WASHINGTON STATE Recreation and Conservation Office

Final Report

Project #09-1623, Lower Wenatchee River Flow Enhancement Project

Submitted by Aaron Penvose on 10/03/2013 Accepted by Marc Duboiski on 10/03/2013

CONTACTS

Primary Sponsor: Trout Unlimited Inc.

Lead Entity: Chelan County LE

Managing Agency: Rec. and Conserv. Office

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DESCRIPTION OF THE COMPLETED PROJECT

Project Start Date: 12/10/2009 **FundingEnd Date:** 12/15/2013 **RCO Closure Date:** 10/21/2013 **Last Closure Date:** 03/26/2014

The objective of this project is to improve habitat by increasing flows in the Lower Wenatchee by 38.27 cubic-feet per second (CFS). This project intiated and implemented the primary phase of the Pioneer Water Users Association project in the lower 7.0 miles of the Wenatchee River. This project created infrastructure improvements for the Pioneer Water Users Association (PWUA) who operate and maintain the Gunn Ditch, which supplies water for agricultural and residential irrigation to shareholders. The project has several components that will address limiting factors in the Wenatchee and is part of the Upper Columbia Salmon Recovery Board implementation schedule. By initiating this project, other biologically productive restoration activities can also be implemented, including habitat improvements, diversion removal, and possible side channel reconnection.

This project has three key elements: 1) The project will replace the PWUA current conveyance system, a gravity fed open ditch, with a new enclosed pressurized system and 2) change the PWUA point of diversion from the flow limited Wenatchee River to the confluence with the Columbia River and 3) will remove a side channel concrete diversion dam just upstream of Monitor. This project protects 38.27 cfs of the historically diverted water back into the lower 7.0 miles of the Wenatchee River, benefiting habitat for fish, particularly during low flows. The water is permanently protected as an in-stream flow right through Washington States Trust Water Rights Program (TWRP).

SITE LOCATION

General Area of Project: lower wenatchee river, Chelan County, Wa

Waterbodies: Wenatchee River

Cong District 2012:	08
County:	Chelan
HUC:	UPPER COLUMBIA/ENTIAT
Leg District 2012:	12
Salmon Recov Reg 05:	Upper Columbia
Section:	28
Township/Range:	T23NR20E
WAU:	Burch Mtn
WRIA:	Wenatchee

Sponsor Clarifications:

Sponsor verified the above information is correct and complete.

PROJECT NARRATIVE

For the past 15 years Pioneer Water Users Association (PWUA) has been dealing with an aging system and trying to decided what direction to take that would inable the Association to move the irrigation system into the 21 first century. Trout Unlimited's - Washington Water Project (TU) approached PWUA in 2008 with a plan to convert the gravity fed cannel system into a pump-back pressurized pipe system using the existing ditch right of way for the pipe. The intention was to improve instream flow while creating more efficient management of water. The proposal was to move the PWUA point of diversion downstream and to try to bring water from the confluence of the Columbia and Wenatchee Rivers back up to users. PWUA agreed in concept, starting the wheels in motion and for over four years, TU has been working on securing funding, designing, engineering and working with project partners to insure a successful project for PWUA and the Wenatchee River. All told the project brought 3.4 million dollars together, with 11 funders. In addition, TU secured 17 different permits from Chelan County to Washington D.C. Insuring that the project was a success was a challenge, but in the end the project is a legacy for all of the Wenatchee River' s users. There was an enormous amount of work completed and even before construction it was a big project, but TU, PWUA and Forsgren got it done.

Within the larger project there were actually were two separate projects, The North River and the Walla Walla Satellite project.

The North River pump station which is a pressurized pump back system from the confluence of the Columbia and Wenatchee Rivers, now servers 56 users, and the Walla Walla pump station which is now from a well and serves, 29 users.

