

# NORTH FORK JOHN DAY AREA RIPARIAN FENCING

9303800

## SHORT DESCRIPTION:

Resetting and construction of seasonal electric fence and construction of barb wire enclosure fence.

## SPONSOR/CONTRACTOR: US FS

USDA Forest Service, Umatilla National Forest  
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## SUB-CONTRACTORS:

None

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## GOALS

### GENERAL:

Supports a healthy Columbia basin, Maintains biological diversity, Increases run sizes or populations, Provides needed habitat protection

### WATERSHED:

Implementation

### ANADROMOUS FISH:

Habitat or tributary passage

### NPPC PROGRAM MEASURE:

7.6B.5

### RELATION TO MEASURE:

Project is critical to riparian recovery on streams throughout the North Fork John Day watershed that are impacted by livestock grazing. The project has multiple benefits including water quality, Floodplain restoration, wildlife habitat, streambank recovery, and fish habitat restoration.

### TARGET STOCK

John Day River Spring Chinook  
John Day River Summer Steelhead

### LIFE STAGE

Rearing juveniles and spawning adults  
Rearing juveniles and spawning adults

### MGMT CODE (see below)

N, W  
N, W

### AFFECTED STOCK

Bull Trout  
Redband Trout

### BENEFIT OR DETRIMENT

Beneficial  
Beneficial

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## BACKGROUND

### Stream name:

North Fork John Day River tributaries

### Stream miles affected:

60

### LAND AREA INFORMATION

#### Subbasin:

John Day River

#### Land ownership:

Public

#### Acres affected:

2,000

### HISTORY:

The project was proposed in 1993 to determine if seasonal electric fence would make effective livestock enclosures for riparian protection. The technique has proven effective and the project has expanded in scope to more sites and to include permanent fence construction.

**BIOLOGICAL RESULTS ACHIEVED:**

Project monitoring has shown that electric fence at remote locations can be effective livestock exclosures. Water temperature, photo point, and fish observational monitoring is being conducted to document the effects of plant community and aquatic habitat recovery.

**PROJECT REPORTS AND PAPERS:**

Progress reports are due bi-monthly and Opac billings are due quarterly.

**ADAPTIVE MANAGEMENT IMPLICATIONS:**

Since 1993, approximately 76 miles of seasonal electric fence has been constructed to protect an estimated 60 miles of riparian habitat. Monitoring results from 1994 have documented a 98% effectiveness in excluding livestock from riparian areas. The riparian fence allows management the flexibility to protect multiple riparian sites and sites with investments while continuing to graze traditional areas.

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**PURPOSE AND METHODS**

**SPECIFIC MEASUREABLE OBJECTIVES:**

Riparian vegetation recovery resulting in improved water quality and recovery of degraded fish habitat.

**CRITICAL UNCERTAINTIES:**

N/A - There are no critical uncertainties or risks associated with this ongoing project.

**BIOLOGICAL NEED:**

The North Fork John Day River is home to the one remaining totally wild run of summer steelhead trout and spring chinook salmon within the Columbia basin. Portable electric fence and barb wire exclosures allow management to continue grazing traditional areas while protecting and restoring aquatic habitat.

**HYPOTHESIS TO BE TESTED:**

N/A - This project is not a study

**ALTERNATIVE APPROACHES:**

Immediate construction of permanent fence was considered but rejected due to the high initial cost.

**JUSTIFICATION FOR PLANNING:**

N/A

**METHODS:**

Major project tasks in the years 1997 to 2000 include new barb wire fence exclosure construction, maintenance of existing barb wire exclosure fence, and resetting and maintenance of seasonal electric fence exclosures.

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**PLANNED ACTIVITIES**

**SCHEDULE:**

<b><u>Planning Phase</u></b>	<b><u>Start</u> 1992</b>	<b><u>End</u> Ongoing</b>	<b><u>Subcontractor</u></b>
<b><u>Task</u></b> The operations and maintenance phase of the project is planned to start in 2001. Annual operation and maintenance will entail resetting and maintenance of electric fence exclosures and maintenance of barb wire exclosure fence.			
<b><u>Implementation Phase</u></b>	<b><u>Start</u> 4/97</b>	<b><u>End</u> 10/2000</b>	<b><u>Subcontractor</u></b>
<b><u>Task</u></b> Resetting electric fence and construction of permanent fence			

**O&M Phase**

**Start** 2001

**End** Unknown

**Subcontractor**

**Task** Maintenance of both electric fence and permanent fence

**PROJECT COMPLETION DATE:**

Unknown

**CONSTRAINTS OR FACTORS THAT MAY CAUSE SCHEDULE OR BUDGET CHANGES:**

There are no known risks associated with implementing the project.

