

Application for: WaterSMART Small-Scale Efficiency Projects
FY2022

Funding Opportunity: R22AS00195

Yaksum Water Company Pipeline Replacement Project

Applicant

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Technical Proposal and Evaluation Criteria

Date: 22 April 2022
Applicant: Chelan County Natural Resources Department
Applicant Category: A
City: Wenatchee
County: Chelan
State: Washington

Chelan County Natural Resources Department (CCNRD) is partnering with the Yaksum Water Company (YWC) to improve water delivery within Yaksum Canyon to agricultural producers and residential users. YWC diverts water from the Icicle Irrigation District (IID) to serve its

customers. This project will replace approximately 3,500 feet of leaking and failing concrete pipe with new 12-inch diameter PVC pipe and one (1) steel diversion box. The project will greatly reduce seepage loss and is necessary to ensure that YWC can effectively and efficiently deliver a full 120 shares of water to its more than 30 customers. Once YWC can effectively deliver full shares of water, agricultural producers will be able to implement on-farm irrigation improvements. The project implements conservation and efficiency actions identified in (1) the IID Comprehensive Irrigation District Management Plan, (2) the YWC action plan, (3) the Icicle Strategy and (4) the Chelan County Voluntary Stewardship Plan.

LENGTH OF TIME/COMPLETION DATE

The project is planned to require 24 months to complete and will be accomplished by April 30, 2025.

FEDERAL FACILITY

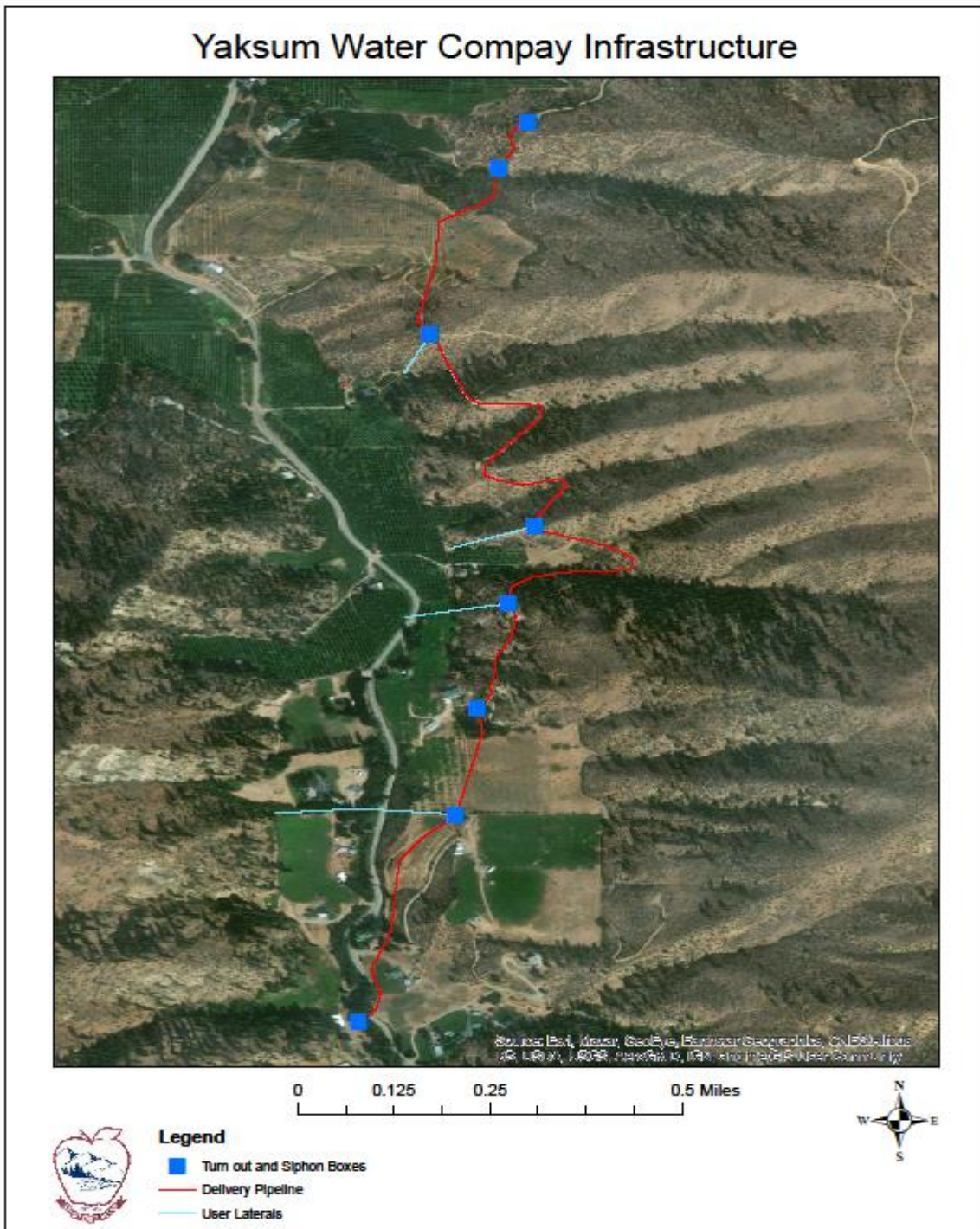
This project is not located on a Federal facility, although there is a nexus with Bureau of Reclamation described later in the application.

