

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	City of Portola
Name of Primary Contact	Robert Meacher
Name of Secondary Contact	Karen Downs
Mailing Address	P.O.Box1225 96122
E-mail	r.meacher@ci.portola.ca.us
Phone	530-832-4216
Other Cooperating Agencies /	Plumas County & State of California
Organizations / Stakeholders	
Is your agency/organization	Yes
committed to the project through	
completion? If not, please explain	

II. GENERAL PROJECT INFORMATION

Project Title	MS-1: Wastewater System Infrastructure Improvements
Project Category	☐ Agricultural Land Stewardship
	☐ Floodplains/Meadows/Waterbodies
	Municipal Services
	☐ Tribal Advisory Committee
	☐ Uplands/Forest
Project Description	This proposed solution to correct the increased
(Briefly describe the project,	inflow/infiltration (I&I) to the City system is a discrete plan to
in 300 words or less)	reconstruct aged, failing and failed sewer lines throughout the
	City as determined by existing video logs of the system. The
	attached mMaps on file at City Hall show where the
	reconstruction work is being proposed. Also attached, are
	documents with information on on file are types of
	reconstruction options, including open trench, fold and form
	linings, and point repairs with individual cost estimates.
Project Location Description (e.g.,	City of Portola Census Tract 33.07 Block group 3012
along the south bank of stream/river	
between river miles or miles from	
Towns/intersection and/or address):	
Latitude:	120.4697 W
Longitude:	39.8103 N

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: Restore natural hydrologic	Will the project address the objective?	Brief explanation of project linkage to selected Objective	Quantification (e.g. acres of streams/wetlands restored or enhanced) N/A
functions.	■ N/A		
Reduce potential for catastrophic wildland fires in the Region.	☐ Yes ■ N/A		N/A
Build communication and collaboration among water resources stakeholders in the Region.	■ Yes	By the very nature of the project this objective is met.	N/A
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.	■ Yes	Project area receives water from DWR facility at Lake Davis.	Treated Lake Davis Water is being leaked into the aquifer from aged sewer infrastructure. Stopping the leaks would increase water supply
Encourage municipal service providers to participate in regional water management actions that improve water supply and water quality.	Yes	Reconstructing aged, failing and failed sewer lines throughout the City will prevent leakage of raw sewage and improve water quality in the area.	N/A
Continue to actively engage in FERC relicensing of hydroelectric facilities in the Region.	☐ Yes ■ N/A		N/A
Address economic challenges of municipal service providers to serve customers.	■ Yes	As a Severely Disadvantaged Community, Portola is dependent on grant funds to complete this project. The project will prevent leakage of raw sewage and contribute to better sanitation and water quality.	N/A

	Will the project		Quantification (e.g. acres of streams/wetlands
Upper Feather River IRWM Objectives:	address the objective?	Brief explanation of project linkage to selected Objective	restored or enhanced)
		,	
Protect, restore, and enhance the quality of surface and	Yes	The project will stop runoff and leakage into the Feather River	
groundwater resources for all beneficial uses, consistent with the RWQC Basin Plan.	□ N/A	and into groundwater.	
Address water resources and wastewater needs of DACs and	■ Yes	This project will reconstruct leaking/failing sewer lines to	Stop the leakage without raising
Native Americans.	□ N/A	address the wastewater needs of Portola (SDAC).	rates
Coordinate management of recharge areas and protect	Yes	Reduces leakage of untreated wastewater into groundwater	Stopping the effluent leakage
groundwater resources.	□ N/A	basin	will protect groundwater.
Improve coordination of land use and water resources	Yes		
planning.	■ N/A		
Maximize agricultural, environmental and municipal	Yes		
water use efficiency.	■ N/A		N1/A
Effectively address climate change adaptation and/or	Yes		N/A
mitigation in water resources management.	■ N/A		
Improve efficiency and reliability of water supply and	Yes	Improves system capacity and reliability, and protects water	Stops water waste by fixing leaks.
other water-related infrastructure.	□ N/A	supply from contamination.	by fixing leaks.
Enhance public awareness and understanding of water	Yes	Citizens understand that leaking sewage affects the local	Public education and outreach.
management issues and needs.	□ N/A	economy.	
Address economic challenges of agricultural producers.	☐ Yes		N/A
	■ N/A		
Work with counties/	Yes	The City of Portola will continue	N/A
communities/groups to make		to work with the County to	
sure staff capacity exists for	□ N/A	ensure the successful	
actual administration and implementation of grant		implementation of this project.	
funding.			

	o objectives are addressed, describe how the pion:	oroject relat	tes to a challenge or opportunity for the
IV.	PROJECT IMPACTS AND BENEFITS ase provide a summary of the expected project	t henefits a	nd impacts in the table below or check N/A
	ot applicable; do no leave a blank cell. Note th		
If a	oplicable, describe benefits or impacts of the	project wit	h respect to:
a.	Native American Tribal Communities	■ N/A	///
b.	Disadvantaged Communities ¹	□ N/A	Saves ratepayers' valuable dollars in fees that would be required to complete this project without grant funding. Portola is a Severely Disadvantaged Community as per footnote 1 below
c.	Environmental Justice ²	□ N/A	This project improves sanitation for all people in Portola, regardless of race, culture or income.
d.	Drought Preparedness	■ N/A	///
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	Less energy used at treatment plant
g.	Other expected impacts or benefits that are not already mentioned elsewhere	□ N/A	Makes repairs less likely therefore saving the DAC \$\$\$ and making the City a more attractive place to live.
inco UFR ² En resp regu (e.g	Disadvantaged Community is defined as a composed that is less than 80 percent of the Statewick website (http://featherriver.org/maps/). vironmental Justice is defined as the fair treat pect to the development, adoption, implement ulations and policies. An example of environme, water supply, flooding, sanitation) in an area mate change effects are likely to include increased wildfire risk, example of the condary effects such as increased wildfire risk, example of the condary effects such as increased wildfire risk, example of the condary effects such as increased wildfire risk, example of the condary effects such as increased wildfire risk, example of the condary effects such as increased wildfire risk, example of the condary effects such as increased wildfire risk, example of the condary effects such as increased wildfire risk, example of the condary effects such as increased wildfire risk, example of the condary effects such as increased wildfire risk, example of the condary effects such as increased wildfire risk, example of the condary effects such as increased wildfire risk, example of the condary effects such as increased wildfire risk, example of the condary effects such as increased wildfire risk, example of the condary effects such as increased wildfire risk, example of the condary effects such as increased wildfire risk, example of the condary effects such as increased wildfire risk, example of the condary effects such as increased wildfire risk, example of the condary effects as increased wildfire risk, example of the condary effects as the condary effects as increased wildfire risk, example of the condary effects as th	ment of per tation and e ental justice of racial m ased floodi	MHI. DWR's DAC mapping is available on the ople of all races, cultures, and incomes with enforcement of environmental laws, be benefit would be to improve conditions inorities. Ing, extended drought, and associated

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 use efficiency	☐ Yes	g.	Drinking water treatment and	☐ Yes
		■ N/A		distribution	■ N/A
b.	Storm water treatment,	Yes	h.	Watershed protection	Yes
	management	□ N/A			□ N/A
c.	Removal of invasive non-native	☐ Yes	i.	Contaminant removal through	☐ Yes
	species, creation/enhancement of	■ N/A		other treatment technologies	■ N/A
	wetlands,				
	acquisition/protection/restoration				
	of open space and watershed lands				
d.	Non-point source pollution	Yes	j.	Planning and implementation of	☐ Yes
	reduction, management and	□ N/A		multipurpose flood management	■ N/A
	monitoring			programs	
e.	Groundwater recharge and	☐ Yes	k.	Ecosystem and fisheries	☐ Yes
	management projects	■ N/A		restoration and protection	■ N/A
f.	Water banking, exchange,	☐ Yes			
	reclamation, and improvement of	■ N/A			
	water quality				

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/).

Danasana Manasana da Charles	Will the Project incorporate	Description of how RMS to be employed,
Resource Management Strategy	RMS?	if applicable
Reduce Water Demand		
Agricultural Water Use Efficiency	Yes No	
Urban water use efficiency	Yes No	
Improve Flood Management		
Flood management	Yes No	
Improve Operational Efficiency and Tr	ansfers	
Conveyance – regional/local	☐ Yes ■ No	
System reoperation	☐ Yes ■ No	
Water transfers	☐ Yes ■ No	
Increase Water Supply		
Conjunctive management	☐ Yes ■ No	
Precipitation Enhancement	☐ Yes ■ No	
Municipal recycled water	☐ Yes ■ No	
Surface storage – regional/local	☐ Yes ■ No	
Improve Water Quality		
Drinking water treatment and	□ Yes ■ No	
distribution	☐ res ■ NO	
Groundwater remediation/aquifer	☐ Yes ■ No	
remediation	☐ res ■ NO	

	Will the Project	
	incorporate	Description of how RMS to be employed,
Resource Management Strategy	RMS?	if applicable
Matching water quality to water use	Yes No	
Pollution prevention	■ Yes □ No	Prevent leakage of untreated sewage into ground and the Feather River.
Salt and salinity management	☐ Yes ■ No	
Urban storm water runoff management	☐ Yes ■ No	
Practice Resource Stewardship		
Agricultural land stewardship	☐ Yes ■ No	
Ecosystem restoration	☐ Yes ■ No	
Forest management	☐ Yes ■ No	
Land use planning and management	☐ Yes ■ No	
Recharge area protection	☐ Yes ■ No	
Sediment management	☐ Yes ■ No	
Watershed management	☐ Yes ■ No	
People and Water		
Economic incentives	☐ Yes ■ No	
Outreach and engagement	☐ Yes ■ No	
Water and culture	☐ Yes ■ No	
Water-dependent recreation	☐ Yes ■ No	
Wastewater/NPDES	Yes No	Reconstruction of failing/failed sewer lines to prevent leakage of untreated sewage
Other RMS addressed and explanation	n:	
N/A		

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 BUDGE	:T		
	oject serves a need of a DAC?: Yes anding Match Waiver request?: Yes				
	Category	Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Source*	Total Cost
a.	Direct Project Administration	6,000	0	0	6,000
b.	Land Purchase/Easement	29,500	0	0	29,500
c.	Planning/Design/Engineering / Environmental	255,000	0	0	255,000
d.	Construction/Implementation	969,520	0	0	969,520
e.	Environmental Compliance/ Mitigation/Enhancement	N/A	0	0	N/A
f.	Construction Administration	N/A	0	0	N/A
g.	Other Costs	35,000	0	0	35,000
h.	Construction/Implementation Contingency	129,502	0	0	129,502
i.	Grand Total (Sum rows (a) through (h) for each column)	1,424,522	0	0	1,424,522
j.	Can the Project be phased? Yes	■ No If yes, pr	ovide cost breakd	own by phases	
		Project Cost	O&M Cost	Descriptio	n of Phase
	Phase 1	///	///	///	
	Phase 2	///	///	///	
	Phase 3 Phase 4			/// ///'	
k.	Explain how operation and maintenan	1	City sewer fees	111	
	financed for the 20-year planning peri implementation (not grant funded).		City sewer rees		
I.	Has a Cost/Benefit analysis been comp	oleted?	■ Yes □ No		
m. Describe what impact there may be if the project is not funded (300 words or less)		Leakage into gro leakage into syst Failure.			
	t all sources of funding.	alatha n Connector		a alata a a la Ur	
	Note: See Project Development Manual, Exhibit B, for assistance in completing this table				
/h+	(http://featherriver.org/documents/).				

VIII. PROJECT STATUS AND SCHEDULE

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		■ Yes □ No □ N/A	Done	2015	2015
b. Final Design		■ Yes □ No □ N/A	Done	2015	2015
c. Environmental Documentation (CEQA / NEPA)		■ Yes □ No □ N/A	Done	2015	2015
d. Permitting		Yes No N/A	Done	2015	2015
e. Construction Contracting		☐ Yes ■ No ☐ N/A	Awaiting Funding	3-4 months after funding depending on time of the year	4-5 months after funding
f. Construction Implementation		☐ Yes ■ No ☐ N/A	Awaiting Funding	4-5 months after funding	10-12 months after funding
Provide explanation stage is checked as c		• •	This project is shovel real	ady. All documents	are on file at City

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	Portola General Plan
	project is consistent with or supported by (e.g. General	Portola Wastewater Master Plan
	Plans, UWMPs, GWMPs, Water Master Plan, Habitat	
	Conservation Plans, TMDLs, Basin Plans, etc.).	
b.	List technical reports and studies supporting the	Fites Engineering Study
	feasibility of this project.	Bastian Engineering Report
	•	CDBG Application supporting
		documents all on file at City Hall
c.	Concisely describe the scientific basis (e.g. how much	
	research has been conducted) of the proposed project in	Video logs of the system documented
	300 words or less.	the aged, failing and failed sewer lines
		and their locations throughout the City.
		Maps of the failing and failed sewer
		lines have also been generated.
d.	Does the project implement green technology (e.g.	☐ Yes ☐ No ■ N/A
	alternate forms of energy, recycled materials, LID	If yes, please describe.
	techniques, etc.).	
e.	Are you an Urban Water Supplier ¹ ?	☐ Yes ■ No ☐ N/A
f.	Are you are an Agricultural Water Supplier ² ?	☐ Yes ■ No ☐ N/A
g.	Is the project related to groundwater?	■ Yes □ No □ N/A
		If yes, please indicate which
		groundwater basin.
		Feather River / Sierra Valley
	Irban Water Supplier is defined as a supplier, either publicly o	
	unicipal purposes either directly or indirectly to more than 3,	000 customers or supplying more than
	000 acre-feet of water annually.	
² A	gricultural Water Supplier is defined as a water supplier, eith	ner publicly or privately owned, providing
	-	

Climate Change – Project Assessment Checklist

This climate change project assessment tool allows project applicants and the planning team to assess project consistency with Proposition 84 plan standards and RWMG plan assessment standards. The tool is a written checklist that asks GHG emissions and adaptation/resiliency questions.

Name of project: MS-1: Wastewater System Infrastructure Improvements

Project applicant: <u>City of Portola</u>

GHG Emissions Assessment
Project Construction Emissions (If you check any of the boxes, please see the attached worksheet)
 □ The project requires nonroad or off-road engines, equipment, or vehicles to complete. □ The project requires materials to be transported to the project site. □ The project requires workers to commute to the project site. □ The project is expected to generate GHG emissions for other reasons. □ The project does not have a construction phase and/or is not expected to generate GHG emissions during the construction phase.
Operating Emissions (If you check any of the boxes, please see the attached worksheet)
The project requires energy to operate.
The project will generate electricity.
☐ The project will proactively manage forests to reduce wildfire risk.
The project will affect wetland acreage.
The project will include new trees.
Project operations are expected to generate or reduce GHG emissions for other reasons.

Adaptation & Resiliency Assessment

Water Supply
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water supply vulnerability issues:
Not applicable ■ Not applicable Not applicable
Reduced snowmelt
Unmet local water needs (drought)
☐ Increased invasive species
Water Demand
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water demand vulnerability issues:
Not applicable ■ Not applicable Not applicable
☐ Increasing seasonal water use variability
Unmet in-stream flow requirements
Climate-sensitive crops
Groundwater drought resiliency
Water curtailment effectiveness

Water Quality
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water quality vulnerability issues:
☐ Not applicable
☐ Increasing catastrophic wildfires
Eutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and
other related water quality issues)
Seasonal low flows and limited abilities for waterbodies to assimilate pollution
☐ Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold freshwater habitat, spawning habitat, wildlife habitat, etc.)
Reduces inflow to treatment plant. Saves energy, reduces GHG emissions, reduces threat of water
pollution.
Flooding
Describe how the project makes the watershed (more/less) resilient to one or more of the following
Describe how the project makes the watershed (more/less) resilient to one or more of the following
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain Insufficient flood control facilities
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain Insufficient flood control facilities Sewer treatment is located in a critical floodplain. Project will reduce the threat of releasing untreated
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain Insufficient flood control facilities
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Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain Insufficient flood control facilities Sewer treatment is located in a critical floodplain. Project will reduce the threat of releasing untreated

Climate Change- Project Assessment Tool
Ecosystem and Habitat Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority ecosystem and habitat vulnerability issues:
☐ Not applicable
Climate-sensitive fauna or flora
□ Recreation and economic activity
Quantified environmental flow requirements
Erosion and sedimentation
Endangered or threatened species
Fragmented habitat
With a good sewer system the City of Portola will be more attractive for economic activities. With the reduced threat of discharges into the middle fork of the Feather River the fishery, and its endangered species, will be better protected for ecosystem and recreational benefits.
Hydropower Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority hydropower vulnerability issues: Not applicable □ Reduced by degree year systems.
Reduced hydropower output

Upper Feather River Integrated Regional Water Management Plan

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-1: Wastewater System Infrastructure Improvements

GHG Emissions Analysis

Project Construction Emissions

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

	Maximum		
	Number Per	Total 8-Hour Days in	
Type of Equipment	Day	Operation	Total MTCO₂e
Pavers	1	20	6
Plate Compactors	1	60	1
Rollers	1	20	5
Signal Boards	2	120	15
Tractors/Loaders/Bac			
khoes	2	115	62
Excavators	1	20	9
			0
			0
			0
			0
		Total Emissions	97

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

	Average Trip	
Total Number of	Distance	
Round Trips	(Miles)	Total MTCO₂e
6	100	1

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

		Average Round Trip		
, and the second		Distance Traveled		
of Workers	of Workdays	(Miles)	Total MTCO₂e	
5	120	20		4

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.

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-1: Wastewater System Infrastructure Improvements **Project Operating Emissions** The project requires energy to operate. If yes: **Annual Energy Needed** Total MTCO₂e Unit 0 kWh (Electricity) Therm (Natural Gas) The project will generate electricity. If yes: Annual kWh Generated Total MTCO₂e *A negative value indicates GHG reductions The project will proactively manage forests to reduce wildfire risk. If yes: Acres Protected from Wildfire Total MTCO₂e 0 *A negative value indicates GHG reductions The project will affect wetland acreage. If yes: Acres of Protected Wetlands Total MTCO₂e *A negative value indicates GHG reductions The project will include new trees. If yes: Acres of Trees Planted Total MTCO₂e 0 0 *A negative value indicates GHG reductions Project operations are expected to generate or reduce GHG emissions for other reasons. If yes, explain: This project will reduce energy costs by reducing inflow to the treatment plant. **GHG Emissions Summary** Construction and development will generate approximately: 102 MTCO₂e

In a given year, operation of the project will result in:

0 MTCO₂e



UPPER FEATHER RIVER IRWM

PROJECT INFORMATION FORM

Please submit by <u>5:00 p.m. on August 3, 2015</u>, to UFR.contact@gmail.com Please provide information in the tables below:

I. PROJECT PROPONENT INFORMATION

Agency / Organization	City of Portola		
Name of Primary Contact	Robert Meacher		
Name of Secondary Contact	Phil Oels		
Mailing Address	35 third Ave. Portola, Ca. 96122		
E-mail	r.meacher@ci.portola.ca.us philoels7@gmail.com		
Phone	530-832-4216		
Other Cooperating Agencies /	none		
Organizations / Stakeholders			
Is your agency/organization	yes		
committed to the project through			
completion? If not, please explain			

II. GENERAL PROJECT INFORMATION

Project Title	MS-2: Turner Springs Improvement		
Project Category	Agricultural Land Stewardship		
Municipal	Floodplains/Meadows/Waterbodies		
	X Municipal Services		
	Tribal Advisory Committee		
	Uplands/Forest		
Project Description	The City owns a pre-1914 water source and		
(Briefly describe the project,	approximately 25 acres at Turner Springs. It was used to		
in 300 words or less)	supply water to town until Lake Davis was built. The		
	project is to improve the spring, replace the old water		
	lines and connect to existing lines along highway A-15.		
	The property also has about 20 acres of second-growth		
	timber land that is in desperate need of fire-hazard		
	reduction/watershed enhancement work, as it is badly		
	over-stocked with young growth. Areas of the timber		
	stand are so dense that walking through them is difficult,		
	bark beetle infestation has left trees diseased or dead,		
	and the prevalent ladder fuels could be disastrous for		
	rapid expansion of a wildland fire. This project will thin		
	the trees and reduce ladder fuels to reduce the dangers		

	of wildland fires, to improve water penetration into the
	ground and to improve overall watershed health.
Project Location Description (e.g.,	w. half of sw. quarter of sw. quarter, sec. 14 and 200 ft of
along the south bank of	e. half of sw quarter of sw quarter, sec. 15. t22n. R13e.
stream/river between river miles or	Approx. 4 mi west of portola on A-15 to f.s. Rd 22n03y,
miles from Towns/intersection	then south to the end of the road. Property is in eastern
and/or address):	Plumas county, CA.
Latitude:	39 degrees, 45ft
Longitude:	120 degrees, 30ft

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.

			Quantification
	Will the		(e.g. acres of
	project		streams/wetlands
	address		restored or
Upper Feather River IRWM	the	Brief explanation of project	enhanced)
Objectives:	objective?	linkage to selected Objective	
Restore natural hydrologic	Yes	N/A	N/A
functions.			
	X N/A		
Reduce potential for		Yes. The timber stand on	20 acres of
catastrophic wildland fires in	X Yes	approximately 20 acres is	improved, fire
the Region.		badly over-stocked. Thinning	and disease
	N/A	would reduce fire-hazard,	resistant timber.
		make it more resistant to pine	
		beetles and enhance water	
		flow by reducing transpiration	
Build communication and			
collaboration among water	Yes	N/A	N/A
resources stakeholders in the			
Region.	X N/A		
Work with DWR to develop		Yes. Developing this spring	An additional two
strategies and actions for the	X Yes	would give Portola an average	million gallons of
management, operation, and		of somewhere around two	water per month
control of SWP facilities in	N/A	million gallons of water per	
the Upper Feather River		month. This would lessen our	
Watershed in order to		dependence on Lake Davis,	

Upper Feather River IRWM Objectives: increase water supply, recreational, and environmental benefits to the Region.	Will the project address the objective?	Brief explanation of project linkage to selected Objective leaving more water for the fishery there and/or other users downstream	Quantification (e.g. acres of streams/wetlands restored or enhanced)
Encourage municipal service providers to participate in regional water management actions that improve water supply and water quality.	Yes X N/A	N/A	N/A
Continue to actively engage in FERC relicensing of hydroelectric facilities in the Region.	Yes X N/A	N/A	N/A
Address economic challenges of municipal service providers to serve customers.	X Yes N/A	Yes. Gravity fed, chlorinated spring water has to be significantly less expensive than treated Lake Davis water.	Can't quantify with the data currently available
Protect, restore, and enhance the quality of surface and groundwater resources for all beneficial uses, consistent with the RWQC Basin Plan.	Yes X N/A	N/A	N/A
Address water resources and wastewater needs of DACs and Native Americans.	X Yes	This project would add 24 million gallons per year of less expensive water per year to Portola's water supply.	N/A
Coordinate management of recharge areas and protect groundwater resources.	Yes X N/A	N/A	N/A
Improve coordination of land use and water resources planning.	X Yes	Yes. By managing our timber stand better, we should see an increase in our water supply	Approximately 20 acres of treated timber stand
Maximize agricultural, environmental and municipal	Yes	N/A	N/A

Upper Feather River IRWM Objectives: water use efficiency. Effectively address climate change adaptation and/or	Will the project address the objective? X N/A X Yes	Brief explanation of project linkage to selected Objective Yes. Treated timber stands are more resistant to fire and pine	Quantification (e.g. acres of streams/wetlands restored or enhanced)
mitigation in water resources management.	N/A	beetle infestations. Reduces SWP dependence.	
Improve efficiency and reliability of water supply and other water-related infrastructure.	X Yes	Yes. Turner springs would be a good additional source of water for the City. It has been in use from 1911 to the construction of Lake Davis and has never gone dry that we know of. Water from there would also gravity feed into our system because the spring is about 400 ft. higher in elevation than our tanks	An increase of supply of approximately two million gallons of water per month
Enhance public awareness and understanding of water management issues and needs.	Yes X N/A	N/A	N/A
Address economic challenges of agricultural producers.	Yes X N/A	N/A	N/A
Work with counties/ communities/groups to make sure staff capacity exists for actual administration and implementation of grant funding.	X Yes N/A	Yes, Portola is a full-service City.	N/A

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.

projects.	,
If applicable, describe benefits or impacts of the	
project with respect to:	
a. Native American Tribal Communities	
	N/A
b. Disadvantaged Communities ¹	Lower Cost of water
c. Environmental Justice ²	Improve water supply for all people in
	service area regardless of race, culture
	or income.
d. Drought Preparedness	Fire proofing water source
e. Assist the region in adapting to effects of	Better use of surface and ground water
climate change ³	sources results in better availability
_	and reliability of water supplies
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

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/).

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	Yes
b. Storm water capture, storage, clean-up, treatment, management	N/A	h. Watershed protection and management	Yes
c. Removal of invasive non- native species, creation/enhancement of	N/A	i. Contaminant and salt removal through reclamation/desalting, other	N/A

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.

wetlands, acquisition/protection/restoratio n of open space and watershed lands		treatment technologies and conveyance of recycled water for distribution to users	
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	Yes
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/).

(http://reathernver.org/2015 camornia water plan apaate/).				
	Will the			
	Project			
	incorporate	Description of how RMS to be employed,		
Resource Management Strategy	RMS?	if applicable		
Reduce Water Demand				
Agricultural Water Use Efficiency	N/A			
Urban water use efficiency	No			
Improve Flood Management	No			
Flood management	No			
Improve Operational Efficiency and	Transfers Yes.	Water from Turner springs would gravity		
		feed		
Conveyance – regional/local	Yes	Re-connects spring to City		
System reoperation	Yes	Turner used to be a domestic supply		
Water transfers	No			
Increase Water Supply	Yes.	Turner Spring will add approximately 24		
		gallons per year		
Conjunctive management		The coordinated management of both the		
	Yes	Lake Davis Water and spring water will		
	165	maximize the availability and reliability of		
		water supplies.		
Precipitation Enhancement	No			
Municipal recycled water	No			
Surface storage – regional/local	No			

	Will the	
	Project	
	incorporate	Description of how RMS to be employed,
Posourse Management Strategy	RMS?	if applicable
Resource Management Strategy	VIA12:	п аррпсавте
Improve Water Quality		Towns a series so will see the food into some
Drinking water treatment and	Yes	Turner springs will gravity feed into our
distribution		existing system
Groundwater	No	
remediation/aquifer remediation		
Matching water quality to water	Yes	High quality, inexpensive water for
use	165	domestic use
Pollution prevention	No	
Salt and salinity management	No	
Urban storm water runoff	NI -	
management	No	
Practice Resource Stewardship		
Agricultural land stewardship	No	
Ecosystem restoration	No	
Forest management	Yes	Fire-hazard thinning over 20 acres
Land use planning and	No	
management	INO	
Recharge area protection	No	
Sediment management	No	
Watershed management	Yes	Thinning is also watershed management
People and Water		
Economic incentives	Yes	Water that is less expensive to produce
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?: Yes Funding Match Waiver request?: Yes

	Category	Requested Grant Amount	Cost Share: Non- State Fund Source* (Funding Match)	Cost Share: Other State Fund Source*
a.	Direct Project Administration	63000	N/A	N/A
b.	Land Purchase/Easement	7000	N/A	N/A
C.	Planning/Design/Engineering/ Environmental Documentation	41000	N/A	N/A
d.	Construction/Implementation	220000	N/A	N/A
e.	Environmental Compliance/ Mitigation/Enhancement	4000	N/A	N/A
f.	Construction Administration	Included in "a"	N/A	N/A
g.	Other Costs	65000	N/A	N/A
h.	Construction/Implementation Contingency	-0-	N/A	N/A
i.	Grand Total (Sum rows (a) through (h) for each column)	403000	N/A	N/A
j. Can the Project be phased? Yes		If yes , provide c	ost breakdown by p	hases
	Duoinet Cost	0004 Coot	Description	of Dhase

j.	j. Can the Project be phased? Yes		If yes , provide cost breakdown by phases	
		Project Cost	O&M Cost	Description of Phase
	Phase 1	71200	N/A	Survey, environmental, engineering, permitting, and title searches on easements
	Phase 2	293000	Portola City will maintain Turner Spring	Construction, administration, and chlorination facility
	Phase 3	40000	N/A	Fire-hazard and watershed enhancement work
	Phase 4			
k.	Explain how operati	ion and maintenance		rence in cost between Lake er and gravity-fed spring water

k.	Explain how operation and maintenance	By saving the difference in cost between Lake
	costs will be financed for the 20-year	Davis treated water and gravity-fed spring water
	planning period for project	
	implementation (not grant funded).	
I.	Has a Cost/Benefit analysis been completed?	No

m.	Describe what impact there may be if	Portola is a severely disadvantaged community.
	the project is not funded (300 words or	Therefore, without funding from outside sources,
	less)	the project cannot be implemented, and the
		community will not have reliable water supplies
		during extended drought. Additionally, the dense
		forest with abundant ladder fuels will continue to
		pose a significant risk for wild fires.

^{*}List all sources of funding.

Note: See Project Development Manual, Exhibit B, for assistance in completing this table (http://featherriver.org/documents/).