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**OUTCOMES, MONITORING AND EVALUATION**

**SUMMARY OF EXPECTED OUTCOMES**

**Expected performance of target population or quality change in land area affected:**

The expected outcome of this project is the recovery of stream adjacent vegetation along selected reaches of tributaries of the North Fork John Day River. The recovery of stream adjacent vegetation will lead to improved aquatic habitat with the expected outcome of increased production of wild steelhead trout and spring chinook salmon. Improvements are expected in both spawning and rearing habitat for salmon and steelhead.

**Present utilization and conservation potential of target population or area:**

Summer steelhead trout and spring chinook salmon wild stocks are depressed in number in the John Day basin. Steelhead are presently proposed for further study by National Marine Fisheries Service under Endangered Species Act implementation.

**Assumed historic status of utilization and conservation potential:**

Stocks were historically healthy and supported a Native American fishery.

**Long term expected utilization and conservation potential for target population or habitat:**

Wild stocks of anadromous fish have an excellent potential for recovery because of their position low in the Columbia basin. They need only to negotiate three major dams on the main stem Columbia.

**Contribution toward long-term goal:**

Increase production of wild salmon and steelhead. Reduce stream temperatures and stream width. Increase rearing and spawning habitat, macro invertebrate populations, dissolved oxygen, bank cover and stream cover.

**Indirect biological or environmental changes:**

None known

**Physical products:**

76 miles of seasonal electric fence to protect and restore 60 miles of riparian habitat along with the construction of up to 10 miles of permanent fence each year.

**Environmental attributes affected by the project:**

Riparian vegetation recovery will indirectly result from livestock exclusion.

**Changes assumed or expected for affected environmental attributes:**

No near term detrimental effects with long-term water quality and fish habitat improvement.

**Measure of attribute changes:**

N/A

**Assessment of effects on project outcomes of critical uncertainty:**

No critical uncertainties were identified

**Information products:**

Annual accomplishment report

**Coordination outcomes:**

Big game utilization study of grasses and hardwood shrubs is monitored for representative exclosures.

**MONITORING APPROACH**

Effectiveness of seasonal electric and permanent fence for protection of riparian areas by livestock exclusion is monitored during periodic operation checks as part of project implementation.

**Provisions to monitor population status or habitat quality:**

Annual redd surveys are conducted jointly by ODFW and USFS.

**Data analysis and evaluation:**

An annual monitoring report will be published.

**Information feed back to management decisions:**

Information from annual monitoring has resulted in an increased emphasis on permanent fence.

**Critical uncertainties affecting project's outcomes:**

No critical uncertainties are identified.

**EVALUATION**

Riparian vegetation recovery documented by photopoints and transect monitoring.

**Incorporating new information regarding uncertainties:**

We have complete control of on-the-ground activities and could make adjustments during project implementation.

**Increasing public awareness of F&W activities:**

Permittees grazing livestock on the National Forest and Forest visitors have already observed the effectiveness of exclosure fencing in promoting recovery of riparian vegetation. Recent lawsuits have focused a great deal of attention on riparian management in the John Day River basin.

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**RELATIONSHIPS**

**RELATED BPA PROJECT**

8400800 North Fork John Day Anadromous Fish Habitat were transferred to this project

**RELATIONSHIP**

The new projects uses an example of adaptive management

**RELATED NON-BPA PROJECT**

Range investment program/ US Forest Service

**RELATIONSHIP**

Same goals of fish habitat restoration and protection are accomplished

**OPPORTUNITIES FOR COOPERATION:**

Projects could share skilled workers

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**COSTS AND FTE**

**1997 Planned:** \$80,000

**FUTURE FUNDING NEEDS:**

<u>FY</u>	<u>\$ NEED</u>	<u>% PLAN</u>	<u>% IMPLEMENT</u>	<u>% O AND M</u>
1998	\$80,000	5%	80%	15%
1999	\$80,000	5%	80%	15%
2000	\$75,000	5%	75%	20%
2001	\$75,000	5%	75%	20%
2002	\$75,000	5%	70%	25%

**PAST OBLIGATIONS (incl. 1997 if done):**

<u>FY</u>	<u>OBLIGATED</u>
1995	\$59,992
1996	\$139,926
TOTAL:	\$199,918

Note: Data are past obligations, or amounts committed by year, not amounts billed. Does not include data for related projects.

<u>FY</u>	<u>OTHER FUNDING SOURCE</u>	<u>AMOUNT</u>	<u>IN-KIND VALUE</u>
1998	USFS Range Investment Funding	\$50,000	
1999	USFS Range Investment Funding	\$50,000	
2000	USFS Range Investment Funding	\$50,000	
2001	USFS Range Investment Funding	\$50,000	
2002	USFS Range Investment Funding	\$50,000	

**OTHER NON-FINANCIAL SUPPORTERS:**

None

Continued implementation with a continued increase in the proportion of funding of operation and maintenance.

**1997 OVERHEAD PERCENT:** 11%

**HOW DOES PERCENTAGE APPLY TO DIRECT COSTS:**

[Overhead % not provided so BPA appended older data.] Total direct project costs

**SUBCONTRACTOR FTE:** N/A

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