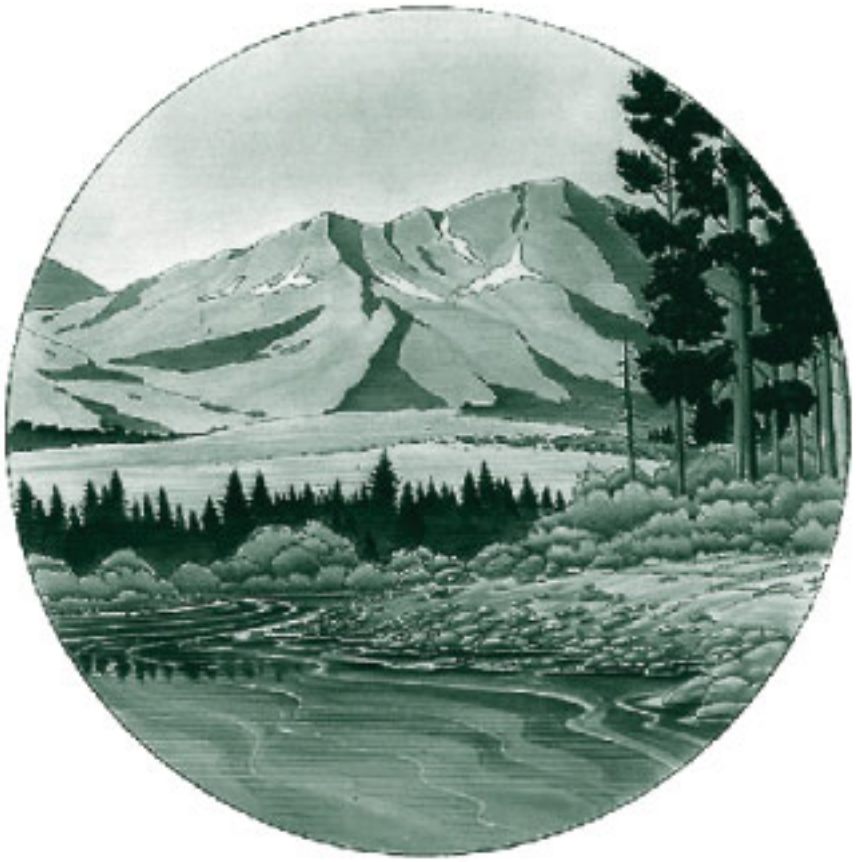
John Day River Subbasin
Fish Habitat Enhancement Project

Annual Report
2002 - 2003



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John Day River Sub-basin Fish Habitat Enhancement Project

2003 ANNUAL REPORT

By

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Mr. John Baugher, C.O.T.R.

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ABSTRACT

Work undertaken in 2003 included: **1**) Seven new fence projects were completed thereby protecting 7.6 miles of stream **2**) Completion of 0.7 miles of dredge tail leveling on Granite Creek. **3**) Maintenance of all active project fences (66.14 miles), watergaps (66), spring developments (33) and plantings were checked and repairs performed. **4**) Since the initiation of the Fish Habitat Project in 1984 we have 72.94 miles of stream protected using 131.1 miles of fence. With the addition of the Restoration and Enhancement Projects we have 205.96 miles of fence protecting 130.3 miles of stream.

INTRODUCTION

Background:

This project was initiated on July 1, 1984, under the Bonneville Power Administration (BPA) contract number DE A179-84 BP17460 and allows for initial landowner contacts, agreement development, project design, budgeting, and implementation for anadromous fish habitat improvement on privately owned lands within the John Day Basin. . The primary goal of ***"The John Day Basin Fish Habitat Enhancement Project"*** is to access, create, improve, protect, and restore riparian and instream habitat for anadromous salmonids, thereby maximizing opportunities for natural fish production within the basin. This project provided for implementation of Program Measure 703 (C)(1), Action Item 4.2 of the Northwest Power Planning Council's Columbia River Basin Fish and Wildlife Program (NPPC, 1987), and continues to be implemented as offsite mitigation for mainstem fishery losses caused by the Columbia River hydro-electric system.

The purpose of the John Day Fish Habitat Enhancement Program is to enhance production of indigenous wild stocks of spring chinook and summer steelhead within the sub basin through habitat protection, enhancement and fish passage improvement. The John Day River system supports the largest remaining wild runs of spring Chinook salmon and summer steelhead in Northeast Oregon.

DESCRIPTION OF PROJECT AREA

The John Day River drains 8,010 square miles of land in east central Oregon and is the third largest drainage in the state (Figure 3). The sub basin includes a major part of Gilliam, Grant, and Wheeler counties and portions of Crook, Harney, Jefferson, Morrow, Sherman, Umatilla, Union, and Wasco counties.

The mainstem John Day River flows 284 miles from its source in the Strawberry Mountains to its confluence with the Columbia River one mile upstream of the John Day Dam. The largest tributary, the North Fork, enters the mainstem of the John Day River at Kimberly (RM 184) and extends 112 miles to its headwaters in the Elkhorn Mountains near the town of Granite. The Middle Fork of the John Day River originates just south of the headwaters of the North Fork and flows roughly parallel to it for 75 miles until they merge at RM 31 of the North Fork. The South Fork of the John Day River originates from Cougar Mountain southwest of the town of Burns and drains the south side of Aldrich Mountain. Then it flows into the mainstem of the John Day River near the town of Dayville at RM 212.

The Bonneville Power Administration under contract number DEA 179-84 BP17460 provides funding for this endeavor. This funding is for private land leasing, stream habitat inventory, planning and design work, contract development, budgeting, fish passage improvement, fence construction, instream habitat placement, vegetation enhancement, construction review and maintenance. These activities are for anadromous fish habitat improvement on private lands within the John Day Basin. The John Day Fish Habitat program primarily relies on restoring natural vegetation, floodplain connectivity and groundwater interactions, using riparian fencing in streams that have been impacted by livestock grazing. This method has proven to be effective in protecting and

restoring streams (Beschta and others, 1991; Chaney and others, 1993). This program is coordinated with other fish habitat improvement programs on BLM and Forest Service and Tribal lands within the basin, and for these restoration activities to be successful, they must be coordinated across many jurisdictional and ownership boundaries; Section 7, Action Item 7.6C of the Northwest Power Planning Council's Columbia River Basin Fish and Wildlife Program (NPPC, 1994).

