Lower Wenatchee River In-Stream Flow Enhancement Project

2009-2010



Funding Proposal to the:

Salmon Recovery Funding Board:

\$167,500

The Habitat Conservation Plan Tributary Fund:

\$167,500

Contact Information: Aaron Penvose 509-881-7689 aaron@warivers.org

Proposal Contents	✓ Received
A) Title Page: includes sponsor, project title, and funding	
request	
B) Proposal Changes Page	
 C) Scope of Work (project description) (1) Restoration and acquisition projects (excluding fish passage); 	
D) Maps (general vicinity and work site)	
E) Project Photos	
F) Reports	
G) Long-Term Stewardship Plan	N/A
H) Landowner Acknowledgement Form	
I) Barrier Evaluation Forms (Passage Only)	N/A
J) Other Materials (optional)	
of modifications from pre proposal at a please list all	
additional materials	

Lower Wenatchee River In-Stream Flow Enhancement Project Checklist

Reviewer: Please confirm all the sections of the proposal are in the packet in the following order and check received.

Sponsor: Please change content titles to match the titles in your proposal (e.g. Design Report would be changed to read "BOR 2009 Fir Creek Design Report"). Label attachments alphabetically in Prism so they coincide with the proposal checklist.

PROPOSAL CHANGE PAGE

LOWER WENATCHEE RIVER INSTREAM FLOW ENHANCEMENT PROJECT

WASHINGTON RIVERS CONSERVANCY

The scope of this project has changed as a result of the Wenatchee Regional Water System Partners (Regional's) interest, support and commitment to the Pioneer Water User's Association (PWUA) project. WRC and other project partners have been exploring all options for this project and as a result of conversations and field visits with Regional representatives there is sincere interest and imminent commitment from regional to absorb the project implementation and to provide service to the PWUA, south of the Wenatchee River. This commitment makes sense for both PWUA and Regional, by meeting the objectives of both entities and provides a more practical approach to the funding requirement for the PWUA, WRC and other partners. A draft letter of commitment from Regional has been distributed to Mayor Johnson, City of Wenatchee, Commissioner Randy Smith, Chelan PUD, and Commissioner John Sterk, East Wenatchee Water District and is pending signature.

The environmental benefits and the project implementation outline still addresses the same limiting factors in the Wenatchee Subbasin, highlight's stewardship and partnerships and ultimately serves as an example for other large water conservation efforts across the region. Changes or improvements to the general application have been bolded throughout the application. Questions regarding the City of Wenatchee and Regional's involvement are specifically addressed within this proposal change page and within the project budget.

1. Describe in more detail Regional's involvement in this project?

The Wenatchee Regional Water Supply system supplies over 50,000 people in the greater Wenatchee area with water, and includes the City of Wenatchee, Chelan County PUD and the East Wenatchee Water District. Regional is and will continue to pursue water conservation and water supply alternatives to ensure a low cost, high quality, efficient water delivery system to their users. There is interest in increasing the capacity of non-potable water for municipal irrigation purposes and the PWUA water provides an opportunity to meet that objective. It provides an opportunity to reduce the future demand at the Well Field near Rocky Reach Dam and improve capacity and efficiency at the well field in Wenatchee, near Hawley Street.By absorbing the "south-side" of the Wenatchee River portion of the PWUA project Regional will be able to more effectively manage the PWUA south-side service area and shareholders, implement the project more effectively by tying into existing infrastructure and by utilizing the developed well field on Hawley Street.

2. More specifically "nail down" the budget?

Please see budget within the application.

3. Please describe how much it will cost annually for pumping and who will pay the pumping costs?

The formula for energy cost:

1.023 X TDH X Electrical Rate (\$/KWH)

= dollars p/acre p/month

Overall Pump Plant Efficiency (%)

So,

1.023 X 210 X .043 cents

= \$11.80 p/acre/p/month

78(%)

So, if Pioneer is serving 500 acres annually the total cost would be \$5,900 dollars a month or \$35, 400 annually. This is a high estimate of cost and has been presented to the PWUA for review. Considerations that factor into this cost from PWUA perspective are the fact that this estimate includes the south-side portion of the project, there will be less Operation and Maintenance (O and M) costs, which are currently high, and each user currently has their own pumping costs. With Regional's involvement the total cost to PWUA will decrease by at least 1/3, O and M will be cut in 1/3 and the efficiency of the system will decrease overall pumping costs to the individual shareholder. Ultimately initial considerations create a situation where the "increase" in cost is absorbed almost entirely by improvement to the system.