VIII. PROJECT STATUS AND SCHEDULE

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**.

activities planned to		jeet stage. If al	ikilowii, ciitci ibb .	T	
	Check				
	the			Planned/	Planned/
	Current		Description of	Actual Start	Actual
	Project		Activities in Each	Date	Completion
Project Stage	Stage	Completed?	Project Stage	(mm/yr)	Date (mm/yr)
a. Assessment and		No	Concept and cost	When funding	2 months after
Evaluation	х		analysis. Forwarded	is awarded	funding
			to engineer.		awarded
b. Final Design		No	Engineering and	2 months after	4 months after
			design.	funding	funding
				awarded	awarded
c. Environmental		No		4 months after	10 months after
Documentation				funding	funding
(CEQA / NEPA)				awarded	awarded
d. Permitting		No		4 months after	10 months after
				funding	funding
				awarded	awarded
e. Construction		No		10 months after	12 months after
Contracting				funding	funding
				awarded	awarded
f. Construction				12 months after	14 months after
Implementation		No		funding	funding
				awarded	awarded
Provide explanation	if more th	an one		L	
project stage is checl			Project is in conceptual stage and cannot move forward		
project stage is theth	ica as carr	ciii statas	without financial assistance		

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.

	ocuments gathered on the OFR Region.		
a.	List the adopted planning documents the proposed	General plan, water master plan	
	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	Legal documentation on Turner	
	feasibility of this project.	Springs tracked back to 1911.	
		Department of Forestry and Fire	
		Protection Notice of Inspection and	
		site report documenting dead, dying	
		and diseased trees, primarily due to	
		bark beetle infestation, high tree	
		density and fire fuel loading. This	
		document also provides a long-term	
		management goal that is in	
		agreement with the plans in this	
		proposal.	
c.	Concisely describe the scientific basis (e.g. how	Turner springs was one of the	
	much research has been conducted) of the proposed	original Portola Water Company	
	project in 300 words or less.	properties from 1911 and provided	
		water to the community from that	
		time until 1967, when the Lake Davis	
		water treatment plant came on line.	
		The City Council, at the time,	
		decided to cease maintenance on it,	
		thinking Lake Davis was all we would	
		ever need. This no longer seems to	
		be the case.	
d.	Does the project implement green technology (e.g.	Yes	
	alternate forms of energy, recycled materials, LID	If yes, please describe.	
	techniques, etc.).	Water will be gravity-fed into the	
		system. Turner Springs is	
		approximately 400 ft. higher in	
		elevation than the tanks on the	
		south side of Portola	
e.	Are you an Urban Water Supplier ¹ ?	No	
f.	Are you are an Agricultural Water Supplier ² ?	No	
		I.	

g. Is the project related to groundwater?	Yes. Turner Springs is not in a designated groundwater basin. The spring is located on the north-west end of Beckwith Peak. This is near the lower end of a basin that is about 1000 acres covered by brush and rock on Forest Service Land.

NN 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.

Climate Change – Project Assessment Checklist

This climate change project assessment tool allows project applicants and the planning team to assess project consistency with Proposition 84 plan standards and RWMG plan assessment standards. The tool is a written checklist that asks GHG emissions and adaptation/resiliency questions.

Name of project: MS-2: Turner Springs Improvement

Project applicant: <u>City of Portola</u>

GHG Emissions Assessment

Project Construction Emissions
(If you check any of the boxes, please see the attached worksheet)
igwedge The project requires nonroad or off-road engines, equipment, or vehicles to complete.
$oxed{\boxtimes}$ The project requires materials to be transported to the project site.
$oxed{\boxtimes}$ The project requires workers to commute to the project site.
The project is expected to generate GHG emissions for other reasons.
The project does not have a construction phase and/or is not expected to generate GHG emissions during the construction phase.

Operating Emissions

(If you check any of the boxes, please see the attachea worksheet)
☑ The project requires energy to operate.
The project will generate electricity.
☑ The project will proactively manage forests to reduce wildfire risk.
The project will affect wetland acreage.
☑ The project will include new trees.
oxtimes Project operations are expected to generate or reduce GHG emissions for other reasons.

Adaptation & Resiliency Assessment

Water Supply Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water supply vulnerability issues:
☐ Not applicable
Reduced snowmelt
□ Unmet local water needs (drought)
Increased invasive species
(More Resilient) Redevelops a 40 gpm pre 1914 supply for water security. The project will reduce fire
hazard by thinning the property and decrease GHGs by planting new trees after the dead trees are
removed. There may be a wetlands component as well.
Water Demand
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water demand vulnerability issues:
☐ Not applicable
Unmet in-stream flow requirements
Climate-sensitive crops
Groundwater drought resiliency
□ Water curtailment effectiveness
(More Resilient) This project by adding another source, will reduce demand on dwindling supplies
and/or curtailed sources during drier months.

Water Quality
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water quality vulnerability issues:
☐ Not applicable
☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
Eutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and
other related water quality issues)
Seasonal low flows and limited abilities for waterbodies to assimilate pollution
☑ Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold freshwater habitat, spawning habitat, wildlife habitat, etc.)
The project will decrease the threat of catastrophic wildfire by taking out dead and dying trees on
approximately 20 acres of city owned watershed land. It will reduce GHGs by reducing the need for
treatment plant operations, and will help protect the municipal and domestic water supply vulnerability
due to drought.
Flooding
Describe how the project makes the watershed (more/less) resilient to one or more of the following
Describe how the project makes the watershed (more/less) resilient to one or more of the following
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues:
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain Insufficient flood control facilities
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain Insufficient flood control facilities
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain Insufficient flood control facilities
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain Insufficient flood control facilities

Ecosystem and Habitat Describe how the project makes the watershed (mare /less) resilient to one or more of the following
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority ecosystem and habitat vulnerability issues:
Not applicable ■
Climate-sensitive fauna or flora
Recreation and economic activity
Quantified environmental flow requirements
Erosion and sedimentation
Endangered or threatened species
Fragmented habitat
Hydronower
Hydropower Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority hydropower vulnerability issues:
Not applicable ■
Reduced hydropower output

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-2: Turner Springs Improvement

GHG Emissions Analysis

Project Construction Emissions

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

	Maximum		
	Number Per	Total 8-Hour Days in	
Type of Equipment	Day	Operation	Total MTCO₂e
Excavators	1	2	1
Tractors/Loaders/Bac			
khoes	1	10	3
Bore/Drill Rigs	1	2	2
Cement and Mortar			
Mixers	1	1	0
Other Construction			
Equipment	1	2	0
			0
			0
			0
			0
			0
		Total Emissions	6

Χ	The project requires materials to be transported to the project site. If yes:

	<u> </u>	
	Average Trip	
Total Number of	Distance	
Round Trips	(Miles)	Total MTCO₂e
2	100	0

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

	-		_
of Workers of	of Workdays	(Miles)	Total MTCO₂e
Average Number To	otal Number	Distance Traveled	
		Average Round Trip	

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-2: Turner Springs Improvement

Project Operating Emissions

X The project requires energy to operate. If yes:

Annual Energy Needed	Unit	Total MTCO ₂ e
10	kWh (Electricity)	0
	Therm (Natural Gas)	0

The project will generate electricity. If yes:

Annual kWh Generated	Total MTCO₂e
	0

^{*}A negative value indicates GHG reductions

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

Acres Protected from Wildfire	Total MTCO₂e	
20	-1	126

^{*}A negative value indicates GHG reductions

X The project will affect wetland acreage. If yes:

Acres of Protected Wetlands		Total MTCO₂e	
	5		-22

^{*}A negative value indicates GHG reductions

The project will include new trees. If yes:

Acres of Trees Planted		Total MTCO₂e
	15	-2,790

^{*}A negative value indicates GHG reductions

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

Reducing GHGs by using a gravity fed spring water supply to the City> Thus reducing the need for energy intinsive treatment of Lake Davis water. There will also be a benefit in less energy requiered to pump water to the "South Tank".

GHG Emissions Summary

Construction and development will generate approximately:	#VALUE!	MTCO₂e
In a given year, operation of the project will result in:	- 2,9 3	88 MTCO₂e



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	East Quincy Services District
Name of Primary Contact	Mike Green - General Manager
Name of Secondary Contact	Vicki Poh – Administrative Assistant
Mailing Address	179 Rogers Avenue
E-mail	mike@eastquincycsd.com vicki@eastquincycsd.com
Phone	530-283-2390
Other Cooperating Agencies /	Bastian Engineering – Daniel Bastian
Organizations / Stakeholders	bastianengineeringinc@gmail.com 530-832-2644
Is your agency/organization	Yes
committed to the project through	
completion? If not, please explain	

II. GENERAL PROJECT INFORMATION

Project Title	MS-4: Water Tank Project		
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,	Replace the existing EQSD 800,000 gallon concrete tank with a		
in 300 words or less)	steel tank of equal size. It is estimated that the project will		
	reduce groundwater pumping by over 1 million gallons for any		
	given year, to create a more reliable, drought-proof water		
	supply.		
Project Location Description (e.g.,			
along the south bank of stream/river	This project is located on the southern flank of the American		
between river miles or miles from	Valley Groundwater Basin (designated 5-10) and within the		
Towns/intersection and/or address):	disadvantaged community block group in the EQSD boundary,		
	located in Plumas County.		
	The EQSD owned parcel (shown in pink on Figure 2) that the		
	tank occupies is APN 116-280-020 and 1.13 Ac. In size. The		
	tank footprint is approximately 6,600 sq. ft.		

Latitude:	39.927422°
Longitude:	-120.891447°

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	Will the project address the	Brief explanation of project	Quantification (e.g. acres of streams/wetlands restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Restore natural hydrologic functions.	☐ Yes ■ N/A		
Reduce potential for catastrophic wildland fires in the Region.	■ Yes	Improved water supply reliability allows water to be available to fight wildfires with a reduced impact on supplies needed to meet existing demands.	
Build communication and collaboration among water resources stakeholders in the Region.	☐ Yes ■ N/A		
Work with DWR to develop strategies and actions for the management, operation, and control of SWP facilities in the	☐ Yes		
Upper Feather River Watershed in order to increase water supply, recreational, and environmental benefits to the Region.	— 1971		
Encourage municipal service providers to participate in regional water management actions that improve water supply and water quality.	■ Yes	Increase water supply and quality by reducing leaks and possibility of contamination associated with tank leakage.	
Continue to actively engage in FERC relicensing of hydroelectric facilities in the Region.	☐ Yes ■ N/A		

			Quantification
	Will the		(e.g. acres of
	project		streams/wetlands
Upper Feather River IRWM	address the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Address economic challenges of		This project is dependent on	
municipal service providers to	Yes	grant funding. A new water	
serve customers.	□ N/A	storage tank will reduce annual maintenance costs and costs	
	I LI IN/A	associated with pumping well	
		water. Increasing water supply	
		reliability will help to ensure that	
		demands associated with the	
		regional economy – including	
		manufacturing, tourism and	
		agriculture – can be met.	
Protect, restore, and enhance	Yes	Replacement of leaking storage	
the quality of surface and	_	tank reduces the groundwater	
groundwater resources for all	□ N/A	demand for the District. Reduced	
beneficial uses, consistent with		groundwater pumping by over 1	
the RWQC Basin Plan.		million gallons per year will	
		protect groundwater resources	
Address water resources and	Yes	for other beneficial uses.	
wastewater needs of DACs and	res	Improve storage and water quality to DAC.	
Native Americans.	□ N/A	quanty to DAC.	
Coordinate management of	Yes	This project will reduce reliance	
recharge areas and protect		on groundwater by over 1 million	
groundwater resources.	□ N/A	gallons per uear, thereby helping	
		the Region meet drinking water	
		demands that are threatened by	
		drought restrictions. As a local,	
		sustainable water supply, the	
		groundwater saved by this	
		project becomes available for	
		future needs and is not	
		vulnerable loss.	
Improve coordination of land	☐ Yes		
use and water resources			
planning.	■ N/A		
Maximize agricultural,	Yes	EQSD relies entirely on	
environmental and municipal		groundwater sources for its	
water use efficiency.	□ N/A	potable water. The American	
		Valley also includes agricultural	
		users that access the same	

			Quantification
	Will the		(e.g. acres of
	project		streams/wetlands
Upper Feather River IRWM	address the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
•	•	aquifer. Any reduction in	,
		groundwater supplies could	
		result in local water restrictions	
		to agricultural users. Local,	
		drought-proof measures such as	
		this tank project provide a local	
		water supply buffer that allows	
		the Region to minimize or avoid	
		water use restrictions to	
		agricultural users in times of	
		drought.	
Effectively address climate	Yes	This project improves water use	
change adaptation and/or		efficiencies and groundwater	
mitigation in water resources	□ N/A	storage as extended drought	
management.		poses limitations on water	
		resources.	
Improve efficiency and	Yes	Provide additional water storage	
reliability of water supply and		supply and repair aging	
other water-related	□ N/A	infrastructure to minimize water	
infrastructure.		loss from tank leakage.	
Enhance public awareness and	☐ Yes		
understanding of water			
management issues and needs.	■ N/A		
Address economic challenges of	☐ Yes		
agricultural producers.			
	■ N/A		
Work with counties/	Yes	EQSD is committed to the	
communities/groups to make		successful implementation of the	
sure staff capacity exists for	□ N/A	project, and is willing to work	
actual administration and		with any necessary	
implementation of grant		cooperators/stakeholders.	
funding.			

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

The project is a multi-benefit project that addresses conservation, health, safety, welfare and drought impacts and is able to be implemented and provide benefits within an expedited timeline. Expedited funding is needed for this high-priority project because it provides additional local potable water supplies that are critical in times of drought.

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 a	oplicable, describe benefits or impacts of the	project wit	h respect to:			
a.	Native American Tribal Communities	■ N/A				
b.	Disadvantaged Communities ¹	□ N/A	Additional water storage, protection of system stability and improved water quality that serves DAC.			
c.	Environmental Justice ²	■ N/A				
d.	Drought Preparedness	□ N/A	Additional water storage and reduction of groundwater demand, reduction of water loss from aging tank leakage.			
e.	Assist the region in adapting to effects of climate change ³	□ N/A	Added water storage.			
f.	Generation or reduction of greenhouse gas emissions (e.g. green technology)	□ N/A	It is estimated that the project will reduce groundwater pumping by over 1 million gallons for any given year – reducing energy consumption for pumping.			
g.	Other expected impacts or benefits that are not already mentioned elsewhere	■ N/A				
Ι 1 Λ Ι	¹ A Disadvantaged Community is defined as a community with an annual median household (MHI)					

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

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/).

	Will the Project		
	incorporate	Description of how RMS to be employed,	
Resource Management Strategy	RMS?	if applicable	
Reduce Water Demand			
Agricultural Water Use Efficiency	■ Yes □ No	Water management – improving water delivery systems	
Urban water use efficiency	Yes No	Improving water delivery infrastructure	
Improve Flood Management			
Flood management			
Improve Operational Efficiency and Tr	ansfers		
Conveyance – regional/local	Yes No	System stability and efficiency improvement	
System reoperation	■ Yes □ No	Improvement of existing operations and water facilities to meet needs more efficiently and reliably	
Water transfers	☐ Yes ■ No		
Increase Water Supply			
Conjunctive management	☐ Yes ■ No		
Precipitation Enhancement	☐ Yes ■ No		
Municipal recycled water	☐ Yes ■ No		

	Will the Project	
Resource Management Strategy	incorporate RMS?	Description of how RMS to be employed, if applicable
Surface storage – regional/local		New additional water storage tank,
	Yes No	replacement of old leaking water storage tank
Improve Water Quality		
Drinking water treatment and		Replacing leaking tank will increase water
distribution	Yes No	quality by decreasing opportunity for
		infiltration.
Groundwater remediation/aquifer remediation	☐ Yes ■ No	
Matching water quality to water use	☐ Yes ■ No	
Pollution prevention	Yes No	
Salt and salinity management	☐ Yes ■ No	
Urban storm water runoff	☐ Yes ■ No	
management		
Practice Resource Stewardship		
Agricultural land stewardship	Yes No	
Ecosystem restoration	Yes No	
Forest management	Yes No	
Land use planning and management	Yes No	
Recharge area protection	Yes No	
Sediment management	Yes No	
Watershed management	■ Yes □ No	Reduce current demand to groundwater sources by replacing leaking tank.
People and Water		
Economic incentives	☐ Yes ■ No	
Outreach and engagement	Yes No	
Water and culture	Yes No	
Water-dependent recreation	☐ Yes ■ No	
Wastewater/NPDES	☐ Yes ■ No	
Other RMS addressed and explanation	n:	

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				
	oject serves a need of a DAC?: Yes anding Match Waiver request?: Yes	□ No □ 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		\$47,450		\$47,450
b.	Land Purchase/Easement				
c.	Planning/Design/Engineering / Environmental		\$76,450		\$76,450
d.	Construction/Implementation	\$1,090,600	\$74,700		\$1,165,300
e.	Environmental Compliance/ Mitigation/Enhancement		\$800		\$800
f.	Construction Administration		\$9,200		\$9,200
g.	Other Costs				
h.	Construction/Implementation Contingency	\$111,060			\$111,060
i.	Grand Total (Sum rows (a) through (h) for each column)	1,201,660	\$208,600		1,410,260
j.	Can the Project be phased? Yes	■ No If yes, pr	ovide cost breakdo	own by phases	
		Project Cost	O&M Cost	Descriptio	n of Phase
	Phase 1				
	Phase 2				
	Phase 3				
l,	Phase 4	aa aasta will ba	Annual Operation	as and Maintana	nco budgot
k.	Explain how operation and maintenan financed for the 20-year planning periods.		Annual Operation funded by month		-
	implementation (not grant funded).	ou for project	Tanaca by month	ily customer serv	ice rates.
I.	Has a Cost/Benefit analysis been comp	oleted?	☐ Yes ■ No		
m.	Describe what impact there may be if	the project is	Increase groundwater demand due to leakage.		
	not funded (300 words or less)		Increased risk of MCL violations due to		
			contamination ris Increased risk of seismic shifts and	catastrophic tanl	

*Match funding will be provided by the EQSD Capital Improvement Program. Water rates have been structured to create a sinking fund for this purpose.

Note: See Project Development Manual, Exhibit B, for assistance in completing this table (http://featherriver.org/documents/).

VIII. PROJECT STATUS AND SCHEDULE

Please provide a status of the project, level of completion as well as a description of the activities planned for each project stage.

	Check the Current Project		Description of Activities in Each	Planned/ Actual Start	Planned/ Actual Completion
Project Stage	Stage	Completed?	Project Stage	Date (mm/yr)	Date (mm/yr)
a. Assessment and		Yes	Engineer's		
Evaluation		□ No	Assessment		
		□ N/A	Completed		
b. Final Design		☐ Yes		2 months after	4 months after
		□ No		funding	funding
		□ N/A		received	received
c. Environmental		☐ Yes		4 months after	7 months after
Documentation		□ No		funding	funding
(CEQA / NEPA)		□ N/A		received	received
d. Permitting		☐ Yes		7 months after	8.5 months
		□ No		funding	after funding
		□ N/A		received	received
e. Construction		☐ Yes		8.5 months	9 months after
Contracting		□ No		after funding	funding
		□ N/A		received	received
f. Construction		☐ Yes		9 months after	12 months after
Implementation		□ No		funding	funding
		□ N/A		received	received
Provide explanation	if more than	one project			
stage is checked as c	current status	i			

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	EQSD Capital Improvement Plan				
	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	Engineers Report of the project				
	feasibility of this project.	(attached)				
c.	Concisely describe the scientific basis (e.g. how much	Replacing the 800,000 gallon concrete				
	research has been conducted) of the proposed project in	tank with a new steel tank of equal size				
	300 words or less.	would save the Region about 1 million				
		gallons per year of groundwater and				
		ensure the District of a structurally				
		sound, seismic force resisting tank for				
		water storage and reliability. The				
		volume of water saved by the project				
		was calculated as the sum of the water				
		that was observed leaking from the				
		facility.				
		The May 23, 2013 magnitude 5.7				
		earthquake that struck the south of				
		Lake Almanor in Lassen Volcanic				
		National Park created additional leaks				
		and elevated the District's concern over				
		potential failure and increased leaking.				
d.	Does the project implement green technology (e.g.					
	alternate forms of energy, recycled materials, LID	☐ Yes ■ No ☐ N/A				
	techniques, etc.).	If yes, please describe.				
		ii yes, piedse describe.				
e.	Are you an Urban Water Supplier ¹ ?	☐ Yes ■ No ☐ N/A				
f.	Are you are an Agricultural Water Supplier ² ?	☐ Yes ■ No ☐ N/A				
g.	Is the project related to groundwater?	■ Yes □ No □ N/A				
		If yes, please indicate which				
		groundwater basin.				
		5-10				
		American Valley				
	rban Water Supplier is defined as a supplier, either publicly of					
	unicipal purposes either directly or indirectly to more than 3,	000 customers or supplying more than				
	000 acre-feet of water annually.					
² A	gricultural Water Supplier is defined as a water supplier, eith	ner publicly or privately owned, providing				
14/2	water to 10 000 or more irrigated acres, excluding the acreage that receives recycled water					

Climate Change – Project Assessment Checklist

This climate change project assessment tool allows project applicants and the planning team to assess project consistency with Proposition 84 plan standards and RWMG plan assessment standards. The tool is a written checklist that asks GHG emissions and adaptation/resiliency questions.

Name of project: MS-4: Water Tank Project

Project applicant: East Quincy Services District

GHG Emissions Assessment

Project Construction Emissions

(If you check any of the boxes, please see the attached worksheet)

 X The project requires nonroad or off-road engines, equipment, or vehicles to complete. X The project requires materials to be transported to the project site. X The project requires workers to commute to the project site. The project is expected to generate GHG emissions for other reasons. The project does not have a construction phase and/or is not expected to generate GHG emissions during the construction phase.
Operating Emissions (If you check any of the boxes, please see the attached worksheet)
X The project requires energy to operate.
The project will generate electricity.
The project will proactively manage forests to reduce wildfire risk.
The project will affect wetland acreage.
The project will include new trees.
Project operations are expected to generate or reduce GHG emissions for other reasons.

Adaptation & Resiliency Assessment

Water Supply Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water supply vulnerability issues:
 Not applicable Reduced snowmelt X Unmet local water needs (drought) ☐ Increased invasive species
Reliable water storage without the concerns of catastrophic tank failure of a 51-year-old leaking tank. Improved water quality.
Water Demand Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water demand vulnerability issues:
Not applicable
X Increasing seasonal water use variability
Unmet in-stream flow requirements
Climate-sensitive crops
Groundwater drought resiliency
Water curtailment effectiveness
Increased water storage and tank dependability
Water Quality Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water quality vulnerability issues:
☐ Not applicable
X Increasing catastrophic wildfires
 Eutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and other related water quality issues)
Seasonal low flows and limited abilities for waterbodies to assimilate pollution
☐ Water treatment facility operations
X Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold freshwater habitat, spawning habitat, wildlife habitat, etc.)

[
Improved municipal water supply reliability.
Improved water supply reliability allows water to be available to fight wildfires with a reduced impact on
supplies needed to meet existing demands.
Flooding
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority flooding vulnerability issues:
X Not applicable
Aging critical flood protection
☐ Wildfires
Critical infrastructure in a floodplain
Insufficient flood control facilities
Insuricient nood control racinates
Esperature and Habitat
Ecosystem and Habitat Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority ecosystem and habitat vulnerability issues:
mgn priority coosystem and habitat valuerasmy issues.
X Not applicable
Climate-sensitive fauna or flora
Recreation and economic activity
Quantified environmental flow requirements
Erosion and sedimentation
☐ Endangered or threatened species
Fragmented habitat
Hydropower
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority hydropower vulnerability issues:
X Not applicable
Reduced hydropower output

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-4: Water Tank Project

GHG Emissions Analysis

Project Construction Emissions

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

	Maximum		
	Number Per	Total 8-Hour Days in	
Type of Equipment	Day	Operation	Total MTCO₂e
Rollers	1	2	0
Cranes	1	14	11
Graders	1	3	1
Tractors/Loaders/Bac			
khoes	1	8	2
Other Construction			
Equipment	1	14	1
Cement and Mortar			
Mixers	1	1	0
			0
			0
			0
			0
		Total Emissions	16

Χ	The project requires materials to be transported to the project	site. If yes

		1 7
	Average Trip	
Total Number of	Distance	
Round Trips	(Miles)	Total MTCO₂e
3	300	1

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

Average Number		Average Round Trip Distance Traveled		
of Workers	of Workdays	(Miles)	Total MTCO₂e	
5	20	10		0

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-4: Water Tank Project Page 1

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

	MS-4	1: Water Tank Project	
Project Op	erating Emissions		
X The project	t requires energy to operate. If yes:		
	Annual Energy Needed	Unit	Total MTCO₂e
	150	kWh (Electricity)	0
		Therm (Natural Gas)	0
The project	t will generate electricity. If yes:		_
	Annual kWh Generated	Total MTCO₂e	
		0	
	*A negative value indicates GHG red	luctions	-
The projec	t will proactively manage forests to re	educe wildfire risk. If y	/es:
_	Acres Protected from Wildfire	Total MTCO₂e	
		0	
	*A negative value indicates GHG red	luctions	•
The project	t will affect wetland acreage. If yes:	•	-
	Acres of Protected Wetlands	Total MTCO₂e	
		0	
	*A negative value indicates GHG red	luctions	
The project	t will include new trees. If yes:		_
	Acres of Trees Planted	Total MTCO₂e	
	0	0	
	*A negative value indicates GHG red	luctions	
Project ope X explain:	erations are expected to generate or	reduce GHG emission	s for other reasons. If yes,
	It is estimated that the project will	-	. = .
	million gallons for any given yea		onsumption for
	pu	ımping.	

GHG Emissions Summary

Construction and development will generate approximately:

In a given year, operation of the project will result in:

MS-4: Water Tank Project Page 2

18 MTCO₂e

 $_{0}$ MTCO $_{2}$ e



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	Gold Mountain Community Service District (GM CSD)
Name of Primary Contact	Ivan Gossage, General Manager
Name of Secondary Contact	Rich McLaughlin, Board President
Mailing Address	150 Pacific Street, Portola, CA 96122
E-mail	gossageivan@gmail.com
	rich.mclaughlinGMCSD@gmail.com
Phone	(530) 832-5945
Other Cooperating Agencies /	None
Organizations / Stakeholders	
Is your agency/organization	Yes. Project is included in our long-term capital plan.
committed to the project through	
completion? If not, please explain	

II. GENERAL PROJECT INFORMATION

Project Title	MS-7: High Elevation Water Tank & Well		
Project Category	☐ Agricultural Land Stewardship		
	☐ Floodplains/Meadows/Waterbodies		
	Municipal Services		
	Water Supply/Water Quality		
	☐ Tribal Advisory Committee		
	☐ Uplands/Forest		
Project Description (Briefly describe the project, in 300 words or less)	Phase 1: Construction of a new water storage tank at an elevation of 5670' to ensure a positive supply of domestic water distributed via gravity flow to all locations in the service area. The current domestic water system relies on two 125,000-gallon tanks at an elevation of 5170', which is insufficient to provide water pressure to roughly 32% of properties; currently served by multiple booster pump stations only.		
	Phase 2: Drilling a high altitude well to service the new tank. Lower altitude existing wells and the limited distribution system are insufficient to meet long-term community requirements. Drought conditions, compounded by the hard rock geology, limit the groundwater supply even in wet years. Existing wells were originally rated at capacities over two		

	times their current output. The new well combined with the new tank and associated distribution lines will help provide a sufficient and reliable water system to meet all community requirements. Domestic Water Reliability - This project will increase the reliability and efficiency of the CSD's domestic water system. The current system, installed by the original bankrupt developer, is insufficient to meet community demands, and due to the need to pump water to a large segment of the community, the system is complex, costly to maintain, and at times unreliable during peak use. Emergency Water Supply - The project will provide for a viable water supply for structural firefighting and wild land fire suppression through much of the community's hydrant systems that currently rely on booster pump pressure. Water conservation – The current pressurized system is prone to increase severity of water loss due to leaks. Booster pumps do not efficiently provide consistent pressure to the system and cause parts of the system to be unnecessarily prone to under/over-pressurization and increase the occurrence of leaks and pressure losses.
Project Location Description (e.g.,	The new storage tank will be located on CSD property, GM lot
along the south bank of stream/river	P at the highest point on the Eagle's nest loop located in the
between river miles or miles from	SE corner of the CSD service area between lots 354 and 355.
Towns/intersection and/or address):	The location of the new well has not yet been identified but
	will depend on hydrologic studies of likely locations in
1.49	proximity to the new storage tank.
Latitude:	39° 45′ 20.81″ N
Longitude:	120° 30′ 14.89″ W

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.

			Quantification
	Will the		(e.g. acres of
	project		streams/wetlands
Upper Feather River IRWM	address the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Restore natural hydrologic	Yes	The new well, in a different	The new well is
functions.		fractured granite aquifer, will	anticipated to
	□ N/A	reduce over pumping of existing	provide an
		wells allowing for more natural	additional 200
		recharge rates for those deep	acre-feet or more
		wells.	annually to CSD
			supply.

	ı		
Upper Feather River IRWM	Will the project address the	Brief explanation of project	Quantification (e.g. acres of streams/wetlands restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Reduce potential for catastrophic wildland fires in the Region.	■ Yes	A secondary objective of the high altitude storage tank/well is to provide greatly increased availability of emergency water supplies available to firefighters.	Thousands of acres of wild land will benefit by the reduced wildfire potential.
Build communication and collaboration among water resources stakeholders in the Region.	■ Yes	These improvements will present significant collaboration opportunities between the CSD, the HOA, and commercial entities in the district	Many community members, businessmen and women and resource managers will work together.
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.	☐ Yes ■ N/A		
Encourage municipal service providers to participate in regional water management actions that improve water supply and water quality.	■ Yes	Gold Mountain Community Service District is a municipal service provider. This project represents a very pro-active action to contribute in a positive way to regional water supply management and long-term water quality.	Many State and local water management officials interact together.
Continue to actively engage in FERC relicensing of hydroelectric facilities in the Region.	☐ Yes ■ N/A		
Address economic challenges of municipal service providers to serve customers.	■ Yes	Project solves a major challenge for the CSD by providing a long-term solution for domestic water supply management.	Small CSD's must overcome daunting economic challenges.
Protect, restore, and enhance the quality of surface and groundwater resources for all beneficial uses, consistent with the RWQC Basin Plan.	■ Yes	Project will significantly relieve pressure on two existing wells to protect the fragile fractured granite aquifers allowing more natural recharging.	40,000 gallons per day or more of water pumping from existing wells can be eliminated.