Main Projects in 2003

Stream/ Landowner	Canyon/ Berry Cr./ Larson	Lake Cr./ Hoover	Granite Cr./Rollins/ USFS/ Petrocinni	Indian Cr./ Corwin	Canyon Cr./ Napier	Canyon Cr./Olson	Mainstem John Day River/Pike	Totals
Stream Length Protected	1.4Mile	4.0 Miles	0.7 Miles	0.5 Miles	0.5 Miles	0.5 Miles	0.7 Mile	7.6 Miles of stream Protected
Spring/solar Development	One							One
Cost for Labor/ Materials	$18,176	$49,261	$90,000.00 Dredge tail leveling	$10,186	$8,117	$11,000	$8,960	$194,700

Specific areas that were added to the project during FY 2003 were:

- Construction of (1.1 miles) on Canyon Creek and (0.3 miles) on Berry Creek /Mr. Gordon Larson property. The fence construction on Canyon Creek is only on the east side of the creek, Highway 395 is the West boundary. Combining Berry/Canyon Creek the fence will protect 1.2 miles of creek. There was also one solar development installed. Contractor had an accident so project completion was in the spring of 2003.
- Placement of one cattle guard on Canyon Creek/Larson property.
- The leveling of 0.7 miles of dredge tails by Harney County Gypsum construction on Granite Creek/Rollins and Petrocinni property was completed in October, 2003. **Appendix 1**.
- Construction of 0.5 miles of riparian fence on Indian Creek/Corwin property protecting 0.25 miles of stream was completed by ODFW personnel. Also installed juniper bank stabilization. **Appendix 2.**
- Lancaster Construction built 5.75 miles of fence on Lake Creek/Hoover property protecting 4.0 miles of stream.
- Construction of 0.7 miles of riparian fence on Mainstem John Day River/Pike property protecting 0.7 miles of stream was completed by ODFW personnel.
- ODFW personnel built 0.3 miles of fence on Canyon Cr. /Napier property protecting 0.5 miles of stream.
- Construction was completed on the Canyon Cr. /Olson property; Webb construction finished the construction in the spring of 2003.

METHODS AND MATERIALS

The overall project goal is to rehabilitate and improve anadromous fish spawning and rearing habitat thereby contributing to the Northwest Power Planning Council's interim goal of doubling anadromous fish runs in the Columbia River Basin. The quality and quantity of instream and riparian cover is severely reduced in many John Day basin streams. This condition will be directly improved utilizing three complementary approaches: 1) fencing riparian areas, 2) constructing instream structures, and 3) planting streamside vegetation. These methods have proven effective in restoring stream habitat condition when properly applied.

Streams requiring rehabilitation in the John Day basin were first prioritized in 1983, and again in 1987 by ODFW biologists in cooperation with the United States Forest Service (USFS), the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) and the Grant County Soil and Water Conservation District (GSWCD). Problem identification was based on previous habitat evaluations in the basin and field biologists' knowledge of present conditions and problems. Streams were prioritized based on 1) severity of habitat degradation, 2) location within the basin, 3) fish species present, 4) landowner acceptance and cooperation, 5) ongoing habitat improvement projects in the area, 6) anticipated fish benefits, and 7) logistical constraints.

In 1996 a modification of program direction was decided upon. More emphasis will be placed on encouraging landowners to build and maintain their own riparian fences through the ten-year Restoration and Enhancement program. Providing fence materials and assist with fence layout, along with help in initial construction and giving of technical advice will accomplish this. Project personnel will continue to lease and build fences on high priority streams if landowners will not build them. Personnel will also continue to maintain project fences under previous leases.

Beginning in 1993 the ODFW Fish Habitat Enhancement Program was broken down into four main activities:

1. **IMPLEMENTATION - Prework**
2. **IMPLEMENTATION - Onsite**
3. **OPERATIONS and MAINTENANCE**
4. **MONITORING and EVALUATION**

IMPLEMENTATION - Prework:

This is one of the most time-consuming and important phases of the program in which landowner relations and goals of the project are established and work activities are scheduled. Prior to project construction the following activities are conducted:

Project Planning

Project planning includes design, layout and mapping of all work to be done onsite, landowner coordination, development of contracts and contract specifications, and obtaining necessary work permits.

Project Preparation

Prior to signing leases or construction contracts, all lease boundaries and work sites must be identified, staked, and agreed upon by the landowner and/or contractor. Work sites may include easements or right-of-ways, fences, livestock watering gaps, instream structures, offsite water developments, planting, and miscellaneous lease or construction related areas.

Riparian Lease Development and Procurement

Riparian lease development and procurement includes meeting with landowners and/or their legal representatives specifically for the purpose of developing an acceptable lease or cooperative agreement text. Lease documents must be signed, notarized, and filed in the county courthouse.

Field Inventories
These may include prework stream surveys and photographic documentation to provide baseline information on habitat condition and potential for improvement prior to any onsite implementation.

IMPLEMENTATION - Onsite:

Onsite implementation activities are the primary responsibility of ODFW personnel with technical oversight being provided by the Grant County Soil and Water Conservation District. The actual on-the-ground work phase of the program may include any or all of the following:

Instream Work
During late summer and early fall (instream work window) when stream flows are lowest, instream structures may be installed in streams at locations pre-selected by fishery biologists and/or hydrologists. Instream structures will be installed to specifically address the factors limiting fish production in each stream reach. Structures of various types may be used to provide optimum pool/riffle ratios, raise stream water tables, collect spawning gravels, and increase the amount of large woody debris, thereby increasing quantity and quality of spawning and rearing habitats. Hard rock structures may be necessary under some circumstances, but bioengineered or other "soft" structures will be the primary methods used to stabilize stream banks. Boulders may be used to create small rearing pools and hiding cover and also may be used as anchor points for cabling large woody debris.

In some cases such as in artificially channelized reaches, more intensive work may be needed to restore a channel back to functioning at its full potential. Work in these reaches will be conducted based on Rosgen (1996) natural channel design to restore streams back into their natural dimension, pattern and profile.

Planting
During the early spring, shrub and/or tree species may be planted at pre-selected locations along streams within project areas. Since high summer water temperatures are a major limiting factor, plantings will be made to provide stream shade, thereby reducing summer water temperatures and increasing salmonid utilization of streams. The maximum shade attainable for most streams in project areas is estimated at 80 percent.

Plantings may also be done in areas of poor bank stability as a preferred alternative to the more costly rock structures. Plantings will be done only after riparian fences have been installed to ensure their protection. During the fall, areas disturbed during implementation activities will be seeded to stabilize soils and discourage weed growth.

Fencing
Degradation of streamside vegetation by domestic livestock has been a major problem within project areas. To provide protection from livestock, and thereby promote rapid recovery of existing and planted vegetation, fences will be constructed along riparian zones within project areas. When negotiating fence locations with landowners, preference will be given to projects where fences are located well outside the normal flood-prone area.

Offsite Water Developments
In an attempt to reduce the number of water gaps in riparian fences (thereby reducing fence construction and maintenance costs), and to encourage livestock utilization of vegetation away from riparian areas, offsite water sources will be developed.

Miscellaneous Implementation Activities
Cooperator signboards denoting riparian enhancement projects as cooperative efforts between BPA, ODFW and private landowners will be installed at highly visible sites along completed riparian enhancement project areas.

OPERATIONS AND MAINTENANCE:

Operations and maintenance activities will begin the year following implementation and include:

Landowner Coordination
Ongoing coordination and cooperation between landowners and ODFW is a vital element to ensure long-term project success after the initial implementation is completed.

Fence Maintenance
Biannual inspections of all project areas will be made. Following these inspections, all fence maintenance will be done. Stream cross fences and/or water gap cross fences may be installed or removed during these inspections or at any time during the year to meet landowner needs and ensure maximum recovery within the projects.

Instream Maintenance
Annual inspections of all instream structures will be done in combination with fence maintenance inspections. Instream structures are generally expected to provide long lasting benefits with low maintenance. Instream structure maintenance will be done on a case-by-case basis, depending on impact of the structure failure on riparian recovery, streambank stability and/or landowner needs.