4. How quickly can the project be implemented?

Item/Milestone	Outcome	Target Date (Month/Year)
Obtain necessary permits	Section 106, Well Construction	April-June 2010
	Permits, SEPA and NEPA	
Final Engineering	Completed Final Engineering Plan	March 2010
Bid Process	Contactors Hired	June-July 2010
Issue Specifications		
Begin on the ground	Site prep, pipe instillation, well	September 2010 – April 2011
Construction	development, and connection	
Trust Water Acceptance	15 cfs in Lower Wenatchee River	April, 2011
Project Wrap-Up	Complete test operations, check	October-December, 2011
	systems and project clean up, if need.	

PROJECT PROPOSAL – RESTORATION, ACQUISITION, AND COMBINATION RESTORATION/ACQUISITION PROJECTS

INSTRUCTIONS: Salmon Recovery Funding Board applicants must respond to the following items. Please respond to each question individually -- do not summarize your answers collectively in essay format). Local citizen and technical advisory groups will use this information to evaluate your project. Contact your lead entity for additional information that may be required. Limit your response to eight pages.

Submit information via the PRISM attachment process. Application checklists and attachment forms may be downloaded off the SRFB Web site at <u>http://www.rco.wa.gov/srfb/docs.htm</u>.

NOTE: Acquisition, Combination, Fish Passage, and Diversions and Screening projects have supplemental questions embedded within this worksheet. Please answer the questions below and all pertinent supplemental questions.

1) **PROJECT OVERVIEW**

Explain your project overall and include the following elements:

a) List your primary project objectives, such as how this project will improve or maintain habitat conditions and habitat forming processes.

The primary objective of this project is to improve habitat by increasing instream flow by 15 cubic-feet per second (CFS), in the lower 7.5 miles of the Wenatchee River. The primary objective of improving instream flow to benefit salmonid habitat in the Lower Wenatchee River will be implemented by decommissioning the PWUA diversion, changing the POD to the Columbia River, and by completing efficiency improvements throughout the service area (piping of the conveyance system). Upon completion of this phase of the project other habitat objectives could also be addressed by removing the diversion dam and improving habitat structure in the side channel, and possibly connecting off channel habitat currently provided by the ditch. The project would also eliminate fish mortality caused by maintenance of the current diversion and fish capture in the ditch.

b) State the nature, source, and extent of the problem that the project will address, including the primary causes of the problem, not just the symptoms. Explain how achieving the project objectives will help solve the problem. (Fish Passage projects and Diversions and Screening projects should refer to the supplemental questions later in this worksheet for further guidance on information to include in their problem statement.)

The nature of the problem this project addresses is low instream flow in the Wenatchee River. The protection of instream flow aims to improve the natural geomorphic river processes and addresses the root of problems in the Wenatchee River. Peak water use in the Wenatchee River is during the dry summer months when there is little or no precipitation to augment demand. The majority of water withdrawn from the Wenatchee River from April to October each year is withdrawn by irrigation districts. There are 4 major irrigation districts in the Wenatchee River which provide irrigation water to most agricultural lands, covering several thousand service acres. Instream flow is a limiting factor in the Wenatchee River and this project will help improve flow conditions, particularly from August through October. The Climate Impacts Group (CIG) projects a notable decrease of 28-29% in snow-water equivalent (water stored in snow) by 2040 (CIG, 2009). This projected impact of climate change in the Wenatchee River indicates the need to address low flows before conditions worsen.

Implementation of this project helps to address low instream flows in the Wenatchee River and is a good step towards bridging water conservation and agricultural interests to improve low flow limitations for ESA species in the Wenatchee River.

c) Describe the fish resources (species and life history stages present, unique populations), the habitat conditions, and other current and historic factors important to understanding this project. Be specific--avoid general statements. Which salmonid species and life cycle stage(s) are targeted to benefit by this project?