Below is a list of all the funders involved in this project along with all the permits that were needed

Funders:

- Washington Department of Ecology-Office of Columbia River
- Washington State Recreation and Conservation Office-Salmon Recovery Funding Board
- Confederated Tribes and Bands of the Yakama Nation
- Washington State Conservation Commission-Irrigation Efficiencies Program
- Grant County Public Utility District-Priest Rapids Coordinating Committee
- Bonneville Power Administration-Fish and Wildlife Program
- Chelan and Douglas County's Tributary Committee
- United States Fish and Wildlife Service-Western Native Trout Initiative
- United States Department of Interior-Bureau of Reclamation
- National Fish and Wildlife Foundation-Columbia Basin Water Transactions Program
- Cascadia Conservation District
- Chelan County Department of Natural Resources-Watershed Planning
- Washington State Department of Fish and Wildlife

Permits that were needed:

Chelan County

- Shoreline Exemption (allowable under WA state law due to the integral agriculture relationship to the project),
- Building Permit (pump building and rock retaining wall),
- Conditional Use Permit (locating utility infrastructure within residential zoning),
- Wetland Variances (work within wetlands and wetland buffers)
- Right-of Way Permit (work within the county right-of-way)

City of Wenatchee

- Right-of Way Permit (work within the county right-of-way)

Washington State

- Department of Natural Resources lease (locating the fish screen and intake on lands owned by the state),
- Fish & Wildlife Hydraulic Project Approval (work adjacent to and/or with surface waters of the state),
- Department of Transportation General Permit (work within state right-of-way),
- Ecology Construction Stormwater (NPDES Stormwater General Permit requirements).
- SEPA- Washington Department of Ecology Lead
- Section 106 -Cultural Resources- National Historic Preservation Act

Federal

- USACE Section 404 permit (work within wetlands and /or surface waters of the state),
- FERC (work within the Columbia River Hydropower Project boundary)
- NEPA- Bonniville Power Administration Lead

PUD no. 1 of Chelan County permit

- Work within its Rock Island Dam permit boundary

Pipe of Washington contracting of Pasco Washington (POW) was awarded the contract to do the project(s) in October and ground breaking on the project was November 8th, 2012. As part of the project POW also had 7Sub-Contractors working on the project:

- Safe Set ---- Traffic control
- Brian Bell Enterprise LLC ---- Tree and brush removal
- Top Tree Service ---- Tree removal and tree chipping
- Irrigation Technology & Control INC ---- Installing pumps
- RM Shearer INC ---- Consulting
- Landmark Landscaping ---- Landscaping & drip Irrigation
- A - Core - hydro seeding

TU-WWP contracted local engineering firm Forsgren and Associates, Inc. to conduct early alternatives analysis on the system in 2008. By 2009, Forsgren was already developing 30% and by 2010 the 75 % design for a pump station near the Columbia-Wenatchee Confluence. An important consideration was location and as part of the development, the team evaluated a preferred location at Confluece State Park and investigated a well field alternative just downstream from the river crossing into Wenatchee, but ultimately ended up at a PWUA owned parcel just upstream from the bridge on river left. This site, though steep, was logistically desirable and the location was still significantly influenced by the Columbia System back-water, providing assurance and stability.

A portion of the design analysis is described below:

The PWUA used to provide irrigation water to 107 users having a total of 527 shares. These users are located on the north and south side of the Wenatchee River. Based on survey information, the total estimated acreage served by PWUA north of the Wenatchee River is 385 acres with 81 users. The acreage is defined as the total parcel acreage and is not limited to irrigation acreage. Crop-water requirement estimates indicate an average annual flow requirement to serve the northern users of approximately 3.7 cubic feet per second (cfs) or 1,700 gallons per minute (gpm). The peak flow required to serve these users during summer months is estimated at approximately 7.7 cfs or 3,400 gpm. It is estimated that the flow require to serve the southern PWUA users is approximately 2.0 cfs or approximately 900 gpm.

The old system primarily consisted of the following major elements:

1. Approximately 25,500 feet of unlined open canal
2. Approximately 10,000 feet of piped section
3. Two siphon highway crossings
4. · An inverted siphon river crossing
5. A fish screen and diversion structure
6. Flow measurement flume

In July 2010, a 30% plan and engineering report for a pressurized pump and pipeline delivery system replacing the existing canal was prepared by Forsgren. After review of this 30% document, it was determined that two additional alternatives needed to be considered at the 30% level. These options included:

1. Upgrading the existing diversion site to provide adequate fish screening, relocate the diversion point to a stable section of the main river channel, and convert the existing canal to a pipeline maintaining a gravity flow delivery system;
2. Relocating the diversion to just downstream of the Monitor Bridge, provide a pumped diversion with adequate fish screening, and convert the existing canal to a pipeline utilizing partial gravity flow to offset pumping costs.