Revegetation
Replanting and/or seeding of project areas may be necessary to produce adequate stream shading, bank stability, or cover within the 15-year lease period. Events such as severe flooding and bank erosion, or when recovery is unacceptably slow due to lack of parent stock may result in a decision to replant an area.

Miscellaneous Operations & Maintenance Activities
These activities include vehicle, ATV, and equipment maintenance and repair. Installing or replacing project signs, and efforts to control wildlife damage.

MONITORING AND EVALUATION:

Whenever possible, some level of monitoring will be established prior to project implementation and will continue beyond the term of the lease agreement if the landowner is willing. Individual projects will be monitored using one or more of the following methods:

Photopoint Establishment
Photopoint establishment will include locating and placing permanent markers at sites from which photographs can be taken at regular intervals. These photographs are a primary and inexpensive means of documenting physical and biological changes along streams. Also associated with photopoint establishment is development of a photopoint notebook for each project area. These notebooks contain maps of all photopoint locations, instructions on taking the photographs, and labeled slides and prints.

Photopoint Picture Taking
Standardized pictures will be taken from pre-selected photopoints prior to implementation of any project area and for the next two years immediately following the completion of a project. Once these initial photos are obtained the frequency of photopoint picture taking may diminish to once every two to three years.

Habitat Monitoring Transect Establishment
Within selected project areas permanent habitat monitoring transects will be established. Specific measurements will then be taken along each transect to record channel morphology and vegetative characteristics. These measurements will be repeated at regular intervals and compared with original measurements as a means of quantitatively measuring environmental changes through time.

Habitat Monitoring Transect Data
Immediately after establishing habitat monitoring transects, baseline data will be collected. Data collection will be done on the first year following completion of implementation activities and thereafter at approximately 5 year intervals.

Thermograph Data Collection and Summarization
Thermograph data will not be recorded, collected, summarized, or graphed on a regular basis. The purpose of this type of monitoring is to detect changes in stream water temperatures that may occur over the years within fenced-off recovering riparian areas. Currently the Fish Habitat program has no projects that include enough concurrent fence mileage, where the effects of fencing can be evaluated.

Miscellaneous Monitoring and Evaluation
Miscellaneous monitoring and evaluation activities may include Chinook salmon and steelhead redds counts, juvenile fish population surveys, streambank stability surveys, and evaluating riparian vegetative recovery and/or planting success.

RESULTS AND DISCUSSIONS: FIELD ACTIVITIES

All implementation activities were accomplished in two phases: Prework and Onsite Implementation.

Implementation – Prework:

Project Planning

Design and Layout
The design and layout of the Lake Creek/Hoover project was completed.

A meeting was set up and attended with Lee Hoover and Al Garber both landowners on Lake Creek. A fenceline alignment problem was settled between the landowners before further habitat project fenceline was to be completed.

The technician met with the contractor on Canyon Creek/ Larson property to discuss the fence alignment.

Landowner Coordination
The seasonal technician coordinated with Victor Pike on fence location on the Mainstem of the John Day River.

The biologist met with landowners Ronald Rollins and Don Petroccini on Granite Creek to discuss details of the dredgetail leveling project.

The biologist met with Eric Nansen on Cottonwood Creek to discuss a riparian project on his 5.0 miles of stream. He has signed the agreement and the construction of approximately 11 miles of riparian fence will begin in the spring of 2004.

Project personnel met with Mr. Pete Rawlins on his property on the East Fork of Canyon Creek to discuss fence alignment, Mr. Rawlins was agreeable with the project and will contact the habitat biologist when he has the forest service fenceline issue is dealt with. He was agreeable to get the project completed in 2004 and when time permitted would like to have a walk through.

Developing Contracts and Contract Specifications

The 15 year Cooperative Agreement with Gene Napier/Canyon Creek was signed and fence construction was started and completed by ODFW personnel.

The Cooperative Agreement with Ronald Rollins/Granite Creek on the dredge tail leveling project was signed.

The 15 year Cooperative Agreement with Gale Corwin/Indian Creek was signed, the DSL permits to complete a juniper blanket was approved.

Obtaining Work Permits

DSL permits were filed on the Indian Creek/Corwin property and Mountain Creek/Brown property. DSL personnel (Kevin Herkamp) came out to both sites and gave approval with minimal changes to the original permits.

A permit through the State Forestry was acquired to cut 125 gate ends.

Project Preparation

The staking of materials (rock yardages and juniper placement) was completed on Mountain Creek/Brown property.

Staking with landowner approval was completed on a ½ mile section of Indian Creek/Corwin property.

Staking of the Pike property on the Mainstem John Day River was completed.

The seasonal technician met with the OYCC crew on Indian Creek/Kuhl property and cut 1300 willow cuttings that were put into soil / cooler to condition them to be planted at a later time.

A cultural resource survey was set up and completed for the Granite Creek/Rollins and Petroccini property's for the dredge tail leveling project.

The Lake Cr. /Hoover property was staked with a total of 5.1 miles of fence line staked out protecting 2.5 miles of stream and 78 acres.

Riparian Lease Development & Procurement

The biologist spoke with Gary Engle, John Cole, Erik Nansen, and Richard Naumann about completing a riparian project on their properties on Cottonwood Creek; those that could qualify (Engle, Cole and Nansen) were in favor of the program and were told that they were scheduled for construction in 2004.
The biologist sent Cooperative Agreements to Gary Engle, John Cole and Richard Naumann to look over.

Personnel meet with Rodger Lang on Squaw Creek to discuss a Cooperative Agreement for 2004.

The biologist revised the Cooperative Agreement with Gale Corwin on the Indian Creek project that is to be implemented in 2003.

Several meetings with Bryce Logan and Lee Hoover on their Lake Creek property were attended to discuss the riparian project.

Program personnel met with Gene Napier on Canyon Creek to discuss a riparian lease, an agreement was reached to add additional support to the existing fences which would encompass 35 acres within the project riparian area.

Field Inventories

Before and after comparative photos were given to Pete Rawlins/Canyon Creek project.

Biologist met with Ed Calame (private consultant) on Granite Creek to discuss budget constraints and also take pre construction photos.

Implementation - On site:

Fencing

Project personnel moved a cattle guard down to the Pike property which was installed by Speakman/Swaggart construction.

The biologist started the staking of Cottonwood Creek/Engle property, to be constructed in 2004.

Removal of 0.7 miles of fence was completed on the Mainstem John Day River / Pike property by project personnel.

ODFW personnel built approximately 100 ft of electric fence on Canyon Cr. /Larson property to temporarily protect the offsite solar water development area.

ODFW personnel built 0.7 miles of riparian fence on the Mainstem John Day River/Pike property.

Final fence inspection/payment was completed on Berry Cr. and Canyon Cr. /Larson property.

The Canyon Creek/Olson project was completed; the Canyon Creek and Berry Creek/Larson project was also completed both of these projects would have been done in 2002 if an accident by the contractor had not complicated the operation.

Project personnel removed 0.25 miles of old fence then rebuilt the section with stock yard fence, 0.40 miles of barbed wire fence was strengthened by the addition of wooden stays and tee posts on Canyon Creek/Napier property; this new project encompasses 35 acres.

The seasonal technician finished maintenance on Mainstem John Day River/Jacobs property and Cottonwood Cr. /Hettinga property.