In the upper Columbia River, which includes the Wenatchee subbasin summer steelhead (Oncorhynchus mykiss) and spring Chinook salmon (Oncorhynchus tshawytscha) were listed under the ESA as "endangered" on August 18, 1997 and on March 24, 1999, respectively. Bull trout (Salvelinus confluentus) populations of the same region were listed under the ESA as threatened" on June 10, 1998. Coho salmon (Oncorhynchus kisutch) disappeared from the Wenatchee Basin in the early 1900s, though the Yakama Nation is working to reintroduce them in multiple locations in the basin. (Andonaequi, 2001). Also, within this reach of the Wenatchee River there are spawning steelhead and summer Chinook, and all species utilize the reach for rearing and migration.

d) Discuss how this project fits within your regional recovery plan or local lead entity strategy (i.e., does the project address a priority action, occur in a priority area, or target priority fish species?).

The Wenatchee Watershed Implementation Schedule from the Upper Columbia Salmon Recovery Board and the Wenatchee Watershed Plan lists water quality, water quantity and habitat diversity and quantity as limiting factors in the Lower Wenatchee River. This project will specifically address instream flow improvement through irrigation practice improvements and water acquisition, which is consistent and prioritized within these plans.

The Upper Columbia Recovery Plan States "Because maintaining existing water rights are important to the economy of landowners within the Upper Columbia Basin, this plan will not ask individuals or organizations to affect their water rights without empirical evidence as to the need for the recovery of listed species. To the extent allowed by law, landowners will be adequately compensated for implementing recovery actions. In addition, any land acquisition proposal in this plan will be based on the concept of no net loss of private property ownership, such as conservation easements, transfer of development rights, and other innovative approaches. These objectives will be implemented within natural, social, and economic constraints. Local habitat groups (in cooperation with local landowners) will prioritize and coordinate the implementation of "specific" habitat actions within specific stream areas."

The implementation of the Pioneer project would improve and begin to address the following short and long-term objectives taken from the Upper Columbia Recovery Plan, for Chinook and Steelhead.

Short-Term Objectives, pg. XXXViii

- Restore connectivity (access) throughout the historic range where feasible and practical for each listed species.
- Where appropriate, establish, restore, and protect stream flows (within the natural hydrologic regime and existing water rights) suitable for spawning, rearing, and migration (based on current research and modeling).
- Increase habitat diversity in the short term by adding instream structures (e.g., large wood debris, rocks, etc.) where appropriate.
- Protect and restore riparian habitat along spawning and rearing streams and identify long term opportunities for riparian habitat enhancement.
- Protect and restore floodplain function and reconnection, off-channel habitat, and channel migration processes where appropriate and identify long-term opportunities for enhancing these conditions.

Long-Term Objectives

- Protect areas with high ecological integrity and natural ecosystem processes.
- Maintain suitable stream flows (within natural hydrologic regimes and existing water rights) for spawning, rearing, and migration.
- Protect and restore off-channel and riparian habitat.
- Increase habitat diversity by rebuilding, maintaining, and adding instream structures (e.g., large woody debris, rocks, etc.) where long-term channel form and function efforts are not feasible.
- Develop incentive and collaborative programs with local stakeholders and land owners to enhance and restore habitat within productive areas.

The Lower Wenatchee River has exceeded State and federal water quality standards for pH, DO, temperature and other constituents. DO and pH are related to phosphorus transport and loading in the sub-watershed. Increased flows may also help address temperature exceedances in the Lower Wenatchee River (pg. 67 Wenatchee Watershed Plan). Limited channel migration zones are also listed as a limiting factor. Side channel are frequently dewatered to provide an irrigation district's water.

Wenatchee Watershed Plan

QUANT-4: Provide incentives for conserving water rather than using it to avoid losing it.