PROJECT LOCATION

Yaksum Water Company provides water delivery to orchards and residents of Yaksum Canyon. Yaksum Canyon is located within Chelan County, Washington, approximately 0.75 miles southeast of the town of Cashmere. Yaksum Water Company draws water from the Icicle Irrigation District canal system, from which point water is transported via gravity flow through a mix of PVC, steel, and concrete pipe. The pipeline extends for 1.6 miles where it terminates in an overflow cistern. All excess water is returned to Yaksum Creek, which flows into Mission Creek and eventually the Wenatchee River. A map of the project area is included below as Figure A.

Yaksum Pipeline Project Coordinates	
Start	47.5011 North
	120.4643 West
End	47.4832 North
	120.4674 West

Figure A. Project Area Map



TECHNICAL PROJECT DESCRIPTION

The objective of CCNRD and the YWC Board, in addition to the mandate of Icicle Irrigation District, is to make all efforts to conserve the water resources that are relied upon by the

community, businesses, farms, natural habitat, and wildfire protection strategies. Water delivered by the system currently provides irrigation water for four (4) commercial orchards, one vegetable grower (farmers market), several families grazing livestock, and one newly-installed apple and fruit orchard for a local winery. The water also is used for irrigation and landscaping for the 30+ residents living along the canyon and to mitigate risks associated with wildfire.

CCNRD and the YWC are seeking to address and increase water delivery efficiency within this community irrigation project in order to reduce the amount of water lost during transmission through the system and reduce the risks associated with overflows and critical failures of an aging pipeline. The main objective of this project is to replace the remaining 3500 linear feet (LF) of concrete piping with new 12-inch schedule 40 PVC pipe. For years, most users have struggled to get access to 50% of the water they are allotted and paying for each season. Our goal is to deliver the water each user is allotted during the season while significantly reducing the amount of water wasted in the process. With an efficient system in place, as users come on- and off –line during the irrigation season, adjustments can be made quickly and easily that reduce or eliminate losses and potential for over-flows and subsequent damages. Completion of this project will help the numerous acres of orchard, homes, and wildlife habitat situated along Yaksum Canyon and drastically mitigate the use of natural resources in our county. Once full shares of water can be delivered to all of the YWC users, on-farm irrigation efficiencies can be explored to expand water conservation efforts.

Through the use of excavation equipment such as backhoes and excavator, the old concrete pipe will be unearthed, removed and replaced with new PVC pipe. New PVC pipe will be installed, bedded and buried with the same equipment used to expose and remove the concrete piping.

PROJECT BACKGROUND

Yaksum Canyon is a community owned and operated system of buried concrete piping, steel syphon draws, and concrete vent and portioning boxes. Like many aging irrigation systems in the region, the Yaksum system was installed and extended during the first half of the 1900s, as orchards reached further southward into the productive canyon. Also, like many aging systems, the condition and function of the piping and boxes has deteriorated, having far exceeded the functional expected lifespan of such structures.