Project personnel completed fence maintenance and installed watergaps on Indian Cr. /Kuhl and Oxbow property.

The technician set 16 railroad ties with the newly purchased backhoe attachment on Canyon Creek/Olson property.

Offsite Water Developments

Project personnel installed culvert for solar development on Canyon Cr. /Larson property.

The four troughs on the Mountain Cr. /Brown property were drained and cleaned out.

Miscellaneous Implementation Activities

The remaining 1400 pounds of riparian seed mixture was picked up in Pendleton from the USFS and stored at the La Grande ODFW seed shed.

Program personnel from the Murderers Creek wildlife area was given assistance on the mapping, staking, construction contract and inspection of 2.1 miles of riparian fence that was completed on Murderers Creek, along with the major maintenance of 2.5 miles of existing riparian enclosure. The OYCC crew was also used one day to remove three small fence enclosures on the Murderers Creek project.

OPERATIONS AND MAINTENANCE:

Landowner Coordination

All landowners were contacted to complete a mid summer walk through of existing project areas.

All landowners were contacted and asked about watergap removal.

Most watergaps were removed and/or raised to prevent icing/flooding, with some being left in to water livestock throughout the winter.

All landowners were coordinated with on water gap installation and fence maintenance.

Several landowners were contacted regarding watergap needs and cattle movements.

Instream Maintenance

The streambank stabilization project on Mountain Creek/ Brown property was completed with 30 juniper trees and 60 yards of rock placed on five sites.

The streambank stabilization project on Indian Creek/ Corwin property was completed with 27 juniper trees placed on three sites.

Revegetation

The seasonal technician along with OYCC crew planted the 1300 willow cuttings previously cut and also cut another 500 that were planted the same day on Indian Creek/Kuhl property. We decided to compare the survivability of conditioned willow plants to plants that were cut and planted the very same day. As of end of September we had approximately an 80 % survival in both planting techniques.

Project personnel took drift boat up to Granite Creek/Kerns and USFS property to shuttled a 20 person planting crew along with 5,000 Ponderosa pine, 5,000 willow and 500 alder seedlings to be planted along/across the completed Granite Creek dredge tail leveling project of 2002.

Fence Maintenance

Mountain Creek landowner Herb Jones called with concerns of new born calves getting into the riparian area so a bottom wire was added for ¾ of a mile along his riparian fence.

Spring walk through of project areas to assess and repair damages were completed on all riparian enclosures.

Fish habitat personnel fixed major fence damage due to neighboring cattle trespass on Sam McDaniel/Grub Creek property.

Project personnel removed watergaps from Fox Cr. /Hiatt property.

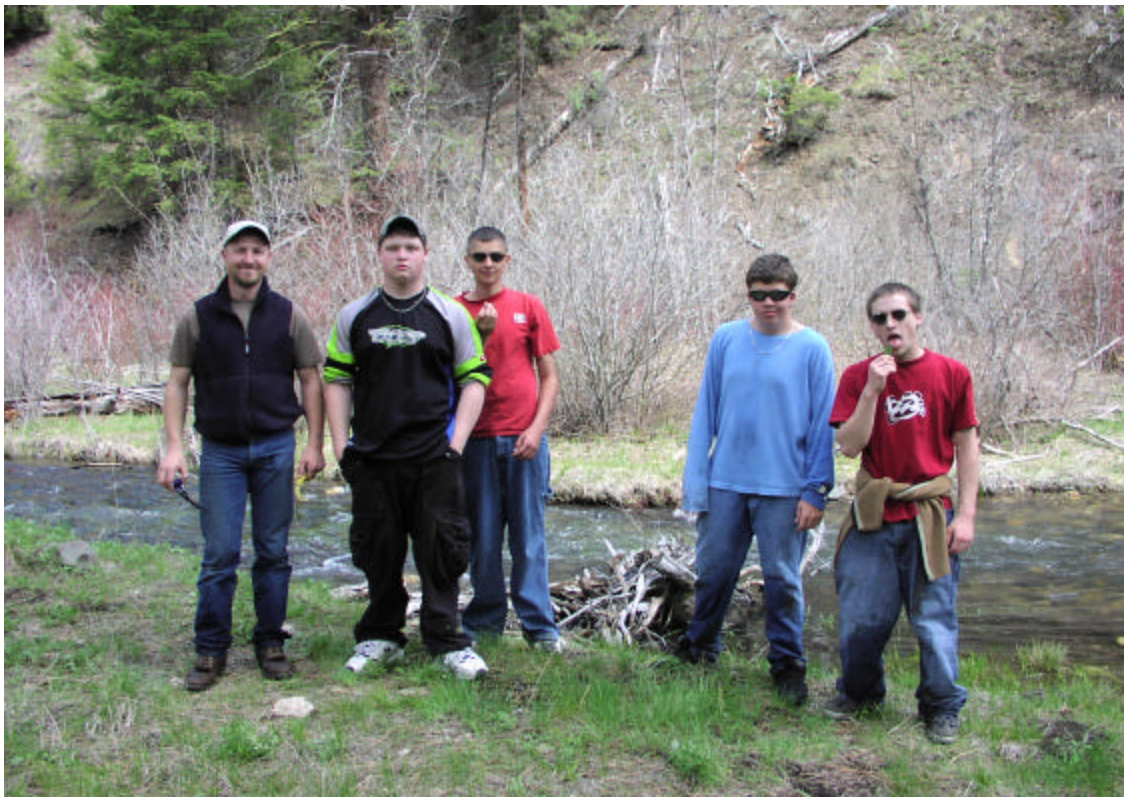
The technician built a rock jack and hung a 16 foot Powder River gate on Grub Cr. /McDaniel property.

Miscellaneous Operations & maintenance activities

Here are some of the ways the TEC / OYCC program has helped out the ODFW fish habitat program in John Day in 2003.

- By helping collect 1800 willow cuttings and plant on our Indian Creek project
- By collect and plant 1600 willow cuttings on our Mountain Creek project
- Remove 0.5 miles of barbed wire fence on our Canyon Creek
- Replace 0.7 miles of 2x4 stays with 4' tamarack wood stays on one of our Canyon Creek projects
- Remove 0.75 miles of barbed wire fence on our Lake Creek project
- By completing some minor work on one of our projects on Canyon Creek by wrapping wire clips onto the steel and cleaning up the area
- The crews also build 150 bird boxes that were given back to the public either through the ODFW or John Day bird club
- They seeded 12 acres on one of our Indian Creek projects
- They also helped with steelhead redd counts on the Middle Fork of Canyon Creek
- They helped build 0.3 miles of fence on our Indian Creek project
- They've help seed approximately 90 acres of land on our Granite Creek project
- Clean area up around Dayville headquarters, Murderer's Creek ranch house and around the screens compound in John Day
- Help build a pole fence at the Murderer's Creek ranch house

The crews had between 3 to 5 young adults plus a crew leader. They are always interested and willing to begin the projects; I think it will be interesting for them to see the changes on some of the projects from 2003 to 2004, as most of the young adults will be on the same crews here in the 2004 work year. I have seen many changes in the interest level of the young adults, at first they seemed a little skeptical on what our/their purpose was but after explaining some of the processes and the reasons for what we are doing they seem to understand and appreciate what they are getting involved with.