• Encourage efficiencies through current water law using tools such as water trusts and/or other innovative techniques. Consider the Irrigation Efficiencies Program, and other incentives programs offered by the state and other entities. Criteria for participation include a demonstration of financial need and environmental benefit, a minimum 10 year lease of the conserved water to the Trust Water Program, and the public investment in the project not exceeding 85% of the total cost. In general, the state offers financial programs and incentives to conserve when there is a public benefit. In many places the application of the Final Plan April 26, 2006 -38- 043- 1284.203 many cases, dedication of the conserved water to instream flows has been the legislature's preferred means of securing the public benefit.

QUAL-10: Stream temperature is related to the amount of instream flow, and increases in flow generally result in decreases in temperatures. The WQTS should work with the Planning Unit and watershed entities to encourage projects that have the potential to increase and protect surface and groundwater flows.

- Voluntary retirement, purchase, leasing of existing water rights, or other conservation methods to preserve and enhance instream flow should be encouraged. In addition, water storage opportunities that have the potential to increase instream flows during critical periods should be considered (WQTS, 2006d). pg 56. The Wenatchee Watershed contains salmonid habitat important to the entire Columbia River region. The Upper Columbia Biological Strategy (Biological Strategy) states that, "the Wenatchee River is unique among sub-basins in the Upper Columbia Region in that it supports the greatest diversity of populations and overall abundance of salmonids, yet is facing the greatest risk of habitat loss and degradation. There are core populations of sockeye salmon, steelhead, bull trout, and both Spring and Summer Chinook salmon in the upper Wenatchee [Watershed] that are relatively strong when compared to other populations in the Columbia sub-basin" (UCRTT, 2002).
- Recognize the significance of the roles of limiting factors outside of the watershed and natural events within the watershed. The long term goal is to have the

Wenatchee River's existing and future habitats contribute to the recovery of listed species and to eventually provide harvestable and sustainable populations of fish and other aquatic resources. **There may be other less apparent benefits of increased flow** in sorting and transporting of sediments, woody debris placement, and channel maintenance to name a few (Annear et al. 2002). With severe reductions in flow, there may be concentrated, opportunistic predators that feed on young salmonids (Park 1990; Zabel et al. 2002). The effects of increased temperatures can cause disease and increased mortality of immature salmonids (Pippy and Hare 1969; Vadas 2000). Lower flow may also concentrate young salmonids into a more competitive surrounding, and thus reduce growth and condition factors (Shirvell and Morantz 1983; Vadas 2000).

The NPCC plan states that in years of low snowpack, water withdrawls for irrigation and domestic use negatively impacts salmonids spawning in the lower river.

The Lower Wenatchee River has several large irrigation districts which divert directly from the Wenatchee or its tributaries. All of these district's conveyance systems are roughly the same age and have the same annual maintenance problem. The antiquated nature of the systems will require constant manual upgrades and some may need significant infrastructure improvements in the relatively near future. WRC believes successful implementation would likely increase interest by other larger water users in the Wenatchee and possibly other irrigation districts in the Columbia Basin. To date, Pioneer is the only district that has expressed sincere interest in a project like this.

e) Has any part of this project been previously reviewed and/or funded by the Salmon Recovery Funding Board? If yes, please provide the project name and SRFB project number (or year of application if a project number is not available). If the project was later withdrawn for funding consideration or was not awarded SRFB funding, please describe how the current proposal differs from the original.

The project has not been previously funded by SRFB or the Tributary Committee.

2) PROJECT DESIGN

a) Describe the location of the project in the watershed, including the name of the water body(ies), upper and lower extent of the project (if only a portion of the watershed is targeted), and whether the project occurs in the nearshore, estuary, main stem, tributary, off channel, or other location.

The current point of diversion is adjacent to Highway 2, near the town of Monitor on a Wenatchee River side channel just upstream of the Monitor Bridge (Hydrologic Unit Code 17020011). The Gunn Ditch runs along the north side of the Wenatchee River and is approximately 5.5 miles long (see attached map). Just upstream of the Wenatchee River Bridge the ditch is conveyed into a pipe that crosses the river on the Wenatchee Reclamation District trestle. On the south-side of the river the partially piped ditch meanders through Wenatchee to serve the remaining users. The current overflow from the Pioneer spills into the Columbia River near Fifth Street in Wenatchee. The new point of diversion will operate from a pump house and convey the water into a piped pressurized system from the Columbia River system.

 b) Describe the project design and how it will be implemented. Describe the extent of the project. Describe specific restoration methods and design elements you plan to employ. If restoration will occur in phases, explain individual sequencing steps, and which of these steps is included in this application. (Acquisition-only projects need not respond to this question.)