Leading up to 2016, the flow of water further down the delivery system exhibited continual decline due to pipe damage, leaking, seepage, and blockage due to intruding roots and flotsam entering the pipe works at vent and weir boxes as coverings are damaged by animals, weather, and general deterioration. Over the past ca. 10 years, users and Yaksum Water Company board members have worked to make repairs to pipes and boxes and to identify possible blockages. Over the past five (5) years, reduction in water delivery capacity caused the user group to take more aggressive actions to clearly identify issues and research options for repair and avoidance

strategies. At this time, distribution of the large volumes of water required through this system represent a real risk of failure and property damages.

In 2018, YWC hired a local plumbing contractor to run cameras along the system in order to gage issues and aid in the repair process. Many blockages and cracks in the pipe were observed along the span of the system and, in many cases, prevented the passage of the video equipment. Several problematic areas were identified. One major corner was excavated by hand, breached, and numerous large pieces of wood, sticks, and bottles were removed prior to patching with hydraulic cement. Removal of these blockages resulted in an immediate improvement in the subsequent flow of water through the system just beyond those points. While this type of repair is beneficial, increased flow potential in one zone does not mean water can flow freely throughout; many areas of overflow exist still and must be carefully managed for flow conditions. Several areas of seepage and surface water can be observed along the pipeline during irrigation season and need to be addressed with a permanent fix.

The general problem faced with the water delivery system is simply conveying the 120+ shares of water to all users without risk of failure or major overflow. In its current state, if too much water is allowed to enter the system in an effort to deliver expected water to end users, boxes and vents inevitably over-flow and find their way down the canyon sides, risking damage to homes and orchards. The Yaksum Water Company board members must closely monitor and coordinate usage to assure water is moving all the way to end users and not risking damage. When up-stream users open/close valves to meet irrigation demands, the entire system must be adjusted.

By design, the Yaksum Water delivery system ends at the final portioning box at the southern point of the line. In the 2000s, one of the end users installed a metal pipe to allow any final over flow to divert directly back in to Yaksum Creek, which was recommended by water conservation authorities and an environmental assessment. If working properly, this system could accommodate changes in water usage allowing any excess to flow directly into Yaksum Creek, finding its way back to the Wenatchee River. In addition, repairs are intended to significantly reduce, if not eliminate, the amount of water taken out of the irrigation canal that is lost before reaching users. As mentioned, each of the areas of loss represents current and potential wash-out and land/mud slides that can damage property, structures, and habitat.

PROJECT EVALUATION CRITERIA

EVALUATION CRITERIA A – PROJECT BENEFITS

Benefits to the Category A Applicant's Water Delivery System: Describe the expected benefits to the Category A applicant's water delivery system. Address the following:

- *Clearly explain the anticipated water management benefits to the Category A applicant's water supply delivery system and water customers.*

• *Explain the significance of the anticipated water management benefits for the Category A applicant's water delivery system and customers. Consider:* ○ *Are customers not currently getting their full water right at certain times of year?* ○ *Does this project have the potential to prevent lawsuits or water calls?* ○ *What are the consequences of not making the improvement?* ○ *Are customer water restrictions currently required?* ○ *Other significant concerns that support the need for the project.*

The primary anticipated benefit of this project will be the ability of YWC to provide its users with full shares of water throughout the irrigation season while greatly reducing risk of catastrophic critical system failure. Currently, YWC is struggling to provide users with 50% of their assessed allocations. Water conveyance and delivery must be continuously and closely monitored and adjusted as various users come on and off line to avoid risks of system overflow, leading to potential property damage, or critical infrastructure failure due to decreased conveyance capacity. CCNRD will experience a water savings benefit that will aid in the conservation of 10cfs to the Icicle River. CCNRD is a co-lead of the Icicle Strategy, water conservation measures and irrigation efficiencies implemented within the YWC service are will aid in CCNRD obtain its overall goal of 10cfs conservation of instream flow to the Icicle River.