		<u> </u>	Τ
			Quantification
	Will the		(e.g. acres of
	project		streams/wetlands
Upper Feather River IRWM	address the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Address water resources and	Yes	The GM CSD falls entirely within	All people benefit
wastewater needs of DACs and		a greater Eastern Plumas County	directly when
Native Americans.	□ N/A	disadvantaged community.	water resources
	,	,	are protected.
Coordinate management of	Yes	Project will reduce the amount of	An approximate
recharge areas and protect		pumping required from existing	33% reduction of
groundwater resources.	□ N/A	wells and will allow for a more	groundwater
ground water resources.		balanced approach to aquifer	pumping from
		management, groundwater	existing sources
		withdrawal and aquifer recharge.	can be achieved if
		withdrawar and aquiter recharge.	
			the new high altitude well is
	— ,,		brought on-line.
Improve coordination of land	Yes	A major commercial golf course	Golf course water
use and water resources		operates within the CSD region	well impacts on
planning.	□ N/A	with their own private wells.	CSD supply and the
		Managing ground water	shared aquifer will
		resources across the district is	be less if the
		required. Coordination and	project is
		planning by all concerned	implemented.
		entities including the golf course	
		and the HOA will be enhanced.	
Maximize agricultural,	Yes	Developing a gravity flow	Consistent water
environmental and municipal		domestic water system for the	pressure in the
water use efficiency.	□ N/A	entire community will materially	system will reduce
		improve district	leaks and other
		efficiency/reliability and reduce	system failures.
		operating costs.	Pumping costs will
			be reduced.
Effectively address climate	Yes	An important element of this	Declining water
change adaptation and/or		project is to increase the CSD's	levels in
mitigation in water resources	□ N/A	tolerance for continued drought	community wells
management.	,	by increasing storage and	can be better
		delivery capacity to ensure	managed with the
		adequate supplies of domestic	project's addition
		water to district users.	of a well in a
			different aquifer
			with a gravity fed
			delivery system.
Improve efficiency and	Yes	The major objective of this	360,000 gallons of
	162		
reliability of water supply and other water-related		project in improved reliability	new water storage
	□ N/A	and efficiency of the district's	will ensure peak
infrastructure.		domestic water supply.	water demands are
			met.

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)
Enhance public awareness and understanding of water management issues and needs.	■ Yes	The CSD has undertaken a major outreach effort to inform our owners of the IRWM project and goals, and the importance of long-term capital projects to ensure workable and effective CSD services.	Hundreds of community members will be aware of the projects benefits.
Address economic challenges of agricultural producers.	☐ Yes ■ N/A		
Work with counties/ communities/groups to make sure staff capacity exists for actual administration and implementation of grant funding.	■ Yes	The GM CSD is fully 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.	Numerous project stakeholders will be able participate in developing and implementing this important IRWM project.

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

The GM CSD sees wide benefits to this project across the spectrum of Municipal Service Group IRWM objectives. The foremost benefit of this project is efficient long-term delivery of domestic water to our residential and commercial customer in the growing region of Eastern Plumas County. Other important benefits include improved management of groundwater resources, reliable water supply during peak demand, installation of sustainable infrastructure, implementation of green systems, and operational and managerial preparation for climate change impacts.

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 a	If applicable, describe benefits or impacts of the project with respect to:				
a.	Native American Tribal Communities	■ N/A			
b.	Disadvantaged Communities ¹	□ N/A	The GM CSD falls entirely within a greater Eastern Plumas County disadvantaged community.		
c.	Environmental Justice ²	□ N/A	The GM CSD ensures fair and equal services regardless of race, culture, income, or any other cultural factors.		
d.	Drought Preparedness	□ N/A	Project will reduce the demand on two existing community wells which are experiencing slow degradation as the drought continues. This project will ensure delivery capacity and allow a more efficient recharge to our fractured granite aquifer.		
e.	Assist the region in adapting to effects of climate change ³	□ N/A	CSD is aggressively responding to the California drought emergency through outreach programs, limitations on outdoor irrigation, reducing hazardous fuel loads, and other measures. As of December 31, 2015 we have reduced water usage by 27% since 2013. Our owners are very aware of the need to adapt to changing climate patterns.		
f.	Generation or reduction of greenhouse gas emissions (e.g. green technology)	□ N/A	If the CSD can reduce the amount of fossil fuel generated electricity it uses for pumping, there will be a net positive reduction in greenhouse gas emissions. The project will eliminate the reliance of booster pump stations to pressurize water service zones. Systems pressure will be maintained by gravity, thus reducing electrical energy and greenhouse gas emissions.		
g.	Other expected impacts or benefits that are not already mentioned elsewhere	□ N/A	While the primary objectives of this project is are to improve the ability of the CSD to reliably and efficiently deliver domestic water, secondary benefits include increased emergency water capacity and reliability as well as improved overall water conservation.		

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

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.

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/).

	Will the Project		
	incorporate	Description of how RMS to be employed, if applicable	
Resource Management Strategy	RMS?		
Reduce Water Demand			
Agricultural Water Use Efficiency	☐ Yes ■ No		
Urban water use efficiency		The existing district distribution system is	
		terribly inefficient due to the dependence on	
		pumping stations to supply roughly 32% of the	
	Yes No	community including emergency water	
		(hydrant) supplies. This project will all but	
		eliminate the need for pumps except to fill	
		and transfer water between storage tanks	
Improve Flood Management		,	
Flood management	Yes No		
Improve Operational Efficiency and T	ransfers	,	
Conveyance – regional/local		Project will dramatically improve efficiency of	
	Yes No	domestic water conveyance across large	
		segments of our service area.	
System reoperation		Project will include re-engineering of the	
	■ Yes □ No	existing distribution system to improve	
		reliability and efficiency of domestic water	
Webselsess	DV. N.	delivery	
Water transfers	Yes No		
Increase Water Supply	T	Davidania a a succession a a	
Conjunctive management		Developing new water supplies in an	
		untapped fractured granite aquifer will reduce dependence on existing over pumped	
	Yes No	resources. Coordinate use of wells across the	
		system will allow water managers to better	
		manage limited ground water reserves.	
Precipitation Enhancement	Yes No	manage minea gi oana water reservesi	
Municipal recycled water	Yes No		
Surface storage – regional/local		Increase storage capacity will better ensure	
	■ Yes □ No	the district's ability to deliver domestic water	
		to all service area users.	
Improve Water Quality			
Drinking water treatment and		This project is a critical element of the	
distribution	Yes No	district's long-term capital plan to deliver	
		domestic, potable water to all customers.	
Groundwater remediation/aquifer		Developing new water supplies in an	
remediation	■ Yes □ No	untapped fractured granite aquifer will reduce	
	■■ 162 □ INO	dependence on existing over pumped	
		resources. Coordinate use of wells across the	

	Will the Project incorporate	Description of how RMS to be employed,
Resource Management Strategy	RMS?	if applicable
		system will allow water managers to better
		manage limited ground water reserves.
Matching water quality to water use	Yes No	
Pollution prevention	Yes No	
Salt and salinity management	Yes No	
Urban storm water runoff	☐ Yes ■ No	
management	☐ 163 ■ 140	
Practice Resource Stewardship		
Agricultural land stewardship	☐ Yes ■ No	
Ecosystem restoration	☐ Yes ■ No	
Forest management	☐ Yes ■ No	
Land use planning and management	☐ Yes ■ No	
Recharge area protection		Developing new water supplies in an
		untapped fractured granite aquifer will reduce
	Yes No	dependence on existing over pumped
		resources allowing the existing aquifers to
		efficiently recharge.
Sediment management	☐ Yes ■ No	
Watershed management	Yes No	
People and Water		
Economic incentives	Yes No	
Outreach and engagement		CSD is aggressively responding to the
		California drought emergency through
	Yes No	outreach programs to engage our customers
	■ 1C3 □ NO	in water discussions. The need for this project
		has been widely discussed among owners in
		the small district
Water and culture	Yes No	
Water-dependent recreation	Yes No	
Wastewater/NPDES	☐ Yes ■ No	

Other RMS addressed and explanation:

Education: the project offers an opportunity to inform the community water resource management. Planning for Sustainability: the project helps to build sustainable systems and project elements. Operational Strategies: the project improves operational efficiency and enhances operational performance strategies.

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						
Due instruction and of a DACO. To Very District							
	Project serves a need of a DAC?: ■ Yes □ No Funding Match Waiver request?: □ Yes ■ No						
- 41	Talling Matter Walver request.: 🗖 res			1	T		
			Cost Share:	061			
		Requested	Non-State Fund Source*	Cost Share: Other State			
		Grant	(Funding	Fund			
	Category	Amount	Match)	Source*	Total Cost		
a.	Direct Project Administration	\$0	\$20,000	\$0	\$20,000		
b.	Land Purchase/Easement	\$0	\$0	\$0	\$0		
c.	Planning/Design/Engineering / Environmental	\$115,150	\$76,850	\$0	\$192,000		
d.	Construction/Implementation	\$1,430,000	\$0	\$0	\$1,430,000		
e.	Environmental Compliance/ Mitigation/Enhancement	\$0	\$10,000	\$0	\$10,000		
f.	Construction Administration	\$199,000	\$0	\$0	\$199,000		
g.	Other Costs	\$0	\$0	\$0	\$0		
h.	Construction/Implementation Contingency	\$286,000	\$0	\$0	\$286,000		
i.	Grand Total (Sum rows (a) through (h) for each column)	\$2,030,150	\$106,850	\$0	\$2,137,000		
j.	j. Can the Project be phased? ■ Yes □ No If yes, provide cost breakdown by phases						
		Project Cost	O&M Cost	Description	n of Phase		
	Phase 1	\$1,733,107	\$5,000	High Altitude Storage Rank			
	Phase 2	\$403,893	\$12,000	High Altitude Well			
	Phase 3						
_	Phase 4						
k.	Explain how operation and maintenance costs will be		Increased annual cost of O&M will be included				
	financed for the 20-year planning period	oa for project	in water user fee	? S.			
I.	implementation (not grant funded). Has a Cost/Benefit analysis been completed? ☐ Yes ■ No						
				funding this proje	act will not bo		
m.	Describe what impact there may be if not funded (300 words or less)	the project is	Without outside funding this project will not be implemented in the conceivable future. The				
	not failaca (300 words of less)		•	er supply delivery			
			•	/3 of the CSD will			
				for CSD operation			
			inefficient multip	ole lift pumping sy	stems will		
			remain in operat	ion.			

*List all sources of funding: We could contribute matching funds from our reserves. If that is insufficient, the district currently has no debt, but incurring long-term debt may be a necessary consideration.

Note: See Project Development Manual, Exhibit B, for assistance in completing this table (http://featherriver.org/documents/).

VIII. PROJECT STATUS AND SCHEDULE

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**.

	Check the Current Project		Description of Activities in Each	Planned/ Actual Start	Planned/ Actual Completion
Project Stage	Stage	Completed?	Project Stage	Date (mm/yr)	Date (mm/yr)
a. Assessment and		Yes	Tank site review	4/16	9/16
Evaluation		■ No	complete. Pipe		
		□ N/A	route analyzed.		
			Need to select well		
		—	location.		- 4
b. Final Design		Yes	Prepare design and	12/15	6/15
		■ No	construction		
		□ N/A	drawings,		
			specifications and		
		—	bidding documents.		0.41.0
c. Environmental		Yes	Submit request to	12/15	3/16
Documentation		■ No	Plumas County to		
(CEQA / NEPA)	_	□ N/A	renew Project		
1.5			Exemption.	42/45	1/1 C
d. Permitting		Yes	Obtain well drilling	12/15	4/16
		No No	permits; County		
		□ N/A	Health plan review.		
e. Construction		☐ Yes	Project Bidding and	6/16	8/16
Contracting		■ No	Award.		
		□ N/A			
f. Construction		☐ Yes	Construction and	9/16	9/17
Implementation		■ No	Construction		
	_	□ N/A	Administration.		
Provide explanation	if more than	•	Final location of well to	be determined and	test hole drilling
-	and pump tested. A preliminary schematic design/plan f the project has been developed. All other design work is hold pending project funding.			design/plan for	

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	Water Quality Control Plan for the			
	project is consistent with or supported by (e.g. General	Sacramento and San Joaquin River			
	Plans, UWMPs, GWMPs, Water Master Plan, Habitat	Basins			
	Conservation Plans, TMDLs, Basin Plans, etc.).				
b.	List technical reports and studies supporting the	Hydrogeological Evaluation and			
	feasibility of this project.	Groundwater Development			
		Recommendations for GM CSD 2006			
		Groundwater Monitoring Network			
		Recommendations November 2006			
		Master Plan Report for GM CSD 2007			
c.	Concisely describe the scientific basis (e.g. how much	CSD has completed a review of all			
	research has been conducted) of the proposed project in	known documents and regulations. We			
	300 words or less.	are well versed in both water storage			
		and well development through previous			
		projects. We've completed initial			
		engineering design review including site			
		location and evaluation for the new			
		tank. We have also completed initial			
		hydrologic studies of possible well sites			
		including one test well but have not yet			
		identified the best site.			
d.	Does the project implement green technology (e.g.	■ Yes □ No □ N/A			
	alternate forms of energy, recycled materials, LID	If yes, please describe.			
	techniques, etc.).	Modern technologies, including new			
		energy efficient equipment and			
		processes, that will enhance project			
		sustainability are proposed. Gravity fed			
		delivery reduces the need for booster			
		pumping. The project will utilize natural			
		green processes to manage stormwater			
		runoff at both the tank and well sites.			
e.	Are you an Urban Water Supplier ¹ ?	☐ Yes ■ No ☐ N/A			
f.	Are you are an Agricultural Water Supplier ² ?	☐ Yes ■ No ☐ N/A			
g.	Is the project related to groundwater?	■ Yes □ No □ N/A			
		If yes, please indicate which			
		groundwater basin. Groundwater basin			
		undefined; however project is located			
		in Hydro Unit Number 518.3 of the			
		Basin Plan.			
¹ U	rban Water Supplier is defined as a supplier, either publicly o	or privately owned, providing water for			
mι	municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than				
3,000 acre-feet of water annually.					
² A	gricultural Water Supplier is defined as a water supplier, eith	ner publicly or privately owned, providing			
	ter to 10,000 or more irrigated acres, excluding the acreage				

Climate Change – Project Assessment Checklist

This climate change project assessment tool allows project applicants and the planning team to assess project consistency with Proposition 84 plan standards and RWMG plan assessment standards. The tool is a written checklist that asks GHG emissions and adaptation/resiliency questions.

Name of project: MS-7: Stage 1, High Elevation Water Tank

Project applicant: Gold Mountain Community Service District

GHG Emissions Assessment

Project Construction Emissions (If you shadk gay of the boyes places see the attached worksheet)
(If you check any of the boxes, please see the attached worksheet)
$oxed{\boxtimes}$ The project requires nonroad or off-road engines, equipment, or vehicles to complete.
igstyle igy igstyle igy igstyle igy igstyle igy igy igstyle igy igy igy igy igy igy igy igy
igstyle igy igstyle igy igstyle igy igstyle igy igy igstyle igy igy igy igy igy igy igy igy
The project is expected to generate GHG emissions for other reasons.
The project does not have a construction phase and/or is not expected to generate GHG emissions during the construction phase.
Operating Emissions
(If you check any of the boxes, please see the attached worksheet)
☐ The project requires energy to operate.
The project will generate electricity.
The project will proactively manage forests to reduce wildfire risk.
The project will affect wetland acreage.
The project will include new trees.
Project operations are expected to generate or reduce GHG emissions for other reasons.

Adaptation & Resiliency Assessment

Water Supply
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water supply vulnerability issues:
☐ Not applicable
Reduced snowmelt
Increased invasive species
New water tanks will substantially increase the district's ability to deal with drought conditions through
increasing the district's annual water storage capacity. Storing water in periods of abundant supply and
thereby reducing pressure on the district's wells during periods of drought provides for better resiliency
for the overall watershed.
The high altitude tank will also significantly reduce energy use as it will allow the district to convert a
large percentage of our customers currently on a pressurized domestic water system to be gravity fed.
The tank project is in conjunction with a high elevation well to service the new tank.
Water Damand
Water Demand
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water demand vulnerability issues:
☐ Not applicable
☐ Increasing seasonal water use variability
Unmet in-stream flow requirements
Climate-sensitive crops
☐ Groundwater drought resiliency
Water curtailment effectiveness
The district serves a large number of seasonal residents and water use goes up accordingly in the May to
September time frame. The new tank will reduce pressure on the current system as well as on our two
critical domestic water wells. Increased storage capacity during the wet months will further reduce
pressure on our wells in the drier months, allowing for the aquifers to more efficiently recharge during

the dry months.

Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water quality vulnerability issues: Not applicable Increasing catastrophic wildfires Eutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and other related water quality issues) Seasonal low flows and limited abilities for waterbodies to assimilate pollution Water treatment facility operations Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold freshwater habitat, spawning habitat, wildlife habitat, etc.) The district currently as limited water storage capacity, both in tanks and available surface sources to fight either house or wildland fires. The high altitude tank both increases capacity but just as importantly provides a gravity pressurized source of emergency water in the event the district suffers from lack of power likely to be expected during an emergency. The Gold Mountain community is a slow growth community, but nevertheless the district must plan for long term water production and delivery to meet a number of beneficial uses including domestic water supplies, recreational contact uses (pools and engineered aquatic habitats) which will see increased demand as the community grows.
 Not applicable Increasing catastrophic wildfires Eutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and other related water quality issues) Seasonal low flows and limited abilities for waterbodies to assimilate pollution Water treatment facility operations Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold freshwater habitat, spawning habitat, wildlife habitat, etc.) The district currently as limited water storage capacity, both in tanks and available surface sources to fight either house or wildland fires. The high altitude tank both increases capacity but just as importantly provides a gravity pressurized source of emergency water in the event the district suffers from lack of power likely to be expected during an emergency. The Gold Mountain community is a slow growth community, but nevertheless the district must plan for long term water production and delivery to meet a number of beneficial uses including domestic water supplies, recreational contact uses (pools and engineered aquatic habitats) which will see increased
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Water treatment facility operations Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold freshwater habitat, spawning habitat, wildlife habitat, etc.) The district currently as limited water storage capacity, both in tanks and available surface sources to fight either house or wildland fires. The high altitude tank both increases capacity but just as importantly provides a gravity pressurized source of emergency water in the event the district suffers from lack of power likely to be expected during an emergency. The Gold Mountain community is a slow growth community, but nevertheless the district must plan for long term water production and delivery to meet a number of beneficial uses including domestic water supplies, recreational contact uses (pools and engineered aquatic habitats) which will see increased
Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold freshwater habitat, spawning habitat, wildlife habitat, etc.) The district currently as limited water storage capacity, both in tanks and available surface sources to fight either house or wildland fires. The high altitude tank both increases capacity but just as importantly provides a gravity pressurized source of emergency water in the event the district suffers from lack of power likely to be expected during an emergency. The Gold Mountain community is a slow growth community, but nevertheless the district must plan for long term water production and delivery to meet a number of beneficial uses including domestic water supplies, recreational contact uses (pools and engineered aquatic habitats) which will see increased
The district currently as limited water storage capacity, both in tanks and available surface sources to fight either house or wildland fires. The high altitude tank both increases capacity but just as importantly provides a gravity pressurized source of emergency water in the event the district suffers from lack of power likely to be expected during an emergency. The Gold Mountain community is a slow growth community, but nevertheless the district must plan for long term water production and delivery to meet a number of beneficial uses including domestic water supplies, recreational contact uses (pools and engineered aquatic habitats) which will see increased
fight either house or wildland fires. The high altitude tank both increases capacity but just as importantly provides a gravity pressurized source of emergency water in the event the district suffers from lack of power likely to be expected during an emergency. The Gold Mountain community is a slow growth community, but nevertheless the district must plan for long term water production and delivery to meet a number of beneficial uses including domestic water supplies, recreational contact uses (pools and engineered aquatic habitats) which will see increased
long term water production and delivery to meet a number of beneficial uses including domestic water supplies, recreational contact uses (pools and engineered aquatic habitats) which will see increased
Flooding Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues:
⊠ Not applicable
Aging critical flood protection
Wildfires
Critical infrastructure in a floodplain
Insufficient flood control facilities

Climate Change- Project Assessment Tool
Ecosystem and Habitat Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority ecosystem and habitat vulnerability issues:
 Not applicable □ Climate-sensitive fauna or flora ☑ Recreation and economic activity □ Quantified environmental flow requirements □ Erosion and sedimentation □ Endangered or threatened species □ Fragmented habitat
The seasonal nature of the Gold Mountain community results in significantly increased pressure on the watershed during the summer months. Current limited water production and storage capacity results in relatively full time production from our wells and frequent turnover of water storage. The increased capacity of this system will greatly reduce pressure on the district's systems and in turn will significantly reduce pressure on our fragile fractured granite aquifers during the dry months.
Hydropower Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority hydropower vulnerability issues: Not applicable Reduced hydropower output

Upper Feather River Integrated Regional Water Management Plan

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-7: Stage 1-High Elevation Tank

GHG Emissions Analysis

Project Construction Emissions

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

	Maximum		
	Number Per	Total 8-Hour Days in	
Type of Equipment	Day	Operation	Total MTCO₂e
Tractors/Loaders/Bac			
khoes	1	14	4
Excavators	1	14	6
Surfacing Equipment	1	14	10
Cranes	1	5	4
			0
			0
			0
			0
_			0
			0
		Total Emissions	24

Y The project requires materials to be transported to the project site. If yes:

	Average Trip	
Total Number of	Distance	
Round Trips	(Miles)	Total MTCO₂e
5	120	1

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

		Average Round Trip		
Average Number	Total Number	Distance Traveled		
of Workers	of Workdays	(Miles)	Total MTCO₂e	
3	45	120		6

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

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

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-7: Stage 1-High Elevation Tank

Project Operating Emissions

N The project requires energy to operate. If yes:

Annual Energy Needed	Unit	Total MTCO₂e
	kWh (Electricity)	0
	Therm (Natural Gas)	0

N The project will generate electricity. If yes:

Annual kWh Generated	Total MTCO₂e
	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 ₂ e
3	-19

^{*}A negative value indicates GHG reductions

N The project will affect wetland acreage. If yes:

Acres of Protected Wetlands	Total MTCO₂e	
		0

^{*}A negative value indicates GHG reductions

The project will include new trees. If yes:

Acres of Trees Planted		Total MTCO₂e	
	1		-186

^{*}A negative value indicates GHG reductions

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

GHG Emissions Summary

Construction and development will generate approximately:	31 MTCO ₂ e
In a given year, operation of the project will result in:	-205 MTCO ₂ e

Climate Change – Project Assessment Checklist

This climate change project assessment tool allows project applicants and the planning team to assess project consistency with Proposition 84 plan standards and RWMG plan assessment standards. The tool is a written checklist that asks GHG emissions and adaptation/resiliency questions.

Name of project: MS-7: Stage 2, High Elevation Well

Project applicant: Gold Mountain Community Service District

GHG Emissions Assessment

Project Construction Emissions
(If you check any of the boxes, please see the attached worksheet)
igstyle igstyle The project requires nonroad or off-road engines, equipment, or vehicles to complete.
The project requires materials to be transported to the project site.
The project requires workers to commute to the project site.
The project is expected to generate GHG emissions for other reasons.
The project does not have a construction phase and/or is not expected to generate GHG emissions during the construction phase.
Operating Emissions
(If you check any of the boxes, please see the attached worksheet)
The project requires energy to operate.
The project will generate electricity.
The project will proactively manage forests to reduce wildfire risk.
The project will affect wetland acreage.
The project will include new trees.
Project operations are expected to generate or reduce GHG emissions for other reasons.

Adaptation & Resiliency Assessment

Water Supply Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water supply vulnerability issues:
☐ Not applicable
Reduced snowmelt
Unmet local water needs (drought)
☐ Increased invasive species
The new well will substantially increase the district's ability to deal with drought conditions by reducing pressure on the district's two existing wells. Additionally, this well is planned as stage 2 of the planned high elevation water project. The well will provide an immediate and local source of domestic water to feed the new high altitude water storage tanks. Storing water in periods of abundant supply and thereby reducing pressure on the district's wells during periods of drought provides for better resiliency for the overall watershed.
The high altitude well/tank will also significantly reduce energy use as it will allow the district to convert a large percentage of our customers currently on a pressurized domestic water system to be gravity fed. Even without the tank, the district has a long term plan for a high altitude well to tap into and as yet untapped aquifer zone.
Water Demand Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water demand vulnerability issues:
☐ Not applicable
☐ Increasing seasonal water use variability
Unmet in-stream flow requirements
Climate-sensitive crops
Groundwater drought resiliency
☐ Water curtailment effectiveness
The district serves a large number of seasonal residents and water use goes up accordingly in the May to
September time frame. The new well/tank will reduce pressure on the current system as well as on our

two critical domestic water wells. Increased storage capacity during the wet months will further reduce pressure on our wells in the drier months, allowing for the aquifers to more efficiently recharge during

the dry months.

Water Quality
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water quality vulnerability issues:
☐ Not applicable
☐ Increasing catastrophic wildfires
Eutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and other related water quality issues)
Seasonal low flows and limited abilities for waterbodies to assimilate pollution
☐ Water treatment facility operations
☐ Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold freshwater habitat, spawning habitat, wildlife habitat, etc.)
The district currently as limited water storage capacity, both in tanks and available surface sources to fight either house or wildland fires. The high altitude well/tank increases capacity but just as importantly provides a gravity pressurized source of emergency water in the event the district suffers from lack of power likely to be expected during an emergency.
The Gold Mountain community is a slow growth community, but nevertheless the district must plan for long term water production and delivery to meet a number of beneficial uses including domestic water
supplies, recreational contact uses (pools and engineered aquatic habitats) which will see increased demand as the community grows.
Flooding Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection
Flooding Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires
Flooding Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain
Flooding Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires
Flooding Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain

Upper Feather River Integrated Regional Water Management Plan Climate Change- Project Assessment Tool **Ecosystem and Habitat** Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority ecosystem and habitat vulnerability issues: Not applicable Climate-sensitive fauna or flora Recreation and economic activity Quantified environmental flow requirements Erosion and sedimentation Endangered or threatened species Fragmented habitat The seasonal nature of the Gold Mountain community results in significantly increased pressure on the watershed during the summer months. Current limited water production capacity results in relatively full time well production during the summer months. The increased capacity of this system will greatly reduce pressure on the district's systems and in turn will significantly reduce pressure on our fragile fractured granite aquifers during the dry months. **Hydropower** Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority hydropower vulnerability issues: Not applicable

4

Reduced hydropower output

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-7: Stage 2-High Elevation Well

GHG Emissions Analysis

Project Construction Emissions

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

	Maximum		
	Number Per	Total 8-Hour Days in	
Type of Equipment	Day	Operation	Total MTCO₂e
Bore/Drill Rigs	1	7	7
Excavators	1	7	3
			0
			0
			0
			0
			0
			0
			0
			0
		Total Emissions	10

Υ	The project requires m	naterials to be	transported to	o the project s	ite. If yes:
---	------------------------	-----------------	----------------	-----------------	--------------

	•	• •
	Average Trip	
Total Number of	Distance	
Round Trips	(Miles)	Total MTCO₂e
5	120	1

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

		Average Round Trip		
Average Number	Total Number	Distance Traveled		
of Workers	of Workdays	(Miles)	Total MTCO₂e	
2	10	120	:	1

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

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

MS-7: Stage 2-High Elevation Well

Project Operating Emissions

Υ	The project requires energy to operate. If yes:

Annual Energy Needed	Unit	Total MTCO₂e	
39,420	kWh (Electricity)	8	;
	Therm (Natural Gas)	0)

N The project will generate electricity. If yes:

Annual kWh Generated	Total MTCO ₂ e
	0

^{*}A negative value indicates GHG reductions

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

Acres Protected from Wildfire	Total MTCO₂e
1	-3

^{*}A negative value indicates GHG reductions

N The project will affect wetland acreage. If yes:

Acres of Protected Wetlands	Total MTCO₂e
	0

^{*}A negative value indicates GHG reductions

N The project will include new trees. If yes:

Acres of Trees Planted		Total MTCO₂e	
	0		0

^{*}A negative value indicates GHG reductions

	Project operations are expected to generate or reduce GHG emissions for other reasons. If you	es
Ν	explain:	

GHG Emissions Summary

Construction and development will generate approximately:	12 MTCO₂e
In a given year, operation of the project will result in:	5 MTCO₂e



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	Gold Mountain Community Service District (GM CSD)		
Name of Primary Contact	Ivan Gossage, General Manager		
Name of Secondary Contact	Rich McLaughlin, Board President		
Mailing Address	150 Pacific Street, Portola, CA 96122		
E-mail	gossageivan@gmail.com		
	rich.mclaughlinGMCSD@gmail.com		
Phone	(530) 832-5945		
Other Cooperating Agencies /			
Organizations / Stakeholders			
Is your agency/organization	Yes. Project is included in our long-term capital plan.		
committed to the project through			
completion? If not, please explain			

II. GENERAL PROJECT INFORMATION

Project Title	MS-8: GM CSD Water Reclamation Facility			
Project Category	☐ Agricultural Land Stewardship			
	☐ Floodplains/Meadows/Waterbodies			
	Municipal Services			
	Water Supply/Water Quality			
	Community Water/Wastewater			
	☐ Tribal Advisory Committee			
	☐ Uplands/Forest			
Project Description	Background. Gold Mountain was developed in the 1990's			
(Briefly describe the project,	with a limited wastewater supply, insufficient to meet long-			
in 300 words or less)	term plans of the community. All 408 home sites were sold			
	prior to the original developer declaring bankruptcy and prior			
	to installation of promised infrastructure improvements. The			
	community reorganized into a public community service			
	district (CSD) in 1996 with essentially zero initial funding.			
	Through sound fiscal management, establishing a practical			
	rate structure, and investing in professional engineering			
	studies, the CSD developed a master plan for wastewater and			
	domestic water management. The CSD master plan is based			
	on trigger points in long-term service requirements that will			

	call for improvements to wastewater handling capacity and effluent quality, as well as for domestic water supply, storage and distribution improvements to complete required infrastructure.
	Description. The existing wastewater system in the CSD is comprised of individual Septic Tank Effluent Pumping (STEP) at each home site, which pump effluent into a common low pressure wastewater main feeding two community leach fields for disposal. The CSD needs to install a modern Water Reclamation treatment and pumping facility to reclaim wastewater for irrigation at a golf course and to increase water reserves available to fight wildfilres within the Gold Mountain CSD service area. Reclaiming treated effluent to the golf course will reduce the depletion of groundwater resources that are shared by the CSD and Golf Course operator; and improve the water quality of the effluent being discharged into the groundwater by the CSD. This project will significantly increase the quality of wastewater to the leach fields, as well as provide additional filtration of the treated wastewater effluent for reclaim to a golf course or use in fire fighting in the area.
Project Location Description (e.g.,	The project site is located approximately 4.5 miles SW of the
along the south bank of stream/river between river miles or miles from	intersection of State Route 70 and Highway A15 in Portola, CA. The middle fork of the Feather River is located approximately
Towns/intersection and/or address):	800 feet NW of the project site.
Latitude:	39° 45′ 58.5″ N
Longitude:	120° 32′ 09.29″ W

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.