A preliminary design has been conducted by RH2 Engineering (2007 and 2009) and the following information is based on the preliminary design. The majority of the piping will use high-density C900 PVC water line culvert pipe which will allow for the pipe to run under a pressurized system without leakage. The pre-design for the piping was conducted considering the pump back option, so the larger piping will be used on the downstream portion of the project and will be tapered back to smaller piping as the pipe reaches the terminal, near the current PWUA POD. The new Pioneer mainline will include tees at each turn out with a gate valve and flow meters for water delivery. Because of concern of debris plugging the flow meters, each turnout will have irrigation magnetic meters, because they have flow tubes and no moving parts, which will prevent disturbance in the delivery system. Turnouts for each place of use will vary from 6 inch for bigger parcels to 3 inch for smaller, and will be based on the number of shares at each delivery point.

The infrastructure improvement is the primary phase of a larger project. When this phase is completed follow up phases will include physical habitat restoration, removal of the diversion dam, and ultimately a 7-mile long community trail.

c) Describe the scale and size of the project or property(s) to be acquired, and its proximity to protected, functioning, or restored habitats. (Fish Passage only projects and Diversions and Screening only projects [i.e., not a combination] need not respond to this question.)

The Gunn Ditch was constructed in 1896 to convey water at the rate of 15 cubic feet per second to a maximum of 700 acres of agricultural land. Currently the there are over 500 acres served by the ditch and 107 shareholders. The present distribution and conveyance system consists of over 25,000 feet of open canal and approximately 10,000 feet of an older leaky piped section. By improving efficiency, preliminary determinations suggest

the water needed to supply the irrigators will be reduced from the maximum of 15 cfs out of the Wenatchee to less than 5 cfs out of the Columbia River pool.

d) Describe the long-term stewardship and maintenance obligations for the project or acquired land. For acquisition and combination projects, identify any planned use of the property, including upland areas.

The water historically diverted by PWUA will be protected in the lower 7.5 miles of the Wenatchee River as and instream flow water right with the Washington State's Trust Water Rights Program. Additionally the new point of diversion and the turnouts will be metered to measure water use. The PWUA understands the scale of this project, the commitment involved, and will take ownership of the operation and maintenance costs, ensuring the projects success for the lifetime of the updated system.

3) PROJECT DEVELOPMENT

- a) List the individuals and methods used to identify the project and its location.
 - i) PWUA board and Mark Peterson, legal representative
 - ii) Aaron Penvose, WRC, Project Sponsor
 - iii) Paul R. Cross, Lead Project Engineer, RH2
 - iv) Randy L. Asplund, Project Engineer, RH2
 - v) Regional Technical Review Team (RTT) Initial project review
- b) Explain how the project's cost estimates were determined.

The estimated costs of rehabilitating the total PWUA system is based on a new source of supply from the Columbia River. The estimate is based on the current cost of the infrastructure needed for the ditch rehabilitation, and costs associated with the contracting and labor to complete the project. **Cost estimates were updated in July, 2009, by RH2 Engineering and are in the detailed budget below**.

Washington Rivers Conservancy's Lower Wenatchee River In-Stream Flow Enhancement Project Budget