In the event of a critical catastrophic system failure, the resulting damage to both agricultural and residential property would be extensive. In addition to property damage, a critical failure would also impose significant environmental damage. The YWC conveyance infrastructure is a gravity system, with the main pipeline running along the slope of Yaksum Canyon. Yaksum Creek is situated in the bottom of the canyon. Yaksum Creek has been identified by the Washington Department of Natural Resources as a fish bearing stream. Additionally, the U.S. Fish and Wildlife Service identifies Yaksum Creek as potentially containing bull trout, a federally listed threatened species, habitat. Yaksum Creek flows into Mission Creek, which is a known salmon and steelhead bearing stream. Effects of catastrophic system failure would have profound effects on federally listed fish species.

Not making the required infrastructure modernization improvements will result in the continuation of water delivery rates of 50% of allocation to users and perpetuate the risk of catastrophic failure, resulting in significant property and environmental damages.

Broader Benefits: *Describe the broader benefits that are expected to occur as a result of the project. Consider: Will the project improve broader water supply reliability at sub-basin or basin scale? • Will the proposed project increase collaboration and information sharing among water managers in the region? Please explain. • Will the proposed project positively impacts/benefit various sectors and economies within the applicable geographic area (e.g., impacts to agriculture, environment, recreation, and tourism)? Please explain. • Will the project complement work being done in coordination with NRCS in the area (e.g., the area with a direct connection to the districts water supply)? Please explain. • Will the project help address drought conditions at the sub-basin or basin scale? Please explain*

YWC is authorized to divert water from the Icicle Irrigation District canal system, which originates from diversions along the Icicle River. Icicle Irrigation District is a member of the Icicle Strategy Workgroup, which is focused on developing water conservation measures within the Icicle Creek watershed and the geographic region where Icicle Creek water is delivered. Partner organizations, such as YWC, are critical implementers of water conservation measures that help achieve the goals of the Icicle Strategy. Implementation of this project will not only benefit YWC but also help reach conservation goals of the Icicle Workgroup through the reduction of leaks and seepage loss of the YWC conveyance infrastructure. Replacement of damaged concrete pipe with new PVC will not only drastically reduce the leak and seepage losses, but also greatly benefit the agricultural community of Yaksum Canyon by allowing YWC to deliver full water shares to agricultural producers. Several Users of YWC provide fruit to a local winery, which draws tourism to the area. The terminus of the YWC pipeline is located within Yaksum Creek, with all excess and unused water flowing directly into the creek. The addition of excess irrigation water aids in addressing drought and climate change concerns of the Yaksum and Mission creek drainages. Excess irrigation water that is returned to the creek helps maintain flow during low precipitation summer months.

EVALUATION CRITERION B—PLANNING EFFORTS SUPPORTING THE PROJECT

Plan Development: *Describe how your project is supported by an existing planning effort. Identify the planning effort and who developed it. If the planning effort was not developed by the Category A applicant, describe the Category A applicant's involvement in developing the planning effort.*

This project is supported by both the Wenatchee Watershed Management Plan and the Icicle Strategy. Chelan County is the Lead Agency for the Wenatchee Watershed Management Plan, which was adopted by the Chelan County Board of Commissioners and the Washington Department of Ecology. Chelan County and the Washington Department of Ecology are also “Co-Leads” of the Icicle Strategy, an integrated water resource management strategy for Icicle Creek. The project’s goals of water conservation and increased instream flows are both listed as priority actions of these plans. Additionally, the project is also supported by Chelan County Voluntary Stewardship Program. Chelan County Natural Resource Department is the lead planning and implementation entity for the Voluntary Stewardship Program. Improvements in irrigation efficiencies, water conservation, instream flow and protection of critical habitats, such as riparian corridors, are critical components to CCNRD’s Voluntary Stewardship Program.

Support for the Project: *Describe to what extent the proposed project is supported by the identified plan. Address the following: • Is the project identified specifically in the planning effort? • Explain whether the proposed project implement a goal or address a need or problem identified in the existing planning effort? Explain how the proposed project has been determined as a priority in the existing planning effort as opposed to other potential projects/measures.*