Steelhead Redd counts on Middle Fork of Canyon Creek with Crew leader Ben Phillips (Left) Zane, Jeremy, Brandon and Josh on May 14, 2003.

OYCC crew putting T-post clips onto new riparian project on Canyon Creek project in the summer of 2003.

I think it is very important to get our young adults involved with these projects we are starting and who knows maybe sometime in the near future they may be interested in applying for a position in this type of

work (or not). The fish habitat program looks forward to working with these crews here in the 2004 work period.

Ben Phillips, youth Coordinator for the Training & Employment Consortium (TEC) has been very happy with the partnership between their youth programs and ODWF in Grant County. The energy that they have brought to the TEC program has been wonderful and a welcome change. We (TEC) could only hope to have more partners who are dedicated to the success of our OYCC youths. Personnel here at TEC look forward to a long term relationship with ODFW in our area.

Project personnel replaced wheel bearings on large utility trailer.

Program personnel went to Deer Creek and checked on the fish Ladder, ladder was working well.

Maintenance on project ATV's and vehicles was completed.

The three-point hitch system on the tractor was modified by shortening the sway brackets to keep tires from wearing on bracket while in motion.

Project personnel removed 0.5 miles of barbed wire fence on the Murderers Creek project.

An herbicide application form for BPA depicting areas where herbicide amounts and types were used was completed and submitted.

The tractor was serviced while it was in Baker City having the backhoe attachment installed.

Solar panels on West Grub Creek were reattached to post after a strong wind had blown them off.

Two spoolers for hi-tensile wire were built by the seasonal technician.

MONITORING AND EVALUATION:

Photopoint Establishment

Two permanent photo points were established on the main stem John Day River/Pike property.

Two photopoints were established on Canyon Creek/ Napier property.

There were six photopoints established on the Granite Creek dredgetail leveling project.

Six photopoints were established on Lake Creek/Hoover property.

Photopoint Picture Taking

Existing photopoints (65) on fish habitat projects were retaken.

Habitat Monitoring Transect Establishment

Two habitat monitoring transects were established on the Lake Creek/Hoover property.

Thermograph Data Collection and Summarization

The fish habitat program set up thermographs one at the upper and lower ends of the Lake Creek/Hoover property.

Miscellaneous Monitoring Activities

The biologist was asked for and delivered comparative photos for landowner Kent Carter on his Long Creek riparian project, house fire had recently destroyed earlier copies.

A steelhead redd survey was initiated on April 23, 2003 on Lake Creek/Hoover property with 48 redds located in 2.5 miles which comes out to 19.2 redds/mile. Another redd survey was established on Lake Creek/Krueger property with 8 redds located in 0.70 miles which computes out to 11.4 redds/mile, these surveys will be retaken annually for 15 years.

Steelhead redd counts were completed on Mountain Cr/Brown property with three redds observed and on Mr. Ron Quant's property twelve redds were counted.

There were two aerial flights taken one in August and one in September with no cattle trespass problems observed.

Project personnel completed steelhead redd counts on 2.5 miles of Tex Creek with two redds observed. Another redd count was completed on 2.5 miles of upper Murderers Creek with eight redds observed.

Project personnel gathered streambank stability data from **Lake Creek/Hoover property** on August 5, 2003.

	Bank Class/Feet	**Total bank**	**Percentage**
Covered/Stable	CS/5198	10,995 ft	47.28 %
Uncovered/Stable	US/1514	10,995 ft	13.77 %
Uncovered/Unstable	UU/2035	10,995 ft	18.51 %
Covered/Unstable	CU/2248	10,995 ft	20.45 %

	Class	**Class Feet**	**Total Bank**	**%**
Total Stable	CS + US	6712	10,995 X 100	61.05 % Stable
Total Covered	CS + CU	7446	10,995 X 100	67.72 % covered

Data derived from this survey shows that this tributary to Alder Creek is in relatively good condition with a 61.05 % stable banks and 67.72 % covered streambanks. This survey will be completed again after 5 years of recovery to compare changes in composition.

Two dump trucks were operated by fish habitat personnel to haul away 600 yards of material on Indian Creek/Corwin property. This removal will help to reconnect the flood plain on ½ mile of Indian Creek; this section was channelized in 1955.

The disturbed area on Steve Mullins property where the junipers were cut for the Indian Cr. /Corwin project was seeded with an upland seed mixture.

Comparative photographs of every project area within the John Day basin were scanned into the computer to be given to landowners.

Photos were taken of bank stability problems on Mountain Creek/Jones property.

Aerial flights were completed on all project areas within the July-September quarterly.

PROGRAM ADMINISTRATION

RESULTS AND DISCUSSION II.

Reports and Data Summaries

Quarterly and annual progress reports for the John Day Basin Fish Habitat Enhancement program were prepared and submitted to BPA and others.

Finished the RPA 150 and 153 reports for BPA.

The Statement of Work and Master budget for 2003 was finalized.

Monthly expenditure summaries were completed.

Budgets/Purchases

Personnel services money was used to purchase a backhoe attachment.

Finished calculating the unspent money from 2003 and sent information to BPA, in order to figure out budget for 2004.

Purchase of a 14' x 24' storage building for materials and supplies was completed.

The biologists worked on budget accruals for October 2002 – February 2003 for BPA.

Three cattle guards were purchased from High Tower construction.

Program Development

The biologist attended a float trip on the Grande Ronde River to discuss the future of riparian projects with other district biologists and five OSU professors.

Personnel

JR Goin was rehired on March 1, 2003 as the seasonal technician.

Jim Jerome (Fish Habitat Tech II) announced that he would be retiring and that the 31st of July, 2003 was the last day of his employment with ODFW.

The biologist finished the interviews for the permanent Fish Habitat Tech II position and it was accepted by Pamela D. Alley.

Contract Administration

The final payments for Canyon Cr., Berry Cr. /Larson and Canyon Creek Olson properties were filed and completed.

A pre-bid tour of the dredge tail leveling project on Granite Creek was given; only one contractor (Swaggart construction) attended the tour. The bid was awarded to Harney County Gypsum who had been the contractor on past dredgetail leveling projects.

The pre-bid tour on the Lake Creek riparian fence was given with four contractors attending. The bid was awarded to Lancaster construction out of Condon.

Miscellaneous Administrative Activities

The biologist was on the interview panel for the new office coordinator position at the district office.

Project personnel met with Mike Brown on his Mountain Creek property to discuss details of the instream work to be completed.

INTERAGENCY COORDINATION & EDUCATION

Interagency Coordination

The biologist attended the 2nd Annual soil and water conservation fair in Monument, Oregon. An informational board showing the different aspects of the habitat program and district information on steelhead and Chinook was displayed.

The biologist met with CiCi, Brooks from NRCS to discuss a head cut problem they are having on one of their projects, we are to meet at an undetermined date on the site.

Several meetings were attended to discuss the Granite Creek dredge tail leveling project with Ken Delano from Grant Soil and Water District and Ed Calame a private consultant out of Pendleton.

The biologist finished a summary report for Rick Barnes (private consultant) who is working on the John Day sub-basin planning report.

Program personnel put together supplies and materials for the Free Fishing Day.

