ROUND VALLEY INDIAN TRIBES

Natural Resources Department Presents it

Mill Creek Streamflow & Riparian Corridor Restoration Project

TO THE

Bureau of Reclamation WaterSMART Drought Response Program: Drought Resiliency Projects for FY 2017

February 14, 2017

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SF-424 Forms Included per Grants.gov submission process



Technical Proposal and Evaluation Criteria

Executive Summary:

February 14, 2017. Round Valley Indian Tribes (RVIT) Covelo, Mendocino County California

The proposed Mill Creek Streamflow and Riparian Restoration Project will focus on establishing a functional riparian corridor along the banks of Mill Creek, the primary aquifer recharge system for Round Valley and its residents. The myriad of ecological, biological and environmental roles that a *functional* riparian corridor play is profoundly complex and intricate, and absolutely vital to the health and stability of a viable stream system. With this in mind, the Tribe seeks to plant (and water) ~ 30,000 trees and willows along the banks of Mill Creek in such a manner as to stabilize and protect $\sim 7,150$ feet of streambank (that is susceptible to erosion) and provide shade that will ultimately reduce water temperatures, evaporation rates and the roots wicking action will help stabilize water table levels and extend the period of surface flow throughout the project reach benefitting a variety of fish and wildlife species. The root structures of these 30,000 plants will be working together to stabilize the rocky/gravelly substrate to help it withstand the swings in weather conditions associated with Climate Change, be it the high water flow events of winter or providing thermal refugia against drought conditions of summer. As the vegetation continues to grow and mature with time, so will its long term resiliency against drought while its ability and effectiveness to provide a myriad of ecological benefits including, but not limited to increasing the reliability of water supplies through Mill Creek and improving the environmental habitat conditions available for a variety of Listed and non-listed species of fish and wildlife.

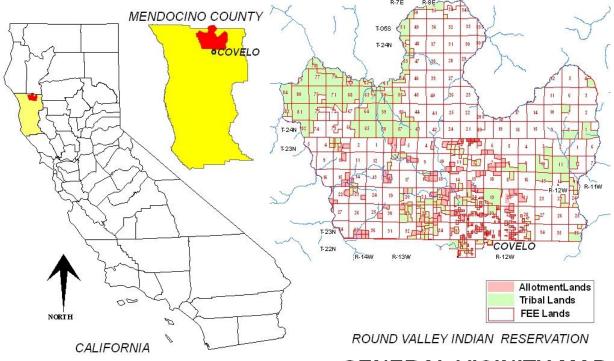
The proposed Mill Creek Streamflow and Riparian Restoration Project is a Funding Group 1, two year proposal that is "shovel ready" and work can commence any time of the year as soon as the proper paperwork is executed. All activities proposed under this proposal should be completed by December 2019.

The proposed project is NOT located on a Federal facility.



Background Data:

The Round Valley Indian Tribes (RVIT) are a Federally Recognized Confederation of seven Tribes. The RVIT Reservation consist of approximately 30,000 acres of diverse habitat ranging from the flat Round Valley floor at ~ 1,380 feet to surrounding hillsides and mountainous peaks (~ 4,950' elev.) contained within the remote California Coast Range of northern Mendocino County. The original Reservation boundary established in 1857 encompassed approximately 103,000 acres and was defined by 3 Forks (Main, North and Middle) of the Eel River and 2 major tributaries (Hull and Williams Creeks) to the Eel system. The current 30,000 acres of tribal lands are scattered throughout the historic boundaries in a checkerboard pattern of ownerships ranging from rural residential, ranches and timber companies. With the influx of white settlers into the valley came profound changes to the environmental landscape as a result of logging, farming and ranching activities. Mill Creek, once a prolific salmon and steelhead bearing stream system was a pristine ecosystem that functioned properly as a stream system should.



GENERAL VICINITY MAP

Mill Creek was identified as "the primary recharge aquifer" and as "having the best fishery potential in the Valley".¹ As Mill Creek descends from the foothills to the valley floor, a series of side channels began to develop, resulting in an increase in stream channel width. Over the decades, these side channels have created a channel width in excess of 750 feet! This "riparian-free" condition perpetuates a number of obvious environmental (physical and biological) problems, most notably; severe bank erosion, absence of shade, woody and vegetative debris, an early cessation of water flow, heating of the water and a myriad of other negative factors resulting in poor fish & wildlife habitats associated with lack of Riparian ecological function. (See **Appendix A** for pre and post pictures of the Mill Creek Restoration and riparian conditions).

¹ USDA SCS IDT notes re: Covelo Mill Creek Field Visit, May 1, 1990



Due to Mill Creeks' intrinsic value to the entire Round Valley community and its residential, commercial and agricultural interests, as well as its environmental importance to wild runs of Chinook salmon and Steelhead that utilize Mill Creek for spawning and rearing purposes, the Tribe made Mill Creek a top priority for restoration efforts in 1998. The Tribes intent to restore Mill Creek was to two-fold. The first goal <u>was</u> to restore Mill Creek (via the Mill Creek SRP) to a single thread, primary channel system similar to the conditions found both upstream and downstream of the Project Area while planting baseline riparian vegetation in conjunction with restoration activities (See Appendix A).

The second goal is the restoration of the Riparian Corridor, so that the project reach will eventually blend into and resemble the riparian conditions and ecological functions that are currently being performed both upstream and downstream of the Project area (See Appendix A, Picture 9). In 2000, the Tribe began its efforts to restore Mill Creek back to a single thread, riparian corridor lined stream system utilizing a variety of site specific Bioengineering techniques based on a comprehensive Stream Habitat Typing Inventory of Mill Creek, mapping /modeling data collected with NRCS and incorporating suggestions by Agency personnel.

In 2007, the Natural Resources Department (NRD) completed restoration efforts on the streams physical and channel development components. In 2008, the U.S. Economy suffered a major setback which severely curtailed Federal funding opportunities, the Tribes only means of implementing such restoration based projects. NRD continued its efforts to develop a functional riparian corridor ecosystem along Mill Creek on a much more fragmented basis. Currently, Mill Creek has only a fraction of the vegetation needed to be capable of fulfilling the many ecological roles that a functional riparian corridor plays in a healthy stream ecosystem. Most notably; stream bank stabilization, water stable stabilization, thermal relief, woody debris recruitment and nutrient supply. Riparian corridor conditions both upstream and downstream of the project area are in very good condition, what the Tribe seeks to do is emulate the riparian conditions found above and below the 2.4 mile project reach and establish those conditions within the proposed project area.

The Tribe recently completed riparian corridor development activities on Mill Creek through Grant funding from the Environmental Protection Agency (EPA) and the Natural Resources Conservation Service (NRCS), while these efforts were successful, the sheer size (~ 2.4 miles and 52 acres) of Project area dwarfs the thousands of additional trees planted and amount to a "drop in the bucket" of what is actually needed to create an effective riparian corridor. The Bureau of Reclamation's (BOR) past involvement with our Mill Creek Restoration effort has been instrumental to the growth and survival of all the vegetation planted in previous years, both those planted in conjunction with the original stream restoration effort and subsequent planting efforts supported by other supporting agencies such as: USFWS, NMFS, BIA, CDFW, et. al.

Unfortunately, trees grow slow and most funding agencies prefer to fund projects that produce results that are more quickly and dramatic realized. Trees and vegetation planted along Mill Creek typically take a minimum of three years (longer the farther they are from the active channel) before their root systems develop enough to become self-sustaining, or at least not totally dependent on supplemental watering throughout the hot, dry rocky conditions associated with the streambanks and floodplain of Mill Creek. Some trees planted in 2001 as part of the SRP work are now **over 30 feet tall.** Because of the time it takes for trees to become self-sufficient (~ 3 years) the Tribe will be submitting this proposal under Funding Group II consideration.



Project Description:

In order to fully achieve the objectives of this proposal, each of the specific components and activities necessary for the successful implementation of this riparian corridor development project have been identified and described in ensure that project implementation can continue from nearly any point in the process. The Schedule of Activities (Table 1) below highlights each work item and the time of the year that is most effective for conducting. The Tribe has been conducting these activities for more than 15 years, based on funding availability, we know what works and what does not as well as the best times to implement and the best methods to use. The methods and techniques described in this proposal are those that have proven themselves to be very effective at this location since the projects inception in 2001.

Annual Schedule of Activities.

<u>Typical Work Plan</u>

Task/Work Item	Responsible Personnel	Timeline (months)	Deliverables
Collecting Riparian	Tribes Natural	Sept -	Collecting a variety of limb cuttings
Vegetation for	Resources Dept	Oct	and seeds for propagation in the Tribes
Greenhouse	Restoration Crew		Greenhouse until ready for planting
Propagation			throughout the Riparian Corridor
Planting Riparian	Tribes Natural	Oct -	Begin a multi-year, multi-species,
Corridor	Resources Dept	May	multi-acre tree and vegetation planting
Vegetation	Restoration Crew		effort as part of the Riparian Corridor
			development component of this project
Dripline	Tribes Natural	Apr -	Develops the infrastructure necessary
Installation for	Resources Dept	June	for the ease of watering the riparian
Riparian	Restoration Crew		vegetation planted in conjunction with
Vegetation			riparian corridor development efforts
Watering Riparian	Tribes Natural	June -	Watering the planted vegetation for
Corridor	Resources Dept	Oct	approximately 3 years - typical length
Vegetation	Heavy Equipment		of time necessary for vegetation to
	Crew		become self-sustaining
Collecting Riparian	Tribes Natural	Sept -	Collecting a variety of limb cuttings
Vegetation for	Resources Dept	Oct	and seeds for propagation in the Tribes
Greenhouse	Restoration Crew		Greenhouse until ready for planting
Propagation			throughout the Riparian Corridor
Planting Riparian	Tribes Natural	Oct -	Begin a multi-year, multi-species,
Corridor	Resources Dept	Dec	multi-acre tree and vegetation planting
Vegetation	Restoration Crew		effort as part of the Riparian Corridor
			development component of this project
Final Report	Project Biologist	Dec	Final Report
Preparation			

Table 1. Work Plan Schedule.