This project will result in irrigation water efficiencies within the Icicle Irrigation District (IID) irrigation system. IID water is diverted from Icicle Creek approximately 5.7 river miles upstream of the confluence with the Wenatchee River. Irrigation efficiency projects within the IID system are a high priority in the Icicle Strategy’s preferred alternative identified in the Final PEIS. The Icicle Work Group (IWG) was formed in December 2012 to “find collaborative solutions for water management within Icicle Creek” while meeting various needs and interests within the basin. Members of the Icicle Work Group include Chelan County, WA Department of Ecology, Yakama Nation, Colville Confederated Tribes, Icicle Irrigation District, Cascade Orchards Irrigation Company, Bureau of Reclamation, non-profit conservation organizations, cities, and other state and federal agencies. Reclamation funds the Leavenworth National Fish Hatchery as part of three hatcheries that make up the Leavenworth Complex. This hatchery is operated by US Fish and Wildlife Service to produce spring Chinook salmon and is part of an extensive FCRPS (Federal Columbia River Power System) hatchery program funding by BPA, USACE, and Reclamation. One of the Icicle Work Group’s guiding principles is a Sustainable Hatchery with several projects identified in the Icicle Strategy identified to meet this goal. The IWG supports implementing this strategy so all guiding principles are met, meaning that implementation of irrigation efficiency and hatchery improvement projects are linked.

EVALUATION CRITERION C—IMPLEMENTATION AND RESULTS

Project Schedule

Task	February-April 2023	April-October 2023	October 2023 - April 2024	April 2024 -- April 2025
Regulatory Compliance				
Planning and Procurement				
Installation				
Evaluation, Monitoring, and Reporting				

Describe the implementation plan for the proposed project. Please include an estimated project schedule that shows the stages and duration of the proposed work, including major tasks, milestones, and dates.

Implementation for this project will begin with the environmental and cultural compliance reviews, following notice of award. As described below there is a portion of the project located on Washington Department of Natural Resource Lands, and required permits/review will need to be investigated further. The first year of the project will focus on obtaining all necessary materials and supplies and pre-construction preparations; such as developing access points for large equipment. The installation phase of this project will begin in either October 2023 or March 2024, depending on weather conditions. During the remainder of the project schedule, after installation, the new delivery system will be monitored and evaluated for effectiveness and any required adjustments to the overall YWC conveyance infrastructure.

- Describe any permits that will be required, along with the process for obtaining such permits.

A portion of the proposed project is located within Washington Department of Natural Resources owned lands. Washington Department of Natural Resources will be consulted with to determine what permits and/or reviews are required to conduct ground disturbing projects located on their lands.

- *Identify and describe any engineering or design work performed specifically in support of the proposed project.*

This project is a relatively simple “remove and replace” type project. No new systems or structures will be constructed during this project. Engineering and/or design work is not expected for this project.

- *Describe any new policies or administrative actions required to implement the project.*

No new policies or administrative actions are required for project implementation

- *Describe the timeline for completion of environmental and cultural resource compliance. Was the timeline for completion of environmental and cultural resource compliance discussed with the local Reclamation office?*

Environmental and cultural resource compliance are the first actions to be completed for this project. CCNRD intends to work cooperatively with Reclamation staff to ensure this review is completed to satisfactory levels before any project installation actions begin.

EVALUATION CRITERION D—NEXUS TO RECLAMATION

Is the proposed project connected to a Reclamation project or activity? If so, how? Please consider the following:

There is a nexus with the YWC project and the Leavenworth National Fish Hatchery. The Bureau of Reclamation (BOR) supports the hatchery with the US Fish and Wildlife Service (USFWS) on Icicle Creek near Leavenworth, WA. BOR and USFWS are active collaborators in the Icicle Work Group and working to improve instream flows in Icicle Creek, including irrigation district efficiency and conservation improvements. YWC receives Icicle Creek water from the Icicle Irrigation District, and the project thus supports and is consistent with the collaborative goals of the Icicle Work Group.

Does the applicant receive Reclamation project water? No

Is the project on Reclamation project lands or involving Reclamation facilities? No

Is the project in the same basin as a Reclamation project or activity?

Yes. The water source for this project is on Icicle Creek just upstream from the Leavenworth National Fish Hatchery which is funded by Reclamation as mitigation for the construction of Grand Coulee Dam. Chelan County, Icicle Irrigation District, and Reclamation are all members of the Icicle Work Group working collaboratively on Icicle Water Management solutions.

o Will the proposed work contribute water to a basin where a Reclamation project is located?