These two additional alternatives assumed the same flow requirements estimated in the July 2010 30% engineering report. Analysis of these two alternatives was presented in a second report prepared by Forsgren in December 2010. Following the review of the December 2010 report, the PWUA decided to implement the pressurized pump and pipeline delivery system described in the July 2010 documents.

The third report documents and summarizes efforts on design of the pressurized pump and pipeline delivery system to the 75% level. The 75% level of effort was determined based on available funding at the time. The flow requirements developed in the July 2010 report continued to be the basis for design

PRESSURIZED PIPELINE WITH COLUMBIA RIVER DIVERSION

Under this preferred alternative, the existing gravity diversion dam was abandoned and the existing canal was to be replaced with a pressurized pipeline. A pump station and diversion were to be constructed just upstream from the highway crossing as it enters Wenatchee. The major elements of the alternative are summarized below:

1. Abandonment of the existing diversion dam and fish screen at Monitor,
2. Development of a new irrigation water source diversion near the Columbia River,
3. Construction of an irrigation pump station and fish screening structure,
4. Conversion of approximately 21,500 linear feet of unlined and open canal to pressurized pipeline
5. Construction of approximately 4,000 linear feet of transmission pipeline,
6. Connection to or modification of existing highway road crossings and siphons,
7. Installation of service connections at existing irrigation delivery points,
8. Installation of required water control and flow measurement devices.
9. Instillation of well and delivery system on the south side

The pump station layout on the Columbia River is provided in the As-Built Plans in Appendix C of attached final report..

Fish screening was a self-cleaning cone-type fish screen. This type of screen has been accepted by WDFW and will provide a durable low maintenance screening structure, meeting NMFS criteria.

The pump station is five vertical turbine pumps configured in parallel. The pump station will include a variable frequency drive control system to ensure optimum energy efficiency. The pumps and controls will be enclosed in a secure concrete masonry and sheet metal building to control noise and provide weather and vandal protection.

A hydraulic model was prepared as part of the 75% design effort. The model was used to simulate irrigation demands along the length of the pipeline in order to optimize the sizing of the pipe.

PROJECTED POWER REQUIREMENTS

The power requirements assume a residual pressure will be maintained along the irrigation transmission pipeline. The pump station will lift water from the station into the new pipeline and provide a residual pressure to a minimum of 40 psi.

The pumping conditions previously described will require approximately 300 horse power. The horse-power calculations are provided in the Appendix D. Table 4 summarizes the conservatively projected power requirements and indicates an annual power cost of approximately $20,690.

O&M / EQUIPMENT REPLACEMENT COST OPINION

Operations and Maintenance (O&M) costs for the pressurized pipeline were evaluated to estimate potential user fees. This effort included

estimates of equipment replacement costs over a 40-year life cycle for the Project, though the life cycle is likely much longer. The life cycle cost analyses are provided in Appendix E. The analyses estimate annual installment requirements for equipment replacement of $32,300 per year. Added to this cost is the estimated annual power cost of approximately $20,690 per year. The total annual estimated O & M cost is $52,990 per year.

Assuming 385 shares, this translates to an annual user fee of $137.63 per share. This estimated user fee does not consider other administrative and personnel cost associated with operation of the system. These user fees also assumed that PWUA would not be responsible for construction of the diversion upgrades and canal to pipeline conversion. Please see Appendix F for Cost Opinion detail.

Construction

Major Construction Elements

Some of the major Project components are given a brief synopsis below and then in an effort to tell the whole story the construction description and accompanying photos demonstrate the construction activities as they played out during construction in Fall of 2012 to Spring of 2013.

Excavation:

Excavation, totaling up to 10,000 cubic yards, was conducted in order to developed the necessary access to the Wenatchee River for the construction of the fish screen cone structure intake and pipe and the pipe pump house structure and pipe. The construction of the fish screen cone structure intake and pipe, the pipe pump house structure and pipe, and the pipe utility lines from the pump house were development approved under Shoreline Exemption 2012-003.

Coffer Dam:

Following excavation of the pump building foundation pad but prior to any work in the water a temporary pre-cured concrete coffer dam was built surrounding and enclosing the entire area of work proposed in the water. A truck delivered the coffer dam components and they were placed by a crane and excavator per plan and detail constructing a coffer dam around the water work area. Water from within the dam was pumped out with electric pumps to prepare for the installation of the water intake.

