featherriver.org

UPPER FEATHER RIVER IRWM

PROJECT INFORMATION FORM

Please submit by 5:00 p.m. on August 3, 2015, to UFR.contact@gmail.com

Please provide information in the tables below:

I. PROJECT PROPONENT INFORMATION

Agency / Organization	Plumas Eureka Community Services District
Name of Primary Contact	Frank Motzkus, General Manager
Name of Secondary Contact	Heather Kotrc, Administrative Manager
Mailing Address	200 Lundy Lane, Blairsden, CA 96103
E-mail	frmotzkus@digitalpath.net
Phone	(530) 836-1953
Other Cooperating Agencies / Organizations / Stakeholders	
Is your agency/organization committed to the project through completion? If not, please explain	Project completion would be dependent on funding alternatives.

II. GENERAL PROJECT INFORMATION

Project Title	MS-27: Treated Wastewater Reuse
Project Category	☐ Agricultural Land Stewardship ☐ Floodplains/Meadows/Waterbodies ☒ Municipal Services Water Supply/Water Quality Community Water/Wastewater ☐ Tribal Advisory Committee ☐ Uplands/Forest
Project Description (Briefly describe the project, in 300 words or less)	When completed, the Plumas Eureka CSD "Treated Wastewater Effluent Feasibility Study", performed by Bastian Engineering, identifies the possibility of utilizing treated wastewater as an irrigation supplement to the Plumas Pines Golf Course. Plumas Eureka has two wastewater treatment plants, only one that has the ability to supplement irrigation water on the front nine holes. The other wastewater treatment plant discharges its treated effluent to a community leachfield on a daily basis.
Project Location Description (e.g., along the south bank of stream/river between river miles or miles from Towns/intersection and/or address):	New reclamation systems will be installed in the existing wastewater treatments within Plumas Eureka CSD.
Latitude:	39° 47' 31.7322"
Longitude:	120° 38' 59.7588"

III. APPLICABLE IRWM PLAN OBJECTIVES ADDRESSED

For each of the objectives addressed by the project, provide a one to two sentence description of how the project contributes to attaining the objective and how the project outcomes will be quantified. If the project does not address *any* of the IRWM plan objectives, provide a one to two sentence description of how the project relates to a challenge or opportunity of the Region.

Upper Feather River IRWM Objectives:	**Will the project address the objective?**	**Brief explanation of project linkage to selected Objective**	**Quantification** (e.g. acres of streams/wetlands restored or enhanced)
Restore natural hydrologic functions.	Yes	Reuse of treated wastewater will reduce demand on the aquifer.	20% reduction in surface and groundwater used to irrigate the golf course
Reduce potential for catastrophic wildland fires in the Region.	Yes	Reduced use of local surface water and groundwater resources for irrigation will make that water more readily available for fire suppression.	
Build communication and collaboration among water resources stakeholders in the Region.	Yes	Reclaiming community wastewater and reusing it for irrigation on the golf course represents significant collaboration between PECSD and commercial entities in the district.	
Work with DWR to develop strategies and actions for the management, operation, and control of SWP facilities in the Upper Feather River Watershed in order to increase water supply, recreational, and environmental benefits to the Region.	N/A		
Encourage municipal service providers to participate in regional water management actions that improve water supply and water quality.	Yes	The PECSD is a municipal service provider. This project represents a pro-active contribution to long-term regional water supply management and water quality.	
Continue to actively engage in FERC relicensing of hydroelectric facilities in the Region.	N/A		
Address economic challenges of municipal service providers to serve customers.	N/A		