To facilitate a streamline and efficient process for the riparian corridor development (RCD), each of the fundamental restoration components and work items will be discussed by:

- **Season** to describe the most prevalent work activities associated with that time of the year. (Fall, Winter, Spring & Summer).
- **Riparian Corridor Development Zones** ("**Zones**") Describe the selection and placement of the various types of vegetation to be used throughout the project as a function of distance from the active channel (**See Appendix B**).
- Planting Areas (Area) Due to the large size (2.4 linear miles) of the project, the project area will be divided into thirds (Area 1, Area 2 or Area 3) that will describe the relative position of the activity within the project area where riparian corridor development activities will be performed. (See Appendix C Figures 2 4)
- Sites 25 specific work sites have been identified w/in the 3 Planting Areas.

FALL (September, October & November)

As the long, hot days of summer begin to give way to the shorter, cooler days of fall, profound changes begin to occur to the physiology of the vegetation in preparation for a period of winter dormancy. This seasonal transition is marked by the cessation of supplemental watering activities that have kept the planted vegetation alive during the summer growing months and denotes the onset of a collection of vegetative cuttings (sprigs) and seeds that will propagated in the greenhouse during the upcoming winter months.

The exact timing of when watering efforts will be terminated for the season will depend on weather conditions being experienced and shall be determined by the RCDP Project Leader. Collection of cuttings, sprigs and seeds will also be determined by weather conditions but typically occurs once the first frost and/or wet weather conditions arrive. Once the first frost and/or wet weather conditions and sprigs will begin for propagation in the greenhouse and planting efforts will commence above the bank- full level.

Watering Activities:

- Reduce and cease supplemental watering activities
- Remove waterlines from vegetation placed within the active channel, i.e. willow walls and interstitial sprigs
- Make necessary repairs to the Water Trucks, Backhoe and Excavator in preparation for next seasons activities
- "Winterize" the equipment.

Greenhouse Activities:

- Repair and prepare the greenhouse for the winter propagation activities
- Collection of sprigs & seeds for winter propagation
- Propagation of Sprigs & Seeds
- Care of Sprigs & Seedlings

Planting Activities:

- Collect and plant freshly harvested willow and cottonwoods cuttings



WINTER (December, January, February)

The winter months of Covelo typically consist of a series of cold, wet storm systems that bring monthly averages of 8.7, 7.8 & 7.2 inches of rainfall to the area, respectively. During this period, RCD activities will focus on the collection of sprig cuttings for greenhouse propagation and planting sprigs throughout the floodplains of Zones 2 & 3, as weather conditions permit.

Watering Activities:

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Suspended.

Greenhouse Activities:

- Collection of sprigs and seeds for propagation
- Propagation and care of sprigs and seedling stock
- Transplanting of sprig cuttings to creek as weather conditions permit.

Planting Activities:

- Collection of live limbs and sprigs and planting them directly within Zones 2 and 3.
- Transplanting sprigs from Greenhouse to streamside, as weather conditions permit.

SPRING (March, April, May)

The spring months in Covelo provide a range of weather conditions ranging from the possibility of rain and snow to temperatures that may reach into the 90's. Average rainfall for the 3 month period ranges between 2.53 and 0.53 inches, respectively. Due to the variability of weather conditions, riparian corridor development activities will vary accordingly, making the most out of what the weather has to offer.

Watering Activities:

- Check and repair waterline systems
- Resume watering (date dependant on weather conditions)

Greenhouse Activities:

- "Season" vegetation from greenhouse for transplanting to the banks of Mill Creek.
- Propagation & care of sprigs and seedling stock until transferred to Mill Creek.

Planting Activities:

- Plant propagated vegetation along banks of Mill Creek according to species and need in designated Planting Areas and Zones
- Plantings will follow the follow the guidelines regarding spacing and techniques described in Planting Techniques

SUMMER (June, July, August)

The summer months of Covelo are generally hot (Avg. temperature $> 90^{\circ}$ F) and dry (Avg. rainfall < 0.25") and are no longer conducive for planting additional vegetation, therefore, activities will focus on watering vegetation and maintaining the Cell waterline systems.



Watering Activities:

- Watering is the primary activity!

Greenhouse Activities:

- Complete transplanting of remaining Greenhouse stock to banks of Mill Creek
- Cleaning & Maintenance for summer cessation of activities

Planting Activities:

- Remaining Greenhouse vegetation will be planted along Mill Creek, once completed, no planting until the onset of Fall.

Planting Techniques

The use of **Zones** and identified **Planting Sites** will be the foundation upon which the Riparian Corridor Development plan will be based upon. Due to the size of the project area and the relative diversity of riparian habitats available (as a function of distance from the active channel), the plants that will be most heavily utilized (Willows, Cottonwoods, Alders, Maples, Oaks, Buckeye). The following guidance is suggested regarding planting technique and a spatial distance to follow in order to provide measure of consistency throughout the Project Area as well as facilitate an effective foundation for monitoring survival and growth of planted vegetation to quantifying the effectiveness and benefits of the proposed Project once it is implemented.

Zone 1: (Active Channel to Bank Full Width)

Interstitial Sprigging -

Vegetation planted in Zone 1 will primarily consist of Willows. Cottonwoods and Alders and will be used for interstitial sprigging between boulder rip rap being utilized for bank protection (See Picture 4). For existing rip rap sections, sprigs with 1 - 3" diameters and 4' lengths will be pounded between the boulders to the greatest depth possible (minimum of 2') making sure that sprigs are not "upside down" and that the pounded end will be cut to a clean end beyond any splitting and then sealed with Pruning Seal to minimize moisture loss and prevent bug or disease entry. Interstitial sprigging will spaced according to boulder size and where the 2' minimum depth can be achieved. To aid in attainment of the 2' depth minimum, 2" rebar stakes can be used to test drive holes before sprigs are inserted and driven. Interstitial sprigging will occur on a limited basis due to its relatively high effort per plant ratio and only at the direction of the Project Biologist.



Picture 4. Interstitial Sprigging.



The preferred method to incorporate willows among boulder rip rap reaches will be to incorporate a bed of willows under future placement of boulders. The bed of willows will be placed so that limbs are extending upward and outward beyond the boulders. Before final bolder placement, willows will be covered with a 3"layer of streambed soils/small gravel material and watered heavily before boulder rip rap is set in place. Cottonwood sprigs (~ 5' lengths) should also be incorporated with this method and shall be placed against the bank pointing upward at ~ 10 - 15 foot intervals.

Willow Walls – are utilized at the intersection where bank full meets bank slope. Timing is critical in the successful development of a willow wall and needs to be implemented in conjunction with receding surface water flow. A backhoe is used to dig as deep a trench as possible (while maintaining trench wall stability) down into the water table at the intersection of bank slope and bank full width and parallel with the stream for the designated reach. Fresh Willow limbs cut to 7 - 10' lengths and should be ready for planting into the trench (which should be at least two feet deep from water seepage) approximately 18" apart. Cottonwoods, also 7 - 10' lengths, can be planted among the willows of the Willow Wall and should be spaced approximately 10' apart. Once the Willows and Cottonwoods are placed upright in the trench and spaced appropriately, the backhoe will then fill in the trench with the excavated material. The Water truck should be onsite and set up with a firehose to spray the vegetation and backfill material as the backfilling occurs to help mobilize the finer soil materials to make better contact with the vegetation, while taking care to ensure that applied water stays within the trench where needed.



Picture 5. Willow Wall planted in wetted trench adjacent to point where water flow goes subterranean.



Willow Wall planting has a narrow window of opportunity; therefore, water levels should be watched carefully for signs of going subterranean in the upstream reaches. Once surface flow starts to recede, plans to start willow wall planting should be made so that planting efforts can follow the receding water level downstream. Great care will be taken to ensure that contact between surface water and heavy equipment is avoided or minimized to the greatest extent possible and only if water has become subterranean directly downstream.

Willow Baffles – are similar to Willow Walls in form, function and planting methodology, the primary difference is that Willow Baffles are planted at an angle to the stream bank rather than parallel to it. Willow Baffles are to be used when stream flow is to be altered to produce a desired hydrological effect (deposition or deflection) at site specific locations. Willow baffles are typically used in conjunction with boulder rip rap as a bioengineering technique to achieve a restoration goal and are to be designed on a site by site basis by the Project Biologist.

Zone 2 (Bank Full Width + 30 Feet)

Vegetation planted in this zone will primarily consist of Alders, Cottonwoods, Poplars, Buckeye and Maple. Areas for planting have been identified in Appendix C Figures 2-4. Prioritization of planting efforts will be determined by the Project Biologist on a yearly basis.

Vegetation planted among Zone 2 will consist primarily of freshly cut sprigs collected locally and planted directly, or transplants propagated in the Greenhouse and transferred to the stream. Due to the rocky composition of the substrate, use of the Tribes Backhoe is the preferred method for digging holes at 10 - 15 foot intervals to a proper depth (at least 80% of the sprigs length). A two man crew for this operation works well and consists of one backhoe operator to dig and re-fill each hole each hole and one assistant to stock each hole with either a propagated tree from the Greenhouse or a freshly cut sprig and then sufficiently water the planted vegetation so to ensure the interface of the planted vegetation and the surrounding ground is wetted.

This procedure works well as an "assembly line" type operation for planting vegetation throughout large areas in an efficient manner. If a third assistant is available, then development of the waterline system (1/2" hose for distribution with a 1/8" spaghetti line delivery to the plant) for the Cell can be conducted simultaneously and development of a small indentation around the base of the sprig or transplant will help concentrate the water to the plant for easier water capture and uptake. In conjunction with the indentation, a perimeter of larger cobbles should be placed around the plantings to help identify and protect it from careless ATV riders.

A certain level of mortality is expected among the harsh environmental conditions of Mill Creek, therefore replacement planting will be conducted annually among each Cell of each Planting Area in order to make full use of existing water lines and watering effort. Replacement plants will utilize the same site of the former occupant, the use of sprigs will be the primary method replacement due to relative ease and expediency of this process.



Zone 3 (Floodplain Beyond Zone 2)

Zone 3 vegetation consists of trees that are more tolerant of drier conditions found at greater distance from the active channel. Tree species naturally occurring among the floodplains of Round Valley include Buckeye, Maple, Oak and Manzanita. Local seed stock will be collected and propagated in the Greenhouse for subsequent planting in throughout the floodplains of Mill Creek. Efforts for Zone 3 will take place on a limited basis where suitable as prescribed by the Project Biologist since Zone 1 & 2 planting will take priority.