Yes. The Icicle Strategy’s preferred alternative includes a 10 cfs improvement to instream flows in Icicle Creek as a result of a collection of conservation and efficiency projects within the Icicle Irrigation District system.

Sub-criterion No. E1. Climate Change

- *Please provide specific details and examples on how the project will address the impacts of climate change and help combat the climate crisis.*

The YWC conveyance system, by design, terminates in Yaksum Creek. All excess and unused irrigation water diverted from the Icicle Irrigation District canal is returned as surface water to Yaksum Creek. The addition of this excess irrigation water provides increased instream flow for the lower half of Yaksum Creek. YWC delivers water through a buried pipeline system, this prevents return water from being heated and negatively altering the temperature of Yaksum Creek. The colder temperature of the excess water will aid in maintaining cooler surface water temperatures, which native salmonids and trout species rely on for spawning and rearing. The additional water inputs from irrigation return also add a constant source of water to the creek, helping to prevent the creek from drying during drought seasons.

- *Does this proposed project strengthen water supply sustainability to increase resilience to climate change? Does the proposed project contribute to climate change resiliency in other ways not described above?*

This project will result in a significant increase in water delivery efficiency for YWC. Given that YWC sources water supply from the Icicle Irrigation District canal system, this will reduce the amount of water Icicle Irrigation District has to divert from Icicle Creek. As described above in Evaluation Criteria D, this project is apart of a much larger initiative to conserve water through out the entire Icicle Watershed.

Sub-criterion No. E2. Disadvantaged or Underserved Communities

Yes. The Washington Department of Health maintains a statewide tracking portal called the “Washington Tracking Network (WTN): A Source for Environmental Public Health Data.” The Cashmere, WA area, including the YWC service area, scores poorly on Socioeconomic Factors, which includes limited English, no high school diploma, people of color, population living in poverty, transportation expense, unaffordable housing and unemployment. The project area scores an 8 on a scale of 1 to 10, with 10 being the poorest performing.

Sub-criterion No. E.3. Tribal Benefits

The YWC project supports tribal interests through improved instream flows and irrigation efficiencies in the Wenatchee Watershed and Icicle Creek. Both the Yakama Nation and the Colville Confederated Tribes assert tribal interests in these areas and support these goals through the Icicle Work Group and their own tribal interests. Notably, both tribes exercise fishery rights at the Leavenworth National Fish Hatchery and support improved instream flows for habitat improvement and fish production.

PROJECT BUDGET

Table 1: Summary of Non-Federal and Federal Funding Sources

FUNDING SOURCES	AMOUNT
Non-Federal Entities	
1. Chelan County	\$87,006.50
Non-Federal Subtotal	\$87,006.50
Requested Reclamation Funding	\$87,006.50

Table 2: Total Project Cost Table

SOURCE	AMOUNT
Costs to be reimbursed with the requested Federal funding	\$87,006.50
Costs to be paid by the applicant	\$87,006.50
Value of third-party contributions	
TOTAL PROJECT COST	\$174,013

Table 3: Budget Proposal

Budget Item Description	Computation		Quantity Type	Total Cost
	\$/Unit	Quantity		
Salaries and Wages				
CCNRD Director	55.32	25	hours	\$ 1,383.00
CCNRD Chief Accountant	37.23	60		\$ 2,233.80
CCNRD Natural Resource Specialist	30.03	260		\$ 7,807.80
<i>Subtotal salaries and wage</i>				\$ 11,424.60
Fringe Benefits				
CCNRD Director	15.79	25		\$ 394.75
CCNRD Chief Accountant	12.51	60		\$ 750.60
CCNRD Natural Resource Specialist	11.21	260		\$ 2,914.60
<i>Subtotal benefits</i>				\$ 4,059.95
Travel				
6 roundtrips @29 miles	0.585	174	miles	\$ 101.79
Contractual/Construction				
Pipe Installation Contractor	\$156,050.00			\$ 156,050.00
Supplies and Materials				
				\$ -
Indirect				
20.8% off salaries (2022)	20.80%			\$ 2,376.32
TOTAL				\$ 174,012.66

BUDGET NARRATIVE:

This project budget was developed based on previous CCNRD project experiences for staff time requirements, current pricing of necessary materials, and a local contractor quote.