Fish Screen Cone Structure Intake and Pipe (In-water work):

An excavator dug an 8’ L x 8’ W x 3’ D hole within the riverbed about 50 ft offshore of the north bank. The excavated material was carefully placed on the riverbed adjacent to the hole. Two (2) 2’ L x 4’ W x 2’ D ecology blocks were placed in the hole. One (1) 6’ L x 6’ W x 3/16” D epoxy coated steel plate with an attached 24” 90 degree steel pipe elbow (bottom of plate) was then attached to the ecology blocks. All required fastener attachments were completed by hand.

A 50’ L x 9’-31’ W x 3’-14’ D flat trench within the river bed was excavated. The excavated material was carefully placed on the riverbed adjacent to the trench. At the location of each pipe joint a walking backhoe excavated a 8’ L x 6’ W x 2’ D hole within the trench. The excavated material was carefully placed on the riverbed adjacent to the hole. A 4’ L x 2’ W x 2’ D ecology block was placed in each hole. 50 ft of 24” pipe was then be placed in the trench. Each pipe joint was connected to an ecology block. All excavated material was then carefully placed back into the excavated trench and holes.

New Pump Station Diversion:

A cone fish screen structure was placed in the Wenatchee River 50 ft offshore of the north bank adjacent (west of) to the SR 285 Wenatchee River bridge. The screen was attached to the top of a steel plate. A pipe elbow was attached to the bottom of the steel plate. The screen/plate/elbow was attached to two (2) ecology blocks established on the riverbed. A pipe was connected to the elbow. This pipe was placed in a flat trench below the riverbed surface for about 50 ft north to the river bank. The pipe continues north landward about 25 ft; west landward (upstream) about 175 ft; ending beneath the pump building foundation pad.

Following installation of the new pressure pipe, the 12 ft long area of disturbance where the pipe enters the river was stabilized by the construction of a bioengineered revetment. The toe of the bank was excavated approximately 2 ft deep to allow the installation of Geotextile filter fabric which was secured over the shoreline and embedded in the excavated toe of the slope. Large, angular rock was placed parallel to the shoreline and native cobble, boulders and soil were backfilled over the geotextile. Existing materials onsite were used for the majority of the Project, however new angular rock was placed over the disturbed area and up the bank to the Ordinary High Water Mark (OHWM). The newly placed angular rock follows the existing slope of the shoreline at the angle of the undisturbed shoreline on each side.

The entire restored bank and the area disturbed by the installation of the pressure pipe in the upland was planted with native trees, shrubs and grasses. The proposed and approved vegetation species list was developed based on existing vegetation in the immediate vicinity.

Re-vegetation is complete and includes 3 cottonwood (Populus trichocarpa), 16 mountian alder (Alnus incana), 15 willow (salix spp.) and 61 red-osier dogwood (Cornus stolonifera). The area also has been seeded with native grasses. The planting areas will be monitored by a count for a five-year period to determine percent survival. 100% survival would be required after year 1, and 80% survival for years 2-5.

Pump House Structure and Pipe:

A track-hoe excavated landward a 200’ L x 4’ W x 14’-22’ D trench to continue placement of the 24” pipe described in the last section to the pump building foundation pad. The building is a 14’ x 16’ NEMA rated enclosure on a concrete foundation with electrical controls, HVAC and wet well pumps located within 200 feet of the Wenatchee River and above the 100 year flood plain. All material excavated for the pump building foundation pad, wet well and associated improvements was transported to awaiting trucks via loader and hauled offsite. The site excavation was completed by bulldozer, backhoe and loader; cement concrete was delivered via pump truck for the foundation pad; enclosure construction was completed by standard building techniques with power equipment per the Chelan County building codes.

Retaining Walls:

Five retaining walls were constructed in conjunction with the development of the access driveway to the pump building and the ditch right-of-way. The retaining walls were essential for the developed access driveways due to the steepness of the existing grade. Two retaining walls (8 ft x 59 ft and 4 ft x 115 ft) were constructed along the driveway that connects to the existing ditch right-of-way. The remaining three retaining walls (4 ft x 65 ft, 4 ft x 32 ft, and 4 ft x 24 ft) were constructed along the driveway that accesses the pump building. These walls were not foreseen as necessary or needed during the original design of the proposal, however as development unfolded, their need became essential to the development of safe access. Each wall was constructed using an excavator to move 3-4 man rock that was stacked to construct the retaining walls, and prior excavated soil was backfilled on the uphill side to create flat, safe driveways for access.