Planting Sites

Due to the large project area involved, it has been divided into 3 approximately equal sections that will assist in the development and description of a systematic manner to describe planting efforts and results. (See Appendix C, Figures 2 - 4)

Vegetation Watering & Propagation

As the aerial photos (Appendix C) of the Project Area demonstrates, this is a <u>BIG</u> Project Area. The Tribe has persevered in reaching a successful conclusion to the Mill Creek Restoration Project. We have been successful in our vegetation planting efforts (as far as intermittent funding has allowed) and we have developed a methodology that has proven itself successful in watering large numbers of trees in a large area in a relatively short amount of time using the "Cell" drip line watering methodology (**Appendix D**). What we need is a multi-year funding commitment (BOR) that will allow the Tribe to make a *significant* stride forward toward the completion of this final riparian development component by ensuring that we will have the funding to plant and water ~ 30,000 trees and shrubs along Mill Creek. Past years efforts have amounted to several drops in a very big bucket, what BOR funding will provide will amount to almost *Filling* the bucket!

The Tribe has two water trucks for use on this project, one will need some maintenance and parts to get it ready for work, the other truck is ready to go. As Appendix D, Picture 10 illustrates, the water truck connects to the 1½" main waterline which subsequently supports several smaller ½" waterlines which connect to 1/8 waterlines that dispense water to the planted vegetation (See Picture 11). The water truck pumps water out to all the plants planted through the entire Cell. A large area of streambank may contain a series of several adjacent Cells which can be serviced by a Water Truck that systematically works its way through a planted area stopping and hooking up to the main waterline for each Cell. It is a remarkably effective method for planting and watering a large number / area of trees in a very timely manner (See Picture 12).

Riparian Vegetation / Propagation Greenhouse

<u>*Riparian Vegetation*</u> – The extensive use of riparian vegetation will be utilized both above and below bank full discharge depending on the purpose of the vegetation by site prescription needed. Above bank full (Zones 2 & 3) will typically involve trees (Cottonwoods, Alders, Willows, Poplars, Maple, Buckeye, Oak) and other native species typically found along the



banks and floodplains of other stream systems with Round Valley. Below bank full (Zone 1) vegetation will primarily utilize Willows, Alders, Cottonwoods and native grasses and sedges collected within Round Valley. In order to facilitate the high demand for riparian vegetation needed for this Project, the Tribes Natural Resources Department developed a Greenhouse for the propagation of riparian corridor vegetation (See Picture 9). To supplement what the Greenhouse can produce, The Tribe also has the ability to collect fresh Willow and Cottonwood cuttings for sprigging, brush mattresses, willow walls, live weirs or whatever vegetative needs are identified.

Performance Measures:

The goal of this project is to develop and restore a functional riparian corridor along 2.4 miles of Mill Creek, the benefits that this project will impart are multiple and include:

1. Providing a direct benefits to several State and Federal Listed species of salmonids, amphibians and reptiles whose life cycles rely upon water remaining in the creek during the summer month,

2. Increasing streambank stability against erosion,

3. Improved surface water retention during the summer as a result of increased shading and subsequent cooling effects,

4. Improved and increased water table stability along the channel course as a result of the wicking action from the root structures associated with the thousands of trees and vegetation planted along Mill Creeks' riparian corridor.

5. Improve Mill Creeks wetted characteristics during summer and drought conditions by creating a riparian buffer capable of tapping into the ground water associated with Mill Creek to provide shade and a cooling effect for the nearby ecosystems and wildlife.

6. Increased vegetation lushness along Mill Creek will also serve to protect and stabilize Mill Creek against the effects of Climate Change when the weather conditions shift to the opposite extreme and creates more frequent and severe flood events.

The very nature of the proposed Project categorically addresses and improve each of the factors listed above as the result of a healthy, functional riparian corridor. In addition, a healthy riparian corridor also improves: water quality, woody debris recruitment, ground water exchange and the physical process of pollutant filtering and removal which all culminate in improved water quality conditions. As mentioned earlier, and is important to reiterate, Mill Creek *is* the primary aquifer recharge system for Round Valley and *is* the primary source for residential water supplies.

The definition and characterization of the Project area by specific Planting Zones and Planting Sites (described previously) provides an excellent platform to develop a comprehensive monitoring methodology to determine the relative effectiveness of planting efforts regarding a variety of metrics. Environmental results (outputs) of this proposed activity will be measured (*literally*) by the:

- Acres of riparian area restored,
- Distance of stream bank planted,
- Number of Willow weirs planted,
- Number of feet Willow walls / stream bank protected,



- Length of stream bank protected by re-directed flow and
- Number of trees and shrubs planted and
- Percentage of surviving vegetation expressed as a function of time (monitored by NRD).

The "beauty" of this Project is that it continues to improve on its own in all aspects of what it provides as a function of time as the riparian vegetation continues to grow, mature and reproduces itself along the banks of Mill Creek. As the Project continues to grow and mature, so does its ability to resist effects of Climate Change on both ends of the spectrum against buffering the Mill Creek ecosystem against the Droughts of summer and the floods of winter with each passing year.

Evaluation Criteria:

Evaluation Criteria has been cut and pasted into the application below to ensure that all necessary information is adequately addressed.

E.1.1. Evaluation Criterion A—Project Benefits

Please describe how the proposed project will improve drought resiliency, including: • Will the project make additional water supplies available?

The proposed project will make **existing** water supplies that are currently subsurface (both in the water table & the stream surface flow that goes subterranean during summer) to become **more available** for use by fish, wildlife, people, vegetation & the entire stream ecosystem throughout the Mill Creek Project area. The Project area is located at the upstream point in the Valley so that the benefits gained here "trickle down" to the entire watercourse downstream and throughout the Valley floor as the amount of existing water lost to evaporation is reduced and subsequent gains to water supply are, in a manner of speaking, made available to other resources.

Surface water not lost to evaporation will also be cooled by riparian shading and the water table along and within the Mill Creek channel will remain and be drawn closer to the surface through the wicking action of the riparian vegetation roots, hence will be more readily available to fish and wildlife species dependent on stream ecosystems for all, or part, of their life cycles.

• If so, what is the estimated quantity of additional supply the project will provide and how was this estimate calculated?

Not Applicable – No additional supply of water will be added, just existing water will become more available for use through a redistribution through natural processes.

• What percentage of the total water supply does the additional water supply represent? How was this estimate calculated?

Not Applicable – No additional water supply added, just a reduction in the amount lost to evaporation and a re-allotment of subterranean distribution.

• Provide a brief qualitative description of the degree/significance of the benefits associated with the additional water supplies.

The existing supply of water that flows through, under and adjacent to the Mill Creek system that is typically lost to evaporation and subterranean flow during the hot summer months will be "re-directed" via the natural processes associated with and produced by a functioning riparian corridor. As the planted vegetation takes root and matures to become a functional riparian



corridor, the developing root systems create an extensive root web that, depending on the species of vegetation, either radiates outward with many small roots creating a dense root ball or will send downward a tap root deep into the ground. Both types of root structures multiplied by the ~ 10,000 trees and vegetation that will be planted annually during each of the three years of the proposed project will create a significant hydraulic wicking action that will tap into the water table and draw moisture upwards into the root system. As the trees and vegetation continue to grow and mature, the foliage and canopy of the vegetation will also continue to grow and spread out providing shade to the water and cooling it and reducing evaporation rates as well as cooling the streambanks and ground temperatures, also reducing evaporative losses. The combined effect of these two actions have been shown to have a significant effect on increasing water table levels to fill pools that, prior to the development of the riparian corridor vegetation, would normally go dry during the summer months.

Within just two years of completion of the Mill Creek Restoration work, we noticed surface water flow continuing longer into the summer months through the project area before going subterranean and then surface water flow returning to the Project area earlier in the fall months than had occurred in the years prior to stream restoration efforts. We have seen firsthand that Mill Creek is very responsive to restoration and riparian development activities. By completing the riparian corridor component, we are confident that the natural processes that a functional riparian corridor provides will have a significant beneficial effect to essential habitat of the fish, amphibian, reptiles and assorted other wildlife that rely on Mill Creek and the riparian vegetation that lines it banks. The benefits and stability of the riparian vegetation continue to improve their benefits with the passage of time and vegetative growth.

• How will the project build long-term resilience to drought? How many years will the project continue to provide benefits?

Just as an "Oasis" in the desert provides a measure of ecosystem stability amidst the harsh, dry surrounding conditions, ... a ribbon of green ecosystem through the currently harsh, dry floodplain of the Mill Creek Project area can serve as an anchor for other vegetation and wildlife species to build upon to resist the effects of drought and produce a cooling micro-climate effect against the reflective and radiating heat that the barren, rock covered emanate to the surrounding environments.

Due to the procreative nature of plants, once the planted vegetation begins to take root and becomes established, they will continue to become larger and more effective with each passing year and start seeding the surrounding areas which will augment the planted sections. Once this process begins, the perpetual nature of vegetation will continue to grow in size, stability and effectiveness for a number of years that reach into perpetuity.

• How will the project improve the management of water supplies?

Not Applicable- Mill Creek is natural stream system that is not directly managed by human intervention.

• Will the project make new information available to water managers? If so, what is that information and how will it improve water management?

The natural response of the water table associated with the Mill Creek recharge system and the effects that the development of a functional riparian corridor system will be detectable, not only



the NRD stream monitoring program, but also by the Tribes EPA Program via several water quality monitoring sites they have on Mill Creek. The Tribes Water Department also monitors several Wells throughout the Valley floor that may show a response. Tree growth is a slow process and it will most likely be a number of years before such results start to become apparent, but once they do, the effects on water table levels, water quality, in-stream and near-stream habitats should indicate the beneficial effects that the project is having on the Mill Creek ecosystem and the Round Valley environment. This information may direct future management of the numerous riparian corridors that populate the Round Valley floor.

• Will the project have benefits to fish, wildlife, or the environment? If so, describe those benefits.

Absolutely!!! The entire premise of this project is to benefit fish, wildlife and the environment on a myriad of levels that a functional riparian corridor can impart to each of these categories.