			Quantification
	Will the		(e.g. acres of
	project		streams/wetlands
Upper Feather River IRWM	address the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Restore natural hydrologic	Yes	Wastewater reclamation will	Ground water
functions.		reduce demand on community	pumping can be
	□ N/A	wells allowing for more efficient	reduced 43,000
		recharging of our shared	gallons per day or
		fractured granite aquifers.	more.
Reduce potential for		A secondary effect of this project	Thousands of
catastrophic wildland fires in	Yes	is to provide a new source of	acres of wild land

		Т	Г
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)
the Region.	□ N/A	water for wildland firefighting and irrigation of public areas in the community. Both uses complement our aggressive hazardous fuel reduction program.	will benefit by the reduced wildfire potential.
Build communication and collaboration among water resources stakeholders in the Region.	Yes	Reclaiming community wastewater and reusing for irrigation on public areas and the private golf course represents significant collaboration between the CSD, the HOA, and commercial entities in the district.	Many community members, businessmen and women and resource managers will work together.
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.	☐ Yes ■ N/A		
Encourage municipal service providers to participate in regional water management actions that improve water supply and water quality.	Yes	This project represents a very pro- active action to contribute in a positive way to regional water supply management and long- term water quality.	Many State and local water management officials interact together.
Continue to actively engage in FERC relicensing of hydroelectric facilities in the Region.	☐ Yes ■ N/A		
Address economic challenges of municipal service providers to serve customers.	Yes	Project solves a major challenge for the CSD by providing a long-term solution for wastewater management.	Small CSD's must overcome daunting economic challenges.
Protect, restore, and enhance the quality of surface and groundwater resources for all beneficial uses, consistent with the RWQC Basin Plan.	■ Yes	Project will significantly improve effluent quality through advanced wastewater treatment and reclamation to further protect the aquifer that supports the community.	Groundwater sources serving 1,290 acres of the CSD community will benefit from wastewater reclamation.

		T	
			Quantification
	Will the		(e.g. acres of
	project		streams/wetlands
Upper Feather River IRWM	address the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Address water resources and	Yes	The GM CSD falls entirely within	All people benefit
wastewater needs of DACs and		the greater Eastern Plumas	directly when
Native Americans.	□ N/A	County disadvantaged	water resources
		community.	are protected.
Coordinate management of	Yes	High quality treatment and	As much as 360
recharge areas and protect		reclamation of wastewater for	acre-feet annually
groundwater resources.	□ N/A	irrigation use is an important	can be delivered
ground water resources.		component of managing our	to reclamation use
		recharge capability and protecting	protecting ground
		ground water resources.	water sources.
Improve coordination of land	Yes	The GM CSD shares an aquifer	Golf course water
use and water resources	162	•	demands will be
	□ N/A	with private golf course operators	less on the local
planning.	□ N/A	(private wells). Coordination of	
		scarce resources is critical to the	aquifer if the
		success of both entities.	project is
			implemented.
Maximize agricultural,	Yes	Reclaiming wastewater for use on	More than 150
environmental and municipal	_	natural and developed landscape	acres of open
water use efficiency.	□ N/A	environments will have a	space and
		significant positive effect on our	landscape
		community water use efficiency.	environment will
			be benefited.
Effectively address climate	Yes	Wastewater reclamation is a key	Declining water
change adaptation and/or		component of the CSD's overall	levels in
mitigation in water resources	□ N/A	drought strategy to reduce	community wells
management.		demand on our wells offsetting	will abate with
		potential negative impacts from	better resource
		climate change.	management.
Improve efficiency and	Yes	Reclaiming community	2,300,000 gallons
reliability of water supply and		wastewater will materially	of treated WW
other water-related	□ N/A	improve aquifer reliability and	can be used to
infrastructure.		enhance overall water supply and	replace well water
		delivery efficiency.	demands annually.
Enhance public awareness and	Yes	While a secondary benefit, this	Info on the project
understanding of water		project will have a direct impact	and water
management issues and needs.	□ N/A	on both our community and	conservation will
The state of the s		commercial awareness of the	be provided to
		importance.	hundreds of
		importance.	community
			members through
			the HOA.
			uic HOA.

			Quantification
	Will the		(e.g. acres of
	project		streams/wetlands
Upper Feather River IRWM	address the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Address economic challenges of	☐ Yes		
agricultural producers.			
	N/A		
Work with counties/	Yes	The GM CSD is fully prepared to	Numerous project
communities/groups to make		work with the IRWM and the	stakeholders will
sure staff capacity exists for	□ N/A	county to administer any	be able to
actual administration and		resultant grant and see this	participate in
implementation of grant		project through to completion.	developing and
funding.		We are prepared to resource	implementing this
		accordingly.	important IRWM
			project.

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

The GM CSD sees wide benefits to this project across the spectrum of Municipal Service Group IRWM objectives. The foremost benefit of this project is long-term water conservation which is critical to the growing region of Eastern Plumas County. Other important benefits include protection of groundwater sources, more efficient use of groundwater resources, installation of sustainable infrastructure and green systems, preparation for climate change impacts and protecting the Feather River.

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	■ N/A		
b. Disadvantaged Communities ¹	□ N/A	The GM CSD falls entirely within a greater Eastern Plumas County disadvantaged community.	
c. Environmental Justice ²			
	■ N/A		
d. Drought Preparedness		Project will reduce the demand on	
	□ N/A	community wells which are experiencing	
		slow degradation as the drought	
		continues. Wastewater reclamation will	
		allow a more efficient recharge to our	
		shared fractured granite aquifer.	

e.	Assist the region in adapting to effects of climate change ³ Generation or reduction of greenhouse gas	□ N/A	As Eastern Plumas County has shifted to a recreational based economy, the demand for parks and golf courses is incongruent with the need to conserve water. Wastewater reclamation will become an important component in adapting to climate change.	
	emissions (e.g. green technology)	N/A		
g.	Other expected impacts or benefits that		The project presents an opportunity to	
	are not already mentioned elsewhere	□ N/A	inform the community about the	
			importance of the management of water	
			resources and allows members of the	
			community to participate in protecting important natural resources, sustaining	
			infrastructure systems and improving the	
			environment and quality of life.	
¹ A [Disadvantaged Community is defined as a com	munity witl		
inco	me that is less than 80 percent of the Statewic	de annual N	AHI. DWR's DAC mapping is available on the	
	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				
	ondary effects such as increased wildfire risk, e			
	in the property of the control of th			

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

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/).

	Will the Project	
Pasaurca Managament Stratogy	incorporate RMS?	Description of how RMS to be employed, if applicable
Resource Management Strategy Reduce Water Demand	VIAI2:	п аррпсавіе
Agricultural Water Use Efficiency	Yes No	
Urban water use efficiency	163 110	Reclaiming wastewater for irrigation use
orsan water use emisiency	■ Yes □ No	decreases demand on wells and contributes to
		the long-term health of the aquifer.
Improve Flood Management		
Flood management	☐ Yes ■ No	
Improve Operational Efficiency and T	ransfers	
Conveyance – regional/local		Providing operational ability to irrigate a golf
	Yes No	course with recycled water rather than
		ground water.
System reoperation		Improvement of existing operations and
	Yes No	management procedures to meet water needs
		more efficiently and reliably.
Water transfers	Yes No	
Increase Water Supply	I	T
Conjunctive management		Recharging groundwater storage using
	Yes No	recycled water maximizes the availability and
Draginitation Enhancement	□ Vas ■ Na	reliability of community water supplies.
Precipitation Enhancement	Yes No	Drainet involves reglaining demostically
Municipal recycled water		Project involves reclaiming domestically produced wastewater and recycling it for
	Yes No	irrigation with a resulting significant reduction
		well production.
Surface storage – regional/local	Yes No	Wen production:
Improve Water Quality		
Drinking water treatment and		
distribution	Yes No	
Groundwater remediation/aquifer		Reducing demand on community wells will
remediation	Yes No	result in more efficient aquifer recharge and
		long-term remediation.
Matching water quality to water use		Using reclaimed water for irrigation is a sound
	Yes No	practice and reduces demand for fresh water
		production from community wells.
Pollution prevention		The project reduces the possibility of ground
		water contamination from leached water and
	■ Yes □ No	eliminates the future possibility of leach field
		failure as the system ages. If the system fails
		the wastewater could contaminate local
		surface waters.

	Will the Project	
	incorporate	Description of how RMS to be employed,
Resource Management Strategy	RMS?	if applicable
Salt and salinity management	☐ Yes ■ No	
Urban storm water runoff	DV. DN.	
management	☐ Yes ■ No	
Practice Resource Stewardship		
Agricultural land stewardship	☐ Yes ■ No	
Ecosystem restoration	☐ Yes ■ No	
Forest management	☐ Yes ■ No	
Land use planning and management	☐ Yes ■ No	
Recharge area protection	■ Yes □ No	Wastewater reclamation through additional treatment reduces the amount of lessertreated water returning to the aquifer. Increasing the treatment of wastewater improves the quality of water returned to the ground to recharge the aquifer.
Sediment management	☐ Yes ■ No	
Watershed management	■ Yes □ No	Using reclaimed water will reduce pressure on the shared aquifer thereby improving ground water retention and storage
People and Water		
Economic incentives	Yes No	
Outreach and engagement	■ Yes □ No	Convincing the community at large that the use of recycled water for irrigation is a safe and efficient practice improves the public's awareness of water issues and the important need for long-term new solutions.
Water and culture	■ Yes □ No	As stated above, changing public attitudes towards water recycling has cultural impacts as to how the public views the use and conservation of this important resource.
Water-dependent recreation	■ Yes □ No	In the case of the GM CSD, the local commercial golf course is the primary recreational resource in the community. This project will use the reclaimed water as an important source for golf course irrigation, which will assist in "keeping the course green" for recreational purposes.
Wastewater/NPDES	☐ Yes ■ No	

Other RMS addressed and explanation: Education: the project offers an opportunity to inform the community of water resource management. Planning for Sustainability: the project helps to build sustainable systems and project elements. Operational Strategies: the project improves operational efficiency and enhances operational performance strategies.

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?: ■ Yes □ No						
Funding Match Waiver request?: Yes No						
		Requested Grant	Cost Share: Non-State Fund Source* (Funding	Cost Share: Other State Fund		
	Category	Amount	Match)	Source*	Total Cost	
a.	Direct Project Administration	\$0	\$20,000	\$0	\$20,000	
b.	Land Purchase/Easement	\$0	\$0	\$0	\$0	
c.	Planning/Design/Engineering / Environmental	\$110,000	\$57,500	\$0	\$167,500	
d.	Construction/Implementation	\$1,280,000	\$0	\$0	\$1,280,000	
e.	Environmental Compliance/ Mitigation/Enhancement	\$0	\$15,000	\$0	\$15,000	
f.	Construction Administration	\$108,000	\$0	\$0	\$108,000	
g.	Other Costs	\$0	\$0	\$0	\$0	
h.	Construction/Implementation Contingency	\$260,000	\$0	\$0	\$260,000	
i.	Grand Total (Sum rows (a) through (h) for each column)	\$1,758,000	\$92,500	\$0	\$1,850,500	
j.	j. Can the Project be phased?					
		Project Cost	O&M Cost	Description	n of Phase	
	Phase 1	\$1,850,000	\$120,000	Planning/Desig	n/Construction	
	Phase 2					
	Phase 3 Phase 4					
k.	Explain how operation and maintenan	ce costs will be	Increased cost O	8.M will be includ	led in sewer	
κ.	financed for the 20-year planning period		Increased cost O&M will be included in sewer user fees.			
	implementation (not grant funded).					
I.	Has a Cost/Benefit analysis been comp	oleted?	☐ Yes ■ No			
m.	Describe what impact there may be if	the project is	Without outside	funding this proj	ect will not be	
	not funded (300 words or less)		implemented in		_	
			•	ater sub-surface e		
				ill remain in servi		
			disposal fields may be near their service life. The topography and geography of the CSD severely			
			limits the expansion of leach field capacity. The			
			fields do not have the capacity to service project			
			buildout. If the fields reach their service life or			
			otherwise become overwhelmed there is a risk			

	the wastewater will surface and runoff into local ephemeral streams that are tributary to the Feather River. An opportunity to protect water resources may be lost.			
*List all sources of funding: We could contribute matching funds from our reserves. If that is insufficient, the				
district currently has no debt, but incurring long-term debt may be a necessary consideration.				
Note: See Project Development Manual, Exhibit B, for assistance in completing this table (http://featherriver.org/documents/).				

VIII. PROJECT STATUS AND SCHEDULE

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 ar Evaluation	nd 🗆	Yes No N/A	Site review complete. Pipe route analyzed.		
b. Final Design	•	☐ Yes ■ No ☐ N/A	Select treatment process and equipment; prepare construction drawings, specifications and bidding documents.	12/15	6/15
c. Environmenta Documentatio (CEQA / NEPA)	n 🗆	☐ Yes ■ No □ N/A	Submit application for Project Exemption.	12/15	3/16
d. Permitting		☐ Yes ■ No ☐ N/A	Special Use Permit. RWQ Report of Waste Discharge and preliminary Engineering Report.	12/15	4/16
e. Construction Contracting		☐ Yes ■ No □ N/A	Project Bidding and Award.	6/16	8/16
f. Construction Implementation	on 🗆	☐ Yes ■ No ☐ N/A	Construction and Construction Administration.	9/16	7/17
Provide explanation stage is checked a			A preliminary schematic design/plan for the project has been developed. All other design work is on hold pending project funding.		

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	Water Quality Control Plan for the
	project is consistent with or supported by (e.g. General	Sacramento and San Joaquin River
	Plans, UWMPs, GWMPs, Water Master Plan, Habitat	Basins
	Conservation Plans, TMDLs, Basin Plans, etc.).	Water Quality Order No. 97-10-DWQ-
		XXXX GW CSD Wastewater Treatment
		and Disposal System (in discovery)
b.	List technical reports and studies supporting the	Master Plan Report for GM CSD 2007
	feasibility of this project.	Disposal Field Seepage Investigation
		October 2014
		GM Leachfield Capacity Study 2015
c.	Concisely describe the scientific basis (e.g. how much	GM CSD personnel have collected many
	research has been conducted) of the proposed project in	years of data from both the wastewater
	300 words or less.	and water operations. Soils
		investigations have been conducted to
		evaluate wastewater disposal field
		performance and infiltration rates.
		Extensive research on reclamation
		system compatible with the district's
		STEP primary treatment systems has
		been completed. Wastewater disposal
		capacity analysis has been conducted.
		Numerous domestic water well
		exploratory test wells have been drilled
		and tested. Pumping testing have been
		conducted on the domestic water
		supply wells serving the CSD.
d.	Does the project implement green technology (e.g.	■ Yes □ No □ N/A
	alternate forms of energy, recycled materials, LID	If yes, please describe.
	techniques, etc.).	Modern technologies, including new
		energy efficient equipment and
		processes, that will enhance project
		sustainability are proposed. The project
		will utilize natural green processes to
		manage storm water runoff at the
		reclamation site.
e.	Are you an Urban Water Supplier ¹ ?	☐ Yes ■ No ☐ N/A
f.	Are you are an Agricultural Water Supplier ² ?	☐ Yes ■ No ☐ N/A
g.	Is the project related to groundwater?	■ Yes □ No □ N/A
		If yes, please indicate which
		groundwater basin. Groundwater basin
		undefined; however project is located
		in Hydro Unit Number 518.3 of the
		Basin Plan.

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.

Climate Change – Project Assessment Checklist

This climate change project assessment tool allows project applicants and the planning team to assess project consistency with Proposition 84 plan standards and RWMG plan assessment standards. The tool is a written checklist that asks GHG emissions and adaptation/resiliency questions.

Name of project: MS-8: Water Reclamation Facility

Project applicant: Gold Mountain Community Service District

GHG Emissions Assessment

Project Construction Emissions (If you check any of the boxes, please see the attached worksheet)
 ☑ The project requires nonroad or off-road engines, equipment, or vehicles to complete. ☑ The project requires materials to be transported to the project site. ☑ The project requires workers to commute to the project site. ☑ The project is expected to generate GHG emissions for other reasons. ☑ The project does not have a construction phase and/or is not expected to generate GHG emissions during the construction phase.
Operating Emissions (If you check any of the boxes, please see the attached worksheet)
 ☑ The project requires energy to operate. ☑ The project will generate electricity. ☑ The project will proactively manage forests to reduce wildfire risk. ☑ The project will affect wetland acreage. ☑ The project will include new trees.
Operating Emissions (If you check any of the boxes, please see the attached worksheet) The project requires energy to operate. The project will generate electricity. The project will proactively manage forests to reduce wildfire risk.

Project operations are expected to generate or reduce GHG emissions for other reasons.

Adaptation & Resiliency Assessment

Water Supply Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water supply vulnerability issues:
 Not applicable Reduced snowmelt Unmet local water needs (drought) Increased invasive species
Currently all district waste water is treated in two large community drain fields. All water used to district landscaping currently comes from our domestic water system. In addition, the district's largest customer is a golf resort with an 18 hole golf course. While the resort has its own private wells for golf course irrigation, those wells tap into the same aquifers as those tapped by the district's two domestic wells. The district's planned water reclamation facility will produce a source of irrigation water for both district landscaping and for golf course irrigation which will significantly reduce pressure on the districts domestic water supply as well as the underlying aquifers. Water conservation measures enacted this year have already had a demonstrable effect the aquifer, water reclamation will help to continue to reduce pressure on the watershed.
Water Demand Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water demand vulnerability issues: Not applicable Increasing seasonal water use variability Unmet in-stream flow requirements Climate-sensitive crops Groundwater drought resiliency Water curtailment effectiveness
The district serves a large number of seasonal residents and water use goes up accordingly in the May to September time frame. The new water reclamation project will reduce pressure on the current system by reducing pressure on district wells as well as private customer wells. Reducing well demand during the drier months when irrigation requirements are at their peak will allow the aquifers to more efficiently recharge during these drier periods.

Water Quality
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water quality vulnerability issues:
Not applicable
Increasing catastrophic wildfires
Eutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and other related water quality issues)
Seasonal low flows and limited abilities for waterbodies to assimilate pollution
Water treatment facility operations
☐ Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold freshwater habitat, spawning habitat, wildlife habitat, etc.)
Using reclaimed water for irrigation use will reduce pressure on limited water storage reserves and enhance the community's ability to prevent catastrophic fires.
The Gold Mountain community is a slow growth community, but nevertheless the district must plan for long term water production and delivery to meet a number of beneficial uses including domestic water supplies, recreational contact uses (pools and engineered aquatic habitats) which will see increased demand as the community grows. By providing reclaimed water for golf course and engineered habitat requirements in the dry months limits pressure on the aquifer during these critical months.
Flooding
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain Insufficient flood control facilities

Upper Feather River Integrated Regional Water Management Plan Climate Change- Project Assessment Tool **Ecosystem and Habitat** Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority ecosystem and habitat vulnerability issues: Not applicable Climate-sensitive fauna or flora Recreation and economic activity Quantified environmental flow requirements Erosion and sedimentation Endangered or threatened species Fragmented habitat The seasonal nature of the Gold Mountain community results in significantly increased pressure on the watershed during the summer months. Current limited water production capacity results in relatively full time well production during the summer months. Reclaiming a significant percentage of waste water and applying it to irrigation will greatly reduce pressure on the district's systems and in turn will significantly reduce pressure on our fragile fractured granite aquifers during the dry months. **Hydropower** Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority hydropower vulnerability issues: Not applicable

Reduced hydropower output

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-8: GM CSD Water Reclamation Facility

GHG Emissions Analysis

Project Construction Emissions

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

	Maximum		
	Number Per	Total 8-Hour Days in	
Type of Equipment	Day	Operation	Total MTCO₂e
Excavators	1	15	7
Cement and Mortar			
Mixers	1	4	0
Cranes	1	2	2
Tractors/Loaders/Bac			
khoes	2	15	8
Dumpers/Tenders	1	5	0
			0
			0
			0
			0
			0
		Total Emissions	17

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

٠.	requires materials to be transported to the project site.				
		Average Trip			
	Total Number of	Distance			
	Round Trips	(Miles)	Total MTCO₂e		
	8	120	1		

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

	4 100	120		16
of Workers	of Workdays	(Miles)	Total MTCO₂e	
Average Number	Total Number	Distance Traveled		
		Average Round Trip		

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

N The project does not have a construction phase and/or is not expected to generate GHG emissions construction phase.

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-8: GM CSD Water Reclamation Facility

Project Operating Emissions

The project requires energy to operate. If yes:

Annual Energy Needed	Unit	Total MTCO₂e
438,000	kWh (Electricity)	86
	Therm (Natural Gas)	0

N The project will generate electricity. If yes:

Annual kWh Generated	Total MTCO₂e
	0

^{*}A negative value indicates GHG reductions

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

Acres Protected from Wildfire		Total MTCO₂e	
	2		-13

^{*}A negative value indicates GHG reductions

N The project will affect wetland acreage. If yes:

Acres of Protected Wetlands	Total MTCO₂e
	0

^{*}A negative value indicates GHG reductions

N The project will include new trees. If yes:

Acres of Trees Planted		Total MTCO₂e	
	0		0

^{*}A negative value indicates GHG reductions

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

Wastewater treatment operations are sources of GHGs such as CO2 and N2O. Modern, efficent and natural processes will be employed as part of the proposed project to reduce GHGs.

GHG Emissions Summary

Const	truction and development will generate approximately:	34 MTCO₂e
In a g	given year, operation of the project will result in:	73 MTCO₂e



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	Grizzly Lake CSD
Name of Primary Contact	Jared Recasens, Chief Operator
Name of Secondary Contact	Larry Terrill, Chairman, Board of Directors
Mailing Address	119 Delleker Drive, Portola, CA 96122
E-mail	glrid@att.net, jrwastewater@gmail.com
Phone	530-832-5225 Office, 530-927-8459 Cell
Other Cooperating Agencies /	
Organizations / Stakeholders	
Is your agency/organization	Yes. The CSD staff and board members will be instrumental in
committed to the project through	overseeing the grant process and ensuring proper
completion? If not, please explain	implementation.

II. GENERAL PROJECT INFORMATION

Project Title	MS-9: Crocker Water Service Meters
Project Category	■ Water Supply/Water Quality
	☐ Environmental Protection/Restoration
	■ Community Water/Wastewater
	☐ Stakeholder/Public Collaboration and Education
	☐ Working Landscape Viability
Project Description	Project will consist of replacing all the illegal service laterals to
(Briefly describe the project,	meet UPC and install new water meters. Project is located in
in 300 words or less)	extremely steep elevation with several different pressure
	zones ranging from 85 psi to 230 psi. Every lateral needs to be
	upgraded from property line to mainline and install approx
	120 radio read meters and computer software to monitor and
	read the system. Meters will be calibrated to accurately
	measure flow of water to meet Mfg. Specs. Additional fire
	hydrants will be added to meet NFPA standards to improve
	overall fire protection. Age of the system is 35-45 years. All
	laterals are DB120 electrical conduit not rated for potable
	water service use. Project will increase water conservation,
	ability to identify leaks and make system repairs to prevent
	water losses in the distribution system.

Project Location Description (e.g., along the south bank of stream/river between river miles or miles from Towns/intersection and/or address):	Project is located approximately 15 miles North of Portola, CA
Latitude:	39.870167degreesN
Longitude:	120.452727degreesW

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.

Will the project address the	Brief explanation of project	Quantification (e.g. acres of streams/wetlands restored or
•	linkage to selected Objective	enhanced)
∐ Yes		
■ NI/A		
- IN/A		
☐ Yes		
■ N/A		
☐ Yes		
■ N/A		
∐ Yes		
■ NI/A		
= IN/A		
	We estimate there will be a 25-	25-30% reduction
■ Yes	30% reduction in water use by	in water use
I	identifying leaks and	
□ N/A	conservation by users when	
	water.	
□ Vos		
☐ TeS		
■ N/A		
	project address the objective? Yes N/A Yes N/A Yes N/A Yes N/A	project address the objective? Pres N/A N/A Yes N/A Yes N/A Yes N/A Yes N/A N/A Yes

	1	T	T
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)
Address economic challenges of		System is 35-45 years old - was	This project cannot
municipal service providers to	■ Yes	not installed property. Nearing	be completed
serve customers.	_	the end of its useful life. Needs	without grant
	□ N/A	to be brought up to UPC.	funding.
Protect, restore, and enhance	■ Yes	Will be able to perform water	Accounting of
the quality of surface and		loss audits and account for water	water losses.
groundwater resources for all	□ N/A	loss.	Repairing leaks to
beneficial uses, consistent with	Ш 11//	1033.	reduce losses.
·			reduce losses.
the RWQC Basin Plan.	- Vac	The Creeken Meter Meter During	Donlageerf-
Address water resources and	■ Yes	The Crocker Water Meter Project	Replace unsafe
wastewater needs of DACs and	l ,,,,	falls entirely within a greater	pipes with new
Native Americans.	□ N/A	Eastern Plumas County DAC.	water delivery
	<u> </u>		pipes.
Coordinate management of	Yes	Protecting groundwater	Reduce water
recharge areas and protect	l	resources by reducing water	use/loss by 25-
groundwater resources.	□ N/A	use/loss by 25-30%.	30%.
Improve coordination of land	☐ Yes		
use and water resources			
planning.	■ N/A		
Maximize agricultural,	■ Yes	Will reduce municipal water use	Reduce water
environmental and municipal	_	by approximately 25-30%.	use/loss by 25-
water use efficiency.	□ N/A		30%.
Effectively address climate	■ Yes	Project will reduce consumption	Reduce water
change adaptation and/or		of water by approximately 25-	use/loss by 25-
mitigation in water resources	□ N/A	30%.	30%.
management.			
Improve efficiency and	■ Yes	Will improve efficiency by	Replace unsafe and
reliability of water supply and		eliminating the majority of leaks	leaky pipes with
other water-related	□ N/A	in system & reduce wear and	new water delivery
infrastructure.		tear on well pump and related	pipes.
imastractare.		appurtenances.	pipes.
Enhance public awareness and	Yes	appartenances.	
understanding of water	□ 162		
management issues and needs.	■ NI/A		
	■ N/A		
Address economic challenges of	☐ Yes		
agricultural producers.	■ NI/A		
Mankanikh agamti /	■ N/A	CLCCD will wonds with the Court	
Work with counties/	Yes	GLCSD will work with the County	
communities/groups to make		to ensure proper administration	
sure staff capacity exists for	□ N/A	and implementation of grant	
actual administration and		funding for this project.	
implementation of grant			
funding.			
tunding.			

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 projection if not applicable; do no leave a blank cell. Note:	that DWR er	ncourages multi-benefit projects.		
If applicable, describe benefits or impacts of the	project wit	h respect to:		
a. Native American Tribal Communities	■ N/A			
b. Disadvantaged Communities ¹	□ N/A	The project is located entirely within a greater Eastern Plumas County disadvantaged community.		
c. Environmental Justice ²	□ N/A	The CSD ensures fair and equal services regardless of race, culture, income, or any other cultural factors.		
d. Drought Preparedness	□ N/A	Will be able to monitor use with installed meters and account for missing water. Perform comprehensive water audits.		
e. Assist the region in adapting to effects of climate change ³	□ N/A	Water use will be reduced by approximately 25 - 30 % per year.		
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 cor income that is less than 80 percent of the Statew UFR website (http://featherriver.org/maps/). ² Environmental Justice is defined as the fair trea respect to the development, adoption, implemer regulations and policies. An example of environm (e.g. water supply, flooding, sanitation) in an area Climate change effects are likely to include incresecondary effects such as increased wildfire risk,	tment of pentation and one that ion and one that ion and one that is a firm of the that is a firm of in the that is a firm of the th	ople of all races, cultures, and incomes with enforcement of environmental laws, e benefit would be to improve conditions inorities.		

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

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 ■ No				
Urban water use efficiency	☐ Yes ■ No				
Improve Flood Management					
Flood management	☐ Yes ■ No				
Improve Operational Efficiency and Tr	ansfers				
Conveyance – regional/local	■ Yes □ No	Upgrade infrastructure facilities.			
System reoperation	■ Yes □ No	Improvement of existing operations and management procedures of water facilities to meet needs more efficiently and reliably			
Water transfers	Yes x No				
Increase Water Supply					
Conjunctive management	☐ Yes ■ No				
Precipitation Enhancement	☐ Yes ■ No				
Municipal recycled water	☐ Yes ■ No				
Surface storage – regional/local	☐ Yes ■ No				
Improve Water Quality					
Drinking water treatment and distribution	■ Yes □ No	Improve infrastructure by upgrading distribution lines & installing water meters.			

	Will the Project				
	incorporate	Description of how RMS to be employed,			
Resource Management Strategy	RMS?	if applicable			
Groundwater remediation/aquifer	☐ Yes ■ No				
remediation					
Matching water quality to water use	☐ Yes ■ No				
Pollution prevention	☐ Yes ■ No				
Salt and salinity management	☐ Yes ■ No				
Urban storm water runoff	☐ Yes ■ No				
management					
Practice Resource Stewardship					
Agricultural land stewardship	☐ Yes ■ No				
Ecosystem restoration	☐ Yes ■ No				
Forest management	☐ Yes ■ No				
Land use planning and management	☐ Yes ■ No				
Recharge area protection	☐ Yes ■ No				
Sediment management	☐ Yes ■ No				
Watershed management	☐ Yes ■ No				
People and Water					
Economic incentives	☐ Yes ■ No				
Outreach and engagement	☐ Yes ■ No				
Water and culture	☐ Yes ■ No				
Water-dependent recreation	☐ Yes ■ No				
Wastewater/NPDES	☐ Yes ■ 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?: ■ Yes □ No Funding Match Waiver request?: ■ Yes □ No							
Ful	nding Match Waiver request?: Yes	□ NO					
			Cost Share:				
			Non-State	Cost Share:			
		Requested	Fund Source*	Other State			
		Grant	(Funding	Fund			
	Category	Amount	Match)	Source*	Total Cost		
a.	Direct Project Administration	10,000			10,000		
b.	Land Purchase/Easement						
c.	Planning/Design/Engineering	75,000			75,000		
	/ Environmental						
d.	Construction/Implementation	1,200,000			1,200,000		
e.	Environmental Compliance/ Mitigation/Enhancement						
f.	Construction Administration	11,000			11,000		
g.	Other Costs						
h.	Construction/Implementation Contingency	204,000			204,000		
i.	Grand Total (Sum rows (a) through	1,500,000			1,500,000		
	(h) for each column)						
j.	Can the Project be phased? Yes	■ No If yes, pr	rovide cost breakdo	own by phases			
		Project Cost	O&M Cost	Descriptio	n of Phase		
	Phase 1						
	Phase 2						
	Phase 3						
	Phase 4						
k.	Explain how operation and maintenar		Anticipated reve		•		
	financed for the 20-year planning peri	od for project	maintain. Cut do		•		
	implementation (not grant funded).		removing illegal service laterals which cost several thousand dollars to repair each time				
				dollars to repair	each time		
	the Control of the Co	.1.112	system breaks.				
I.	Has a Cost/Benefit analysis been comp		☐ Yes ■ No				
m.	Describe what impact there may be if	the project is	Continue to repair lines. Will be unable to meet				
	not funded (300 words or less)		CA water reductions. System upkeep will				
	increase, reliability will decrease. Fire flow v be dramatically affected.				FIRE TIOW WIII		
*List all sources of funding.							
Note: See Project Development Manual, Exhibit B, for assistance in completing this table							
	(http://featherriver.org/documents/).						
,	methy reacher we horg accumental fr						

VIII. PROJECT STATUS AND SCHEDULE

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**.