North-Side Well					
Alternative (Pioneer)					
			RH2 Estimate		
-	.	. .	Unit	-	
Item	Description	Quantity	Price	Total Price	
	Mobilization /		***	# • • • • • •	
1	Demobilization	1 LS	\$20,000	\$20,000	
	Pre-level and	26,100	* •	*-------------	
2	Cleaning		\$2	\$52,200	
3	4-inch C900 PVC	880 LF	\$40	\$35,200	
4	10-inch C900 PVC	9,100 LF	\$45	\$409,500	
5	14-inch C900 PVC	7,600 LF	\$45	\$342,000	
6	16-inch C900 PVC	9,400 LF	\$ 60	\$564,000	
	3-inch Services and				
7	Mag Meter	35 Ea	\$1,000	\$35,000	
_	4-inch Services and				
8	Mag Meter	3 Ea	\$1,500	\$4,500	
_	6-inch Services and				
9	Mag Meter	2 Ea	\$2,000	\$4,000	
	Measured Turnout				
10	Structures	12 Ea	\$1,000	\$12,000	
11	10-inch Valves	4 Ea	\$1,000	\$4,000	
12	14-inch Valves	3 Ea	\$1,500	\$4,500	
13	16-inch Valves	4 Ea	\$2,000	\$8,000	
	Wells, Control				
	System, and				
14	Building	1 LS	\$650,000	\$650,000	
	Remove River				
15	Crossings	1 LS	\$50,000	\$50,000	
	Replace Road				
16	Crossings	6 Ea	\$20,000	\$120,000	
	Connections to				
17	existing system	8 Ea	\$2,800	\$22,400	
	Traffic Control				
18	Labor	120 hr	\$35	\$4,200	
	Roadway and	_			
19	Landscape Repairs	1 LS	\$50,000	\$50,000	
	Subtotal 1			\$2,391,500	
	Contingencies				
	(15%)			\$358,725	
	Engineering Pre-desi	gn and			
	Design (15%)			\$358,725	
	Subtotal 2 Sales Tax @ 8.0%			\$3,108,950	
				\$248,716	
	TOTAL			\$3,357,666	

South-Side Replacement(Regional)					
періа	cement(Regional)		RH2 Estimate		
			Unit		
Item	Description	Quantity	Price	Total Price	
	Mobilization /	- ·			
1	Demobilization	1 LS	\$20,000	\$20,000	
	Pre-level and	13,900			
2	Cleaning	LF	\$2	\$27,800	
3	4-inch C900 PVC	880 LF	\$40	\$35,200	
4	10-inch C900 PVC	4,400 LF	\$40	\$176,000	
5	12-inch C900 PVC	9,500 LF	\$50	\$475,000	
	3-inch Services and				
6	Mag Meter	12 Ea	\$2,500	\$30,000	
	6-inch Services and				
7	Mag Meter	2 Ea	\$5,000	\$10,000	
8	12-inch Valves	10 Ea	\$1,600	\$16,000	
	Replace Road				
9	Crossings	8 Ea	\$20,000	\$160,000	
10	Trench Patching	2,000 SY	\$25	\$50,000	
	Connections to				
11	existing system	4 Ea	\$2,800	\$11,200	
	Traffic Control				
12	Labor	6,200 hr	\$35	\$217,000	
	Roadway and				
13	Landscape Repairs	1 LS	\$150,000	\$150,000	
	Subtotal 1			\$1,378,200	
	Contingencies (15%)				
				\$206,730	
Engineering Pre-design and Design (15%) Subtotal 2 Sales Tax @ 8.0%					
			\$206,730		
			\$1,791,660		
			\$143,333		
	TOTAL			\$1,934,993	
	TOTAL PROJECT COMBINED PRO	' COST - JECTS:		\$5,292,659	

Cost Share Budget

	Funding Status	Federal	Non- Federal	Local	Total
NFWF	Pending	\$1,000,000	-	-	\$1,000,000
BPA Capitol	Pending	\$1,000,000			\$1,000,000
Department of Ecology, Columbia River	Pending		\$600,000		\$600,000
City of Wenatchee (Regional)	Confirmed			\$1,934,993	\$1,934,993
Salmon Recovery Funding Board	Applied		\$167,500		\$167,500
Habitat Conservation Plan Tributary Funds	Applied		\$167,500		\$167,500
Other, Yakama Nation, Tributary, etc	Prospective		\$338,193		\$673,193
Chelan County	Confirmed			\$37,500	\$37,500
In-Kind	Confirmed			\$46,973	\$46,973
Total		\$2,000,000	\$1,273,193	\$2,019,466	\$5,292,659

c) Describe other approaches, opportunities, and design alternatives that were considered to achieve the project's objectives.