Fish – Mill Creek currently supports wild, native runs of steelhead, Chinook salmon and occasionally a Coho Salmon, all Federally Listed T & E Species. The benefit to these species is as diverse as the number of roles that a functional riparian corridor plays and as essential as the water that the riparian corridor helps to protect. The benefits that the development of a functional riparian corridor will provide includes, but is not limited to:

- Riparian vegetation provides shade to the stream and its surrounding habitat thus reducing evaporation rates and prolonging the retention of surface flow, creating cooler microclimates that provide shelter for various fish and wildlife species, and cool ground temperatures which help stabilize ground water levels.
- Streambank stabilization vegetation planted parallel to streamflow at slightly above bank full width will protect the streambanks from erosion which will reduce the amount of "fines" entering the stream (which is essential to egg survival while in the redd), prevent channel meander and side-channel development, provides bank stability that allows planted vegetation to stay in one place and grow and mature, as opposed to getting washed out after a year or two and provides structure to slow water flow during periods of high water that creates not only a velocity buffer between thalweg flow, but provides cover structure and habitat for fish protection.
- Root growth of vegetation planted at bank full level is key for tapping into the streams water level and creates a "wicking action" that helps draw up and retain water / moisture closer to the surface. This function, combined with vegetative shading promote retention of the water table and longevity of surface water flows. Compare "Before and After "Pictures) pictures at the lower reach is and the vegetated area are within a ¼ mile of each other, note the correlation between the presence of water and a functional riparian corridor and the lack thereof.

Wildlife – Mill Creek is also home to the Foothill Yellow Legged Frog and the Northwestern Pond Turtle, both State Listed Species of Concern. While these species do have measure of terrestrial capability to escape the annual cessation of water flow that occurs with the onset of summer, frog egg masses and juvenile frogs caught in the shallows pools of water before flows go subterranean are virtually assured of death, likewise for any juvenile steelhead or lamprey that may also inhabit this 2.4 mile reach of Mill Creek. Covelo is also home to a wide variety of migratory birds. The riparian free reach of the Project area is a desolate, nest free zone compared to the nest rich environment associated with the riparian rich zone.



Environment – The two environmental conditions (those with vegetation and those without) convey numerous contrasts in both habitat quality and quantity and between a healthy environment and not so healthy environment, again, the presence or absence of a riparian corridor and water. In addition to the obvious and visible environmental characteristics, environmental conditions such as what is occurring in hyporheic zone beneath and alongside a streambed where the mixing of shallow groundwater and surface waters intermingle and the aforementioned root structures do their magic to wick those waters upward and to retain them. The presence of a viable, functioning riparian corridor also provides the baseline for ecosystems and food webs that exist among them that provide large and small woody debris for everything from channel morphology development to food sources for the smallest aquatic invertebrates, that in turn serve as food for the fish and wildlife associated with the lotic system of Mill Creek. An ecosystem that is tapped into groundwater source is more resilient to periods of drought.

• What is the estimated quantity of water that will be better managed as a result of this project?

Not Applicable- Mill Creek is natural stream system that is not directly managed by human intervention, however, the USGS has two Gauging Stations on Mill Creek (#'s 11473530 & 11473700) that have been in service since 2011 and 2000, respectively. These can provide data that may help estimate the effectiveness of the riparian corridor as it develops over time.

• What percentage of the total water supply does the water better managed represent?

Not Applicable- Mill Creek is natural stream system that is not directly managed by human intervention.

• Provide a brief qualitative description of the degree/significance of anticipated water management benefits.

Not Applicable - Mill Creek is natural stream system that is not directly managed by human intervention, however, the benefits to fish, wildlife and the environment (as described above) are significant by fostering the return of natural processes to "manage" the system.

Environmental/Wildlife Projects

• What are the types and quantities of environmental benefits provided, such as the types of species and their numbers benefited, acreage of habitat improved, restored or protected, the status of the species of interest?

The overall environmental and ecological benefits to fish, wildlife and the environment were described in detail four questions prior to this one. In terms of project specifics, (species, numbers, acreage) that will benefit:

Fish:

- Chinook Salmon (Onchorhynchus tshawytscha)
 - Status: Federal Threatened

Numbers: The numbers vary according to precipitation received, the drier the year the lower the numbers. As a population, Mill Creek numbers are getting critical, returning spawning adults' number below 100 based on creel surveys and spawning carcass counts.

- Coho Salmon (O. kisutch)

Status: Federal – Endangered

State - Endangered



Numbers: The numbers vary according to precipitation received, the drier the year the lower the numbers. As a population, Mill Creek Coho numbers are extremely sporadic, the last Coho observed in Mill Creek was 2006. Juvenile Coho spend the first few years of their life cycle in their natal stream, the annual desiccation of 2.4 miles of rearing habitat could be disastrous for any coho caught in this reach during the onset of summer.

- Steelhead (O. mykiss irideus)

Status: Federal – Threatened

Numbers: The numbers also vary according to precipitation received, the drier the year the lower the numbers. As a population, Mill Creek steelhead are the most populous and dependable species to return to Round Valley. The steelhead population is the salmonid species that would benefit most from the restoration of the riparian corridor and stabilization of the hyporheic water table since juvenile steelhead use Mill Creek for several years of their life cycle before they migrate downstream to begin their salt water cycle. The Project area is ~2.4 miles long at the upstream edge of the valley, improvements here will improve conditions downstream throughout the valley floor.

- **Pacific Lamprey** (*Entosphenus tridentatus*)

Status: CDFW – Species of Special Concern

Numbers: The numbers also vary according to precipitation received, the drier the year the lower the numbers. As a population, Mill Creek lamprey are probably being hit the hardest as a result of the dry stream conditions that exist during the summer months since the lamprey typically commence their spawning activity in the late spring months just before subterranean flow begins and desiccation of the streambed commences.

The Pacific Lamprey is another species that would benefit greatly from the restoration of the riparian corridor and stabilization of the hyporheic zone/ water table since juvenile lamprey burrow into the sand and gravel of the active channel for several years as part of their life cycle before they migrate downstream to begin their salt water cycle. The Project area is ~2.4 miles long at the upstream edge of the valley, improvements here will improve conditions downstream throughout the valley floor. During a Habitat Typing survey conducted by the Tribe for salmonid restoration purposes in 1998, a total of 214 Lamprey redds were counted, in recent years, few if any Lamprey redds were observed.

Wildlife:

- Foothill Yellow-legged Frog (Rana boylii).

Status: CDFW – Species of Special Concern

Numbers: Foothill yellow-legged frogs (FYLF) are relatively common within the stream systems of Round Valley, no formal surveys have been conducted, however they are observed in conjunction with various stream surveys and activities. The fact that FYLF's lay their egg masses in Mill Creek during the spring and summer months puts their offspring in jeopardy of mortality by desiccation as surface flow goes subterranean during the summer months.

The FHLF is another species that would benefit greatly and directly from the restoration of the riparian corridor and stabilization of the hyporheic zone/ water table.



- Western Pond Turtle – (*Emys marmorata*)

Status: CDFW - Species of Special Concern

Numbers: The Western Pond Turtle is also a relatively common species found within the stream systems of Round Valley. No formal surveys have been conducted, however they are commonly observed sunning on rocks near slow or standing waters of Mill Creek during various stream surveys and activities. Western Pond Turtles are associated with Mill Creek and riparian habitats for at least a portion of their life cycle, if that portion can be extended and improved, the species will also likely benefit.

The Western Pond Turtle is another species that would benefit greatly and directly from the restoration of the riparian corridor and stabilization of the hyporheic zone/ water table.

Acreage of habitat improved & restored:

The Mill Creek Project area is approximately 2.4 miles long and we will be focusing on developing the riparian corridor from approximately bank full width outwards and up onto the floodplain for approximately 50 feet along EACH bank. This endeavor involves an approximate area of 30.3 acres. We expect to plant approximately 10,000 pieces of riparian vegetation annually. The Project area does have reaches where riparian vegetation has been established to a degree. This proposed project will focus on filling the gaps where:

- little or no riparian vegetation exists,
- streambank stability is at risk or
- additional vegetation planting that will augment existing vegetation.

As such, our goal is to plant and water approximately *10.1 acres per year for each of the 3 years* being sought through this Funding Group II Project.

• How has the drought impacted the species? How was this estimate calculated?

To answer this question, one must consider the importance of water to the species involved as well as to its life cycle. For the fish involved (Listed and non-listed species) the 2.4 mile reach of stream is absolutely essential. Drought conditions have been particularly lethal on steelhead, lamprey and Foothill yellow-legged frogs due to their vulnerability to drought induced low flows and much earlier cessation of surface water flow through the stream course and hyporheic zone. During drought years, the severity of subterranean desiccation are undoubtedly more severe and last longer and affects greater reaches of stream and riparian habitat. No direct studies have been conducted to determine the extent of impact that the past several years of drought have had on the already declining number of these species to differentiate the cause, but it is relatively safe to say that every juvenile steelhead, lamprey or FYLF unfortunate enough to reside in this reach of stream during the cessation of surface flow in the Spring did not survive to the Fall.

The drought has also had a negative effect on the environmental conditions that indirectly impact the aforementioned species. The other two salmonid species (Chinook & Coho) depend on adequate rainfall to allow passage over many miles of rivers and streams to reach their natal spawning system. A lack of rain can result in sufficient water flows to allow passage over, or past, low flow fish barriers thus preventing them from reaching and spawning in their natal stream and force them to spawn elsewhere downstream or in the main river system, thus further reducing future generations of fish from returning to Mill Creek. Drought, and the subsequent re-routing or re-directing of spawning activities from Mill Creek contribute directly to the declining numbers of returning salmon.



The past several years of drought have also been a brutal hindrance to natural success of vegetation establishment from seed due to the hot, dry Mediterranean like summer climate of Round Valley. Last summer, NRD crews noticed large numbers of grasshoppers were having an extremely adverse effect (eating) on riparian vegetation, drought conditions seem to favor such insect outbreaks, thus adding an additional negative impact to the lotic riparian environment and the myriad of fish, wildlife that depend on the hyporheic ecosystem.

If the proposed project will benefit federally listed threatened or endangered species please consider the following elements:

• Is the species subject to a recovery plan or conservation plan under the ESA?

Yes, almost. The National Marine Fisheries Service (NMFS) has developed the <u>2015 Public</u> <u>Draft Coastal Multispecies Recovery Plan.</u> This document addresses the North Central California Coast Recovery Domain for California Coastal Chinook, Northern California Steelhead and Central California Coast Steelhead. This document cites "severe weather patterns" as one of the sources of major impairments adversely affect salmonid populations. Our proposed Project will also address the opposite of drought ... floods. A stable riparian vegetation corridor provides an effective, protective buffer/barrier between the erosive scouring power of moving water and the terrestrial materials that comprise the stream bank! This has an extremely beneficial role not only for stabilizing stream channels against erosion and bank failure, but it also curtails the sediment loading of fines that can have deleterious effects on salmonid eggs developing within the redds and resulting in suffocation of the eggs. Regarding Coho Salmon, NMFS released the Southern Oregon/Northern California Coast (SONCC) Coho Salmon Recovery Plan, September 30, 2014.