The biologist attended meeting at the TEC center to coordinate projects with the OYCC crews.

Project personnel helped the USFS, OYCC crew, Canyon City Mayor, Malheur Forester and various citizens with a clean up day on Canyon Mountain trail head area; it was scheduled to be a two day clean up, but it was completed in 6 hours.

Coordination with the Gilliam County Weed Department to spray scotch thistle and Knap weed was conducted on the Lake Cr. /Hoover property.

The biologist electro shocked the Davidson ditch out of Monument on Cottonwood Creek for the screens shop to remove all fish species so they could dewater the ditch to install a new screen.

The biologist completed a report for Federal Columbia River Power System Bi-Op measure 153 which is BPA's effort to document compliance with NOAA Fisheries.

The biologist and the assistant District biologist met with the landowner (Mr. Dovenburg) on Widows Creek to discuss alternatives to watergaps along the John Day River.

Arrangements were made with Ben Phillips who is in charge of the OYCC program to have students work on habitat projects. They worked on two projects one where they collected willow stock to later be planted on our Indian Creek projects and another on Canyon Creek where they put on fence clips and picked up project area.

Project personnel and district personnel surveyed the lower John Day River R & E projects and fixed problem areas where cattle trespass was a problem.

The biologist spoke with Dave Harcombe (Habitat program manager from Pendleton) about riparian project on Murderer's Creek.

Education

- The biologist attended the 3rd Annual Northwest Stream Restoration Design Symposium in Stevenson Washington.
- Program personnel attended a hazmat refresher course in La Grande.
- Monthly safety meetings were attended at the screens office.
- The fish habitat biologist gave five ATV classes to update ODFW employees on ATV safety.
- Biologist attended Grande Ronde Fish Habitat Monday morning meeting in La Grande.
- The fish habitat personnel attended CPR & First Aid training at the John Day Screens Shop.
- The biologist attended a fish management meeting in La Grande.

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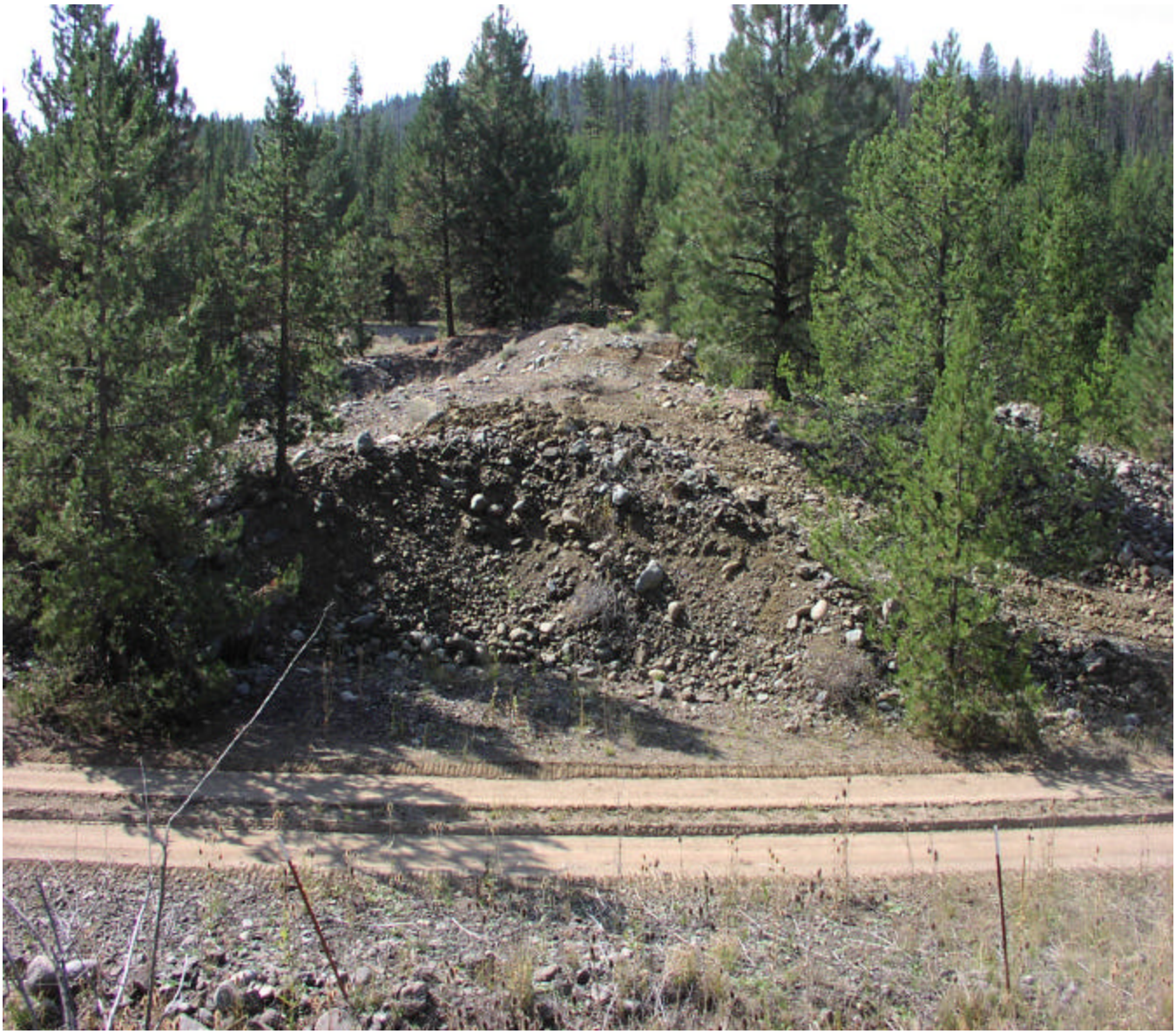
Appendix 1

Granite Creek September 15, 2003(Before)

This picture depicts how confined the channel has been for many years since the dredge mining had occurred in the 1930's through 1950.

Granite Creek September 30, 2003(After)

This photo shows the three 790 John Deere excavators used moving materials back from the high water mark. Now the channel has room to move in order to evolve into a more stable system.



