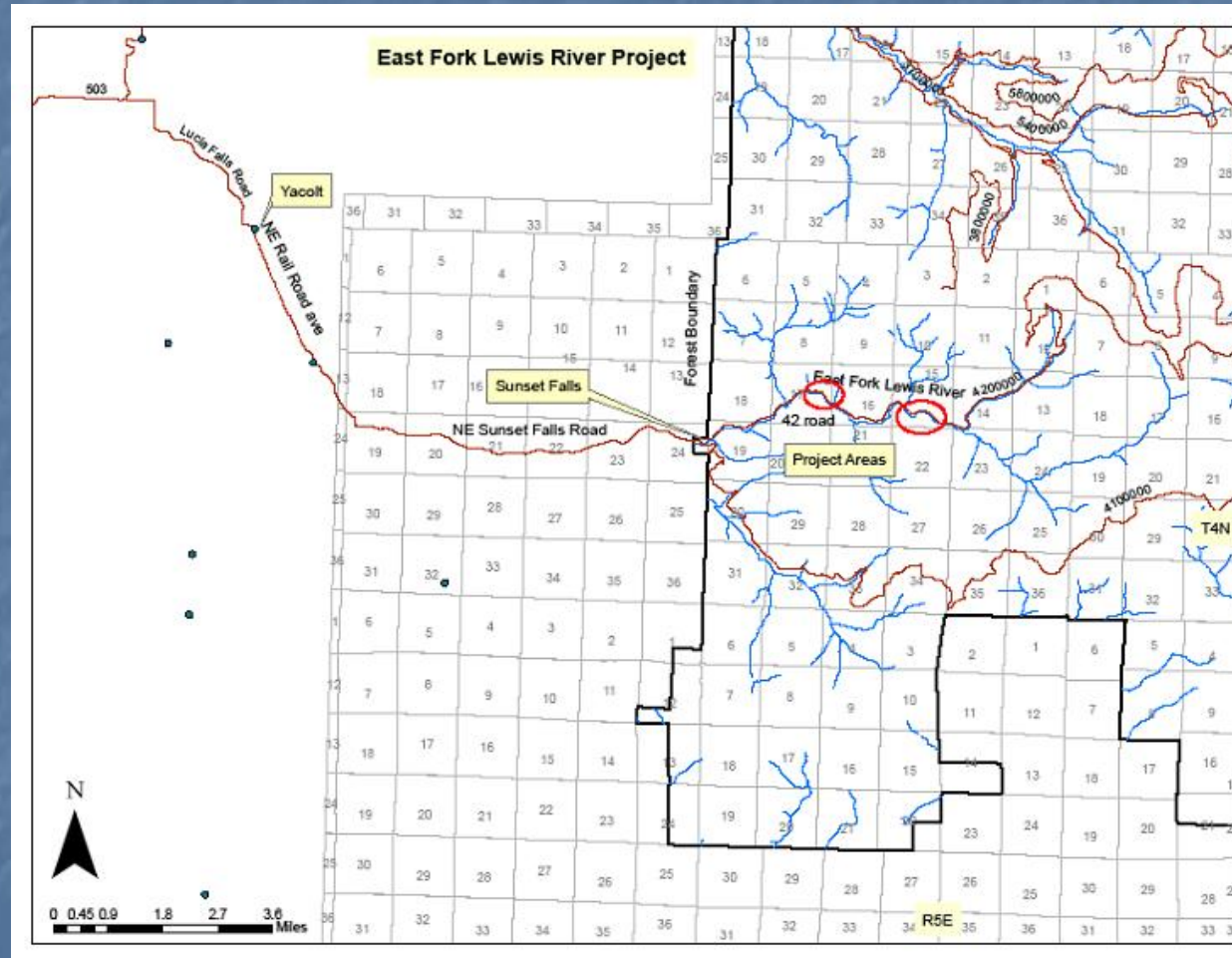
Typical Cross Vane



Rootwad in pool



Map of Project Area



Budget

Matching Funds

■ ACC	\$60,000
■ RAC 2007-2008 (Helicopter)	\$85,000
■ RAC 2006-2007 (Helicopter and Excavator)	\$95,000
■ Forest Service	\$17,000
■ Forest Service Joint Venture Fund	
■ <u>(under contract with Fish First-Excavator)</u>	<u>\$40,000</u>
■ TOTAL	\$297,000

Budget Break Down

8 Cross Vanes with Large Woody Material & Spawning Gravel

■ Boulders	\$15,000
■ Large Woody Material	\$4,000
■ Spawning gravel	\$5,000
■ Contract Planning and Administration, ■ NEPA, Permits	\$23,000
■ Contract	\$28,000
■ <u>Monitoring</u>	<u>\$2,000</u>
■ Total	\$77,000