CCNRD staff time (salaries, wages and fringe benefits) will be utilized for conducting project administration, financial administration, stakeholder coordination, site visits, environmental and cultural compliance and construction management tasks. Indirect costs are based off of salaries/wages. Chelan County has a federally negotiated indirect rate. The indirect allocation includes costs for buildings, IT, facilities maintenance, treasurer costs, etc. It does not include our departments director or financial administration which is why we are accounting for them as direct costs. Travel expenses are expected for conducting site visits with stakeholders and construction contractor in addition to a CCNRD staff member being on site during construction phases of the project. A local contractor specializing in excavation and pipeline installation was consulted with to develop an estimate of project costs. These costs include all excavation actions and supplies and materials required for the pipeline replacement. A detailed breakdown of project material and labor costs can be found in Appendix A.

ENVIRONMENTAL AND CULTURAL RESOURCE CONSIDERATIONS

Will the proposed project impact the surrounding environment (e.g., soil [dust], air, water [quality and quantity], animal habitat)? Please briefly describe all earth-disturbing work and any work that will affect the air, water, or animal habitat in the project area. Please also explain the impacts of such work on the surrounding environment and any steps that could be taken to minimize the impacts

The YWC project is a pipeline replacement project, and all environmental impacts are expected to be temporary and not significant. Replacement of 3500 LF of 12-inch diameter concrete pipe with 12-inch diameter PVC pipe will require excavation. Excavation operations and equipment will create temporary dust and noise pollution. Given the rural location of the project, the dust and noise pollutions are not anticipated to create lasting air quality impacts. Yaksum Creek flows in the bottom of the canyon, however, given sizeable agricultural parcels between the creek and project area no impacts to water quality are expected. If deemed necessary for areas of steeper slopes, erosion and sediment containment systems will be investigated. The impacts to wildlife are expected to be temporary and non-significant. Construction operations will create noise and human traffic that animals will avoid during the project. Some habitat will be impacted through the removal and replacement of buried water pipes. Excavation of the trenches will be kept to the narrowest width, while still providing safe working conditions for laborers. Once the new pipe is installed and buried areas of disturbance can be seeded with native plants species.

Are you aware of any species listed or proposed to be listed as a Federal threatened or endangered species, or designated critical habitat in the project area? If so, would they be affected by any activities associated with the proposed project?

Washington Department of Fish and Wildlife list Golden Eagle and Northern Spotted Owl as potentially occurring within the project area. Northern spotted owls are not expected to be residing within the project boundaries as the habitat is not conducive to sustain northern spotted owl. U.S. Fish and Wildlife Service, via IPaC, indicates Canada Lynx, Gray Wolf, Yellow-Billed Cuckoo, Bull trout, Monarch butterfly, and Wenatchee Mountains Checkermallow may have the potential of occurrence within the project boundaries. It is not expected to find Lynx within the project boundaries the habitat is not suitable for Lynx. Gray wolf have previously been reported in the area, however, with the project's proximity to a human population area it is most likely any wolves found near the project are there on a transient basis. Yellow-billed Cuckoos have not been sighted near the project site and are not expect to experience any adverse effects. Bull Trout are not expected to experience any negative impacts from this project, as no in water work will be conducted. Impacts to Monarch butterfly are also expected to non-adverse and temporary. Wenatchee Mountain Checkermallow has the potential to be found onsite. Pre-construction surveys can identify is any located within the project and develop plans for how best to address its presence. Neither WDFW nor USFWS list any critical habitats within the project boundary.

Are there wetlands or other surface waters inside the project boundaries that potentially fall under CWA jurisdiction as "Waters of the United States"? If so, please describe and estimate any impacts the proposed project may have.

No.

When was the water delivery system constructed?

Yaksum Water Company water delivery system was constructed in the early 1900s. The exact construction date is unknown.

Will the proposed project result in any modification of or effects to, individual features of an irrigation system (e.g., headgates, canals, or flumes)? If so, state when those features were constructed and describe the nature and timing of any extensive alterations or modifications to those features completed previously.