	Check the Current Project		Description of Activities in Each	Planned/ Actual Start	Planned/ Actual Completion
Project Stage	Stage	Completed?	Project Stage	Date (mm/yr)	Date (mm/yr)
a. Assessment and	-	☐ Yes	Evaluated by district	TBD Pending Funding	
Evaluation	-	No	staff. Needs expert	Fulluling	
		□ N/A	evaluation		
b. Final Design		☐ Yes	Create final design	TBD	
		■ No	& engineering for		
		□ N/A	project		
c. Environmental		☐ Yes	Approve & file CEQA	TBD	
Documentation		■ No	documentation		
(CEQA / NEPA)	Ш	□ N/A	including negative		
			declaration		
d. Permitting		☐ Yes	Project engineer will	TBD	
		■ No	prepare & submit		
		□ N/A	necessary permits		
e. Construction		☐ Yes	Request for	TBD	
Contracting		■ No	proposal thru notice		
	_	□ N/A	to proceed.		
f. Construction		☐ Yes	Complete project	TBD	
Implementation		■ No	and sign off		
		□ N/A			
Provide explanation if more than one project					
stage is checked as c	urrent 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.					
c. Concisely describe the scientific basis (e.g. how much					
research has been conducted) of the proposed project in	Water meters will enable GLCSD to				
300 words or less.	perform water loss audits and account				
	for water loss. The US EPA Water				
	Conservation Plan Guidelines include				
	water metering and water accounting				
	and loss control as Level 1 measures for				
	water conservation. According to				
	Renwick and Green (2000) and Beecher				
	et al. (1994) charging customers by				
	volume sends a price signal to				
	customers to use the resource more				
	efficiently. Additionally data from other				
	water purveyors indicate reductions in				
	individuals' use of water when users are				
	required to pay for the amount of water				
	used as compared to a flat rate for				
	water.				
d. Does the project implement green technology (e.g.	☐ Yes ☐ No ■ N/A				
alternate forms of energy, recycled materials, LID	If yes, please describe.				
techniques, etc.)					
e. Are you an Urban Water Supplier ¹ ?	☐ Yes ■ No ☐ N/A				
f. Are you are an Agricultural Water Supplier ² ?	☐ Yes ■ No ☐ N/A				
g. Is the project related to groundwater?	■ Yes □ No □ N/A				
go to the project resident to great an arrange to	If yes, please indicate which				
	groundwater basin.				
	Grizzly Valley GWB				
	,, -				
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.					

Climate Change – Project Assessment Checklist

This climate change project assessment tool allows project applicants and the planning team to assess project consistency with Proposition 84 plan standards and RWMG plan assessment standards. The tool is a written checklist that asks GHG emissions and adaptation/resiliency questions.

Name of project: MS-9 Crocker Water Service Meters

Project applicant: Grizzly Lake CSD

GHG Emissions Assessment
Project Construction Emissions (If you check any of the boxes, please see the attached worksheet)
 ☑ The project requires non road or off-road engines, equipment, or vehicles to complete. ☑ The project requires materials to be transported from outside of the UFR watershed. ☑ The project requires workers from outside of the UFR watershed. ☑ The project is expected to generate GHG emissions for other reasons. ☑ The project does not have a construction phase and/or is not expected to generate GHG emissions during the construction phase.
Operating Emissions (If you check any of the boxes, please see the attached worksheet)
 ☐ The project requires energy to operate. ☐ The project will generate electricity. ☐ The project will proactively manage forests to reduce wildfire risk.
The project will affect wetland acreage.

The project will include new trees.

Adaptation & Resiliency Assessment

Water Supply Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water supply vulnerability issues:
 Not applicable Reduced snowmelt Unmet local water needs (drought) Increased invasive species
Project will consist of replacing all the illegal service laterals to meet UPC. This project meets drought preparedness by achieving long-term reduction of water use and promoting water conservation. Objective of this project is to be able to find and fix leaks in water system and be able to record usage by individuals; enforce reduction in water usage. Having meters installed, we estimate 25 - 30% reduction in water usage.
Water Demand Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water demand vulnerability issues:
 Not applicable Increasing seasonal water use variability Unmet in-stream flow requirements Climate-sensitive crops ✓ Groundwater drought resiliency ✓ Water curtailment effectiveness
This project will improve efficiency by eliminating the majority of leaks in an old system that was not installed properly. It needs to be brought up to UPC. We estimate the groundwater resources will be protected by reducing water use by 25 - 30% by user conservation of water. Having meters will allow us to monitor usage by meter.

Water Quality
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water quality vulnerability issues:
Not applicable
Increasing catastrophic wildfires
Eutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and other related water quality issues)
Seasonal low flows and limited abilities for waterbodies to assimilate pollution
Water treatment facility operations
Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold freshwater habitat, spawning habitat, wildlife habitat, etc.)
We will be protecting groundwater resources by reducing domestic water use by 25 - 30%. Efficiency will be improved by eliminating the majority of leaks in the system and will also reduce wear and tear on well pump. Additional fire hydrants will be added to meet NFPA standards to improve overall fire protection.
Flooding Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain Insufficient flood control facilities

Upper Feather River Integrated Regional Water Management Plan Climate Change- Project Assessment Tool

Ecosystem and Habitat
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority ecosystem and habitat vulnerability issues:
Not applicable ■ Not applicable Not applicable
Climate-sensitive fauna or flora
Recreation and economic activity
Quantified environmental flow requirements
Erosion and sedimentation
☐ Endangered or threatened species
Fragmented habitat
Hydropower
Describe how the project makes the watershed (more/less) resilient to one or more of the following
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority hydropower vulnerability issues:
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority hydropower vulnerability issues: Not applicable
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Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-9	Crocker	Water	Service	Meters

GHG Emissions Analysis

Proi	iect	Constr	uction	Fmis	sions
ГІО	CCL	COHSU	uction	LIIII3	310113

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

t requires non-road or on-road engines, equipment, or venicles to complete. If y				
	Maximum			
	Number Per	Total 8-Hour Days in		
Type of Equipment	Day	Operation	Total MTCO₂e	
Excavators	2	150	131	
Paving Equipment	1	30	8	
Off-Highway Trucks	3	150	559	
			0	
			0	
			0	
			0	
			0	
			0	
			0	
		Total Emissions	697	

Χ	The project requires materials to be transported from outside of the UFR watershed. If yes
	, p j i i i i i i i

	Average Trip	
Total Number of	Distance	
Round Trips	(Miles)	Total MTCO₂e
10	90	1

X The project requires workers from outside of the UFR watershed. If yes:

		Average Round Trip		
Average Number	Total Number	Distance Traveled		
of Workers	of Workdays	(Miles)	Total MTCO₂e	
10	150	100		51

The project is expe	ected to generate GHG emissions for other reasons. If yes, explain:
	CO produced by construction activities

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

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-9 Crocker Water Service Meters

i ne proje	ct requires energy to operate. If yes:	Т	T
	Annual Energy Needed	Unit	Total MTCO₂e
		kWh (Electricity)	0
		Therm (Natural Gas)	0
The proje	ct will generate electricity. If yes:		
	Annual kWh Generated	Total MTCO₂e	
		(0
	*A negative value indicates GHG re	eductions	_
7			
The proje	ct will proactively manage forests to	1	s:
The proje	ct will proactively manage forests to Acres Protected from Wildfire	reduce wildfire risk. If ye Total MTCO₂e	s:
The proje	Acres Protected from Wildfire	Total MTCO₂e	
The proje		Total MTCO₂e	
	Acres Protected from Wildfire	Total MTCO ₂ e ceductions	
	*A negative value indicates GHG re	Total MTCO ₂ e ceductions	
_	*A negative value indicates GHG rect will affect wetland acreage. If yes	Total MTCO ₂ e ceductions	
_	*A negative value indicates GHG rect will affect wetland acreage. If yes	Total MTCO ₂ e eductions Total MTCO ₂ e	
_	*A negative value indicates GHG rect will affect wetland acreage. If yes Acres of Protected Wetlands	Total MTCO ₂ e eductions Total MTCO ₂ e	
The proje	*A negative value indicates GHG rect will affect wetland acreage. If yes Acres of Protected Wetlands	Total MTCO ₂ e eductions Total MTCO ₂ e	
The proje	*A negative value indicates GHG rect will affect wetland acreage. If yes Acres of Protected Wetlands *A negative value indicates GHG rect was acres of Protected Wetlands	Total MTCO ₂ e eductions Total MTCO ₂ e	

GHG Emissions Summary

Construction and development will generate approximately:	750 MTCO₂e
In a given year, operation of the project will result in:	₀ MTCO ₂ e



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	Grizzly Lake CSD
Name of Primary Contact	Jared D. Recasens, Chief Operator
Name of Secondary Contact	Larry Terrill, Chairman, Board of Directors
Mailing Address	119 Delleker Road, Portola, CA 96122
E-mail	glrid@att.net; jrwastewater@gmail.com
Phone	530-832-5225 office; 530-927-8459 cell
Other Cooperating Agencies /	
Organizations / Stakeholders	
Is your agency/organization	Yes.
committed to the project through	
completion? If not, please explain	

II. GENERAL PROJECT INFORMATION

Project Title	MS-10: Crocker Welch Ground Tank Repair
Project Category Project Description (Briefly describe the project, in 300 words or less)	■ Water Supply/Water Quality □ Environmental Protection/Restoration ■ Community Water/Wastewater □ Stakeholder/Public Collaboration and Education □ Working Landscape Viability This project includes repairing and bringing up to code the Crocker/Welch 211,000-gallon water tank. Project will retrofit the deteriorated water storage tank to provide a reliable water supply to customers. The tank is rusting on the inside and needs to be made OSHA Compliant and meet NFPA and
Project Location Description (e.g., along the south bank of stream/river between river miles or miles from Towns/intersection and/or address):	AWWA codes. Tank was built in 2002. Project is located approximately 15 miles North of Portola, CA
Latitude:	39.870167 degrees N
Longitude:	120.452727 Degrees W

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	☐ Yes		
functions.	 		
Reduce potential for	■ N/A		
catastrophic wildland fires in	☐ Yes		
the Region.			
the Region.	■ N/A		
Build communication and			
collaboration among water	☐ Yes		
resources stakeholders in the			
Region.	■ N/A		
Work with DWR to develop	İ		
strategies and actions for the	☐ Yes		
management, operation, and			
control of SWP facilities in the	■ N/A		
Upper Feather River Watershed			
in order to increase water			
supply, recreational, and environmental benefits to the			
Region. Encourage municipal service		Grizzly Lake CSD is a municipal	
providers to participate in	■ Yes	service provider. This project will	
regional water management		improve water quality and supply	
actions that improve water	□ N/A	by meeting water standards.	
supply and water quality.		.,	
Continue to actively engage in			
FERC relicensing of	☐ Yes		
hydroelectric facilities in the			
Region.	■ N/A		
Address economic challenges of	I	Grant funding for this project is	
municipal service providers to	■ Yes	necessary to ensure that Grizzly	
serve customers.		Lake CSD will be able to continue	
	□ N/A	to provide drinkable water to	
		approximately 120 households	
		using existing water supply.	

			Quantification
	\A/: +		-
	Will the		(e.g. acres of
	project		streams/wetlands
Upper Feather River IRWM	address the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Protect, restore, and enhance	Yes	Funding is urgently needed to	Repairing this
the quality of surface and	l .	reduce the amount of	water storage tank
groundwater resources for all	□ N/A	groundwater used to provide a	will save
beneficial uses, consistent with		reliable water supply for both	approximately 20%
the RWQC Basin Plan.		domestic use and emergency fire	of the groundwater
		protection.	currently being
			pumped from the
			deep well.
Address water resources and	■ Yes	Project is located entirely within	
wastewater needs of DACs and	l	a greater Eastern Plumas County	
Native Americans.	□ N/A	disadvantaged community.	
Coordinate management of	■ Yes	By reducing leakage more water	Project will save
recharge areas and protect	I	will be available to users, which	approximately 20%
groundwater resources.	□ N/A	will in turn help protect	of the groundwater
		groundwater resources.	currently being
			pumped from the
			deep well.
Improve coordination of land	☐ Yes		
use and water resources			
planning.	■ N/A		
Maximize agricultural <u>,</u>	■ Yes	By saving approx 20% of current	20% more
environmental and municipal	1	water used, efficiency of water	efficient???
water use efficiency.	□ N/A	use is increased.	
Effectively address climate	■ Yes	Use 20% less groundwater in a	
change adaptation and/or	I	climate when drought limits	
mitigation in water resources	□ N/A	surface and groundwater	
management.		supplies.	
Improve efficiency and	■ Yes	Maintaining infrastructures will	
reliability of water supply and	l <u> </u>	allow system operation to	
other water-related	□ N/A	improve efficiency of water	
infrastructure.		supply.	
Enhance public awareness and	☐ Yes		
understanding of water	I		
management issues and needs.	■ N/A		
Address economic challenges of	☐ Yes		
agricultural producers.			
	■ N/A		
Work with counties/	Yes	The Grizzly Lake CSD is fully	
communities/groups to make		prepared to work with the IRWM	
sure staff capacity exists for	□ N/A	and the County to administer any	
actual administration and		resultant grant and see this	
implementation of grant		project through to completion.	
funding.		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 projectif not applicable; do no leave a blank cell. Note to		•				
If applicable, describe benefits or impacts of the	project wit	h respect to:				
a. Native American Tribal Communities	■ N/A					
b. Disadvantaged Communities ¹	□ N/A	Will address water needs of a dis- advantaged community which is located within a greater Eastern Plumas County DAC				
c. Environmental Justice ²	□ N/A	The Grizzly Lake CSD ensures fair and equal services regardless of race, culture, income, or any other cultural factors. The repaired tank will benefit all users in the service area.				
d. Drought Preparedness	□ N/A	Repairing this water storage tank will save approximately 20% of water currently used.				
e. Assist the region in adapting to effects of climate change ³	□ N/A	We need to be aware and take action to conserve water whenever we can.				
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	■ Yes	g.	Drinking water treatment and	■ Yes
	conservation, water use efficiency	□ N/A		distribution	□ N/A
b.	Stormwater capture, storage, clean-	☐ Yes	h.	Watershed protection and	☐ Yes
	up, treatment, management	■ N/A		management	■ N/A
c.	Removal of invasive non-native	☐ Yes	i.	Contaminant and salt removal	☐ Yes
	species, creation/enhancement of	■ N/A		through reclamation/desalting,	■ N/A
	wetlands,			other treatment technologies and	
	acquisition/protection/restoration			conveyance of recycled water for	
	of open space and watershed lands			distribution to users	
d.	Non-point source pollution	☐ Yes	j.	Planning and implementation of	☐ Yes
	reduction, management and	■ N/A		multipurpose flood management	■ N/A
	monitoring			programs	
e.	Groundwater recharge and	☐ Yes	k.	Ecosystem and fisheries	☐ Yes
	management projects	■ N/A		restoration and protection	■ N/A
f.	Water banking, exchange,	☐ Yes			
	reclamation, and improvement of	■ N/A			
	water quality				

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/).

Described Management Streets	Will the Project incorporate	Description of how RMS to be employed,		
Resource Management Strategy Reduce Water Demand	RMS?	if applicable		
Agricultural Water Use Efficiency	☐ Yes ■ No			
Urban water use efficiency	☐ Yes ■ No	Rural water use efficiency		
Improve Flood Management				
Flood management	☐ Yes ■ No			
Improve Operational Efficiency and Tr	ansfers			
Conveyance – regional/local	■ Yes □ No	Repair and improve infrastructure		
System reoperation	☐ Yes ■ No	More efficient water use to reduce demand		
		on groundwater.		
Water transfers	☐ Yes ■ No			
Increase Water Supply				
Conjunctive management	☐ Yes ■ No			
Precipitation Enhancement	☐ Yes ■ No			
Municipal recycled water	☐ Yes ■ No			
Surface storage – regional/local	☐ Yes ■ No			
Improve Water Quality				
Drinking water treatment and	■ Yes □ No	Maintain and upgrade infrastructure facilities.		
distribution				
Groundwater remediation/aquifer	☐ Yes ■ No			

	Will the Project	
Resource Management Strategy	incorporate RMS?	Description of how RMS to be employed, if applicable
remediation	KIVI3:	п аррисаме
Matching water quality to water use	Yes No	
Pollution prevention	Yes No	Replacing the rusting and leaky tank with a tank compliant with current regulations will reduce the possibility of water contamination
Salt and salinity management	☐ Yes ■ No	
Urban storm water runoff management	☐ Yes ■ No	
Practice Resource Stewardship		
Agricultural land stewardship	☐ Yes ■ No	
Ecosystem restoration	☐ Yes ■ No	
Forest management	☐ Yes ■ No	
Land use planning and management	☐ Yes ■ No	
Recharge area protection	☐ Yes ■ No	
Sediment management	☐ Yes ■ No	
Watershed management	☐ Yes ■ No	
People and Water		
Economic incentives	■ Yes □ No	Will reduce wear and tear on well pump
Outreach and engagement	☐ Yes ■ No	
Water and culture	Yes ■ No	
Water-dependent recreation	☐ Yes ■ No	
Wastewater/NPDES	☐ Yes ■ No	
Other RMS addressed and explanation	ı:	

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							
	eject serves a need of a DAC?: Inding Match Waiver request?:	Yes Yes	□ No □ No					
	Category		quested Grant Amount	N Fu	ost Share: lon-State nd Source* (Funding Match)	Ot	st Share: her State Fund ource*	Total Cost
a.	Direct Project Administration	1,000	0					1,000
b.	Land Purchase/Easement	0.00						0.00
C.	Planning/Design/Engin eering/ Environmental	22,000						22,000
d.	Construction/Implementation	165,0	000					165,000
e.	Environmental Compliance/ Mitigation/Enhancement	0.00						0.00
f.	Construction Administration	2,000	0					2,000
g.	Other Costs	0.00						0.00
h.	Construction/Implementation Contingency	10,000						10,000
i.	Grand Total (Sum rows (a) through (h) for each column)	200,0	000					200,000
j.	Can the Project be phased?	Yes	■ No If ye	es, pr	ovide cost bre	eakd	own by pha	ses
			Project Co	st	O&M Cos	t	Description	on of Phase
	Phase 1							
	Phase 2 Phase 3							
	Phase 4							
k. Explain how operation and mainten financed for the 20-year planning pe implementation (not grant funded).			g period for project		Operation and maintenance costs will be absorbed by our existing employees.			
I.	Has a Cost/Benefit analysis been	•			☐ Yes ■ No			
m.	Describe what impact there may not funded (300 words or less)	be if	the project i	S	System upke of safe drink households meet CA was	ing v will c	vater for 12 lecrease. U	20

*List all sources of funding.

Note: See Project Development Manual, Exhibit B, for assistance in completing this table (http://featherriver.org/documents/).

VIII. PROJECT STATUS AND SCHEDULE

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**.

	Check the		Decement on of	Dlama d /	Planned/
	Current Project		Description of Activities in Each	Planned/ Actual Start	Actual Completion
Project Stage	Stage	Completed?	Project Stage	Date (mm/yr)	Date (mm/yr)
a. Assessment and Evaluation	•	☐ Yes ☐ No ☐ N/A	Evaluated by district staff. Will need Engineer/expert evaluation.	Upon execution of grant agreement	1 month after funding agreement
b. Final Design		☐ Yes ■ No ☐ N/A	Create final design & engineering for project.	2 months after funding secured	4 months after funding secured
c. Environmental Documentation (CEQA / NEPA)		☐ Yes ■ No ☐ N/A	Anticipate negative declaration for CEQA	4 months after funding secured	7 months after funding secured
d. Permitting		☐ Yes ■ No ☐ N/A	Project engineer will prepare & submit necessary permits	7 months after funding secured	8.5 months after funding secured
e. Construction Contracting		☐ Yes ■ No ☐ N/A	Request for proposal thru notice to proceed	8.5 months after funding secured	9 months after funding secured
f. Construction Implementation		☐ Yes ■ No ☐ N/A	Complete project and sign off	9 months after funding secured	12 months after funding secured
Provide explanation stage is checked as c		• •			

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	Grizzly Hill CSD Capital Improvement		
	project is consistent with or supported by (e.g. General	Plan???		
	Plans, UWMPs, GWMPs, Water Master Plan, Habitat			
	Conservation Plans, TMDLs, Basin Plans, etc.).			
b.	List technical reports and studies supporting the	Anticipate an Engineer's Report		
	feasibility of this project.			
c.	Concisely describe the scientific basis (e.g. how much	Retrofitting the deteriorating 211,000-		
	research has been conducted) of the proposed project in	gallon water tank will ensure OSHA		
	300 words or less.	compliance and that NFPA and AWWA		
		codes are met. The project's improved		
		efficiency will reduce groundwater use		
		by approximately 20%, and provide safe		
		drinking water to 120 households and a		
		water supply for emergency fire		
		protection.		
d.	Does the project implement green technology (e.g.	☐ Yes ■ No ☐ N/A		
	alternate forms of energy, recycled materials, LID	If yes, please describe.		
	techniques, etc.).			
e.	Are you an Urban Water Supplier ¹ ?	☐ Yes ■ No ☐ N/A		
f.	Are you are an Agricultural Water Supplier ² ?	☐ Yes ■ No ☐ N/A		
g.	Is the project related to groundwater?	■ Yes □ No □ N/A		
		If yes, please indicate which		
		groundwater basin.		
		Grizzly Valley GWB		
	rban Water Supplier is defined as a supplier, either publicly of			
	inicipal purposes either directly or indirectly to more than 3,	000 customers or supplying more than		
-	000 acre-feet of water annually.			
	gricultural Water Supplier is defined as a water supplier, eith			
water to 10,000 or more irrigated acres, excluding the acreage that receives recycled water.				

Climate Change – Project Assessment Checklist

This climate change project assessment tool allows project applicants and the planning team to assess project consistency with Proposition 84 plan standards and RWMG plan assessment standards. The tool is a written checklist that asks GHG emissions and adaptation/resiliency questions.

Name of project: MS-10 Crocker Welch Ground Tank Repair

Project applicant: Grizzly Lake CSD

GHG Emissions Assessment

erre Ermostene / tosessment
Project Construction Emissions (If you check any of the boxes, please see the attached worksheet)
 □ The project requires nonroad or off-road engines, equipment, or vehicles to complete. □ The project requires materials to be transported from outside of the UFR watershed. □ The project requires workers from outside of the UFR watershed. □ The project is expected to generate GHG emissions for other reasons. □ The project does not have a construction phase and/or is not expected to generate GHG emissions during the construction phase.
Operating Emissions (If you check any of the boxes, please see the attached worksheet)
 ☐ The project requires energy to operate. ☐ The project will generate electricity. ☐ The project will proactively manage forests to reduce wildfire risk.
The project will affect wetland acreage.The project will include new trees.

Adaptation & Resiliency Assessment

Water Supply Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water supply vulnerability issues:
☐ Not applicable
Reduced snowmelt
□ Unmet local water needs (drought)
Increased invasive species
This project will help achieve long-term reduction of water use and promote water conservation.
Project will retrofit the deteriorated water storage tank to provide a reliable water supply to customers.
Needs to be made OSHA compliant and meet NFPA and AWWA codes.
Water Demand
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water demand vulnerability issues:
☐ Not applicable
Increasing seasonal water use variability
Unmet in-stream flow requirements
Climate-sensitive crops
Groundwater drought resiliency
Water curtailment effectiveness
By reducing leakage more water will be available to users, which will in turn help protect groundwater
resources. Repairing this water storage tank will save approximately 20% of the groundwater currently
being pumped from the deep well.

Water Quality
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water quality vulnerability issues:
Not applicable
Increasing catastrophic wildfires
 Eutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and other related water quality issues)
Seasonal low flows and limited abilities for waterbodies to assimilate pollution
Water treatment facility operations
\square Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold freshwater habitat, spawning habitat, wildlife habitat, etc.)
By saving approximately 20% of current water used, efficiency of water is increased.
Flooding
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority flooding vulnerability issues:
high priority flooding vulnerability issues:
high priority flooding vulnerability issues:
high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires
high priority flooding vulnerability issues: Not applicable Aging critical flood protection
high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain
high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain
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Upper Feather River Integrated Regional Water Management Plan Climate Change- Project Assessment Tool

Ecosystem and Habitat
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority ecosystem and habitat vulnerability issues:
Not applicable ■ Not applicable Not applicable
Climate-sensitive fauna or flora
Recreation and economic activity
Quantified environmental flow requirements
Erosion and sedimentation
☐ Endangered or threatened species
Fragmented habitat
Hardway access
Hydropower
Describe how the project makes the watershed (more/less) resilient to one or more of the following
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority hydropower vulnerability issues:
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority hydropower vulnerability issues: Not applicable
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Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority hydropower vulnerability issues: Not applicable

		MS-10: Crocker	Welch Ground Tank F	Repair	
GHG Emissions Ana	lysis				_
Project Constructio	n Emissions	S			
The project requires	non-road	or off-road engin	nes, equipment, or veh	nicles to complete.	. If yes:
		Maximum			
		Number Per	Total 8-Hour Days in		
Type of I	Equipment	Day	Operation	Total MTCO₂e	
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
			Total Emissions		0
The project requires		to be transported Average Trip Distance	d from outside of the	UFR watershed. If	yes:
Round T	rips	(Miles)	Total MTCO₂e		
	4	100	1		
X The project requires	s workers fr	om outside of th	ne UFR watershed. If y Average Round Trip	es:	٦
Average	Number	Total Number	Distance Traveled		
of Work		of Workdays	(Miles)	Total MTCO₂e	
6	4	,	100		4
The project is expec			ions for other reasons		<u>"</u>
The project is expec	ica to gene	rate drid cillissi	ions for other reasons	. II yes, explain.	
X The project does no construction phase.		nstruction phase	and/or is not expecte	ed to generate GH	G emissions during th

MS-10: Crocker Welch Ground Tank Repair

	perating Emissions		
The projec	ct requires energy to operate. If yes:		
	Annual Energy Needed	Unit	Total MTCO₂e
		kWh (Electricity)	0
		Therm (Natural Gas)	0
=			
The project	ct will generate electricity. If yes:		-
	Annual kWh Generated	Total MTCO₂e	
		0	
	*A negative value indicates GHG re	ductions	•
_			
The project	ct will proactively manage forests to	reduce wildfire risk. If y	/es:
_	Acres Protected from Wildfire	Total MTCO₂e	
		0	
	*A negative value indicates GHG re	ductions	•
The project	ct will affect wetland acreage. If yes:		
	Acres of Protected Wetlands	Total MTCO ₂ e	
		0	
	*A negative value indicates GHG re	_	
	*A negative value indicates GHG re	_	
The projec	*A negative value indicates GHG rect will include new trees. If yes:	_	
The projec	-	_]
The projec	ct will include new trees. If yes:	ductions	

•	
Construction and development will generate approximately:	5 MTCO₂e
In a given year, operation of the project will result in:	0 MTCO₂e



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	Grizzly Lake CSD		
Name of Primary Contact	Jared D. Recasens, Chief Operator		
Name of Secondary Contact	Larry Terrill, Chairman, Board of Directors		
Mailing Address	119 Delleker Drive, Portola, CA 96122		
E-mail	glrid@att.net; jrwastewater@gmail.com		
Phone	530-832-5225 office; 530-927-8459 cell		
Other Cooperating Agencies /			
Organizations / Stakeholders			
Is your agency/organization	Yes		
committed to the project through			
completion? If not, please explain			

II. GENERAL PROJECT INFORMATION

Project Title	MS-11: Delleker Water Meters
Project Category	■ Water Supply/Water Quality
	☐ Environmental Protection/Restoration
	■ Community Water/Wastewater
	☐ Stakeholder/Public Collaboration and Education
	☐ Working Landscape Viability
Project Description	Project will consist of replacing mainline as needed. Estimate
(Briefly describe the project,	approx 1000 lineal feet of mainline. Replace several service
in 300 words or less)	laterals and install approx 400 radio read meters and
	computer software necessary to read the system. All related
	appurtenances (meter box, yoke, meters, misc. fittings) will
	also need to be replaced. System is approx 50 - 60 years old
	and consists of asbestos cement service mains, most laterals
	are 3/4" soft roll copper configures so that one 3/4" service
	line feeds two households. The rest of the lines are boiler pipe
	that was used for the sawmill in Delleker in the early 1900s.
Project Location Description (e.g.,	Project is located 3 miles west of Portola, CA
along the south bank of stream/river	
between river miles or miles from	
Towns/intersection and/or address):	

Latitude:	39.8114DegreesNorth
Longitude:	120.4978Degrees West

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.