Existing Fish Wheel

This structure is located just south (downstream) of the Monitor Main Street bridge. Since water will no longer be flowing through the canal it will be abandoned. WDFW was able to salvage the structure and will use it in another location and application.

COMPLETION

There were a few bugs to work out of both of the systems in the first two or three weeks, but after that the systems have been running very nicely. Currently, PWUA is using about 1/3 of the water that they are accustomed to using from the Wenatchee River, thanks to the on-demand pressurized system. This is the type of system that should be installed for water conservation and could be practical in most situations.

PWUA shareholders are very happy with the new system and are thankful to TU-WWP for helping them upgrade their irrigation system and for

being the leader in this Project.
TU-WWP's Pioneer Project is a good example of public/private/government cooperation to insure agriculture in conjunction with measureable ecological benefits, which improves future water supply and insures environmental preservation for future generations.

AMENDMENTS

#	Type	Applied Date	Description
3	Cost Change	08/05/2013	The SRFB share is increased by $42,222 to complete the diversion dam removal portion of the project.
2	Cost Change	01/07/2013	The lowest responsible bid was $250,000 higher than estimated. Other fund sources have provided an additional $151,322 in funds. This amendment is to add the final $98,678 to meet the shortfall. Increased costs were due to more site preparation and grading, increased pump station costs, and an increase in gas and pipe prices.
1	Cost Change	01/14/2011	Adding the 2010 grant agreement, 10-1901R, approved by the SRFB on December 10, 2010, to this grant for administrative efficiencies.

OVERALL PROJECT COSTS

Funding Formula:	Requested		Original		Final	
Salmon Federal Projects:	$0.00	(0%)	$167,500.00	(50%)	$513,400.00	(49%)
Salmon State Projects:	$167,500.00	(50%)	$0.00	(0%)	$0.00	(0%)
Sponsor Match:	$167,500.00	(50%)	$167,500.00	(50%)	$523,822.00	(51%)
Total:	$335,000.00	(100%)	$335,000.00	(100%)	$1,037,222.00	(100%)

Paid To Date:	$513,400.00			**Last Released Billing:**	10/21/2013
Remaining RCO Funds:	$0.00			**Pending Billing:**	No
Advance Balance:	$0.00	**Match Bank:**	$0.00	**Number of Billings:**	9
Admin Limit:	$0.00	**Admin Spent:**	$0.00		
A&E Limit:	$239,358.92 30.00%	**A&E Spent:**	$274,014.51 26.41%		

Billed Cost Summary:	Original Agreement	Expended	Non-Reimbursable	Total Billed
Restoration				
Construction	$797,863.08	$394,917.34	$508,359.51	$903,276.85
AA&E	$239,358.92	$118,482.66	$155,531.85	$274,014.51
Restoration Total	$1,037,222.00	$513,400.00	$663,891.36	$1,177,291.36
Total	$1,037,222.00	$513,400.00	$663,891.36	$1,177,291.36

Project Cost Metrics:	Original Agreement	Final
PCSRF Federal Funds:		$513,400.00
State Funds:		
Pending Billing - RCO Share Approved:		
Retainage - RCO amount retained:		$0.00
Amount of other monetary funding:	$335,000.00	$663,891.00
Project identifier for the other monetary funding:	n/a	DOE, BPA, Yakama Nation, PRCC, Tributary Comittee, WDFW, USFWS,
Source of other monetary funding:	BPA Tributary Fund and WSDOE	DOE, BPA, Yakama Nation, PRCC, Tributary Comittee, WDFW, USFWS, etc...
Value of Donated Unpaid Labor (Volunteers):	$0.00	$0.00
Source of Donated Un-paid labor contributions:	n/a	NA
Number of hours volunteers contributed to the project:		0
Describe how the value of the volunteers was determined:		NA
Value of Donated Paid Labor:	$0.00	$0.00
Source of Donated Paid Contributions:		NA
Value of Other In-Kind Contributions:	$0.00	$0.00
Source of Other In-Kind Contributions:		NA
Description of other In-Kind contributions:	n/a	NA

PROJECT METRICS

	Original Agreement	Final
Completion Date		
Projected date of completion:	12/15/2013	07/15/2013
Project Goals		
Goals, purpose, and expected benefits:		There are two main benefits derrived from this project that improve instream flow for ESA listed and other culturally signifigant species in the Wenatchee. The first is this project permanently protects 38.27 CFS instream from the old point of diversion(POD) upstream from Monitor WA to the confluence of the Wenatchee and Columbia rivers through the change in POD. The second is this project is operated under pressure, allowing an on demand use of the resource, so the only time water is used when it is needed, not continually like most irrigation and gravity diversions. This project should be the showcase for water use in Washington State. In addition, a 85 foot channel spanning diversion dam was removed on the Wenatchee River, creating free passage for salmonids until Dryden, Wa.