The primary objective of this project is to replace aging and damaged concrete pipe with new modern PVC. It is unknown of the exact date the concrete pipe was installed. The Yaksum Water Company has completed routine repairs and alterations to conveyance infrastructure since 2000. The most recent alteration made to the system in Spring 2020 was the removal and replacement of approximately 1000 LF of concrete pipe with PVC near the beginning of the system. Planned alterations of this system need to be implemented in the spring months before the pipes are

charged with water. This system is a gravity system. Fall construction is problematic due to a number of factors, including ensuring that the system is completely drained.

Are any buildings, structures, or features in the irrigation district listed or eligible for listing on the National Register of Historic Places? A cultural resources specialist at your local Reclamation office or the State Historic Preservation Office can assist in answering this question.

No.

Are there any known archeological sites in the proposed project area?

No.

APPENDICES

APPENDIX A: DETAILED MATERIAL AND LABOR COSTS

Yaksum Water Company; Ca. 3000' of PVC to replace concrete pipe.			
Item	\$/unit	Unit	Cost
PVC; 12" CL125 Sch40 gasketed; by foot	\$30.00	3000	\$90,000.00
PVC; 12" CL125 Sch40 gasketed; by foot	NA	120	on-hand
12-inch 45	\$194.00	20	\$3,880.00
12-inch Saddle; 12 " x 4"	\$230.00	12	\$2,760.00
12" Coupler	\$110.00	6	\$660.00
Compression coupling	\$750.00	3	\$2,250.00
12-inch fittings			\$9,550.00
Steel diversion box #1	NA	NA	On-Hand
Steel Diversion Box #2	\$3,000.00	1	\$3,000.00
Total Materials			\$102,550.00
Total per 1000'			\$34,183.33
Labor			
Potter Built LLC; Excavation and Installation of 3000' PVC and diversion boxes.	NA	NA	\$53,500.00
Materials and Labor			\$156,050.00
Total per 1000'			\$52,016.67

RESOLUTION 2022- 40

RE: Resolution supporting Chelan County application to the US Bureau of Reclamation WaterSMART Small-Scale Water Efficiency Projects on behalf of the Yaksum Water Company

WHEREAS, the Wenatchee Watershed (Water Resource Inventory Area 45 (WRIA 45)) in Chelan County, Washington contains critical needs for water quantity, water quality, habitat protection, and out-of-stream needs; and

WHEREAS, the Wenatchee Watershed is a priority watershed; and

WHEREAS, the Yaksum Water Company is a community owned and operated water delivery entity authorized to divert water from the Icicle Irrigation District canal to more than 30 users for agricultural and domestic irrigation purposed; and

WHEREAS, the Yaksum Water Company has established objectives and goals in order to address the critical needs of the watershed for water conservation and irrigation efficiency improvements as outlined in the Wenatchee Watershed Management Plan and the Icicle Strategy; and

WHEREAS, the State of Washington acknowledged Chelan County, the City of Wenatchee and the Wenatchee Reclamation District as “initiating governments” for watershed planning, and these initiating governments established Chelan County as the “Lead Agency” for grant management, planning unit facilitation and consultant management purposes.

NOW, THEREFORE BE IT RESOLVED that:

1. The Chelan County Natural Resource Director (Mike Kaputa) is authorized to make formal application to the US Bureau of Reclamation for grant assistance; and
2. The Chair of the Chelan County Commissioners (Commissioner Overbay or successor) shall be authorized to enter into the agreement upon majority approval by the Chelan County Commissioners; and
3. The Natural Resource Director has reviewed the grant application on behalf of the Chelan County Commissioners; and
4. Chelan County certifies that the matching funds indicated in the grant application shall be provided if the grant application is successful; and
5. The Natural Resource Director and staff will work with the US Bureau of Reclamation to meet established deadlines for entering into a financial assistance agreement; and

6. This resolution becomes part of the grant application.

DATED at Wenatchee, Washington this 26th day of April, 2022.




BOARD OF CHELAN COUNTY COMMISSIONERS



KEVIN OVERBAY, CHAIRMAN



BOB BUGERT, COMMISSIONER



TIFFANY GERING, COMMISSIONER

ATTEST: CARLYE BAITY



Clerk of the Board