There have been numerous alternatives considered with this project and the current plan is the most feasible for long term goals, for both instream flow interest and for providing clean water supply to PWUA. The current plan is the most cost effective and leverages the stakeholders, funders and project partner's abilities and resources, creating a common sense solution this large project.

d) Describe the consequences of not conducting this project at this time. Consider the current level and imminence of risk to habitat in your discussion.

The imminent risk of not moving forward on this project is the loss of interest and momentum with the PWUA association. At this time there is strong support for this project with the PWUA board and a majority of shareholders. Additionally material costs associated with this project are likely to continue to rise.

e) Describe any concerns about the project raised from the community, recreational user groups, or adjacent land owners, and how you addressed them.

We have not heard any community concerns for this project, thus far. There has been positive feedback on the project as a whole throughout the community. The local land trust (Chelan-Douglas) is planning a follow up phase with the PWUA association that will provide a community trail along the right of way of the Gunn Ditch, which will provide a great community benefit.

f) Include a Partner Contribution Form, when required, from each partner outlining its role and contribution to the project. This form may be downloaded off the SRFB Web site. State agencies are required to have a local partner that is independently eligible to be a project sponsor. A Partner Contribution Form is also required from partners providing third-party match.

Upper Columbia Salmon Recovery Board

Has agreed to help assist in acquisition of funding for this project and WRC is continually working with UCSRB to insure project development is in line with UCSRB recovery objectives. This project is on the UCSRB implementation priority list.

Bureau of Reclamation

WRC will be working closely with the Bureau of Reclamation and their Wenatchee liaison, Steve Kolk. WRC will work with Steve to help guide the final engineering and implementation of the project.

Chelan County Natural Resources Department

CCNRD has agreed to help provide assistance in the implementation of this project, helping provide expertise and funding assistance.

Cascadia Conservation District

CCD will assist WRC with technical, educational and financial assistance to landowners.. WRC will work very closely with CCD on the ditch rehabilitation.

g) List all landowner names. Include a signed Landowner Acknowledgement Form (available on the SRFB Web site) from each landowner acknowledging their property is proposed for SRFB funding consideration. If a restoration project covers a large area and encompasses numerous properties, Landowner Acknowledgement Forms are not required. For sponsors proposing work on their own property, this form is not required. For multi-site acquisition projects involving a relatively large group of landowners, include, at a minimum, signed Landowner Acknowledgement Forms for all known priority parcels.

Due to the scale of this project a list of all landowner signatures is not feasible. Included as an attachment is a letter of support to pursue funding from the PWUA representative attorney, Mark Peterson. The PWUA board is aware of this funding request and supports the implementation of the project.

h) Describe your experience managing this type of project. List the names, qualifications, roles, and responsibilities for all known staff, consultants, and subcontractors who will be implementing the project. If unknown, describe the selection process.

WRC's Cowiche Creek project involves the change in points of diversion for 17 irrigators with water rights presently authorized to divert from three separate locations on Cowiche Creek and the South Fork of Cowiche Creek. The 7.9 cfs historically diverted from SF Cowiche Creek and Cowiche Creek will be permanently protected as an instream flow Trust Water Right, continuing downstream to the confluence with the Naches River. Cowiche Creek (and SF Cowiche Creek) supports steelhead, spring Chinook and Coho, as well as other resident salmonids including rainbow and cutthroat trout, mountain whitefish, and other non-salmonid species. Mid-Columbia steelhead are listed as Threatened under the Federal Endangered Species Act. This project demonstrates WRC's cooperative approaches to conservation that enable irrigators and agricultural producers to maintain current land-use practices, while also protecting the listed fish species that the creeks support.

Pioneer Project Leads

- 1) Aaron Penvose, WRC, Project Sponsor
- 2) Paul R. Cross, Lead Project Engineer, RH2 Consulting
- 3) Randy L. Asplund, Project Engineer, RH2 Consulting

All contractors will go through a standard bidding process.