			Quantification
	Will the		(e.g. acres of
	project		streams/wetlands
Upper Feather River IRWM	address the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Restore natural hydrologic	☐ Yes		
functions.	_		
	■ N/A		
Reduce potential for			
catastrophic wildland fires in	☐ Yes		
the Region.			
	■ N/A		
Build communication and			
collaboration among water	☐ Yes		
resources stakeholders in the			
Region.	■ N/A		
Work with DWR to develop			
strategies and actions for the	☐ Yes		
management, operation, and			
control of SWP facilities in the	■ N/A		
Upper Feather River Watershed			
in order to increase water			
supply, recreational, and			
environmental benefits to the			
Region.			
Encourage municipal service		Grizzly Lake CSD is a municipal	
providers to participate in	■ Yes	service provider. Replacing	
regional water management	_	asbestos containing water lines	
actions that improve water	□ N/A	and other old lines with new, up-	
supply and water quality.		to-code water lines will improve	
, , ,		water quality and delivery. We	
		estimate approx 25 -30%	
		reduction in water use.	
Continue to actively engage in			
FERC relicensing of	☐ Yes		
hydroelectric facilities in the			
Region.	■ N/A		

Upper Feather River IRWM Objectives: Address economic challenges of municipal service providers to serve customers.	Will the project address the objective? Yes N/A	Brief explanation of project linkage to selected Objective Grant funding is necessary to provide safe, reliable water supplies to the local community. The existing system is 35-45 years old, was not installed properly, and is nearing the end of its useful life. Needs to be brought up to UPC.	Quantification (e.g. acres of streams/wetlands restored or enhanced)
Protect, restore, and enhance the quality of surface and groundwater resources for all beneficial uses, consistent with the RWQC Basin Plan.	■ Yes □ N/A	Will be able to perform water loss audits and account for water loss.	
Address water resources and wastewater needs of DACs and Native Americans.	■ Yes	Project is located in a Severely Disadvantaged Community.	
Coordinate management of recharge areas and protect groundwater resources.	Yes N/A	Protection of groundwater resources by reducing approx 25 - 30% reduction in water use.	
Improve coordination of land use and water resources planning.	☐ Yes		
Maximize agricultural, environmental and municipal water use efficiency.	■ Yes	Project will reduce consumption of water by approx 9 million gallons of water annually	
Effectively address climate change adaptation and/or mitigation in water resources management.	■ Yes	There will be less of a tax on power system by eliminating majority of leaks in system.	
Improve efficiency and reliability of water supply and other water-related infrastructure.	■ Yes	Project will reduce wear and tear on well pump. Improve efficiency by eliminating majority of leaks in system.	
Enhance public awareness and understanding of water management issues and needs.	☐ Yes ■ N/A	.,	
Address economic challenges of agricultural producers.	☐ Yes ■ N/A		
Work with counties/ communities/groups to make sure staff capacity exists for	■ Yes	The Grizzly Lake CSD is fully prepared to work with the IRWM and the County to administer any	

			Quantification
	Will the		(e.g. acres of
	project		streams/wetlands
Upper Feather River IRWM	address the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
actual administration and		resultant grant and see this	
implementation of grant		project through to completion.	
funding.		We are prepared to resource	
		accordingly.	

		accordingly	•	
If no objectives are addressed, describe how the project relates to a challenge or opportunity for the Region:				
IV DPOIECT IMPACTS AND	DENEEITS			
Please provide a summary of the	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	r impacts of the	e project wit	th respect to:	
a. Native American Tribal Com	munities	■ N/A		
b. Disadvantaged Communities	s ¹	□ N/A	Entire project is locate Disadvantaged Comm	•
c. Environmental Justice ²		□ N/A	Improve water supply primarily composed of Grizzly Lake CSD ensu services regardless of income, or any other	of minorities. The res fair and equal race, culture,
d. Drought Preparedness		□ N/A	Will be able to monitor meters. Account for a performing comprehension	missing water by
e. Assist the region in adapting climate change ³	g to effects of	□ N/A	Reducing water use b gallons per year.	y approx 9 million

f. Generation or reduction of greenhouse gas emissions (e.g. green technology)

g. Other expected impacts or benefits that are not already mentioned elsewhere

■ N/A

■ N/A

¹ A Disadvantaged Community is defined as a community with an a	annual median household (MHI)
income that is less than 80 percent of the Statewide annual MHI. I	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	of all races, cultures, and incomes with
respect to the development, adoption, implementation and enforce	rcement of environmental laws,
regulations and policies. An example of environmental justice ben	nefit would be to improve conditions
(e.g. water supply, flooding, sanitation) in an area of racial minorit	ties.
³ Climate change effects are likely to include increased flooding, ex	extended drought, and associated
secondary effects such as increased wildfire risk, erosion, and sedi	limentation.

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

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	■ No			
Urban water use efficiency	☐ Yes	■ No	Rural water use efficiency		
Improve Flood Management					
Flood management	☐ Yes	■ No			
Improve Operational Efficiency and Transfers					
Conveyance – regional/local	■ Yes	No	Upgrade infrastructure facilities.		

	Will the Project	
	incorporate	Description of how RMS to be employed,
Resource Management Strategy	RMS?	if applicable
System reoperation	-	The improvement of existing operations and
	Yes No	management procedures of water facilities to
_		meet needs more efficiently and reliably
Water transfers	Yes No	
Increase Water Supply		
Conjunctive management	☐ Yes ■ No	
Precipitation Enhancement	☐ Yes ■ No	
Municipal recycled water	Yes No	
Surface storage – regional/local	Yes No	
Improve Water Quality		
Drinking water treatment and	■ Yes □ No	Improve infrastructure by upgrading
distribution		mainlines, distribution lines and installing
		water meters.
Groundwater remediation/aquifer	Yes No	
remediation	- v - 🗆 v	Language Market and the Market and the second and
Matching water quality to water use	■ Yes □ No	Improved infrastructure will allow system
Dallistias surestias	Dyes - Ne	operation to improve water quality.
Pollution prevention	☐ Yes ■ No	
Salt and salinity management	☐ Yes ■ No	
Urban storm water runoff	☐ Yes ■ No	
management		
Practice Resource Stewardship	DV. BN.	
Agricultural land stewardship	☐ Yes ■ No	
Ecosystem restoration	☐ Yes ■ No	
Forest management	☐ Yes ■ No	
Land use planning and management	☐ Yes ■ No	
Recharge area protection	☐ Yes ■ No	
Sediment management	☐ Yes ■ No	
Watershed management	☐ Yes ■ No	
People and Water		
Economic incentives	☐ Yes ■ No	
Outreach and engagement	☐ Yes ■ No	
Water and culture	☐ Yes ■ No	
Water-dependent recreation	Yes No	
Wastewater/NPDES	☐ Yes ■ No	
Other RMS addressed and explanation	า:	

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.

	PR	OJECT BUDGET			
_		—			
	pject serves a need of a DAC?: Yes	□ No			
Fui	nding Match Waiver request?: Yes	∐ No			
			Cost Share:		
			Non-State	Cost Share:	
		Requested	Fund Source*	Other State	
		Grant	(Funding	Fund	Total
	Category	Amount	Match)	Source*	Cost
a.	Direct Project Administration	10,000			10,000
b.	Land Purchase/Easement				
c.	Planning/Design/Engineering	75,000			75,000
	/ Environmental				
d.	Construction/Implementation	1,200,000			1,200,000
e.	Environmental Compliance/ Mitigation/Enhancement				
f.	Construction Administration	11,000			11,000
g.	Other Costs				
h.	Construction/Implementation Contingency	204,000			204,000
:	Grand Total (Sum rows (a) through	1,500,000			1,500,000
i.	(h) for each column)	1,300,000			1,500,000
		= N . 16			
j.	Can the Project be phased? Yes		provide cost brea		
	_	Project Cost	O&M Cost	Description	on of Phase
	Phase 1				
	Phase 2				
	Phase 3				
	Phase 4				
k.	Explain how operation and maintenan		•	venue will help	
	financed for the 20-year planning peri	od for project		Removal of ill	U
	implementation (not grant funded).			ill result in a re	auction of
	Has a Cost/Danafit analysis has a same	alata da	maintenance o		
I.	Has a Cost/Benefit analysis been comp	•	☐ Yes ■ No		
m.	Describe what impact there may be if	the project is		CA water redu	
	not funded (300 words or less)			m upkeep will i	
				y will decrease.	Fire flow
			will be dramat	ically affected.	

*List all sources of funding.

Note: See Project Development Manual, Exhibit B, for assistance in completing this table (http://featherriver.org/documents/).

VIII. PROJECT STATUS AND SCHEDULE

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	•	☐ Yes ■ No □ N/A	Evaluated by district staff. Will need Engineer/expert assistance.	Upon execution of grant agreement	1 month after funding agreement
b. Final Design		☐ Yes ■ No ☐ N/A	Create final design & engineering for project.	2 months after funding received	4 months after funding received
c. Environmental Documentation (CEQA / NEPA)		☐ Yes ■ No ☐ N/A	Anticipate negative declaration. Approve & file CEQA	4 months after funding received	7 months after funding received
d. Permitting		☐ Yes ■ No ☐ N/A	Project engineer will prepare & submit necessary permits	7 months after funding received	8.5 months after funding received
e. Construction Contracting		☐ Yes ■ No ☐ N/A	Request for proposal thru notice to proceed.	8.5 months after funding received	9 months after funding received
f. Construction Implementation		■ Yes □ No □ N/A	Complete installation of water meters & sign off on project.	9 months after funding received	12 months after funding received
Provide explanation stage is checked as c					

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	Grizzly Lake CSD Capital Improvement
	project is consistent with or supported by (e.g. General	Plan
	Plans, UWMPs, GWMPs, Water Master Plan, Habitat	
	Conservation Plans, TMDLs, Basin Plans, etc.).	
b.	List technical reports and studies supporting the	Anticipate an Engineer's Report
	feasibility of this project.	
c.	Concisely describe the scientific basis (e.g. how much	Installation of new pipelines and the
	research has been conducted) of the proposed project in	necessary appurtenances, the radio
	300 words or less.	read meters and the appropriate
		software will ensure OSHA compliance
		and that NFPA and AWWA codes are
		met. The project's improved efficiency
		will save approx. 9 million gallons of
		water per year and improve fire
		protection.
d.		
	alternate forms of energy, recycled materials, LID	☐ Yes ☐ No ■ N/A
	techniques, etc.).	If yes, please describe.
e.	Are you an Urban Water Supplier ¹ ?	☐ Yes ■ No ☐ N/A
f.	Are you are an Agricultural Water Supplier ² ?	☐ Yes ■ No ☐ N/A
g.	Is the project related to groundwater?	■ Yes □ No □ N/A
		If yes, please indicate which
		groundwater basin.
		Humbug Valley
¹ U	rban Water Supplier is defined as a supplier, either publicly of	or privately owned, providing water for
mι	unicipal purposes either directly or indirectly to more than 3,	000 customers or supplying more than
3,0	000 acre-feet of water annually.	
² A	gricultural Water Supplier is defined as a water supplier, eith	ner publicly or privately owned, providing
wa	ter to 10,000 or more irrigated acres, excluding the acreage	that receives recycled water

Climate Change – Project Assessment Checklist

This climate change project assessment tool allows project applicants and the planning team to assess project consistency with Proposition 84 plan standards and RWMG plan assessment standards. The tool is a written checklist that asks GHG emissions and adaptation/resiliency questions.

Name of project: MS-11: Delleker Water Meters

Project applicant: Grizzly Lake CSD

GHG Emissions Assessment

OHO LIIIISSIOHS ASSESSITICHU
Project Construction Emissions (If you check any of the boxes, please see the attached worksheet)
 ☑ The project requires nonroad or off-road engines, equipment, or vehicles to complete. ☑ The project requires materials to be transported from outside of the UFR watershed. ☑ The project requires workers from outside of the UFR watershed. ☑ The project is expected to generate GHG emissions for other reasons. ☑ The project does not have a construction phase and/or is not expected to generate GHG emissions during the construction phase.
Operating Emissions (If you check any of the boxes, please see the attached worksheet)
 ☐ The project requires energy to operate. ☐ The project will generate electricity. ☐ The project will proactively manage forests to reduce wildfire risk. ☐ The project will affect wetland acreage.
The project will include new trees.

Adaptation & Resiliency Assessment

Water Supply Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water supply vulnerability issues:
 Not applicable Reduced snowmelt Unmet local water needs (drought) Increased invasive species
This project meets drought preparedness by achieving long-term reduction of water use and promoting water conservation. Having meters will allow GLCSD to perform water audits and help us to measure gallons used by each household. We estimate 25 - 30% savings in water usage.
Water Demand Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water demand vulnerability issues:
 Not applicable Increasing seasonal water use variability Unmet in-stream flow requirements Climate-sensitive crops Groundwater drought resiliency Water curtailment effectiveness
This project will help the District to better meet drought preparedness by achieving long-term reduction of water use and promoting water conservation. Having meters will allow GLCSD to perform water audits and help measure actual gallons used by each household. Using meters we estimate 25 - 30% savings in water usage. People using metered rather than flat rates cut down on their water use.

Water Quality
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water quality vulnerability issues:
☐ Not applicable
☐ Increasing catastrophic wildfires
Eutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and other related water quality issues)
Seasonal low flows and limited abilities for waterbodies to assimilate pollution
☐ Water treatment facility operations
\boxtimes Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold freshwater habitat, spawning habitat, wildlife habitat, etc.)
Best guess is approximately 9 million gallons of water saved each year. GLCSD will be able to perform water audits and help measure actual gallons used by each household. We estimate overall a 25 - 30% savings each year in water usage.
Flooding Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues:
Not applicable ■ Not applicable Not applicable
Aging critical flood protection
Wildfires
Critical infrastructure in a floodplain
Insufficient flood control facilities

MS-11: Delleker Water Meters

MS-11	. Del	leker \	Mater	Meters
INIO-TT	. Dei	iekei i	vvalei	Merers

GHG Emissions Analysis

Project Construction Emissions

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

	Maximum		
	Number Per	Total 8-Hour Days in	
Type of Equipment	Day	Operation	Total MTCO₂e
Dumpers/Tenders	2	10	1
Excavators	2	90	79
Concrete/Industrial			
Saws	2	45	19
Rubber Tired Loaders	1	10	4
Skid Steer Loaders	1	10	1
Other Construction			
Equipment	1	15	1
			0
			0
			0
			0
		Total Emissions	105

Χ	The project requires materials to be transported from outside of the UFR watershed. If y	es:

	15	90	2
Ro	und Trips	(Miles)	Total MTCO₂e
Tot	tal Number of	Distance	
		Average Trip	

The project requires workers from outside of the UFR watershed. If yes:

		Average Round Trip		
Average Number	Total Number	Distance Traveled		
of Workers	of Workdays	(Miles)	Total MTCO₂e	
10	90	200		62

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-11: Delleker Water Meters **Project Operating Emissions** The project requires energy to operate. If yes: **Annual Energy Needed** Total MTCO₂e Unit kWh (Electricity) Therm (Natural Gas) 0 The project will generate electricity. If yes: Annual kWh Generated Total MTCO₂e 0 *A negative value indicates GHG reductions The project will proactively manage forests to reduce wildfire risk. If yes: Acres Protected from Wildfire Total MTCO2e 0 *A negative value indicates GHG reductions The project will affect wetland acreage. If yes: Acres of Protected Wetlands Total MTCO₂e 0 *A negative value indicates GHG reductions The project will include new trees. If yes: Acres of Trees Planted Total MTCO₂e *A negative value indicates GHG reductions **GHG Emissions Summary** Construction and development will generate approximately: 168 MTCO₂e

In a given year, operation of the project will result in:

MS-11: Delleker Water Meters Page 2

0 MTCO₂e



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	Grizzly Lake CSD		
Name of Primary Contact	Jared D. Recasens, Chief Operators		
Name of Secondary Contact	Larry Terrill, Chairman, Board of Directors		
Mailing Address	119 Delleker Drive, Portola, CA 96122		
E-mail	glrid@att.net; jrwastewater@gmail.com		
Phone	530-832-5225 Office; 530-927-8459 Cell		
Other Cooperating Agencies /			
Organizations / Stakeholders			
Is your agency/organization	Yes		
committed to the project through			
completion? If not, please explain			

II. GENERAL PROJECT INFORMATION

Project Title	MS-12: Delleker Water Tank Rehab
Project Category Project Description (Briefly describe the project, in 300 words or less)	■ Water Supply/Water Quality □ Environmental Protection/Restoration ■ Community Water/Wastewater □ Stakeholder/Public Collaboration and Education □ Working Landscape Viability Grizzly Lake CSD in Portola, CA, stores water in a 300,000-gallon storage tank that was built in 2000. It provides approximately 400 households in this severely disadvantaged community with essential domestic water supply and water for emergency fire protection. The Delleker Tank requires repairs to bring it up to meet OSHA, NFPA, AWWA and EPA codes. It is estimated that approximately 4,200,000 gallons of water will be saved annually by repairing the leaks and refurbishing this tank.
Project Location Description (e.g., along the south bank of stream/river between river miles or miles from Towns/intersection and/or address):	Project is located 3 miles west of Portola, CA

Latitude:	39.8114Degrees N
Longitude:	120.4978DegreesW

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.

	Will the		Quantification
	project		(e.g. acres of
	address		streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Restore natural hydrologic	☐ Yes		
functions.			
	■ N/A		
Reduce potential for			
catastrophic wildland fires in	☐ Yes		
the Region.			
	■ N/A		
Build communication and			
collaboration among water	☐ Yes		
resources stakeholders in the			
Region.	■ N/A		
Work with DWR to develop			
strategies and actions for the	\square_{Yes}		
management, operation, and	-		
control of SWP facilities in the	■ N/A		
Upper Feather River			
Watershed in order to increase			
water supply, recreational, and			
environmental benefits to the			
Region.			
Encourage municipal service		Grizzly Lake CSD is a municipal	
providers to participate in	■ Yes	service provider. This project	
regional water management	I	will support regulatory	
actions that improve water	□ N/A	compliance with current and	
supply and water quality.		future state and federal water	
		quality standards. Project will	
		allow system operator to	
		improve water quality.	
Continue to actively engage in			
FERC relicensing of	☐ Yes		
hydroelectric facilities in the	I		
Region.	■ N/A		

	1		ekei watei Talik Kellab
	Will the project address		Quantification (e.g. acres of streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
-	objective:		·
Address economic challenges	1	Project would improve overall	Project will save
of municipal service providers	Yes	system-wide energy efficiency	approximately 4
to serve customers.	l	by reducing leaks/water losses	Million gallons of
	□ N/A	and therefore, reduce energy	water annually
		use by pumping and treating	
		less water to meet needs of this	
		rural DAC	
Protect, restore, and enhance	☐ Yes		
the quality of surface and			
groundwater resources for all	■ N/A		
beneficial uses, consistent with			
the RWQC Basin Plan.			
Address water resources and	■ Yes	Project serves a community	
wastewater needs of DACs and		that is classified as Severely	
Native Americans.	□ N/A	Disadvantaged.	
Coordinate management of	■ Yes	Be repairing this tank less water	Save approximately
recharge areas and protect	163	will be lost which will in turn	4,200,000 gallons of
	□ N/A		
groundwater resources.	□ N/A	protect the groundwater	water annually
Instrument and institute of land		resource.	
Improve coordination of land	☐ Yes		
use and water resources	- N/A		
planning.	■ N/A		
Maximize agricultural,	Yes	Will help district achieve the	Will save
environmental and municipal	l _	mandatory state reductions in	approximately 4.2
water use efficiency.	□ N/A	water usage.	million gallons of
			water annually
Effectively address climate	☐ Yes		
change adaptation and/or			
mitigation in water resources	■ N/A		
management.	I		
Improve efficiency and	■ Yes	By saving approximately	Repair/rehab existing
reliability of water supply and	_	4,200,000 gallons of water	infrastructure
other water-related	□ N/A	efficiency of water is increased.	
infrastructure.			
Enhance public awareness and	☐ Yes		
understanding of water	-		
management issues and	■ N/A		
needs.	,		
Address economic challenges	Yes		
of agricultural producers.			
o. agricaltarar producers.	■ N/A		
Work with counties/	Yes	The Grizzly Lake CSD is fully	
communities/groups to make	163	prepared to work with the	
sure staff capacity exists for	□ N/A	IRWM and the County to	
sure stair capacity exists for	<u> </u>	inverse and the County to	

	Will the project address		Quantification (e.g. acres of streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
actual administration and		administer any resultant grant	
implementation of grant		and see this project through to	
funding.		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 ■ N/A b. Disadvantaged Communities¹ This project will benefit residents of the □ N/A Delleker area, which is classified as a Severely Disadvantaged community. c. Environmental Justice² A large majority of water users that live in □ N/A this DAC are racial minorities and the Grizzly Lake CSD ensures fair and equal services regardless of race, culture, income, or any other cultural factors. d. Drought Preparedness Project will allow action to conserve □ N/A water and meet state mandated water reductions. e. Assist the region in adapting to effects of Fixing the leak in this tank will result in climate change³ □ N/A approximately 4.2 million gallons of water saved each year. 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/).

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

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.

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/).

	Will the Project	
	incorporate	Description of how RMS to be employed,
Resource Management Strategy	RMS?	if applicable
Reduce Water Demand		
Agricultural Water Use Efficiency	☐ Yes ■ No	
Urban water use efficiency	☐ Yes ■ No	Rural water use efficiency
Improve Flood Management		
Flood management	☐ Yes ■ No	
Improve Operational Efficiency and Tr	ansfers	
Conveyance – regional/local	■ Yes □ No	Repair and improve infrastructure
System reoperation	☐ Yes ■ No	More efficient water use to reduce demand
		on groundwater.
Water (transfers)	☐ Yes ■ No	
Increase Water Supply		
Conjunctive management	☐ Yes ■ No	
Precipitation Enhancement	☐ Yes ■ No	
Municipal recycled water	☐ Yes ■ No	
Surface storage – regional/local	☐ Yes ■ No	
Improve Water Quality		
Drinking water treatment and	■ Yes □ No	Maintain and upgrade infrastructure facilities
distribution		
Groundwater remediation/aquifer	☐ Yes ■ No	
remediation		
Matching water quality to water use	■ Yes □ No	Allow system operation to improve water
		quality
Pollution prevention	☐ Yes ■ No	
Salt and salinity management	☐ Yes ■ No	
Urban storm water runoff	☐ Yes ■ No	
management		
Practice Resource Stewardship		
Agricultural land stewardship	☐ Yes ■ No	
Ecosystem restoration	☐ Yes ■ No	
Forest management	☐ Yes ■ No	
Land use planning and management	☐ Yes ■ No	
Recharge area protection	☐ Yes ■ No	
Sediment management	☐ Yes ■ No	
Watershed management	☐ Yes ■ No	
People and Water		
Economic incentives	■ Yes □ No	Will reduce wear and tear on well pump
Outreach and engagement	☐ Yes ■ No	
Water and culture	☐ Yes ■ No	
Water-dependent recreation	☐ Yes ■ No	
Wastewater/NPDES	☐ Yes ■ 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?: ■ Yes □ No Funding Match Waiver request?: ■ Yes □ No							
		Requested Grant	Cost Share: Non-State Fund Source* (Funding	Cost Share: Other State Fund			
_	Category	Amount	Match)	Source*	Total Cost		
a.	Direct Project Administration	1,000			1,000		
b.	Land Purchase/Easement						
c.	Planning/Design/Engineering / Environmental	22,000			22,000		
d.	Construction/Implementation	165,000			165,000		
e.	Environmental Compliance/ Mitigation/Enhancement						
f.	Construction Administration	2,000			2,000		
g.	Other Costs						
h.	Construction/Implementation Contingency	10,000			10,000		
i.	Grand Total (Sum rows (a) through (h) for each column)	200,000			200,000		
j.	j. Can the Project be phased? Yes No If yes, provide cost breakdown by phases						
		Project Cost	O&M Cost	Description of Phase			
	Phase 1						
	Phase 2						
	Phase 3						
ı.	Phase 4		On a nation and na	-:	مط الثيب		
k.	Explain how operation and maintenance costs will be financed for the 20-year planning period for project		Operation and maintenance costs will be				
implementation (not grant funded).		absorbed by our existing employees using O&M funds.					
I.	Has a Cost/Benefit analysis been completed?		☐ Yes ■ No				
m.							
	not funded (300 words or less)		gallons of water due to leaks in tank. Will have difficulty meeting state mandated water use reductions.				

*List all sources of funding.

Note: See Project Development Manual, Exhibit B, for assistance in completing this table (http://featherriver.org/documents/).

VIII. PROJECT STATUS AND SCHEDULE

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**.

	Check the			Planned/	Planned/
	Current		Description of	Actual Start	Actual
	Project		Activities in Each	Date	Completion
Project Stage	Stage	Completed?	Project Stage	(mm/yr)	Date (mm/yr)
a. Assessment and		☐ Yes	Project has been	Upon	1 month after
Evaluation		■ No	evaluated by staff.	execution of	funding
		□ N/A	Will need Engineer/	grant	agreement
			expert evaluation.	agreement	
b. Final Design		☐ Yes	Create final design &	2 months after	4 months after
	П	■ No	engineering for	funding	funding
		□ N/A	project.	received	received
c. Environmental		☐ Yes	Anticipate a CEQA	4 months after	7 months after
Documentation		■ No	negative declaration.	funding	funding
(CEQA / NEPA)		□ N/A	Approve/file	received	received
d. Permitting		☐ Yes	Project engineer will	7 months after	8.5 months
		■ No	prepare & submit	funding	after funding
		□ N/A	necessary permits	received	received
e. Construction		☐ Yes	Request for proposal	8.5 months	9 months after
Contracting		■ No	thru notice to	after funding	funding
	_	□ N/A	proceed	received	received
f. Construction		☐ Yes	Complete repair of	9 months after	12 months after
Implementation		■ No	tank and sign off on	funding	funding
		□ N/A	project	received	received
Provide explanation if more than one project					
stage is checked as c	urrent status	i			

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	Grizzly Lake CSD Capital Improvement
	project is consistent with or supported by (e.g. General	Plan
	Plans, UWMPs, GWMPs, Water Master Plan, Habitat	
	Conservation Plans, TMDLs, Basin Plans, etc.).	
b.	List technical reports and studies supporting the	Anticipate an Engineer's Report
	feasibility of this project.	
c.	Concisely describe the scientific basis (e.g. how much	Retrofitting the deteriorating 300,000-
	research has been conducted) of the proposed project in	gallon water tank will ensure OSHA
	300 words or less.	compliance and that NFPA and AWWA
		codes are met. The project's improved
		efficiency will reduce groundwater use
		by approximately 4,200,000 gallons
		annually and provide safe drinking
		water to 400 households. It will also
		provide a water supply for emergency
		fire protection.
d.	Does the project implement green technology (e.g.	☐ Yes ☐ No ■ N/A
d.	Does the project implement green technology (e.g. alternate forms of energy, recycled materials, LID	☐ Yes ☐ No ■ N/A If yes, please describe.
d.		
d.	alternate forms of energy, recycled materials, LID	
d.	alternate forms of energy, recycled materials, LID	
d.	alternate forms of energy, recycled materials, LID	
e.	alternate forms of energy, recycled materials, LID techniques, etc.).	
	alternate forms of energy, recycled materials, LID	If yes, please describe.
e.	alternate forms of energy, recycled materials, LID techniques, etc.). Are you an Urban Water Supplier ¹ ?	If yes, please describe. ☐ Yes ■ No ☐ N/A
e. f.	alternate forms of energy, recycled materials, LID techniques, etc.). Are you an Urban Water Supplier ¹ ? Are you are an Agricultural Water Supplier ² ?	If yes, please describe. ☐ Yes ■ No ☐ N/A ☐ Yes ■ No ☐ N/A
e. f.	alternate forms of energy, recycled materials, LID techniques, etc.). Are you an Urban Water Supplier ¹ ? Are you are an Agricultural Water Supplier ² ?	If yes, please describe. ☐ Yes ■ No ☐ N/A ☐ Yes ■ No ☐ N/A ■ Yes ☐ No ☐ N/A
e. f.	alternate forms of energy, recycled materials, LID techniques, etc.). Are you an Urban Water Supplier ¹ ? Are you are an Agricultural Water Supplier ² ?	If yes, please describe. ☐ Yes ■ No ☐ N/A ☐ Yes ■ No ☐ N/A ■ Yes ☐ No ☐ N/A If yes, please indicate which
e. f.	alternate forms of energy, recycled materials, LID techniques, etc.). Are you an Urban Water Supplier ¹ ? Are you are an Agricultural Water Supplier ² ?	If yes, please describe. ☐ Yes ■ No ☐ N/A ☐ Yes ■ No ☐ N/A ■ Yes ☐ No ☐ N/A If yes, please indicate which
e. f. g.	alternate forms of energy, recycled materials, LID techniques, etc.). Are you an Urban Water Supplier ¹ ? Are you are an Agricultural Water Supplier ² ?	If yes, please describe. ☐ Yes ■ No ☐ N/A ☐ Yes ■ No ☐ N/A ■ Yes ☐ No ☐ N/A If yes, please indicate which groundwater basin. Humbug Valley
e. f. g.	alternate forms of energy, recycled materials, LID techniques, etc.). Are you an Urban Water Supplier¹? Are you are an Agricultural Water Supplier²? Is the project related to groundwater?	If yes, please describe. ☐ Yes ■ No ☐ N/A ☐ Yes ■ No ☐ N/A ■ Yes ☐ No ☐ N/A If yes, please indicate which groundwater basin. Humbug Valley or privately owned, providing water for
e. f. g.	alternate forms of energy, recycled materials, LID techniques, etc.). Are you an Urban Water Supplier¹? Are you are an Agricultural Water Supplier²? Is the project related to groundwater? rban Water Supplier is defined as a supplier, either publicly of the project related to groundwater?	If yes, please describe. ☐ Yes ■ No ☐ N/A ☐ Yes ■ No ☐ N/A ■ Yes ☐ No ☐ N/A If yes, please indicate which groundwater basin. Humbug Valley or privately owned, providing water for
e. f. g.	alternate forms of energy, recycled materials, LID techniques, etc.). Are you an Urban Water Supplier¹? Are you are an Agricultural Water Supplier²? Is the project related to groundwater? rban Water Supplier is defined as a supplier, either publicly onicipal purposes either directly or indirectly to more than 3,4	If yes, please describe. ☐ Yes ■ No ☐ N/A ☐ Yes ■ No ☐ N/A ☐ Yes ☐ No ☐ N/A If yes, please indicate which groundwater basin. Humbug Valley or privately owned, providing water for 000 customers or supplying more than

Climate Change – Project Assessment Checklist

This climate change project assessment tool allows project applicants and the planning team to assess project consistency with Proposition 84 plan standards and RWMG plan assessment standards. The tool is a written checklist that asks GHG emissions and adaptation/resiliency questions.