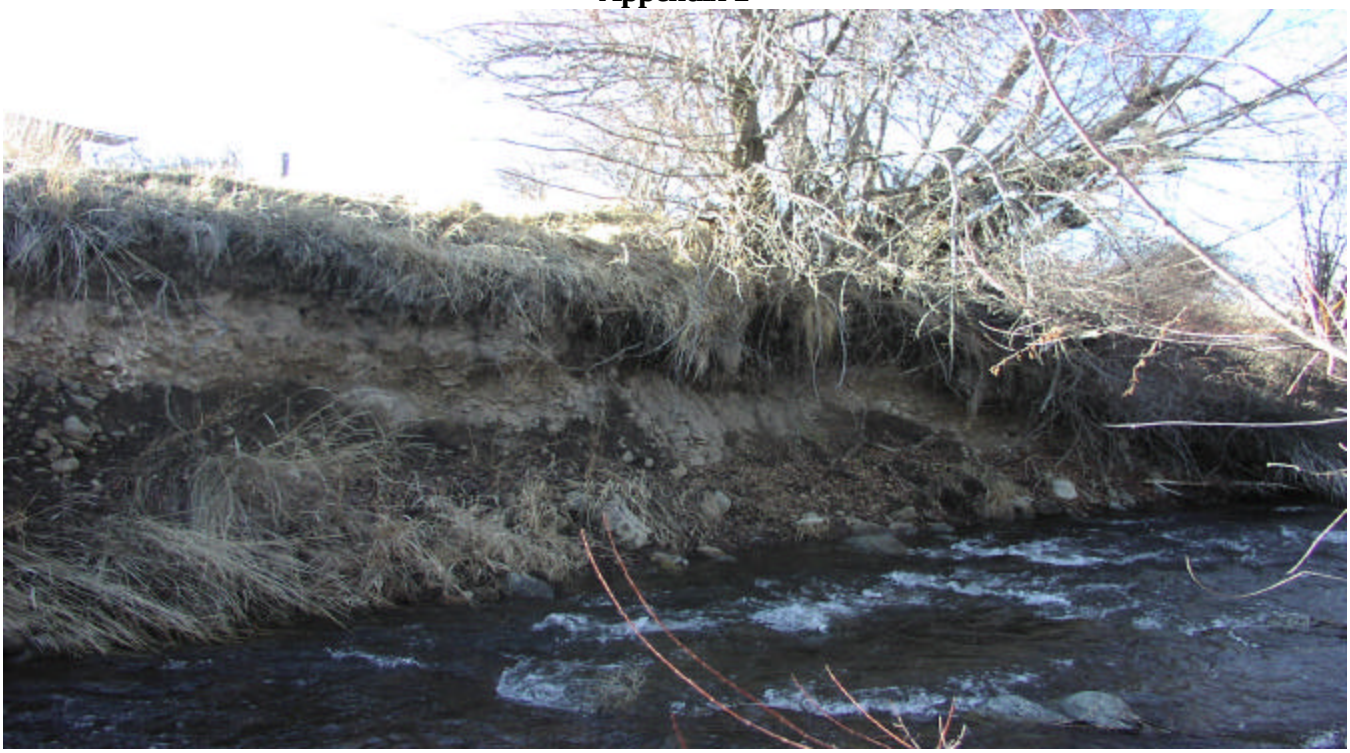
Granite Creek September 15, 2003(Before)

This photo is a before showing the amount of materials that where in place prior to excavation. Notice how scarce the native grasses and shrubs are, our assumption is that it is lacking in top soil and that the water table is where native grasses and shrubs cannot acquire it.

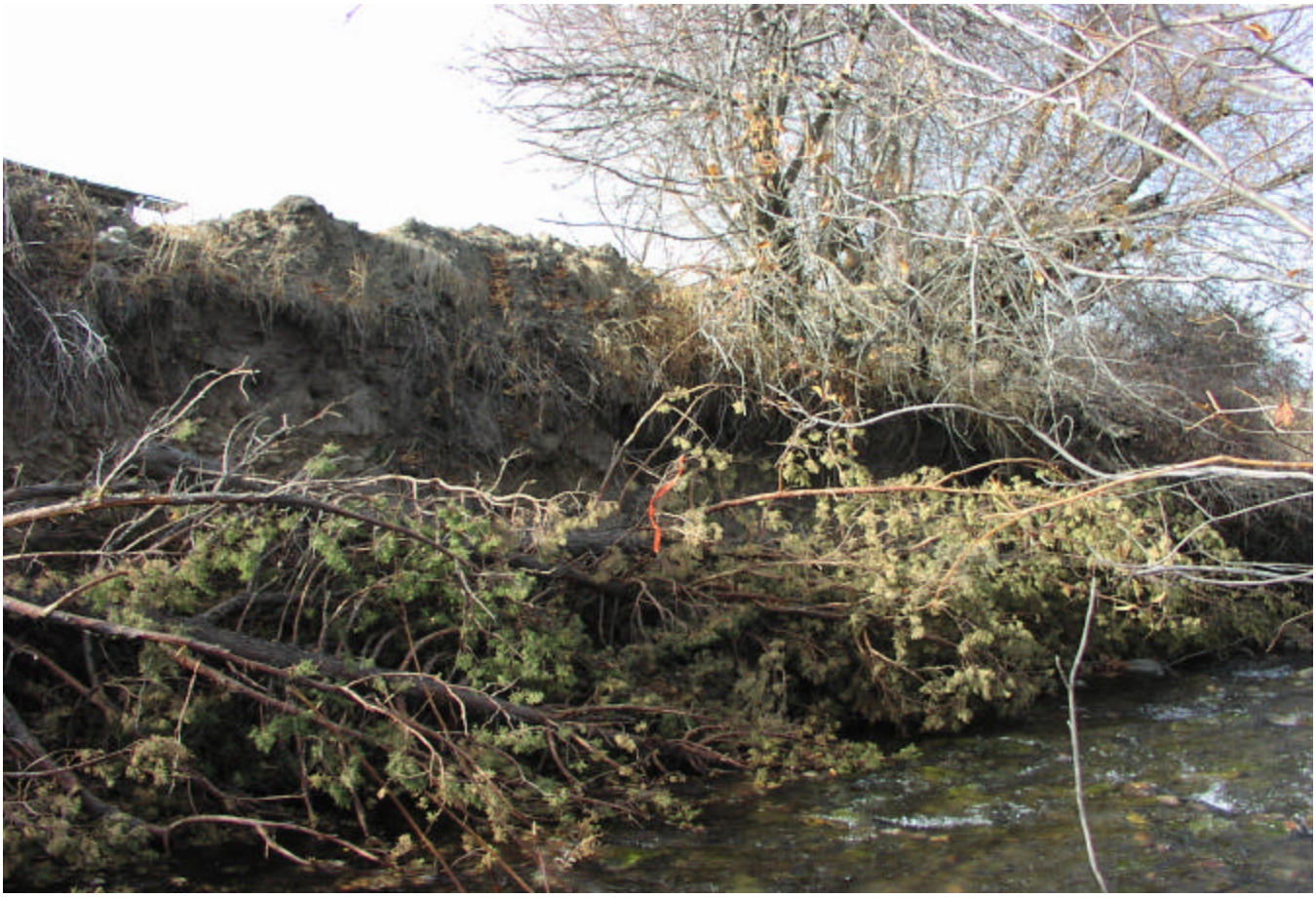
Granite Creek September 30, 2003(After)

Here is the same photo after excavation. The excess materials have been carefully removed and distributed then the final shaping of the ground was completed. All disturbed areas were then seeded with a riparian seed mixture. If you compare the two photographs you can see that not much vegetation was growing in the before photograph, now with top soil and being closer to the water table the native vegetation should start to establish itself.