4) TASKS AND SCHEDULE

Project Time Line

Item/Milestone	Outcome	Target Date (Month/Year)	
Obtain necessary	Section 106, Well Construction Permits,	April-June 2010	
permits	SEPA and NEPA		
Final Engineering	Completed Final Engineering Plan	March 2010	
Bid Process	Contactors Hired	June-July 2010	
Issue Specifications			
Begin on the ground	Site prep, pipe instillation, and	September 2010	
Construction*	connection		
Project Completion	Complete test operations, check systems and project clean up	December 2011	

*This project cannot be implemented on the ground until the end of the irrigation season, which ends in October.

CONSTRAINTS AND UNCERTAINTIES

Each project should include an adaptive management approach that provides for contingency planning. State any constraints, uncertainties, possible problems, delays, or unanticipated expenses

that may hinder completion of the project. Explain how you will address these issues as they arise and their likely impact on the project.

There are several opposing constraints that make this project schedule difficult to estimate. 1) All work within the City and County right-of-way would require use permits. The project needs to be constructed during the non-irrigation season which is **October 1 through April 1** (might be able to push this to April 15th). However, the City and County will require any work within the right-of-ways to be accomplished during the months that asphalt paving is available which is usually the first week of April to the end of October. However, we think the project could be ready to bid by early spring of 2010 with work to begin in March 2010 and completed Spring 2011, with wrap up in the fall. 2) A building permit would be required for the building and PUD approval of the wells for concurrency with their FERC license if the wells are located within the project pool for the Rock Island Dam.

The development of this project has been carefully drawn out and the current plan with Regional is the most efferent and effective way to leverage this project and improve instream flow in the Wenatchee River. The partnerships in this project should provide for early assessment of potential delays, constraints, and allow for adequate adaptation, which will be required for a project of this scale.

Citations

Andonaegui, C. 2001. Salmon, steelhead, and bull trout habitat limiting factors for the Wenatchee subbasin (Water Resource Inventory Area 45) and Portions of WRIA 40 within Chelan County (Squilchuck, Stemilt and Colockum drainages). Final draft report. WSCC.

Climate Impacts Group, University of Washington, 2009. The Washington Climate Change Impacts Assessment: Evaluating Washington's Future in a Changing Climate. March 2009. <u>http://cses.washington.edu/cig/res/ia/waccia.shtml</u>

WRIA 45 Watershed Planning Unit. 2006. Final Wenatchee Watershed Management Plan. Full report available online at: <u>http://www.co.chelan.wa.us/nr/nr_wen_watershed.htm</u>

UCSRB, 2007. Upper Columbia Salmon Recovery Board's Upper Columbia Spring Chinook Salmon and Steelhead Recovery Plan. August 2007. <u>http://www.ucsrb.com/plan.asp</u> or <u>http://www.ucsrb.com/UCSRP%20Final%209-13-2007.pdf</u>.

Picture #1 Gunn Ditch, near Monitor



Picture #2 PWUA Diversion, near Monitor





Peterson Law Office 103 Palouse, Suite 5 Wenatchee, WA 98801

June 1, 2009

Tributary Committee Salmon Recovery Funding Board

Subject:

Wenatchee Sub-basin Instream Flow Restoration Project for a Coastal and Marine Habitat Restoration Project Grant

Dear Salmon Board:

I represent Pioneer Water Users Association which owns the property and water system that is the subject of the above referenced grant. The Pioneer Board of Directors, in close consultation with its shareholders, has determined that the described project serves Pioneer's long term interests and strongly supports this funding application. Particularly, the project will result in a modern pressurized water system that will yield a higher level of service to Pioneer shareholders at higher operational cost, but lower maintenance costs for the foreseeable future.

Pioneer looks forward to this change and the opportunity to participate in a project that yields societal benefits far beyond the irrigation needs of its shareholders. Pioneer appreciates its role as a member of a much larger community that has identified the ecologic and economic goals to be furthered by this project. Further, Pioneer understands that electrical costs possibly associated with the pressurization of the system may substantially increase the operational costs beyond that currently experienced. These facts should assure you of Pioneer's enduring commitment to the project.

Specifically, I understand that you require signatures from Landowners Acknowledging that their property is proposed for funding consideration. This is not practical. Further, Pioneer has sufficient administrative authority to make this representation on their behalf.

Sincerely, Mark Peterson MM

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