Name of project: MS-12: Delleker Water Tank Rehab

Project applicant: Grizzly Lake CSD

GHG Emissions Assessment
Project Construction Emissions (If you check any of the boxes, please see the attached worksheet)
 □ The project requires nonroad or off-road engines, equipment, or vehicles to complete. □ The project requires materials to be transported from outside of the UFR watershed. □ The project requires workers from outside of the UFR watershed. □ The project is expected to generate GHG emissions for other reasons. □ The project does not have a construction phase and/or is not expected to generate GHG emissions during the construction phase.
Operating Emissions (If you check any of the boxes, please see the attached worksheet)
The project requires energy to operate.
The project will generate electricity.
☐ The project will proactively manage forests to reduce wildfire risk.
The project will affect wetland acreage.
The project will include new trees.

Adaptation & Resiliency Assessment

Water Supply Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water supply vulnerability issues:
 Not applicable Reduced snowmelt ✓ Unmet local water needs (drought) Increased invasive species
This project meets drought preparedness by achieving long-term reduction of water use and promoting water conservation. This water tank leaks. It also needs to be brought up to OSHA, AWWA, NFPA, and EPA codes and standards.
Water Demand Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water demand vulnerability issues:
Not applicable☐ Increasing seasonal water use variability
Unmet in-stream flow requirements
Climate-sensitive crops
Groundwater drought resiliency
Water curtailment effectiveness
This tank provides approximately 400 households in this severely disadvantaged community with essential domestic water supply and water for emergency fire protection. The tank requires repairs to bring it up to meet OSHA standards.

Upper Feather River Integrated Regional Water Management Plan Climate Change- Project Assessment Checklist
Water Quality Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water quality vulnerability issues:
 Not applicable Increasing catastrophic wildfires Eutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and other related water quality issues) Seasonal low flows and limited abilities for waterbodies to assimilate pollution Water treatment facility operations Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold
The 300,000-gallon water tank will be repaired and we will be able to continue to serve the community of Delleker. Estimated savings of water is 4,200,000 gallons annually. The project will repair an existing aging water supply tank. Will help meet fire flow requirements for the local area. It will increase system flexibility and resiliency to adapt to climate variability.
Flooding Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues:
 Not applicable ☐ Aging critical flood protection ☐ Wildfires ☐ Critical infrastructure in a floodplain ☐ Insufficient flood control facilities

Ecosystem and Habitat Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority ecosystem and habitat vulnerability issues:
Not applicable ■ Not applicable Not applicable
Climate-sensitive fauna or flora
Recreation and economic activity
Quantified environmental flow requirements
Erosion and sedimentation
Endangered or threatened species
Fragmented habitat
Hudwanauau
Hydropower Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority hydropower vulnerability issues:
Not applicable Not
Reduced hydropower output

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

		MS-12: Delleker	Water Tank Rehab		
GHG Emiss	sions Analysis				
Project Co	nstruction Emissions	3			
The project	t requires non-road	or off-road engin	es, equipment, or veh	icles to complete.	f yes:
		Maximum]
		Number Per	Total 8-Hour Days in		
	Type of Equipment	Day	Operation	Total MTCO₂e	
				- 0	1
				0	1
				0	1
				0	•
				0	1
				0	1
				0	1
				0	1
				0	1
				0	-
			Total Emissions	0	-
			10141 211113310113		J
X The project	t requires materials t	to he transporte	d from outside of the	LIFR watershed If v	, PC.
X The projec	requires materials	Average Trip	a from outside of the]	C3.
	Total Number of	Distance			
	Round Trips	(Miles)	Total MTCO₂e		
	-				
	5	100	1		
V The			- UEDt		
x The project	t requires workers tr	om outside of th	e UFR watershed. If y Average Round Trip	es: I	1
	Average Number	Total Number	Distance Traveled		
	Average Number of Workers			T. I. I. NATCO	
	or workers	of Workdays	(Miles)	Total MTCO₂e	
	4	30	100	4	
The projec	t is expected to gene	erate GHG emissi	ons for other reasons	. If yes, explain:	-
					4
X The project	t does not have a co	nstruction phase	and/or is not expecte	ed to generate GHG	emissions during the
construction		·	•	-	3

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

	MS-12: Delleke	r Water Tank Rehab	
Project Op	erating Emissions		
The projec	t requires energy to operate. If yes:		
	Annual Energy Needed	Unit	Total MTCO₂e
		kWh (Electricity)	0
		Therm (Natural Gas)	0
The projec	t will generate electricity. If yes:		•
	Annual kWh Generated	Total MTCO₂e	
		0	
	*A negative value indicates GHG red	ductions	•
The project	t will proactively manage forests to r Acres Protected from Wildfire	Total MTCO ₂ e	,
	*A negative value indicates GHG red	ductions	
The projec	t will affect wetland acreage. If yes:		_
	Acres of Protected Wetlands	Total MTCO₂e	
		0	
	*A negative value indicates GHG red	ductions	
The projec	t will include new trees. If yes:		
	Acres of Trees Planted	Total MTCO₂e	
		0	1
			4

GHG Emissions Summary

	E NATCO a
Construction and development will generate approximately:	5 MTCO₂e
In a given year, operation of the project will result in:	0 MTCO₂e

^{*}A negative value indicates GHG reductions



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 County Environmental Health
Name of Primary Contact	Pat Sanders, REHS III
Name of Secondary Contact	Gerald Sipe, Director Environmental Health
Mailing Address	270 County Hospital Rd. Ste. 127, Quincy, CA 95971
E-mail	patsanders@countyofplumas.com
Phone	(530) 283-6355
Other Cooperating Agencies /	
Organizations / Stakeholders	
Is your agency/organization	Yes
committed to the project through	
completion? If not, please explain	

II. GENERAL PROJECT INFORMATION

Project Title	MS-13: Groundwater Monitoring
Project Category	☐ Agricultural Land Stewardship
	☐ Floodplains/Meadows/Waterbodies
	X Municipal Services
	☐ Tribal Advisory Committee
	☐ Uplands/Forest
Project Description	This project will compile and input existing groundwater
(Briefly describe the project,	monitoring data into GIS layer(s) that will be publicly available.
in 300 words or less)	The goal is to compile and summarize existing data in a format
	that can be used to identify existing and potential water
	quality or quantity issues throughout Plumas County. This
	project will also help comply with the newly implemented and
	state mandated evaluation of water quality impacts of on-site
	sewage disposal systems under AB 885.
	The water quality data will be obtained from approximately
	100 small public drinking water systems throughout Plumas
	County. Water purveyors perform routine water quality
	sampling and analysis as required under existing regulation.
	Depending on the system, data collected may include bacterial

	analyses (primarily coliform and fecal coliform bacteria), chemicals (such as volatile organics like benzene and toluene), minerals (such as arsenic, iron and manganese), and nutrients (like phosphates and nitrates). Additional data, including radiological analyses, could be included in the project subject to available funding. Water quantity data would be accessed through water well completion reports (water well logs), and pump test data where available. The above data are currently compared to an established standard by Plumas County Environmental Health, however, no trend analysis or spatial representation of these data is available. This project's GIS layer would make available data, metadata and trends in the data over time available to stakeholders and the general public.
	The project would be useful for addressing constituents of concern to maintain compliance with drinking water standards. Used in conjunction with other GIS layers, more informed decisions could be made regarding water quality protection, suitable water well location, septic system function, and land use planning.
Project Location Description (e.g.,	
along the south bank of stream/river	This project would encompass all of Plumas County and
between river miles or miles from	existing drinking water system data.
Towns/intersection and/or address):	
Latitude:	N/A
Longitude:	N/A

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.

	Will the project address		Quantification (e.g. acres of streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Restore natural hydrologic	☐ Yes		
functions.			
	X N/A		
Reduce potential for	☐ Yes		
catastrophic wildland fires in			
the Region.	X N/A		
Build communication and	X Yes	This project would produce a	

		T	
	Will the		Quantification
	project		(e.g. acres of
	address		streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
collaboration among water		useable dataset that would be	
resources stakeholders in the	□ N/A	beneficial to water quality	
Region.	,,	stakeholders and the public to	
		identify existing or potential	
		water quality and quantity	
		issues.	
Work with DWR to develop	□Yes	133463.	
strategies and actions for the	□ Tes		
_	V 21/2		
management, operation, and	X N/A		
control of SWP facilities in the			
Upper Feather River			
Watershed in order to increase			
water supply, recreational, and			
environmental benefits to the			
Region.	V V	The consideration of the confidence of	
Encourage municipal service	X Yes	The project would identify	
providers to participate in		existing and potential water	
regional water management	□ N/A	quality and quantity issues.	
actions that improve water		With usable data available, a	
supply and water quality.		municipal service provider	
		could identify any trends within	
		their region and create	
		strategies or partnerships to	
		improve water quality and	
		quantity.	
Continue to actively engage in	☐ Yes		
FERC relicensing of			
hydroelectric facilities in the	X N/A		
Region.			
Address economic challenges	☐ Yes		
of municipal service providers			
to serve customers.	X N/A		
Protect, restore, and enhance	☐ Yes	The project will protect water	
the quality of surface and		quality through data collection,	
groundwater resources for all	X N/A	analysis, and information	
beneficial uses, consistent with		sharing, including a publicly	
the RWQC Basin Plan.		available dataset.	
Address water resources and	X Yes	This project will address	
wastewater needs of DACs and		existing and potential impacts	
Native Americans.	□ N/A	to water resources for all	
		County residents including	
		DACs utilizing water delivery	
		and onsite wastewater systems.	
		and onsite wastewater systems.	

	1		Groundwater Monitorin
	Will the		Quantification
	project		(e.g. acres of
	address		streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Coordinate management of	X Yes	The project will result in a tool	
recharge areas and protect		that could help coordinate	
groundwater resources.	□ N/A	management of recharge areas	
		and protect groundwater	
		resources.	
Improve coordination of land	X Yes	The data produced from this	
use and water resources		project would be extremely	
planning.	□ N/A	beneficial to multiple agencies	
		responsible for evaluating	
		future development projects	
		with regards to land use and	
		water resources.	
Maximize agricultural <u>,</u>	☐ Yes		
environmental and municipal			
water use efficiency.	X N/A		
Effectively address climate	Yes		
change adaptation and/or			
mitigation in water resources	X N/A		
management.			
Improve efficiency and	X Yes	The project would allow better	
reliability of water supply and		decisions regarding future	
other water-related	□ N/A	water supply and infrastructure	
infrastructure.		development.	
Enhance public awareness and	X Yes	This project will produce	
understanding of water		publicly available data, in a	
management issues and needs.	□ N/A	usable format, that would	
	,	enhance public awareness and	
		understanding of water	
		management issues and needs.	
Address economic challenges	☐ Yes		
of agricultural producers.	X N/A		
Work with counties/	X Yes	The majority of the proposed	
communities/groups to make		work is to tabulate existing data	
sure staff capacity exists for	□N/A	through use of an outside	
actual administration and	·	consultant.	
implementation of grant			
funding.			
	ı	ı	

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

N/A		

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 appli	icable, describe benefits or impacts of the	project wi	th respect to:
a. Na	ative American Tribal Communities		The goal of this project is to identify any
		□ N/A	existing or potential water quality
			concerns through analysis of existing
			data. This information will be beneficial
			for all residents of Plumas County, many
			of whom reside in Tribal communities.
b. Di	isadvantaged Communities ¹		The goal of this project is to identify any
		□ N/A	existing or potential water quality
			concerns through analysis of existing
			data. This information will be beneficial
			for all residents of Plumas County, many
			of whom reside in DACs.
c. Er	nvironmental Justice ²		The goal of this project is to identify any
		□ N/A	existing or potential water quality
			concerns through analysis of existing data. This information will be beneficial
d. Dı	rought Preparedness		for all residents of Plumas County. The water quantity information
u. Di	Tought Frepareuness	□ N/A	gathered through well completion
			reports and pump testing could identify
			water shortage areas and dry wells
			trends thus helping improve drought
			resiliency.
			,
e. As	ssist the region in adapting to effects of		
cli	imate change ³	X N/A	
	eneration or reduction of greenhouse		
ga	as emissions (e.g. green technology)	X N/A	
_	ther expected impacts or benefits that	V NI / A	
ar	re not already mentioned elsewhere	X 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	X Yes	g.	Drinking water treatment and	X Yes
	conservation, water use efficiency	□ N/A		distribution	□ N/A
b.	Stormwater capture, storage, clean-	☐ Yes	h.	Watershed protection and	X Yes
	up, treatment, management	X N/A		management	□ N/A
c.	Removal of invasive non-native	☐ Yes	i.	Contaminant and salt removal	☐ Yes
	species, creation/enhancement of	X N/A		through reclamation/desalting,	X N/A
	wetlands,			other treatment technologies	
	acquisition/protection/restoration			and conveyance of recycled	
	of open space and watershed lands			water for distribution to users	
d.	Non-point source pollution	X Yes	j.	Planning and implementation of	☐ Yes
	reduction, management and	□ N/A		multipurpose flood	X N/A
	monitoring			management programs	
e.	Groundwater recharge and	X Yes	k.	Ecosystem and fisheries	☐ Yes
	management projects	□ N/A		restoration and protection	X N/A
f.	Water banking, exchange,	X Yes			
	reclamation, and improvement of	□ N/A			
	water quality				

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/).

	Will the Project incorporate	Description of how RMS to be employed,
Resource Management Strategy	RMS?	if applicable
Reduce Water Demand		
Agricultural Water Use Efficiency	☐ Yes ☐ No	N/A
Urban water use efficiency	X Yes □ No	Project information may help drive urban water use efficiency planning and strategy development.
Improve Flood Management		
Flood management	☐ Yes X No	
Improve Operational Efficiency and T	ransfers	
Conveyance – regional/local	☐ Yes X No	
System reoperation	☐ Yes X No	
Water transfers	☐ Yes X No	
Increase Water Supply		
Conjunctive management	☐ Yes X No	
Precipitation Enhancement	☐ Yes X No	
Municipal recycled water	☐ Yes X No	
Surface storage – regional/local	☐ Yes X No	
Improve Water Quality		
Drinking water treatment and	☐ Yes X No	

	Will the Project incorporate	Description of how RMS to be employed,
Resource Management Strategy	RMS?	if applicable
distribution		
Groundwater remediation/aquifer remediation	☐ Yes X No	
Matching water quality to water use	Yes X No	
Pollution prevention	X Yes □ No	The project will help monitor the impacts that on-site sewage disposal systems have on groundwater quality.
Salt and salinity management	☐ Yes X No	
Urban storm water runoff management	☐ Yes X No	
Practice Resource Stewardship		
Agricultural land stewardship	☐ Yes X No	
Ecosystem restoration	☐ Yes X No	
Forest management	☐ Yes X No	
Land use planning and management Recharge area protection	X Yes □ No	The information and usable format that this project will create will be beneficial in evaluating areas for potential land development. For example if data is available that indicates that the proposed development area is already experiencing impacts to groundwater quality from existing on-site sewage disposal systems the appropriate mitigations can be employed. The information and usable format that this project will be beneficial in evaluating areas vulnerable to contamination. This will help decision makers protect recharge areas of
Sediment management	☐ Yes X No	vulnerable groundwater areas.
Watershed management	X Yes No	The information produced by this project will inform decision makers and the public, and help drive improving watershed management.
People and Water		
Economic incentives	☐ Yes X No	
Outreach and engagement	X Yes □ No	The dataset will be publicly available
Water and culture	Yes X No	
Water-dependent recreation	☐ Yes X No	
Wastewater/NPDES Other RMS addressed and explanation	X Yes □ No	The project will identify any impacts to groundwater resources caused by on-site sewage disposal systems.

Upper Feather River IRWM Project Information Form

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 BUDGE	Т		
Dro	oject serves a need of a DAC?: Yes	□No			
	nding Match Waiver request?: Yes				
	Category	Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Source*	Total Cost
a.	Direct Project Administration	\$4,000			\$4,000
b.	Land Purchase/Easement				
c.	Planning/Design/Engineering / Environmental				
d.	Construction/Implementation	\$36,000			\$36,000
e.	Environmental Compliance/ Mitigation/Enhancement				
f.	Construction Administration				
g.	Other Costs				
h.	Construction/Implementation Contingency				
i.	Grand Total (Sum rows (a) through (h) for each column)				
j.	Can the Project be phased? X Yes	No If yes , pro	ovide cost breakdo	wn by phases	•
		Project Cost	O&M Cost	Descriptio	n of Phase
	Phase 1	\$30,000		Water Quality t mapping	abulation and
	Phase 2	\$10,000		Water Quantity mapping	tabulation and
	Phase 3				
	Phase 4				
k.	Explain how operation and maintenan financed for the 20-year planning perimplementation (not grant funded).		Funding for oper GIS tool will be in County Environm	ncluded in the bu	
I.	Has a Cost/Benefit analysis been comp	pleted?	☐ Yes X No		
m.	Describe what impact there may be if not funded (300 words or less)	the project is	This monitoring properties monitoring required wastewater regulations, the court	ired under the stallations AB 885.	atewide onsite Without

		onsite wastewater program could be in jeopardy, or other funds would be required to satisfy the Regional Water Quality Control Board and their requirements for monitoring onsite wastewater treatment systems.
*Lis	t all sources of funding.	
	te: See Project Development Manual, Exhibit B, for assist tp://featherriver.org/documents/).	ance in completing this table

VIII. PROJECT STATUS AND SCHEDULE

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**.

	Check the Current Project		Description of Activities in Each	Planned/ Actual Start	Planned/ Actual Completion
Project Stage	Stage	Completed?	Project Stage	Date (mm/yr)	Date (mm/yr)
a. Assessment and Evaluation		☐ Yes ☐ No ☐ N/A			
b. Final Design	X	☐ Yes X No ☐ N/A	 Develop an RFP and a scope of work, Solicit bids Select consultant/contractor. 	Based on available funding	Within 1 year of awarding contract
c. Environmental Documentation (CEQA / NEPA)		☐ Yes ☐ No X N/A			
d. Permitting		☐ Yes ☐ No X N/A			
e. Construction Contracting		☐ Yes ☐ No X N/A			
f. Construction Implementation		☐ Yes ☐ No X N/A			
Provide explanation stage is checked as c					

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	SWR – Onsite Wastewater Treatment
	is consistent with or supported by (e.g. General Plans,	System Policy (AB 885)
	UWMPs, GWMPs, Water Master Plan, Habitat Conservation	http://www.waterboards.ca.gov/wat
	Plans, TMDLs, Basin Plans, etc.).	er issues/programs/owts/docs/owts
		_policy.pdf
b.	List technical reports and studies supporting the feasibility	
	of this project.	N/A
c.	Concisely describe the scientific basis (e.g. how much	This project will gather, tabulate and
	research has been conducted) of the proposed project in	input existing groundwater
	300 words or less.	monitoring data into GIS layer(s) that
		will be publicly available. The goal is
		to compile and summarize existing
		data in a format that can be used to
		identify existing and potential water
		quality or quantity issues throughout
		Plumas County.
d.	Does the project implement green technology (e.g.	☐ Yes X No ☐ N/A
	alternate forms of energy, recycled materials, LID	If yes, please describe.
	techniques, etc.).	
e.	Are you an Urban Water Supplier ¹ ?	☐ Yes X No ☐ N/A
e. f.	Are you an Urban Water Supplier ¹ ? Are you are an Agricultural Water Supplier ² ?	☐ Yes X No ☐ N/A ☐ Yes X No ☐ N/A
_		
f.	Are you are an Agricultural Water Supplier ² ?	☐ Yes X No ☐ N/A X Yes ☐ No ☐ N/A
f.	Are you are an Agricultural Water Supplier ² ?	☐ Yes X No ☐ N/A X Yes ☐ No ☐ N/A If yes, please indicate which
f.	Are you are an Agricultural Water Supplier ² ?	☐ Yes X No ☐ N/A X Yes ☐ No ☐ N/A
f.	Are you are an Agricultural Water Supplier ² ?	☐ Yes X No ☐ N/A X Yes ☐ No ☐ N/A If yes, please indicate which
f.	Are you are an Agricultural Water Supplier ² ?	☐ Yes X No ☐ N/A X Yes ☐ No ☐ N/A If yes, please indicate which groundwater basin.
f.	Are you are an Agricultural Water Supplier ² ?	☐ Yes X No ☐ N/A X Yes ☐ No ☐ N/A If yes, please indicate which groundwater basin. This project will benefit all
f.	Are you are an Agricultural Water Supplier ² ?	☐ Yes X No ☐ N/A X Yes ☐ No ☐ N/A If yes, please indicate which groundwater basin. This project will benefit all groundwater basins in Plumas
f.	Are you are an Agricultural Water Supplier ² ?	☐ Yes X No ☐ N/A X Yes ☐ No ☐ N/A If yes, please indicate which groundwater basin. This project will benefit all groundwater basins in Plumas County.
f. g.	Are you are an Agricultural Water Supplier ² ? Is the project related to groundwater?	☐ Yes X No ☐ N/A X Yes ☐ No ☐ N/A If yes, please indicate which groundwater basin. This project will benefit all groundwater basins in Plumas County.
f. g.	Are you are an Agricultural Water Supplier ² ? Is the project related to groundwater? rban Water Supplier is defined as a supplier, either publicly or	☐ Yes X No ☐ N/A X Yes ☐ No ☐ N/A If yes, please indicate which groundwater basin. This project will benefit all groundwater basins in Plumas County.
f. g.	Are you are an Agricultural Water Supplier ² ? Is the project related to groundwater? rban Water Supplier is defined as a supplier, either publicly or unicipal purposes either directly or indirectly to more than 3,00	☐ Yes X No ☐ N/A X Yes ☐ No ☐ N/A If yes, please indicate which groundwater basin. This project will benefit all groundwater basins in Plumas County. privately owned, providing water for 0 customers or supplying more than



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 County Department of Public Works – Engineering
Name of Primary Contact	Robert A. Perreault , Jr., Director of Public works
Name of Secondary Contact	Robert Thorman, Engineering Technician II
Mailing Address	1834 East Main Street, Quincy, CA 95971
E-mail	bobperreault@countyofplumas.com
Phone	(530) 283-6222
Other Cooperating Agencies /	NA
Organizations / Stakeholders	
Is your agency/organization	Yes
committed to the project through	
completion? If not, please explain	

II. GENERAL PROJECT INFORMATION

Project Title	MS-15: Chandler Road Bridge Erosion
Project Category	☐ Agricultural Land Stewardship
	☐ Floodplains/Meadows/Waterbodies
	☐ Tribal Advisory Committee
	☐ Uplands/Forest
Project Description	Significant bank erosion has occurred upstream and
(Briefly describe the project,	downstream from the Chandler Road bridge on Spanish Creek
in 300 words or less)	and is in need of erosion protection by means of rip rap to
	reduce the turbidity of the stream from erosion.
Project Location Description (e.g.,	Upstream and downstream from the Chandler Road bridge on
along the south bank of stream/river	Spanish Creek
between river miles or miles from	
Towns/intersection and/or address):	

Latitude:	39 degrees 58' N
Longitude:	120 degrees 54' W

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.

	Will the project		Quantification (e.g. acres of
	address		streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Restore natural hydrologic	⊠ Yes	Restore hydrologic function by	Reduces significant
functions.		reducing stream-bank erosion	erosion and
	□ N/A	and turbidity in Spanish Creek.	turbidity.
Reduce potential for	☐ Yes		
catastrophic wildland fires in			
the Region.	⊠ N/A		
Build communication and	☐ Yes		
collaboration among water			
resources stakeholders in the	⊠ N/A		
Region.			
Work with DWR to develop	☐ Yes		
strategies and actions for the			
management, operation, and	⊠ N/A		
control of SWP facilities in the			
Upper Feather River			
Watershed in order to increase			
water supply, recreational, and			
environmental benefits to the			
Region.			
Encourage municipal service	☐ Yes		
providers to participate in			
regional water management	⊠ N/A		
actions that improve water			
supply and water quality.	□ Va-		
Continue to actively engage in FERC relicensing of	☐ Yes		
hydroelectric facilities in the	N N / A		
Region.	⊠ N/A		
Address economic challenges	□ Yes		
of municipal service providers	1es		
to serve customers.	⊠ N/A		
to serve editioniers.			

	Will the		Ougatification
			Quantification
	project		(e.g. acres of
Harris Frankrich Direct IDMAN	address	District and a series of a series	streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Protect, restore, and enhance	⊠ Yes	Restore clarity in Spanish Creek	Reduces significant
the quality of surface and		by reducing erosion and	erosion and
groundwater resources for all	□ N/A	turbidity. Reducing erosion and	turbidity in Spanish
beneficial uses, consistent with		turbidity in Spanish Creek also	Creek and the
the RWQC Basin Plan.		translates into reduced	Middle Fork of the
		turbidity in the Middle Fork of	Feather River.
		the Feather River.	
Address water resources and	☐ Yes		
wastewater needs of DACs and			
Native Americans.	⊠ N/A		
Coordinate management of	☐ Yes		
recharge areas and protect			
groundwater resources.	⊠ N/A		
Improve coordination of land	☐ Yes		
use and water resources			
planning.	⊠ N/A		
Maximize agricultural,	☐ Yes		
environmental and municipal			
water use efficiency.	⊠ N/A		
Effectively address climate	☐ Yes		
change adaptation and/or			
mitigation in water resources	⊠ N/A		
management.			
Improve efficiency and	☐ Yes		
reliability of water supply and			
other water-related	⊠ N/A		
infrastructure.			
Enhance public awareness and	☐ Yes		
understanding of water			
management issues and needs.	⊠ N/A		
Address economic challenges	☐ Yes		
of agricultural producers.			
	⊠ N/A		
Work with counties/	⊠ Yes	Plumas County Department of	
communities/groups to make	55	Public Works is committed to	
sure staff capacity exists for	□ N/A	the successful implementation	
actual administration and		of this project. We have the	
implementation of grant		staff capacity to administer and	
funding.		implement the grant project.	
ranang.		implement the grant project.	

If no Reg	o objectives are addressed, describe how the ion:	project rela	ates to a challenge or opportunity for the
IV.	PROJECT IMPACTS AND BENEFITS		the second of the balls and all all all all all all all all all al
	ase provide a summary of the expected project ot applicable; do no leave a blank cell. Note t		
	pplicable, describe benefits or impacts of the	project wi	th respect to:
а.	Native American Tribal Communities	⊠ N/A	
b.	Disadvantaged Communities ¹	⊠ N/A	
c.	Environmental Justice ²	⊠ N/A	
d.	Drought Preparedness	⊠ N/A	
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	Benefit of reduced erosion and turbidity in the creek and tributaries.
inco	Disadvantaged Community is defined as a comome that is less than 80 percent of the Statew UFR website (http://featherriver.org/maps/)	ide annual	
with	vironmental Justice is defined as the fair treat n respect to the development, adoption, impleulations and policies. An example of environm	ementatior	n and enforcement of environmental laws,
(e.g	. water supply, flooding, sanitation) in an area imate change effects are likely to include incre ondary effects such as increased wildfire risk,	a of racial n eased flood	ninorities. Iing, extended drought, and associated

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

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/).

	Will the Project	
	incorporate	Description of how RMS to be employed,
Resource Management Strategy	RMS?	if applicable
Reduce Water Demand		
Agricultural Water Use Efficiency	☐ Yes ☒ No	
Urban water use efficiency	☐ Yes ⊠ No	
Improve Flood Management		
Flood management		Reduced erosion in creeks results in less
	oxtimes Yes $oxtimes$ No	sediment in rivers and better flood
		management.
Improve Operational Efficiency and T	ransfers	
Conveyance – regional/local	☐ Yes ⊠ No	
System reoperation	☐ Yes ⊠ No	
Water transfers	☐ Yes ⊠ No	
Increase Water Supply		
Conjunctive management	☐ Yes ⊠ No	
Precipitation Enhancement	☐ Yes ⊠ No	
Municipal recycled water	☐ Yes ⊠ No	
Surface storage – regional/local	☐ Yes ⊠ No	

	Will the Project	
	incorporate	Description of how RMS to be employed,
Resource Management Strategy	RMS?	if applicable
Improve Water Quality	1	
Drinking water treatment and	☐ Yes ⊠ No	
distribution		
Groundwater remediation/aquifer remediation	☐ Yes ⊠ No	
Matching water quality to water use	☐ Yes ⊠ No	
Pollution prevention	☐ Yes ⊠ No	
Salt and salinity management	☐ Yes ⊠ No	
Urban storm water runoff management	☐ Yes ⊠ No	
Practice Resource Stewardship		
Agricultural land stewardship	☐ Yes ⊠ No	
Ecosystem restoration	☐ Yes ⊠ No	
Forest management	☐ Yes ⊠ No	
Land use planning and	☐ Yes ☒ No	
management	☐ Yes ☒ No	
Recharge area protection	☐ Yes ⊠ No	
Sediment management	⊠ Yes □ No	Reduced sediment in creeks & rivers
Watershed management	☐ Yes ⊠ No	
People and Water		
Economic incentives	☐ Yes ⊠ No	
Outreach and engagement	☐ Yes ⊠ No	
Water and culture	☐ Yes ⊠ No	
Water-dependent recreation	☐ Yes ⊠ No	
Wastewater/NPDES	☐ Yes ⊠ No	
Other RMS addressed and explanation	on:	

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				
Dre	Desirant company and of a DAC2. Vac. MAI				
	Project serves a need of a DAC?: ☐ Yes ☒ No Funding Match Waiver request?: ☐ Yes ☒ No				
- 1 01	manig water waiver requests. Tes	I T	1		1
			Cost Share: Non-State	Cost Share:	
		Requested	Fund Source*	Other State	
		Grant	(Funding	Fund	
	Category	Amount	Match)	Source*	Total Cost
a.	Direct Project Administration	\$20,000			\$20,000
b.	Land Purchase/Easement				
c.	Planning/Design/Engineering / Environmental	\$25,000			\$25,000
d.	Construction/Implementation	\$680,000			\$680,000
e.	Environmental Compliance/ Mitigation/Enhancement	\$10,000			\$10,000
f.	Construction Administration	\$100,000			\$100,000
g.	Other Costs				
h.	Construction/Implementation Contingency	\$62,000			\$62,000
i.	Grand Total (Sum rows (a) through (h) for each column)	\$897,000			\$897,000
j.	Can the Project be phased? ☐ Yes	⊠ No If yes , p	rovide cost breakd	own by phases	
		Project Cost	O&M Cost	Description of Phase	
	Phase 1				
	Phase 2				
	Phase 3				
1,	Phase 4			ill come from	
k. Explain how operation and maintenance costs will be financed for the 20-year planning period for project		Funding for O&M of the project will come from the Plumas County Department of Public Works			
	implementation (not grant funded).	od for project	budget.	ty Department o	Trabile Works
I.	Has a Cost/Benefit analysis been completed?		☐ Yes ☒ No		
m.	m. Describe what impact there may be if the project is		Continued bank erosion and water turbidity		r turbidity
	not funded (300 words or less)				
	t all sources of funding.	whihit D for accid	tanco in completio	t this table	
	te: See Project Development Manual, E	xilibit B, for assist	lance in completing	g uns table	
(III	(http://featherriver.org/documents/).				