• What is the relationship of the species to water supply?

The relationship between these salmonid fish species and water is about as baseline to survival as possible for any species is to required environment. Maybe even more so since salmonids not only require water for their very survival, but they require relatively narrow range of temperature and oxygen limits unlike other fish that can survive almost anything if their gill stay wet. These limitations in tolerance require healthy, functional riparian corridors and ecosystems to provide suitable conditions during the summer months.

• What is the extent of the proposed project that would reduce the likelihood of listing, or would otherwise improve the status of the species?

Mill Creek is a relatively small stream in one of California's largest Wild and Scenic River Systems, and the decline of salmonid populations throughout the Pacific Northwest is the result numerous and diverse causes, therefore the extent that restoring Mill Creeks' riparian corridor and subsequent ecosystems to the degree that it would have any effect on the status of these already Listed Species is unlikely due to the sheer size of the problems facing salmonids. However, the phrase "Think Globally, Act Locally" come to mind with regard to dealing with large problems on a local basis and if enough people did so in their local areas, the cumulative effect would make a difference on the larger level. We may not make a significant improvement to the status of Chinook, Coho and Steelhead throughout the Pacific Northwest population, but we will certainly make a significant improvement to the status of any Chinook, Coho or Steelhead that utilizes Mill Creek for its efforts to propagate its species for generations to come.

• Is the species adversely affected by a Reclamation project? No.



E.1.2. Evaluation Criterion B—Drought Planning and Preparedness

Existing Drought Contingency Plan. If there is an existing drought contingency plan, please attach relevant sections. *(Note, this will not count against the application page limit).*

• Attach a copy of the applicable drought plan, or sections of the plan, as an appendix to your application. These pages will not be included in the total page count for the application.

Please See Appendix E for relevant sections of the <u>Round Valley Basin and Tribal Drought</u> Management Plan, Draft 2015.

• Explain how the applicable plan addresses drought. Proposals that reference plans clearly intended to prepare for and address drought will receive more points under this criterion.

As the title of the document "<u>Round Valley Basin and Tribal Drought Management Plan</u>, Draft 2015." Indicates, the plan deals with the Round Valley water Basin as a whole with Tribal and non-tribal water concerns identified. Please see the Appendix E for relevant topics that the Drought Management Plan addresses.

• Explain whether the drought plan was developed with input from multiple stakeholders. Was the drought plan developed through a collaborative process?

The <u>Round Valley Basin and Tribal Drought Management Plan</u> was developed for the Tribe, but to consider holistically the hydrology in the Valley from a Basin perspective. The Final version will expand its scope and include the other stakeholders in the Valley among other items that will make the Drought Management Plan more comprehensive.

• Does the drought plan include consideration of climate change impacts to water resources or drought?

The document alluded to it, but it did not address it very well, therefore it is one of the items that will be addressed in the Final document.

• Describe how your proposed drought resiliency project is supported by and existing drought plan.

The document was primarily a research document of existing records and current conditions, it does, however, make reference to riparian vegetation and phreatophytes (plants that have roots that can tap into the water table), but were referring to commercial crops of alfalfa, not willows and cottonwoods ...

• Does the drought plan identify the proposed project as a potential mitigation or response action?

No, again the document was primarily a research document of existing records and current conditions.

• Does the proposed project implement a goal or need identified in the drought plan? Yes, in the Summary section (page 5-5, included in the relevant pages in Appendix E).

• Describe how the proposed project is prioritized in the referenced drought plan?

The Drought Management Plan states "The Tribe may have an interest in reversing this and restoring wetlands and wildlife habitat ..."



E.1.3. Evaluation Criterion C—Severity of Actual or Potential Drought Impacts to be Addressed by the Project (20 points)

• What are the ongoing or potential drought impacts to specific sectors in the project area if no action is taken (and how severe are those impacts

If no action is taken, future drought conditions will only be exacerbated by an ever-growing population within the valley which puts an ever higher demand on an already limited commodity. Due to the isolated location of Round Valley, the impacts of drought are more profoundly felt because Round Valley does NOT have the option of tapping into a neighboring community for supplementing its supply of water. What we get from nature is what we have to work with! Drought impacts were so severe in Round Valley back in 2013-14 that several residences and part of the Indian Housing Community were without a reliable, sanitary water source for a period of time. The precarious situation that our remote communities faces against the threat of wildlife is exacerbated by drought conditions. During past wildfire events, CalFire utilizes water from the Eel River, however, in past years even reaches of the Eel R. had run dry.

In terms of natural resources, Round Valley supports several agricultural business endeavors (Pear Orchard, Hay fields and cattle) that are dependant of a reliable source of water for economic success. Likewise, Round Valley also has numerous creeks and streams which run throughout the valley floor that various fish and wildlife species (several of which are Federally Listed T&E species while others are State Listed as Species of Concern) that are directly dependant on these streams for their very survival. As drought conditions increase in frequency and severity, tensions among the various interests (tribal, non-tribal, commercial and residential) that all depend on water for their livelihoods are also likely to increase. The Tribe is in the process of developing a Drought Management Plan, (See Section E.1.2. Evaluation Criterion B. - Drought Planning and Preparedness *above*). This Draft document discusses a variety of drought and water use topics, and has identified critical future needs and management concerns that the Tribe will need to address for the final version of the document.

• Describe any projected increases to the severity or duration of drought in the project area resulting from climate change.

Drought predictions for California's northwest section seem to indicate a lessening drought effect, however, the past decade or so of droughts have taken their toll on the functionality of the riparian corridor that buffers Mill Creek's wildlife, hydrological function and its stability against seasonal weather extremes. If weather predictions are indeed correct, then now is the best time to implement these riparian restoration endeavors so that if we do indeed get more normal rainfalls in the winters, that rain can assist in the watering process and root development that is essential for long-term growth and stability of the riparian corridor, AND will also provide additional protection and bank stabilization to the streambanks along this 2.4 mile project.

To quote the FOA for this RFP from A.2. Objectives of this Funding Opportunity Announcement, page 2, "As stated on the National Drought Mitigation Center website, http://drought.unl.edu: "One frequently cited estimate from FEMA2 is that "mitigation" —taking steps ahead of time to prevent known impacts from a natural disaster—saves \$4 for every \$1 expended. Planning ahead is generally seen as more efficient and more effective than measures taken in crisis mode."" With this thought in mind, establishing the riparian corridor now, while the chance for a break in the drought is on the horizon, would make sense and facilitate the successful development of the proposed project rather than waiting until drought conditions return and *then* trying to plant approximately 30,000 trees in three years.



E.1.4. Evaluation Criterion D—Project Implementation (10 points)

• Describe the implementation plan of 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.

The implementation of the proposed riparian corridor development project was described in greater detail earlier in this document under Project Description (Page 6) which referenced the estimated project schedule that indicates the timelines involved for each of the different project components. We can begin project implementation at any point in the year once the appropriate paperwork has been finalized.

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

This project is "shovel ready and good to go." Since the Tribe is a Sovereign Nation, we work with the Permitting Agencies in a slightly different manner, but all of the environmental concerns addressed in the CEQA review are also addressed through the NEPA review. In addition, riparian vegetation planting efforts do not trigger Permit requirements if work does not come in contact with flowing water. As with previous years stream restoration efforts, Federal funding invokes the Nationwide 27 Permit for such activities. As such, we are good to go!

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

The proposed vegetation planting efforts does not require any engineering or design work for the implementation of this project, typically a can of spray paint and some flagging is sufficient.

• Describe any new policies or administrative actions required to implement the project. None, this Project is ready to implement.

E.1.5. Evaluation Criterion E—Nexus to Reclamation (10 points)

Describe the nexus between the proposed project and a Reclamation project or activity, including:

• How is the proposed project connected to a Reclamation project or activity?

Back in 2007, BOR provided funding that was used for riparian corridor watering support and preliminary Drought Management Assessment work through the BOR's States Emergency Drought Relief Act of 1991. Those funds are almost single-handedly responsible for much of the riparian vegetation that exists along Mill Creek to this day!

- Will the project help Reclamation meet trust responsibilities to any tribe(s)? Yes.
- \bullet Does the applicant receive Reclamation project water? No.
- \bullet Is the project on Reclamation project lands or involving Reclamation facilities? No.
- \bullet Is the project in the same basin as a Reclamation project or activity? No.
- Will the proposed work contribute water to a basin where a Reclamation project is located? Maybe? BOR *may* have a project somewhere downstream, but none that I am aware of.



D.2.2.5. Environmental and Cultural Resources Compliance

To allow Reclamation to assess the probable environmental and cultural resources impacts and costs associated with each application, all applicants must respond to the following list of questions focusing on National Environmental Policy Act (NEPA), Endangered Species Act (ESA), and National Historic Preservation Act (NHPA) requirements. Please answer the following questions to the best of your knowledge. The application should include the answers to:

• 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.

Project impacts will be correspondingly minimal to the nature of the project itself which consists of planting trees and vegetation. To minimize any potential impacts to water quality, all in-channel planting activities associated with willow wall development will be done when surface flow has gone subterranean. The smallest bucket size suitable for the equipment will be selected for the appropriate vegetation planting effort in order to minimize the ground-disturbing footprint. There is virtually no animal habitat along the barren, rocky streambanks of the project reach when the stream goes subterranean, except for perhaps a few Western Fence Lizards. Impacts to the environment are expected to be minimal during the implementation of the work, impacts to the environment are expected to be phenomenal as the project begins to take root and function as a riparian corridor should.

• 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?

Yes, we are aware of three listed species of salmonids that use, or have the potential to use, Mill Creek. In-channel tree planting work will be implemented once surface water flow within the reach has gone subterranean to ensure that NO fish or wildlife will be injured or adversely affected by project implementation activities. After activities are completed and the project begins to "take root" and mature, we certainly expect the completed project to have a very beneficial effect for the listed species that utilize Mill Creek.

• Are there wetlands or other surface waters inside the project boundaries that potentially fall under Clean Water Act (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? There is none.