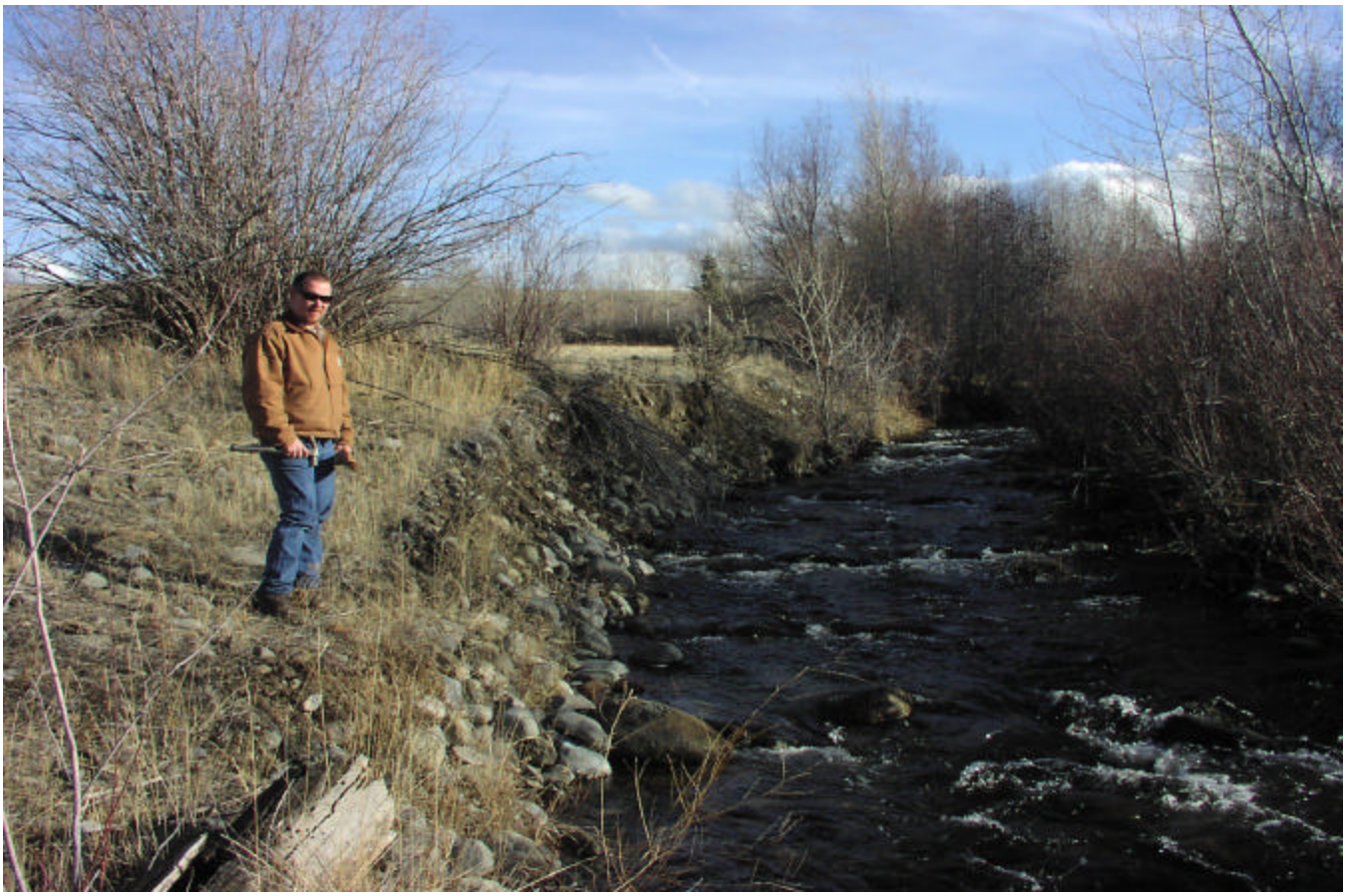
Appendix 2



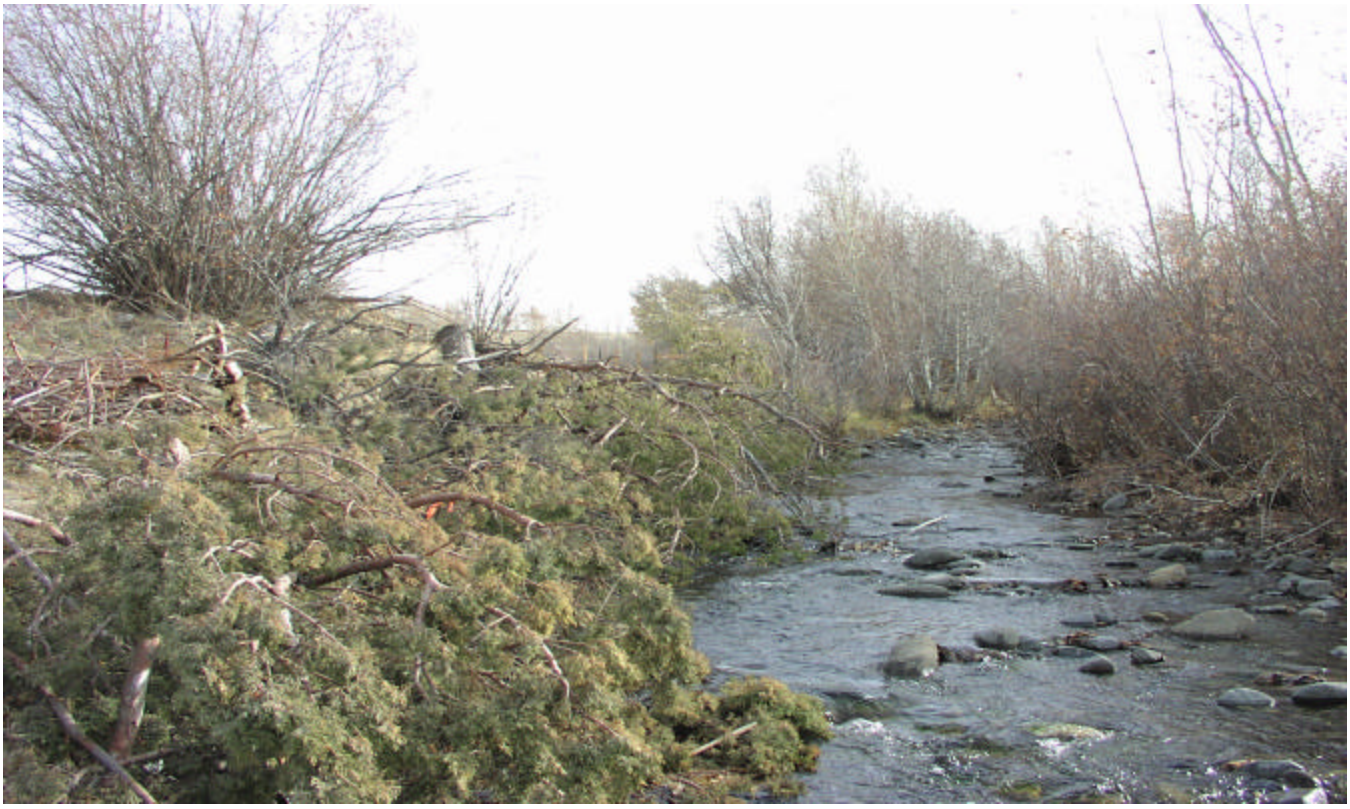
Indian Creek, Corwin property site 1 before, 2003.



Indian Creek, Corwin property site 1 after, Dec. 20, 2003. The placement of 12 juniper trees was to help stabilize 80 feet of the eroding bank.



Indian Creek, Corwin property (before) site 2, 2003.



Indian Creek Corwin site 2 (After) Dec. 15, 2003. We placed 14 juniper trees on this 70 foot section of bank to help stabilize it.