WORKSITE #1: Lower Wenatchee River Flow Enhancement

Worksite Description: The Pioneer Water User's Point of Diversion is just upstream of the Monitor Bridge, near Monitor, Chelan County. The PWUA ditch is know as the Gunn Ditch, which runs 6 miles along the North side of the Wenatchee River, before crossing the Wenatchee River on the Tressel just upstream of the Wenatchee River, where it continues on the South side for 1.5 miles before spilling into the Columbia RIver. This project will complete infastructure improvements for the entire Gunn Ditch and change the point of diversion from the Wenatchee to wells adjacent to the Columbia.

Driving Directions: From Wenatchee:
Take US Highway 2 West approximately 6.0 miles to Monitor.
Turn left at first light on Easy Street
Take immediate right before crossing the bridge and park.
The Pioneer point of diversion is .5 miles up (West of) from gated road

Coordinates for Worksite Directions - Latitude: 0.00 **Longitude:** 0.00

Sponsor Clarifications:

Sponsor verified the above information is correct and complete.

WORKSITE #1 COSTS

Worksite Billed Cost:	Estimated	Expended	Non-Reimbursable	Total Billed
AA&E	$60,000.00	$118,482.66	$155,531.85	$274,014.51
Construction	$275,000.00	$394,917.34	$508,359.51	$903,276.85
Worksite Total	$335,000.00	$513,400.00	$663,891.36	$1,177,291.36

Worksite Costs by Category:	Original Agreement	Final
Instream Flow Funding:	$335,000.00	$903,276.00
Architectural & Engineering Funding:		$274,014.51

WORKSITE #1 METRICS

	Original Agreement	Final
Targeted salmonid ESU/DPS:	Chinook Salmon-Upper Columbia River Spring-run ESU, Chinook Salmon-Upper Columbia River summer/fall-run ESU, Coho Salmon-unidentified ESU, Sockeye Salmon-Lake Wenatchee ESU, Steelhead-Upper Columbia River DPS	Chinook Salmon-Upper Columbia River Spring-run ESU, Chinook Salmon-Upper Columbia River summer/fall-run ESU, Steelhead-Upper Columbia River DPS
Targeted species (non-ESU species):	Bull Trout, Cutthroat, Rainbow	Bull Trout, Cutthroat
Miles Of Stream Treated/Protected:	7.00	7.00
Project Identified In a Plan or Watershed Assessment:	Upper Columbia Salmon Recovery Plan	Upper Columbia Salmon Recovery Plan
Type Of Monitoring:	None	None
Monitoring Location:	No monitoring completed	No monitoring completed
Instream Flow Project		
Miles Of Stream 'Protected' For Adequate Flow:	7.50	7.00
Change In Water Flow:	15.00	38.27
Irrigation practice improvement		
Total cost for Irrigation practice improvement:		
Initial Start Date of irrigation practice improvement:	11/15/2012	11/15/2012
Final End Date of irrigation practice improvement:	0	10/15/2013
Acre Feet Of Water Conserved:	0	7824
Cfs (Cubic Feet Per Second) Of Water Conserved:	15	38
Architectural & Engineering		
Architectural & Engineering (A&E)		
Did A&E costs exceed billed amount (Yes/No):		Yes

PROPERTY DESCRIPTION (Pioneer Water User's Association)

Activity: Restoration

Control & Tenure:

Instrument Type: Landowner Agreement

Timing: Proposed

Term Length: Perpetuity **# yrs:**

Expiration Date:

Landowner Type: Local

Note: Listed landower is the representative for the ditch company, not the actual landowner

Sponsor Clarifications:

Sponsor verified the above information is correct and complete.

Sponsor Clarifications:

SPONSOR CERTIFICATION

[X] I certify that this project has been completed in accordance with the project agreement.

[X] I certify that, to the best of my knowledge, the information in the Final Report is true and correct.

Submitted by Aaron Penvose on 10/03/2013