Protect, restore, and enhance the quality of surface and groundwater resources for all beneficial uses, consistent with the RWQC Basin Plan.	N/A		
Address water resources and wastewater needs of DACs and Native Americans.	Yes	Treated wastewater reuse will decrease the amount of surface water and groundwater currently used for irrigation purposes by as much as 20%.	Groundwater aquafers will be less stressed and surface water supplies will be increased for other areas around the State.
Coordinate management of recharge areas and protect groundwater resources.	Yes	High quality treatment and reuse of wastewater for irrigation is an important component of managing our recharge capability and protecting ground water resources.	
Improve coordination of land use and water resources planning.	Yes	Coordination of land use and water resources is critical to the success of commercial, residential and purveyor entities.	
Maximize agricultural, environmental and municipal water use efficiency.	Yes	Utilizing treated wastewater for irrigation, reduces the hydraulic loading on community leachfields, thereby extending their life expectancy.	Unknown over-all impact. Impacts would need to be evaluated for each particular community.
Effectively address climate change adaptation and/or mitigation in water resources management.	Yes	This project reduces the use of “fresh” surface and groundwater for irrigation and could provide an optional irrigation source for homeowners and commercial landscaping.	
Improve efficiency and reliability of water supply and other water-related infrastructure.	Yes	Installing the new equipment necessary for treated wastewater reuse could extend the life of existing disposal sites and prolong the need to replace existing infrastructure.	Groundwater aquafers will be less stressed and surface water supplies will be increased for other users.
Enhance public awareness and understanding of water management issues and needs.	Yes	Increased public awareness of potential uses for treated wastewater reuse.	
Address economic challenges of agricultural producers.	Yes	Treated wastewater could offset the need for agriculture to use existing water sources for irrigation.	

Work with counties/ communities/groups to make sure staff capacity exists for actual administration and implementation of grant funding.	Yes	PECSD is prepared to work with the IRWM and the County to administer any resultant grant and see this project through to completion. We are prepared to resource accordingly.	

If no objectives are addressed, describe how the project relates to a challenge or opportunity for the Region:

IV. PROJECT IMPACTS AND BENEFITS

Please provide a summary of the expected project benefits and impacts in the table below or check N/A if not applicable; **do no leave a blank cell.** Note that DWR encourages multi-benefit projects.

If applicable, describe benefits or impacts of the project with respect to:		
a. Native American Tribal Communities		Installation of wastewater reuse equipment could become a source of income for the agency.
b. Disadvantaged Communities[1]		Installation of wastewater reuse equipment could become a source of income for the agency.
c. Environmental Justice[2]		PECSD ensures fair and equal services regardless of race, culture, income, or any other cultural factors. Installing the new equipment necessary for treated wastewater reuse could extend the life of existing disposal sites and prolong the need to replace existing infrastructure.
d. Drought Preparedness		Treated wastewater reuse would greatly reduce the amount of surface water and groundwater used for irrigation.
e. Assist the region in adapting to effects of climate change[3]	N/A	
f. Generation or reduction of greenhouse gas emissions (e.g. green technology)	N/A	
g. Other expected impacts or benefits that are not already mentioned elsewhere	N/A	

[1] A Disadvantaged Community is defined as a community with an annual median household (MHI) income that is less than 80 percent of the Statewide annual MHI. DWR's DAC mapping is available on the UFR website (http://featherriver.org/maps/) .
[2] Environmental Justice is defined as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations and policies. An example of environmental justice benefit would be to improve conditions (e.g. water supply, flooding, sanitation) in an area of racial minorities.
[3] Climate change effects are likely to include increased flooding, extended drought, and associated secondary effects such as increased wildfire risk, erosion, and sedimentation.

DWR encourages multiple benefit projects which address one or more of the following elements (PRC §75026(a). Indicate which elements are addressed by your project.

a. Water supply reliability, water conservation, water use efficiency	Yes	g. Drinking water treatment and distribution	N/A
b. Stormwater capture, storage, clean-up, treatment, management	N/A	h. Watershed protection and management	N/A
c. Removal of invasive non-native species, creation/enhancement of wetlands, acquisition/protection/restoration of open space and watershed lands	N/A	i. Contaminant and salt removal through reclamation/desalting, other treatment technologies and conveyance of recycled water for distribution to users	N/A
d. Non-point source pollution reduction, management and monitoring	N/A	j. Planning and implementation of multipurpose flood management programs	N/A
e. Groundwater recharge and management projects	Yes	k. Ecosystem and fisheries restoration and protection	N/A
f. Water banking, exchange, reclamation, and improvement of water quality	Yes		

V. RESOURCE MANAGEMENT STRATEGIES

For each resource management strategy (RMS) employed by the project, provide a one to two sentence description in the table below of how the project incorporates the strategy. A description of the RMS can be found in Volume 2 of the 2013 California Water Plan (http://featherriver.org/2013-california-water-plan-update/).