• Will the proposed project result in any modification of or effects to, individual features of an irrigation system (e.g., head gates, canals, or flumes)? No.

• Are any buildings, structures, or features in the irrigation district listed or eligible for listing on the National Register of Historic Places? No.

• Are there any known archeological sites in the proposed project area? No.



• Will the proposed project have a disproportionately high and adverse effect on low income or minority populations?

No.

• Will the proposed project limit access to and ceremonial use of Indian sacred sites or result in other impacts on tribal lands?

No.

• Will the proposed project contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area? No.

D.2.2.6. Existing Drought Contingency Plan

The Tribe is in process of having a Drought Management Plan developed, the <u>Round Valley</u> <u>Basin and Tribal Drought Management Plan, Draft, August 1, 2015</u> by Stetson Engineering, Inc. Please See page 26 for *E.1.2. Evaluation Criterion B—Drought Planning and Preparedness*, . And Appendix E for relevant excerpted pages.

D.2.2.7. Letters of Support

See Appendix F.

D.2.2.8. Required Permits or Approvals

Applicants must state in the application whether any permits or approvals See *E.1.4. Evaluation Criterion D—Project Implementation* on Page 22 for details.

D.2.2.9. Official Resolution

See Appendix G



D.2.2.10. Project Budget

Funding Plan and Letters of Commitment Funding Plan

•How you will make your contribution to the cost share requirement, such as monetary and/or in-kind contributions and source funds contributed by the applicant (e.g., reserve account, tax revenue, and/or assessments).

The RVIT is not a "cash rich casino tribe", our remote location has hindered our potential for economic growth and development. When the timber industry collapsed several years ago, so did Covelo's primary economic source which left Covelo with a nearly 70% unemployment rate. What Covelo's remote location has taken away in terms of economic potential, it has provided the Tribe with an abundance of natural resources (gravel, vegetation and ironically enough water) which the Tribe can contribute toward the goal of restoring Mill Creek. These resources, if we were required to purchase them from an outside source in the quantities that we will be using, would add up to a significant amount of money. What the Tribe lacks in cash, we have in natural resources, and will utilize them as the Tribes in-kind / share of cost value for these resources as described in the attached Budget.

Similarly, the Tribe also has a variety of heavy equipment that it uses to implement various land management activities associated with managing a 32,000 acre Reservation. In addition to the natural resources the Tribe will contribute toward the Project, the Tribe is also willing to provide the equipment necessary to implement to work at a substantial discount (40%) off of the normal rental rate since the work supports the Tribes effort to restore Mill Creek. As the Budget indicates, the Tribe is making a significant contribution/investment of \$755,360 (52.3%) towards the completion of the Mill Creek Restoration Project, development of its Riparian Corridor and stabilization of the environment against drought and other climate extremes that the future most likely hold. Reclamation funds of \$689,101 (47.7%) will provide the cash assets necessary to implement the groundwork necessary for the next 3 years that will provide the foundation and stability needed to make a significant stride forward to completing one of the largest stream restoration projects in California's Indian Country.

This proposal contains a detailed Budget for Personnel Costs, Equipment Operating Expenses, Materials and Supplies and Indirect Costs for each year of the three year project life for both BOR expenses and Tribal Share of Costs. Tribal Share of Costs also include time contributions from the Managers of the NRD and the Tribal EPA Programs. The availability of the natural resources that the Tribe intends to put forth is readily available.

• Describe any costs incurred before the anticipated Project start date that you seek to include as project costs. For each cost, identify:

No Costs were incurred, nor anticipated to occur before the anticipated start date.

• Describe any funding requested or received from other Federal partners. Note: other sources of Federal funding may not be counted towards the cost share unless otherwise allowed by statute.

The Natural Resources Department currently has one funding request submitted to the Bureau of Indian Affairs for < \$100,000 to conduct riparian development work also, but given that we have not received BIA funds for any stream related restoration project for several years, we are



not counting on those funds to be made available. If BIA funding becomes available, it will not affect the Tribes Share of Cost because the Tribes Share of Cost is based on tribal resources being committed to the Project, not potential funding from potential sources.

• Describe any pending funding requests that have not yet been approved, and explain how the Project will be affected if such funding is denied.

As mentioned above, we have submitted a proposal to the BIA for Mill Creek Riparian Corridor Development activities. Our proposed Project with Reclamation will not be affected in any way, shape or form if BIA funding is not received. If it is received, Mill Creek is a BIG Project area and those activities will seamlessly blend in and augment the goals that this BOR proposal seeks to achieve. Likewise for funding that will be requested from NMFS, USFWS, NRCS, et. al. when their RFP's become available for projects that will support the Tribes efforts to restore and develop the Mill Creek Riparian Corridor Project.

FUNDING SOURCES	AMOUNT	
Non Federal Entities		
1. Round Valley Indian Tribes	755,360.00	
2. 3.		
3.		
Non Federal Subtotal	755,360.00	
Other Federal Entities		
1		
2		
3		
Other Federal Subtotal	0.00	
REQUESTED RECLAMATION FUNDING	689,101.00	

Table 1. Summary of Non-Federal and Federal Funding sources.

Letters of Commitment

Project funding provided by a source other than the applicant shall be supported with letters of commitment from these additional sources. This is a mandatory requirement.

AT this point, there are no other funding sources involved with this Project other than BOR and the Tribe.

Budget Proposal

The budget proposal should include detailed information on the categories listed below and must clearly identify all Project costs. Unit costs must be provided for all budget items including the cost of work to be provided by contractors. The budget proposal should also include any in-kind contributions of goods and services that will be provided to complete the Project.

The following Budget Proposal follows the Table 2 format and expands it to provide detailed, line item information for each budget component for each year of the Project as well as identifying BOR requested funds and Tribal Share of Costs for each component, each year and for total costs associated with the Project.



Fringe Benefits

The Fringe Rate (Staff Benefits) is a fixed rate of 26% that was determined by the Tribal Fiscal Department which covers benefits such all the standard rates for FICA, Health Insurance costs, , un-employment, Retirement, etc ...

Fringe for: Restoration Supervisor (57,120), + Technicians (135,000) + NRD Secretary $(21,700) = $213,820 \times 26\% = $55,593$ for all three years. Fringe amounts are also described for each individual for each year of the Project in the attached Budget Proposal (Pages 27 – 29) above.

Fringe (In-Kind) for the NRD Manager (\$26.775) + TEPA Manager (13,500) = $$40,275 \times 26\%$ = \$10,472 for all three years. Fringe amounts are also described for each individual for each year of the Project in the attached Budget Proposal (Pages 27 - 29) above.

Travel

No overnight or lengthy travel is necessary for the implementation of this project, everything we need is in the Valley. An NRD Vehicle (Ford F-150 Crew Cab) is essential for crew and equipment transportation to and from the site, collection of vegetation from throughout the Valley and delivery to the work sites averages about \$75 per week for fuel, oil and basic maintenance, therefore we estimate that Vehicle Fuel and Maintenance expenses will cost \$300 per month for 7 months ($300 \times 7 = 2,100$ per year for each of the 3 years of the Project = \$6,300 total.

Equipment

The Tribes Natural Resources Department has several pieces of heavy equipment that it uses for a variety of land management operations throughout its 30,000 acre Reservation. Since the Tribe has such a vested interest in seeing the Mill Creek Project completed, the standard rental rate for each type of equipment will waive that portion of the rental rate that typically goes toward the Tribe Heavy Equipment Fund which takes care repairing, replacing or maintaining the equipment and parts. This waiver will reduce the standard rental rate 40%. The remaining bill out rate will include: the Operator's wages, Fuel expenses and a minor fee to cover basic operating costs. The Tribe is not out to make money on this Project, we want to see it completed and by reducing the rate, we can stretch out BOR funds to get more work accomplished. The discounted rate will be counted towards helping the Tribe meet its In-Kind Match responsibility.

NRD normally rents their Water Trucks for \$80/Hr. with an operator, with the 40% rate break, the hourly rate becomes \$48/hr. Likewise for the Backhoe w/operator and the Excavator with operator, they normally bill out at \$75 and \$100 per hour, but with the 40% discount, those rates become \$45 and \$60 per hour. These add up to some significant savings over the course of 3 years. Equipment costs are available at the NRD for current Renal Rates described for each piece of equipment for each year of the Project in the attached Budget Proposal (Pages 27 - 29) above.



Materials and Supplies

Itemize supplies by major category, unit price, quantity, and purpose, such as whether the items are needed for office use, research, or construction. Identify how these costs were estimated (e.g., quotes, past experience, engineering estimates, or other methodology).

Irrigation Lines and Fittings: We will need to purchase several sizes of black irrigation line and fittings for watering the plants. The number of rolls and sizes needed will vary with project needs on a yearly basis, Page 2 of the Budget Proposal describes these needs on a yearly basis.

Water: This Project will require a lot of water to help get the ~ 12,000 pieces of vegetation being planted every year off to a good start and for watering them for the next 3 years until the can become self-sufficient. The Tribe has a Well that can fill the water trucks that will be used for watering the vegetation. We gave water a value of \$0.0035 per gallon to determine the Tribal In-Kind Match value for this resource. We estimate using approximately 7,500,000 gallons of water per year for watering riparian corridor vegetation based on: Two Water Trucks hauling 2,500 gallons of water per load for 10 loads per each for 150 days (2 x 2500 x 10 x 150) = 7,500,000 gallons. With a reasonable value of 0.0035 cents per gallon, the Tribes In-Kind Match equals \$31,500 annually. If water had to be trucked in, it would be **much more expensive**!

Vegetation: This riparian vegetation development project will also require lots of vegetation, ~10,000 living pieces (limbs, branches and sprigs) for various vegetation planting purposes throughout the Project area on an annual basis for three years. Some of this will require time and propagation effort in the Greenhouse, other pieces can simply be cut and planted in the ground. If we had to buy potted and propagated Willow and Cottonwood Sprigs, they would probably cost about \$4.00 ea. and if we could even buy a 6-8' live cut branches of Willow and Cottonwoods, they are bigger, but with less processing effort, we would estimate a relative value of \$6.00 each, therefore we will use the average value of \$5.00 each for vegetation. Using the average value of \$5.00 per piece of vegetation x 12,000 pieces of vegetation = \$60,000 annually.