Resource Management Strategy	Will the Project incorporate RMS?	Description of how RMS to be employed, if applicable
Reduce Water Demand		
Agricultural Water Use Efficiency	Yes	Treated wastewater could offset the need for agriculture to use existing water sources for irrigation.
Urban water use efficiency	Yes	Implementing Best Management Practices for irrigation use. Provide optional irrigation source for homeowners and commercial landscaping.
Improve Flood Management		
Flood management	No	
Improve Operational Efficiency and Transfers		
Conveyance – regional/local	No	
System reoperation	No	
Water transfers	No	
Increase Water Supply		
Conjunctive management	No	
Precipitation Enhancement	No	
Municipal recycled water	Yes	Increases public awareness of potential uses for treated wastewater reuse
Surface storage – regional/local	No	
Improve Water Quality		
Drinking water treatment and distribution	No	
Groundwater remediation/aquifer remediation	No	
Matching water quality to water use	Yes	Treated wastewater could be utilized to augment or replace existing irrigation systems currently using “fresh” water.
Pollution prevention	No	
Salt and salinity management	No	
Urban storm water runoff management	No	
Practice Resource Stewardship		
Agricultural land stewardship	No	
Ecosystem restoration	No	
Forest management	No	
Land use planning and management	No	
Recharge area protection	No	
Sediment management	No	

Resource Management Strategy	Will the Project incorporate RMS?	Description of how RMS to be employed, if applicable
Watershed management	No	
People and Water		
Economic incentives	No	
Outreach and engagement	No	
Water and culture	No	
Water-dependent recreation	No	
Wastewater/NPDES	No	

Other RMS addressed and explanation:

VI. PROJECT COST AND FINANCING

Please provide any estimates of project cost, sources of funding, and operation and maintenance costs, as well as the source of the project cost in the table below.

PROJECT BUDGET

Project serves a need of a DAC?: No
Funding Match Waiver request?: No

	Category	Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Source*	Total Cost
a.	**Direct Project Administration**	75%	25%		unknown
b.	**Land Purchase/Easement**	75%	25%		unknown
c.	**Planning/Design/Engineering / Environmental**	75%	25%		unknown
d.	**Construction/Implementation**	75%	25%		unknown
e.	**Environmental Compliance/ Mitigation/Enhancement**	75%	25%		unknown
f.	**Construction Administration**	75%	25%		unknown
g.	**Other Costs**	75%	25%		unknown
h.	**Construction/Implementation Contingency**	75%	25%		unknown
i.	**Grand Total (Sum rows (a) through (h) for each column)**	unknown	unknown		unknown

j.	**Can the Project be phased? No** If **yes**, provide cost breakdown by phases			
		Project Cost	**O&M Cost**	**Description of Phase**
	Phase 1			
	Phase 2			
	Phase 3			
	Phase 4			
k.	**Explain how operation and maintenance costs will be financed for the 20-year planning period for project implementation (not grant funded).**		Service rates would be increased to meet O&M costs when needed. O&M costs could be offset by charging a fee for the use of treated wastewater.	
l.	**Has a Cost/Benefit analysis been completed?**		**No**	
m.	**Describe what impact there may be if the project is not funded (300 words or less)**		Depletion of aquifer and inadequate surface water supplies during times of extreme drought and over time with climate change. Shorter lifespan of existing community leachfield.	

*List all sources of funding.
Note: See Project Development Manual, Exhibit B, for assistance in completing this table (http://featherriver.org/documents/).

IV. PROJECT IMPACTS AND BENEFITS

Please provide a status of the project, level of completion as well as a description of the activities planned for each project stage. If unknown, enter **TBD**.