Equipment: The Tribe possess various Restoration Equipment (Roto-hammers, generators, winches, chainsaws, etc... that are fundamental for implementing this type of work. If we had to rent this collection of equipment each year for implementation, it would cost ~ $$12,500 \times 3$ years = \$37,500.

Contractual

Only one Contractual consultant has been identified for this Project, Warren Mitchell. He is the original Biologist that was involved with every step of the Mill Creek Stream Restoration Project and is intimately familiar with Mill Creek and all implementation history. He will work with both NRD and TEPA Managers as well as the Restoration Supervisor on a close basis to ensure that riparian development efforts go as planned, where planned and when planned. He will also be responsible for the preparation of all require compliance reporting. In the initial start-up year (year 1) he anticipates spending an average of 60 hours per month on the project, more when planting and collecting effort are in full swing and less as weather and planting activities dictate. In subsequent years, less time and effort to oversee and direct activities will be needed. As such, the Project Biologist anticipates 300 hours for Year 1, and 200 hours for years 2 & 3 therefore anticipated cost at 45/hr. for Years 1, 2 & 3 = 13,500 + 9,000 + 9,000 = 31.900.



Environmental and Regulatory Compliance Costs

Applicants must include a line item in their budget to cover environmental compliance costs.

The Tribe has been working on the Mill Creek Project for a number of years and as such, the Mill Creek Project Area has been looked at and reviewed for Environmental and Regulatory Compliance issues on a regular basis, as such, any effort to review and renew the process will be nominal, if even necessary. If it is necessary, we expect the cost for the Tribe to procure the necessary documentation not to exceed \$2,000.

Indirect Costs

Show the proposed rate, cost base, and proposed amount for allowable indirect costs based on the applicable cost principles for the recipient's organization.

The Tribes negotiated Indirect Cost Determination Rate is currently: 12.17%

Total Costs

Indicate total amount of project costs, including the Federal and non-Federal cost share amounts.

At the time of preparing this proposal, there are no other Federal, State or Other funding entities that have confirmed funding for this Project. It is still early in the year and the Tribe will absolutely be seeking additional funding support from other Resource Agencies as their RFP's become available. Funding from the other Agencies will be sought for site specific stream restoration improvements (pool and habitat development, channel stabilization and supplemental riparian development). At this point, restoration of the riparian corridor and subsequent drought resiliency of the hydrology associated with Mill Creek falls on the shoulders of Reclamation and the Tribe. We hope that the Tribes perseverance and significant In-Kind Match commitment will merit Reclamations support in and assistance in completing this Project and improving Mill Creeks' hydrologically significant role to Round Valley's aquifers, fish, wildlife and residents.

	Year 1	Year 2	Year 3	TOTAL
Bureau of Reclamation Funds: =	\$246,645	\$209,269	\$206,669	\$662,583
Round Valley In-Kind Match: =	\$213,750	\$203,750	\$203,750	\$641,694

Please see the attached Budget Proposal for Line Items costs for Years 1, 2, & 3 of the Project with regard to requested BOR Funding and Tribal In-Kind Match amounts, as well as for Yearly and 3 Year total amounts for both BOR and RVIT. Some items and costs may change as Tribal Rates and such are being reviewed at the time of this writing.

Thank you for your consideration of this very important Project!

PS. The Tribe has no Lobbyist?

ROUND VALLEY INDIAN TRIBES

Natural Resources Department Presents it

Mill Creek Streamflow & Riparian Corridor Restoration Project

Supplemental Information & Appendices

TO THE

Bureau of Reclamation WaterSMART Drought Response Program: Drought Resiliency Projects for FY 2017

February 14, 2017

- APPLICANT: Round Valley Indian Tribes 77826 Covelo Road Covelo, CA. 95428 707.983.6126
- Project Manager: Toni Bettega Natural Resources Dept. 76600 Covelo Road Covelo, CA 95428 <u>tbettega@rvit.org</u> 707.983.8341



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Appendix A "Before and After" Pictures of the Mill Creek Restoration Project Area



Picture 1. Mill Creek - "Upper Project Area", <u>Before</u> Restoration efforts.



Picture 2. Mill Creek - "Upper Project Area", After Restoration efforts, note Willow Wall development along banks.



Picture 3. Mill Creek - "Upper Middle" Project Area", <u>Before</u> Restoration efforts. Note the flat gravel surface right of left bank – no large rock?



Picture 4 Mill Creek - "Upper Middle" Project Area", <u>After</u> Restoration efforts. Note the defined channel and the large rock with the pool around it?



Picture 5. Mill Creek, pre-restoration conditions – going dry, multi-channeled and riparian free.



Picture 6. Mill Creek – Same corner as Picture 1 ... just 2 years AFTER Restoration!



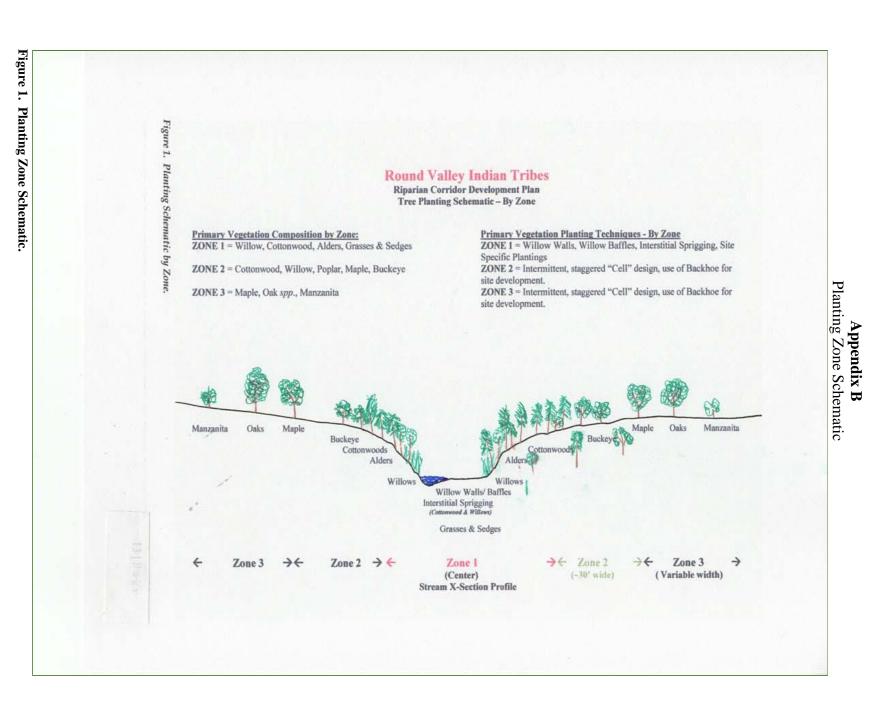
Picture 7. Mill Creek - "Middle" Project Area", <u>Before</u> Restoration efforts.



Picture 8. Mill Creek - "Middle" Project Area", <u>After</u> Restoration efforts.



Picture 9. Riparian Conditions just downstream of the Project area! This is what Mill Creek looks like just about ¼ mile downstream of the Project Area. Note the correlation between the presence of a functional riparian corridor zone and the presence of surface water!





Appendix C. Planting Sites.



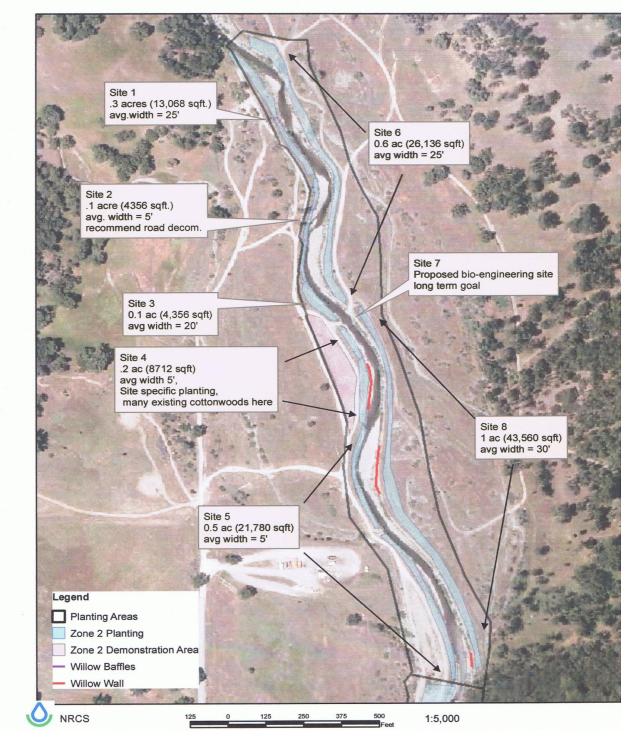
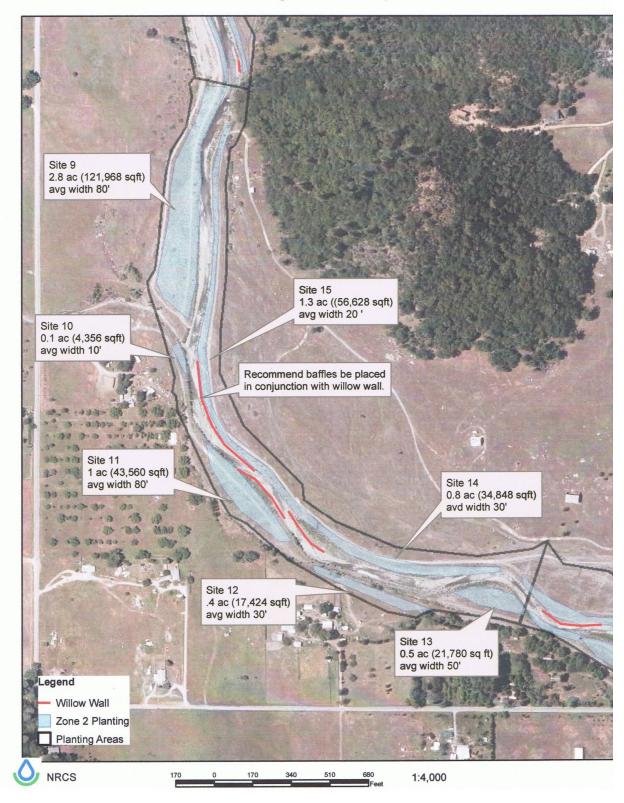


Figure 2. Planting Area 1.



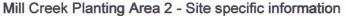
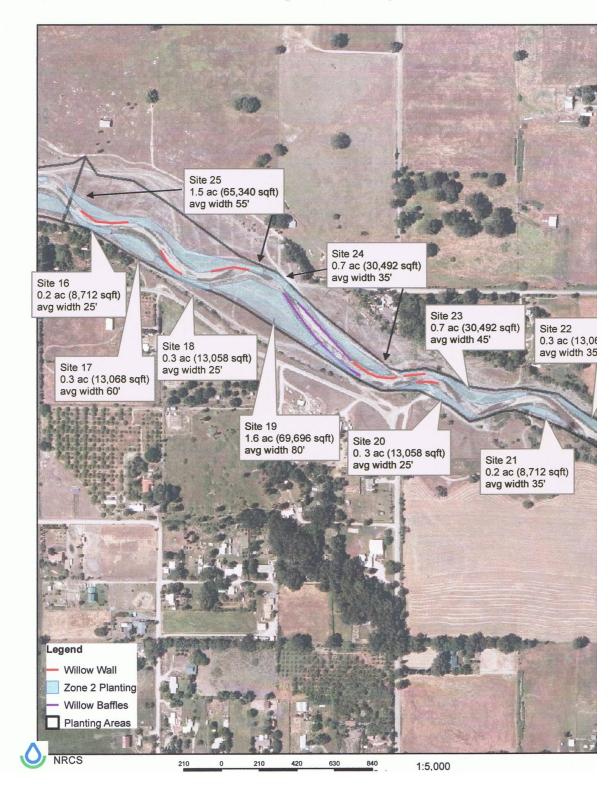


Figure 3. Planting Area 2.



Mill Creek Planting Area 3 - Site specific information

Figure 4. Planting Area 3.



Appendix D Vegetation Watering & Propagation



Picture 10. Example of the "Cell" Watering System successfully used in Riparian Restoration on Mill Creek. Each Cell can facilitate a 200' wide x 100' depth area and works great!).



Picture 11. Close up of a Willow and Cottonwood vegetation planted within the Cell. Note the 1/8" waterline in the upper right hand corner that is supplies water to the planted vegetation.



Picture 11. Riparian vegetation worksites located above bank full (Zone 3). (Picture 6 is located \sim 1/2 mile downstream of this site to help put into perspective the project size, scope and need!)



Picture 12. Tribal Greenhouse – approximately half full. The Greenhouse is capable of producing approximately 10,000 trees and shrubs per year, shown are Willows, Cottonwoods, Alders, Buckeyes, Maples, et. al.

Appendix F Letters of Support



United States Department of the Interior BUREAU OF RECLAMATION

Mid-Pacific Regional Office 2800 Cottage Way Sacramento, CA 95825-1898

MP-400 PRJ-28.00

FEB 10 2017

MEMORANDUM

To: The WaterSMART Drought Response Program

From: Kevin Clancy, Native American Affairs Program Manager, Mid-Pacific Region Subject: Letter of Support

The Bureau of Reclamation's (Bureau) Mid-Pacific Region has been working with the Round Valley Indian Tribe (RVIT), a federally recognized tribe, on the initial phases of the Mill Creek Restoration project.

I have been personally involved with this project. The project received funding in FY2007 based on a request under the Bureau's States Emergency Drought Relief Act of 1991, Public Law 102-250. At the time of award, I was the Mid-Pacific Regional Drought Coordinator. I was the grant's officer technical representative on this award. In my new role as the Native American Affairs Program Manager, I am supportive of the continued work to improve the Mill Creek riparian corridor.

RVIT made good progress on the restoration of Mill Creek. There are reaches of that creek that were barren and now are thriving with native plants. However, there is more work needed to be completed to improve the riparian area and aquatic habitat of the creek. This work will benefit the listed fish and wildlife species along this creek. It will also enable RVIT to continue their cultural practices along the creek that is an important part of their heritage.

I encourage you to consider funding RVIT's application to fund continued work on the Mill Creek Restoration Project.

United States Department of Agriculture



Natural Resources Conservation Service Ukiah Service Center 1252 Airport Park Blvd., Suite B-1 Ukiah, CA 95482 Phone: 707-468-9223 ext.3 Fax ; 707-468-5278

February 7, 2017

To whom it may concern:

The USDA Natural Resources Conservation Service (NRCS) is in support of the grant proposal submitted by the Round Valley Indian Tribes (RVIT) to improve the riparian corridor of Mill Creek, tributary to the Middle Fork Eel River.

Mill Creek is utilized by threatened steelhead trout and Chinook salmon. NRCS has been providing assistance to RVIT in improving habitat in select reaches of Mill Creek, contributing over \$195,000 to this project since 2005. These funds were used to stabilize streambanks through bio-engineered structures, establish riparian vegetation and install livestock exclusionary fencing.

In order to fully implement planned restoration treatments, additional dollars will be necessary. Some streambank sections remain unstable and existing riparian vegetation is inadequate to provide shade and long term habitat needs.

We encourage you to approve the Tribe's application for funding and we look forward to our continued work with the Tribe and welcome your partnership in restoring Mill Creek.

Sincerely,

andhade

Carol Mandel District Conservationist

The Natural Resources Conservation Service provides leadership in a partnership effort to help people conserve, maintain, and improve our natural resources and environment.

An Equal Opportunity Provider and Employer





Inited States Department of the Interior

FISH AND WILDLIFE SERVICE Pacific Southwest Region

Habitat Restoration Office 11641 Blocker Drive, Suite 110 Auburn, California 95603 (530) 889-2327



February 13, 2017

Warren Mitchell Round Valley Tribe 77826 Covelo Rd Covelo, CA 95428

Re: Mill Creek Restoration Project

To Whom It May Concern:

The U.S. Fish and Wildlife Service Partners for Fish and Wildlife Program provides technical assistance and funding for habitat restoration on private lands. We have collaborated with the Round Valley Tribe to implement successful restoration efforts on Mill Creek in the past.

I am writing this letter to demonstrate support for the Mill Creek Habitat Restoration Project. Protecting stream and aquatic habitat and restoring the Mill Creek Riparian corridor will benefit anadromous fish, Pacific Lamprey and migratory birds. We have supported the Round Valley Tribe's restoration efforts through our Tribal Wildlife Grant Program and hope to see other partners support their restoration efforts.

We appreciate the opportunity to work with the various partners to make this project a success.

Sincerely mur

Damion Ciotti Biologist



Appendix G Tribal Council Resolution

ROUND VALLEY INDIAN TRIBES

A Sovereign Nation of Confederated Tribes

TRIBAL COUNCIL OFFICE 77826 COVELO ROAD COVELO, CALIFORNIA 95428 PHONE: 707-983-6126 FAX: 707-983-6128



LOCATION: ON STATE HWY 162 ONE MILE NORTH OF COVELO IN ROUND VALLEY TRIBAL TERRITORY SINCE TIME BEGAN

ROUND VALLEY RESERVATION ESTABLISHED 1856

RESOLUTION NO. RV-2017-02

A RESOLUTION OF ACCEPTANCE OF GRANT FUNDS FROM THE FOLLOWING AGENCIES: NOAA/NATIONAL MARINE FISHERIES SERVICE, U.S. FISH AND WILDLIFE SERVICE, BUREAU OF INDIAN AFFAIRS, NATURAL RESOURCE CONSERVATION SERVICE, BUREAU OF RECLAMATION, THE CALIFORNIA DEPARTMENT OF FISH AND GAME, US ENVIRONMENTAL PROTECTION AGENCY (EPA) ET. AL. FOR THE COMPONENTS OF THE MILL CREEK RESTORATION AND RIPARIAN CORRIDOR DEVELOPMENT PROJECT THROUGH EACH OF THE RESPECTIVE AGENCIES AND PROGRAMS

WHEREAS, the Round Valley Indian Tribes are the sovereign Tribal Nation of the Indian Tribes of the Round Valley Indian Reservation, and

WHEREAS, the Round Valley Tribal Council is recognized by the Federal Government of the United States of America as the governing body for the Indians of the Reservation, and

WHEREAS, Article V, Section 1 of the Constitution of the Round Valley Indian Tribes authorizes the Round Valley Tribal Council to administer all Tribal Business, and

WHEREAS, the Round Valley Tribal Council is the duly elected governing body of the Tribe, and is authorized under Article V, Sections 1(b) and 1(j) to negotiate and enter into contracts with federal, state and local governments on behalf of the Tribe and to regulate all activities on lands within the jurisdiction of the Tribe; and

WHEREAS, the Tribes and the NOAA/National Marine Fisheries Service, US Fish and Wildlife Service, Bureau of Reclamation, and the Californian Department of Fish and Game, U.S Environmental Protection Agency (EPA) et. al., have a common interest and goal in the restoration and enhancement of the native anadromous fisheries on the Reservation and the surrounding watershed areas, and

WHEREAS, the Tribe has proposed a multi-component stream restoration and riparian corridor development related projects for the restoration of degraded portions of Mill Creek



RESOLUTION NO. RV-2017-02 Page 2

within the reservation boundaries (herein, " project") and is applying for the approval for grant funds from these "Services" for FY2017 through each respective Services Grant Application Processes to defray some of the cost of these various restoration and enhancement projects in 2017, and

WHEREAS, that the Tribes fully support the stream restoration and enhancement to restore and enhance native anadromous fisheries on the reservation and surrounding watershed areas as well as wildlife interest throughout the reservation.

NOW THEREFORE BE IT RESOLVED, that the Round Valley Tribal Council hereby approves submission of the grant application for funding as stated in said resolution.

BE IT FURTHER RESOLVED, that the President of the Round Valley Tribal Council and/or the Vice-President in his absence of the President is hereby authorized by the governing body to do execute said resolution approving submission of the grant application for the funding for stream restoration of degraded portions of the Mill Creek within the reservation boundaries.

CERTIFICATION

I, the undersigned, as President of the Round Valley Indian Tribes do hereby certify that this resolution was adopted at duly called special meeting of the Round Valley Tribal Council at which four (4) members were present, constituting a quorum, held on the 12th day of January 2017, and that this resolution was adopted by a vote of:

> For Four (4) Against None (0) Abstaining None (0)

And that said resolution has not been rescinded or amended in any way.

James Russ, President, Round Valley

Indian Tribes

G

Alberta J. Azbill, Executive Secretary, Round Valley Indian Tribes