Project Stage	Check the Current Project Stage	Completed?	Description of Activities in Each Project Stage	Planned/ Actual Start Date (mm/yr)	Planned/ Actual Completion Date (mm/yr)
a. Assessment and Evaluation	■	No	TBD	TBD	TBD
b. Final Design	☐	No	TBD	TBD	TBD
c. Environmental Documentation (CEQA / NEPA)	☐	No	TBD	TBD	TBD
d. Permitting	☐	No	TBD	TBD	TBD
e. Construction Contracting	☐	No	TBD	TBD	TBD
f. Construction Implementation	☐	No	TBD	TBD	TBD
Provide explanation if more than one project stage is checked as current status					

IX. PROJECT TECHNICAL FEASIBILITY

Please provide any related documents (date, title, author, and page numbers) that describe and confirm the technical feasibility of the project. See www.featherriver.org/catalog/index.php for documents gathered on the UFR Region.

a. List the adopted planning documents the proposed project is consistent with or supported by (e.g. General Plans, UWMPs, GWMPs, Water Master Plan, Habitat Conservation Plans, TMDLs, Basin Plans, etc.).	
b. List technical reports and studies supporting the feasibility of this project.	Plumas Eureka CSD "Treated Wastewater Effluent Feasibility Study" by Bastian Engineering (pending completion)
c. Concisely describe the scientific basis (e.g. how much research has been conducted) **of the proposed project in 300 words or less.**	Research on reclamation system compatible with the district's STEP primary treatment systems has been completed. Wastewater disposal capacity analysis has been conducted.
d. Does the project implement green technology (e.g. alternate forms of energy, recycled materials, LID techniques, etc.).	No
e. Are you an Urban Water Supplier[1]?	No
f. Are you are an Agricultural Water Supplier[2]?	No
g. Is the project related to groundwater?	Yes 5-60 Humbug Valley

[1] Urban Water Supplier is defined as a supplier, either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually.

[2] Agricultural Water Supplier is defined as a water supplier, either publicly or privately owned, providing water to 10,000 or more irrigated acres, excluding the acreage that receives recycled water.

MS 27: Treated Wastewater Reuse

GHG Emissions Analysis

Project Construction Emissions

[X] The project requires non-road or off-road engines, equipment, or vehicles to complete. If yes:

Type of Equipment	Maximum Number Per Day	Total 8-Hour Days in Operation	Total $MTCO_2e$
Tractors/Loaders/Backhoes	1	5	1
Other Construction Equipment	2	10	2
			0
			0
			0
			0
			0
			0
			0
			0
		Total Emissions	**3**

[X] The project requires materials to be transported to the project site. If yes:

Total Number of Round Trips	Average Trip Distance (Miles)	Total $MTCO_2e$
6	100	**1**

[X] The project requires workers to commute to the project site. If yes:

Average Number of Workers	Total Number of Workdays	Average Round Trip Distance Traveled (Miles)	Total $MTCO_2e$
3	10	200	**2**

[ ] The project is expected to generate GHG emissions for other reasons. If yes, explain:

[ ] The project does not have a construction phase and/or is not expected to generate GHG emissions during the construction phase.

MS 27: Treated Wastewater Reuse

Project Operating Emissions

[X] The project requires energy to operate. If yes:

Annual Energy Needed	Unit	Total $MTCO_2e$
100,000	kWh (Electricity)	**20**
	Therm (Natural Gas)	**0**

[ ] The project will generate electricity. If yes:

Annual kWh Generated	Total $MTCO_2e$
	0

*A negative value indicates GHG reductions

[ ] The project will proactively manage forests to reduce wildfire risk. If yes:

Acres Protected from Wildfire	Total $MTCO_2e$
	0

*A negative value indicates GHG reductions

[ ] The project will affect wetland acreage. If yes:

Acres of Protected Wetlands	Total $MTCO_2e$
	0

*A negative value indicates GHG reductions

[ ] The project will include new trees. If yes:

Acres of Trees Planted	Total $MTCO_2e$
0	**0**

*A negative value indicates GHG reductions

[ ] Project operations are expected to generate or reduce GHG emissions for other reasons. If yes, explain:

GHG Emissions Summary

Construction and development will generate approximately:	6 $MTCO_2e$
In a given year, operation of the project will result in:	20 $MTCO_2e$