VIII. PROJECT STATUS AND SCHEDULE

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**.

Businest Change	Check the Current Project	Complete d2	Description of Activities in Each	Planned/ Actual Start	Planned/ Actual Completion
Project Stage		Completed?	Project Stage	Date (mm/yr)	Date (mm/yr) 1 month after
a. Assessment a Evaluation		☐ Yes ☑ No ☐ N/A		Upon execution of grant agreement	funding agreement
b. Final Design		☐ Yes ⊠ No □ N/A		2 months after funding secured	4 months after funding secured
c. Environmenta Documentati (CEQA / NEPA	on 🗆	☐ Yes ⊠ No □ N/A		4 months after funding secured	7 months after funding secured
d. Permitting		☐ Yes ⊠ No □ N/A		7 months after funding secured	8.5 months after funding secured
e. Construction Contracting		☐ Yes ⊠ No □ N/A		8.5 months after funding secured	9 months after funding secured
f. Construction Implementat	ion 🗆	☐ Yes ⊠ No □ N/A		9 months after funding secured	12 months after funding secured
•	tion if more than 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	Water Quality Control Plan for the	
	project is consistent with or supported by (e.g. General	Sacramento and San Joaquin River	
	Plans, UWMPs, GWMPs, Water Master Plan, Habitat	Basins	
	Conservation Plans, TMDLs, Basin Plans, etc.).		
b.	List technical reports and studies supporting the	NA	
	feasibility of this project.		
	, ,		
c.	Concisely describe the scientific basis (e.g. how much	Acceptable sediment loads (TSS,	
	research has been conducted) of the proposed project in	turbidity, etc.) in streams and rivers are	
	300 words or less.	regulated by the Water Quality Control	
		Plan for the Sacramento and San	
		Joaquin River Basins (Basin Plan) and by	
		established TMDLs. This project will	
		reduce sediment inputs to local	
		waterways in support of compliance	
		with the Basin Plan and established	
		TMDLs.	
d.	Does the project implement green technology (e.g.	☐ Yes ☒ No ☐ N/A	
	alternate forms of energy, recycled materials, LID	If yes, please describe.	
	techniques, etc.).	, , ,	
e.	Are you an Urban Water Supplier ¹ ?	☐ Yes ☒ No ☐ N/A	
f.	Are you are an Agricultural Water Supplier ² ?	☐ Yes ☒ No ☐ N/A	
g.	Is the project related to groundwater?	☐ Yes ☒ No ☐ N/A	
		If yes, please indicate which	
		groundwater basin.	
¹ U	rban Water Supplier is defined as a supplier, either publicly	or privately owned, providing water for	
mι	inicipal purposes either directly or indirectly to more than 3,	000 customers or supplying more than	
3,000 acre-feet of water annually.			
3,0		, , , , , , , , , , , , , , , , , , ,	

Climate Change – Project Assessment Checklist

This climate change project assessment tool allows project applicants and the planning team to assess project consistency with Proposition 84 plan standards and RWMG plan assessment standards. The tool is a written checklist that asks GHG emissions and adaptation/resiliency questions.

Name of project: MS-15: Chandler Road Bridge Erosion

Project applicant: Plumas County Department of Public Works- Engineering

GHG Emissions Assessment

Project Construction Emissions (If you check any of the boxes, please see the attached worksheet)
 ☑ The project requires nonroad or off-road engines, equipment, or vehicles to complete. ☑ The project requires materials to be transported to the project site. ☑ The project requires workers to commute to the project site. ☑ The project is expected to generate GHG emissions for other reasons.
The project does not have a construction phase and/or is not expected to generate GHG emissions during the construction phase.
Operating Emissions (If you check any of the boxes, please see the attached worksheet)
The project requires energy to operate.The project will generate electricity.
The project will proactively manage forests to reduce wildfire risk. The project will affect wetland acreage.
The project will include new trees. Project operations are expected to generate or reduce GHG emissions for other reasons.

Adaptation & Resiliency Assessment

Water Supply
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water supply vulnerability issues:
Not applicable ■ Not applicable Not applicable
Reduced snowmelt
Unmet local water needs (drought)
☐ Increased invasive species
Water Demand
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water demand vulnerability issues:
Not applicable ■ Not applicable Not applicable
☐ Increasing seasonal water use variability
Unmet in-stream flow requirements
Climate-sensitive crops
Groundwater drought resiliency
Water curtailment effectiveness

high priority water quality vulnerability issues:
Not applicable ■ Not applicable Not applicable
Increasing catastrophic wildfires
 Eutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and other related water quality issues)
Seasonal low flows and limited abilities for waterbodies to assimilate pollution
Water treatment facility operations
Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold freshwater habitat, spawning habitat, wildlife habitat, etc.)
Flooding Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues:
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues:
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues:
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain Insufficient flood control facilities
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Water Quality

Upper Feather River Integrated Regional Water Management Plan Climate Change- Project Assessment Tool

Ecosystem and Habitat Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority ecosystem and habitat vulnerability issues:
☐ Not applicable ☐ Climate-sensitive fauna or flora
Recreation and economic activity
Quantified environmental flow requirements
Erosion and sedimentation
☐ Endangered or threatened species
Fragmented habitat
The project when completed will reduce the erosion and sedimentation in creek.
, p. ojest o p. o
Hydropower
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority hydropower vulnerability issues:
Not applicable ■ Not applicable Not applicable
Reduced hydropower output

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-15: Chandler Road Bridge Erosion

GHG Emissions Analysis

Project Construction Emissions

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

	Maximum		
	Number Per	Total 8-Hour Days in	
Type of Equipment	Day	Operation	Total MTCO₂e
Excavators	1	5	2
Tractors/Loaders/Bac			
khoes	2	5	3
Dumpers/Tenders	1	5	0
Off-Highway Trucks	1	5	6
			0
			0
			0
			0
			0
			0
•	•	Total Emissions	11

Χ	The project requires materials to be transported to the project site. If	f ves:
^	The project requires materials to be transported to the project site. If	ı yes.

	Average Trip	
Total Number of	Distance	
Round Trips	(Miles)	Total MTCO₂e
10	30	0

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

Average Number of Workers	of Workdays	Distance Traveled (Miles)	Total MTCO₂e	
	5 10	60		1

The project	t 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.

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

	MS-15: Ch	nandler Road Bridge Er	osion	
Project Op	erating Emissions			
The projec	t requires energy to operate. If yes:			
	Annual Energy Needed	Unit	Total MTCO₂e	
		kWh (Electricity)	0	
		Therm (Natural Gas)	0	
_				
The projec	t will generate electricity. If yes:	1	•	
	Annual kWh Generated	Total MTCO₂e		
		0		
	*A negative value indicates GHG re	ductions		
The project	t will proactively manage forests to		yes:	
	Acres Protected from Wildfire	Total MTCO₂e		
		0		
	*A negative value indicates GHG re	ductions		
The project	t will affect wetland acreage. If yes:		1	
	Acres of Protected Wetlands	Total MTCO₂e		
		0		
	*A negative value indicates GHG re	ductions		
The projec	t will include new trees. If yes:			
	Acres of Trees Planted	Total MTCO₂e]	
	(0		
· '	*A negative value indicates GHG re	ductions	_	
	erations are expected to generate o	r reduce GHG emissior	ns for other reasons.	If yes,
explain:				
GHG Emissions Summary				
Construction	on and development will generate a	pproximately:	13	MTCO ₂ e
In a given y	vear, operation of the project will re	esult in:	0	MTCO₂e



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 County Department of Public Works – Engineering
Name of Primary Contact	Robert A. Perreault , Jr., Director of Public works
Name of Secondary Contact	Robert Thorman, Engineering Technician II
Mailing Address	1834 East Main Street, Quincy, CA 95971
E-mail	bobperreault@countyofplumas.com
Phone	(530) 283-6222
Other Cooperating Agencies /	NA
Organizations / Stakeholders	
Is your agency/organization	Yes
committed to the project through	
completion? If not, please explain	

II. GENERAL PROJECT INFORMATION

Project Title	MS-16: Humbug Valley Road Bridge Erosion
Project Category	☐ Agricultural Land Stewardship
	☐ Floodplains/Meadows/Waterbodies
	☐ Tribal Advisory Committee
	☐ Uplands/Forest
Project Description	Seasonal flooding of Road 308 is in need of a new culvert to
(Briefly describe the project,	improve water flow, raising the road to eliminate flooding,
in 300 words or less)	and armoring the roadside ditches to prevent polluting
	adjacent lands and reduce ditch turbidity flowing to streams.
Project Location Description (e.g.,	Humbug Road 308 at mile marker 15.1
along the south bank of stream/river	
between river miles or miles from	
Towns/intersection and/or address):	
Latitude:	40 degrees 12' N
Longitude:	121 degrees 16' W

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.

	Will the project address		Quantification (e.g. acres of streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Restore natural hydrologic	☐ Yes		·
functions.			
	⊠ N/A		
Reduce potential for	□ Yes		
catastrophic wildland fires in			
the Region.	⊠ N/A		
Build communication and	☐ Yes		
collaboration among water			
resources stakeholders in the	⊠ N/A		
Region.	_ ,		
Work with DWR to develop	☐ Yes		
strategies and actions for the			
management, operation, and	⊠ N/A		
control of SWP facilities in the			
Upper Feather River			
Watershed in order to increase			
water supply, recreational, and			
environmental benefits to the			
Region.			
Encourage municipal service	☐ Yes		
providers to participate in			
regional water management	⊠ N/A		
actions that improve water			
supply and water quality.	□ V -		
Continue to actively engage in	☐ Yes		
FERC relicensing of hydroelectric facilities in the	N N / A		
Region.	⊠ N/A		
Address economic challenges	☐ Yes		
of municipal service providers	□ 163		
to serve customers.	⊠ N/A		
to serve eastorners.	🖾 IN/A		
Protect, restore, and enhance	⊠ Yes	Reduced pollution entering the	Reduces turbidity
the quality of surface and		surrounding lands by	from drainage
groundwater resources for all	□ N/A	eliminating the roadway	ditch leading to
beneficial uses, consistent with		flooding and reduce turbidity	streams.
the RWQC Basin Plan.		from drainage ditches leading	
		to streams.	

	Will the		Quantification	
	project address		(e.g. acres of streams/wetlands	
Upper Feather River IRWM	the	Brief explanation of project	restored or	
Objectives:	objective?	linkage to selected Objective	enhanced)	
Address water resources and	☐ Yes	age to selected Cajetime	emanecay	
wastewater needs of DACs and				
Native Americans.	⊠ N/A			
Coordinate management of	☐ Yes			
recharge areas and protect				
groundwater resources.	⊠ N/A			
Improve coordination of land use and water resources	☐ Yes			
planning.	⊠ N/A			
Maximize agricultural, environmental and municipal	☐ Yes			
water use efficiency.	⊠ N/A			
Effectively address climate change adaptation and/or	☐ Yes			
mitigation in water resources management.	⊠ N/A			
Improve efficiency and	☐ Yes			
reliability of water supply and				
other water-related	⊠ N/A			
infrastructure.				
Enhance public awareness and understanding of water	☐ Yes			
management issues and needs.	⊠ N/A			
Address economic challenges of agricultural producers.	☐ Yes			
or agricultural producers.	⊠ N/A			
Work with counties/	⊠ Yes	Plumas County Department of		
communities/groups to make sure staff capacity exists for actual administration and implementation of grant	□ N/A	Public Works is committed to the successful implementation of this project. We will ensure staff capacity exists to		
funding.		administer and implement the grant project.		
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	proiect	with respect to:	
a. Native American Tribal Communities		⊠ N/A	·	
b. Disadvantaged Communities ¹		⊠ N/A		
c. Environmental Justice ²		⊠ N/A		
d. Drought Preparedness		⊠ N/A		
e. Assist the region in adapting to effect climate change ³	ts of	⊠ N/A		
f. Generation or reduction of greenhou gas emissions (e.g. green technology)		⊠ N/A		
g. Other expected impacts or benefits the are not already mentioned elsewhere		□ N/A Benefit of reduced turbidity from drainage ditch leading to streams.		
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.			comes ntal laws, anditions	
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	□ Ye 図 N/		Drinking water treatment and distribution	☐ Yes ⊠ N/A
b. Stormwater capture, storage, clean- up, treatment, management	□ Ye 図 N/	A	Watershed protection and management	⊠ Yes □ N/A
c. Removal of invasive non-native species, creation/enhancement of wetlands, acquisition/protection/restoration of open space and watershed lands	□ Ye ⊠ N/		Contaminant and salt removal through reclamation/desalting, other treatment technologies and conveyance of recycled water for distribution to users	☐ Yes ⊠ N/A

d.	Non-point source pollution	☐ Yes	j.	Planning and implementation of	☐ Yes
	reduction, management and	⊠ N/A		multipurpose flood	⊠ N/A
	monitoring			management programs	
e.	Groundwater recharge and	☐ Yes	k.	Ecosystem and fisheries	☐ Yes
	management projects	⊠ N/A		restoration and protection	⊠ N/A
f.	Water banking, exchange,	☐ Yes			
	reclamation, and improvement of	⊠ N/A			ļ
	water quality				

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/).

	Will the Project incorporate	Description of how RMS to be employed,		
Resource Management Strategy	RMS?	if applicable		
Reduce Water Demand				
Agricultural Water Use Efficiency	☐ Yes ⊠ No			
Urban water use efficiency	☐ Yes ⊠ No			
Improve Flood Management				
Flood management		Reduced erosion of roadway and ditches		
	⊠ Yes □ No	results in less sediment in rivers and better		
		flood management.		
Improve Operational Efficiency and T				
Conveyance – regional/local	☐ Yes ⊠ No			
System reoperation	☐ Yes ⊠ No			
Water transfers	☐ Yes ⊠ No			
Increase Water Supply				
Conjunctive management	☐ Yes ⊠ No			
Precipitation Enhancement	☐ Yes ⊠ No			
Municipal recycled water	☐ Yes ⊠ No			
Surface storage – regional/local	☐ Yes ⊠ No			
Improve Water Quality				
Drinking water treatment and	☐ Yes ☒ No			
distribution	L TES Z NO			
Groundwater remediation/aquifer	☐ Yes ☒ No			
remediation				
Matching water quality to water	☐ Yes ⊠ No			
use				
Pollution prevention	☐ Yes ⊠ No			
Salt and salinity management	☐ Yes ⊠ No			
Urban storm water runoff	☐ Yes ☒ No			
management				
Practice Resource Stewardship	T			
Agricultural land stewardship	☐ Yes ⊠ No			

	Will the Project	
	incorporate	Description of how RMS to be employed,
Resource Management Strategy	RMS?	if applicable
Ecosystem restoration	☐ Yes ⊠ No	
Forest management	☐ Yes ⊠ No	
Land use planning and	☐ Yes ⊠ No	
management	☐ Yes ⊠ No	
Recharge area protection	☐ Yes ⊠ No	
Sediment management	⊠ Yes □ No	Reduced sediment in ditches, creeks & rivers
Watershed management	☐ Yes ⊠ No	
People and Water		
Economic incentives	☐ Yes ⊠ No	
Outreach and engagement	☐ Yes ⊠ No	
Water and culture	☐ Yes ⊠ No	
Water-dependent recreation	☐ Yes ⊠ No	
Wastewater/NPDES	☐ Yes ⊠ No	
Other RMS addressed and explanation	n:	

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 BUDGE	: I		
	oject serves a need of a DAC?: ☐ Yes onding Match Waiver request?: ☐ Yes				
	Category	Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Source*	Total Cost
a.	Direct Project Administration	\$20,000			\$20,000
b.	Land Purchase/Easement				
c.	Planning/Design/Engineering / Environmental	\$27,000			\$27,000
d.	Construction/Implementation	\$290,000			\$290,000
e.	Environmental Compliance/ Mitigation/Enhancement	\$12,000			\$12,000
f.	Construction Administration	\$42,000			\$42,000
g.	Other Costs				
h.	Construction/Implementation Contingency	\$17,000			\$17,000
i.	Grand Total (Sum rows (a) through (h) for each column)	\$408,000			\$408,000

j.	Can the Project be phased? ☐ Yes	⊠ No If yes , p	rovide cost breakd	own by phases
		Project Cost	O&M Cost	Description of Phase
	Phase 1			
	Phase 2			
	Phase 3			
	Phase 4			
k.	k. Explain how operation and maintenance costs will be		Funding for O&M of this project will come from	
	financed for the 20-year planning period for project		the Plumas County Department of Public Works	
	implementation (not grant funded).		budget.	
I.	. Has a Cost/Benefit analysis been completed?		☐ Yes ☒ No	
m.	Describe what impact there may be if the project is		Continued roadw	yay erosion and water turbidity
	not funded (300 words or less)			
*Lis	t all sources of funding.			
Note: See Project Development Manual, Exhibit B, for assistan			ance in completing	g this table
(http://featherriver.org/documents/).				

VIII. PROJECT STATUS AND SCHEDULE

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**.

	Check the Current Project		Description of Activities in Each	Planned/ Actual Start	Planned/ Actual Completion
Project Stage	Stage	Completed?	Project Stage	Date (mm/yr)	Date (mm/yr)
a. Assessment and Evaluation	⊠	☐ Yes☒ No☐ N/A		Upon execution of grant agreement	1 month after funding agreement
b. Final Design		☐ Yes☒ No☐ N/A		2 months after funding secured	4 months after funding secured
c. Environmental Documentation (CEQA / NEPA)		☐ Yes☒ No☐ N/A		4 months after funding secured	7 months after funding secured
d. Permitting		☐ Yes☒ No☐ N/A		7 months after funding secured	8.5 months after funding secured
e. Construction Contracting		☐ Yes☒ No☐ N/A		8.5 months after funding secured	9 months after funding secured
f. Construction Implementation		☐ Yes☒ No☐ N/A		9 months after funding secured	12 months after funding secured
Provide explanation stage is checked as c					

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	Water Quality Control Plan for the
	project is consistent with or supported by (e.g. General	Sacramento and San Joaquin River
	Plans, UWMPs, GWMPs, Water Master Plan, Habitat	Basins
	Conservation Plans, TMDLs, Basin Plans, etc.).	
b.	List technical reports and studies supporting the	NA
	feasibility of this project.	
	, , ,	
c.	Concisely describe the scientific basis (e.g. how much	Acceptable sediment loads (TSS,
	research has been conducted) of the proposed project in	turbidity, etc.) in streams and rivers are
	300 words or less.	regulated by the Water Quality Control
		Plan for the Sacramento and San
		Joaquin River Basins (Basin Plan) and by
		established TMDLs. This project will
		reduce sediment inputs to local
		waterways in support of compliance
		with the Basin Plan and established
		TMDLs.
d.	Does the project implement green technology (e.g.	☐ Yes ☒ No ☐ N/A
	alternate forms of energy, recycled materials, LID	If yes, please describe.
	techniques, etc.).	in yes, pieuse describe.
	, , ,	
e.	Are you an Urban Water Supplier ¹ ?	☐ Yes ☒ No ☐ N/A
f.	Are you are an Agricultural Water Supplier ² ?	☐ Yes ☒ No ☐ N/A
g.	Is the project related to groundwater?	☐ Yes ☒ No ☐ N/A
3.		If yes, please indicate which
		groundwater basin.
		0. 5
1 []	rban Water Supplier is defined as a supplier, either publicly o	or privately owned, providing water for
	inicipal purposes either directly or indirectly to more than 3,	
	100 acre-feet of water annually.	or carretines of supplying more than
	gricultural Water Supplier is defined as a water supplier, eith	ner publicly or privately owned, providing
	ter to 10,000 or more irrigated acres, excluding the acreage	

Climate Change – Project Assessment Checklist

This climate change project assessment tool allows project applicants and the planning team to assess project consistency with Proposition 84 plan standards and RWMG plan assessment standards. The tool is a written checklist that asks GHG emissions and adaptation/resiliency questions.

Name of project: MS-16 Humbug Valley Road Bridge Erosion

Project applicant: Plumas County Department of Public Works- Engineering

GHG Emissions Assessment

Project Construction Emissions (If you check any of the boxes, please see the attached worksheet)	
 ☑ The project requires nonroad or off-road engines, equipment, or vehicles to complete. ☑ The project requires materials to be transported to the project site. ☑ The project requires workers to commute to the project site. 	
 The project is expected to generate GHG emissions for other reasons. The project does not have a construction phase and/or is not expected to generate GHG emissio during the construction phase. 	ns
Operating Emissions (If you check any of the boxes, please see the attached worksheet)	
The project requires energy to operate.	
The project will generate electricity.	
The project will proactively manage forests to reduce wildfire risk.	
The project will affect wetland acreage.	
The project will include new trees.	
Project operations are expected to generate or reduce GHG emissions for other reasons.	

Adaptation & Resiliency Assessment

Water Supply
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water supply vulnerability issues:
Not applicable ■ Not applicable Not applicable
Reduced snowmelt
Unmet local water needs (drought)
☐ Increased invasive species
Water Demand
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water demand vulnerability issues:
Not applicable ■ Not applicable Not applicable
☐ Increasing seasonal water use variability
Unmet in-stream flow requirements
Climate-sensitive crops
Groundwater drought resiliency
Water curtailment effectiveness

high priority water quality vulnerability issues:
 Not applicable ☐ Increasing catastrophic wildfires ☐ Eutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and other related water quality issues) ☐ Seasonal low flows and limited abilities for waterbodies to assimilate pollution ☐ Water treatment facility operations ☐ Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold freshwater habitat, spawning habitat, wildlife habitat, etc.)
Flooding Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority flooding vulnerability issues:
high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain Insufficient flood control facilities

Water Quality

Upper Feather River Integrated Regional Water Management Plan Climate Change- Project Assessment Tool

Ecosystem and Habitat Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority ecosystem and habitat vulnerability issues:
☐ Not applicable
Climate-sensitive fauna or flora
Recreation and economic activity
Quantified environmental flow requirements
Erosion and sedimentation
Endangered or threatened species
Fragmented habitat
The project when completed will reduce the erosion and sedimentation in roadside ditch that flows to
creeks.
Hydropower
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority hydropower vulnerability issues:
Not applicable ■ Not applicable Not applicable
Reduced hydropower output

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-16: Humbug Valley Road Bridge Erosion

GHG Emissions Analysis

Project Construction Emissions

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

	Maximum		
	Number Per	Total 8-Hour Days in	
Type of Equipment	Day	Operation	Total MTCO₂e
Scrapers	1	1	1
Tractors/Loaders/Bac			
khoes	1	1	0
Dumpers/Tenders	1	1	0
Off-Highway Trucks	1	1	1
Pavers	1	1	0
Rollers	1	1	0
			0
			0
			0
			0
		Total Emissions	3

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

	•	' '
	Average Trip	
Total Number of	Distance	
Round Trips	(Miles)	Total MTCO₂e
5	30	0

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

		Distance Traveled (Miles)	Total MTCO₂e	
10	1	60		0

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

	The project d	t does not have a construction phase and/or is not expected to generate GHG emis	sions during the
•	construction	on phase.	

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-16: Humbug Valley Road Bridge Erosion **Project Operating Emissions** The project requires energy to operate. If yes: **Annual Energy Needed** Total MTCO₂e Unit kWh (Electricity) 0 Therm (Natural Gas) 0 The project will generate electricity. If yes: Annual kWh Generated Total MTCO₂e *A negative value indicates GHG reductions The project will proactively manage forests to reduce wildfire risk. If yes: Acres Protected from Wildfire Total MTCO₂e 0 *A negative value indicates GHG reductions The project will affect wetland acreage. If yes: Acres of Protected Wetlands Total MTCO₂e 0 *A negative value indicates GHG reductions The project will include new trees. If yes: Total MTCO₂e Acres of Trees Planted 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: 4 MTCO₂e 0 MTCO₂e In a given year, operation of the project will result in:



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 County Department of Public Works – Engineering		
Name of Primary Contact	Robert A. Perreault , Jr., Director of Public works		
Name of Secondary Contact	Robert Thorman, Engineering Technician II		
Mailing Address	1834 East Main Street, Quincy, CA 95971		
E-mail	bobperreault@countyofplumas.com		
Phone	(530) 283-6222		
Other Cooperating Agencies /	NA		
Organizations / Stakeholders			
Is your agency/organization	Yes		
committed to the project through			
completion? If not, please explain			

II. GENERAL PROJECT INFORMATION

Project Title	MS-17: Road 311 Culvert Improvement
Project Category	☐ Agricultural Land Stewardship
	☐ Floodplains/Meadows/Waterbodies
	☐ Tribal Advisory Committee
	☐ Uplands/Forest
Project Description	Seasonal flooding of Road 311 is in need of a new culvert to
(Briefly describe the project,	improve water flow, raising the road to eliminate flooding,
in 300 words or less)	and armoring the roadside ditches to prevent polluting
	adjacent lands and reduce ditch turbidity flowing to streams.
Project Location Description (e.g.,	Old Red Bluff Road 311 at mile marker 3
along the south bank of stream/river	
between river miles or miles from	
Towns/intersection and/or address):	
Latitude:	40 degrees 21' N
Longitude:	121 degrees 19' W

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.

	Will the project address		Quantification (e.g. acres of streams/wetlands
Upper Feather River IRWM Objectives:	the objective?	Brief explanation of project linkage to selected Objective	restored or enhanced)
Restore natural hydrologic	☐ Yes	illinage to selected objective	emanecay
functions.			
	⊠ N/A		
Reduce potential for	☐ Yes		
catastrophic wildland fires in	N		
the Region. Build communication and	⊠ N/A		
collaboration among water	☐ Yes		
resources stakeholders in the	⊠ N/A		
Region.			
Work with DWR to develop	☐ Yes		
strategies and actions for the			
management, operation, and control of SWP facilities in the	⊠ N/A		
Upper Feather River			
Watershed in order to increase			
water supply, recreational, and			
environmental benefits to the			
Region.			
Encourage municipal service	☐ Yes		
providers to participate in regional water management	⊠ N/A		
actions that improve water	I 🖂 IN/A		
supply and water quality.			
Continue to actively engage in	☐ Yes		
FERC relicensing of			
hydroelectric facilities in the	⊠ N/A		
Region. Address economic challenges	☐ Yes		
of municipal service providers	IE3		
to serve customers.	⊠ N/A		
	-		
Protect, restore, and enhance	⊠ Yes	Reduced pollution entering the	Reduces turbidity
the quality of surface and	□ N/A	surrounding lands by	from drainage
groundwater resources for all beneficial uses, consistent with	□ N/A	eliminating the roadway flooding and reduce turbidity	ditch leading to streams.
the RWQC Basin Plan.		from drainage ditches leading	Juliani.
		to streams.	

	Will the		Quantification
	project		(e.g. acres of
	address		streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Address water resources and	☐ Yes		
wastewater needs of DACs and			
Native Americans.	⊠ N/A		
Coordinate management of	☐ Yes		
recharge areas and protect			
groundwater resources.	⊠ N/A		
Improve coordination of land use and water resources	☐ Yes		
planning.	⊠ N/A		
Maximize agricultural, environmental and municipal	□ Yes		
water use efficiency.	⊠ N/A		
Effectively address climate change adaptation and/or	☐ Yes		
mitigation in water resources management.	⊠ N/A		
Improve efficiency and reliability of water supply and	☐ Yes		
other water-related infrastructure.	⊠ N/A		
Enhance public awareness and understanding of water	☐ Yes		
management issues and needs.	⊠ N/A		
Address economic challenges of agricultural producers.	☐ Yes		
or agricultural producers.	⊠ N/A		
Work with counties/	⊠ Yes	Plumas County Department of	
communities/groups to make		Public Works is committed to	
sure staff capacity exists for	□ N/A	the successful implementation	
actual administration and		of this project. We will ensure	
implementation of grant		staff capacity exists to	
funding.		administer and implement the	
		grant project.	
If no objectives are addressed, de Region:	escribe how th	e project relates to a challenge or	opportunity for the

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:				
а.	Native American Tribal Communities	⊠ N/A		
	Disadvantaged Communities ¹	⊠ N/A		
c.	Environmental Justice ²	⊠ N/A		
d.	Drought Preparedness	⊠ N/A		
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	Benefit of reduced turbidity from drainage ditch leading to streams.	
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				

³ Climate change effects are likely to include increased flooding, extended drought, and associated

(e.g. water supply, flooding, sanitation) in an area of racial minorities.

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	☐ Yes	g.	Drinking water treatment and	☐ Yes	5
	conservation, water use efficiency	⊠ N/A		distribution	⊠ N/	Α
b.	Stormwater capture, storage, clean-	☐ Yes	h.	Watershed protection and	⊠ Yes	5
	up, treatment, management	⊠ N/A		management	□ N/	Α
c.	Removal of invasive non-native	☐ Yes	i.	Contaminant and salt removal	☐ Yes	5
	species, creation/enhancement of	⊠ N/A		through reclamation/desalting,	⊠ N/	Α
	wetlands,			other treatment technologies		
	acquisition/protection/restoration			and conveyance of recycled		
	of open space and watershed lands			water for distribution to users		
d.	Non-point source pollution	☐ Yes	j.	Planning and implementation of	☐ Yes	5
	reduction, management and	⊠ N/A		multipurpose flood	⊠ N/	Α
	monitoring			management programs		
e.	Groundwater recharge and	☐ Yes	k.	Ecosystem and fisheries	☐ Yes	5
	management projects	⊠ N/A		restoration and protection	⊠ N/	Α
f.	Water banking, exchange,	☐ Yes				
	reclamation, and improvement of	⊠ N/A				
	water quality					

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/).

	Will the Project incorporate	Description of how RMS to be employed,
Resource Management Strategy	RMS?	if applicable
Reduce Water Demand		
Agricultural Water Use Efficiency	☐ Yes ⊠ No	
Urban water use efficiency	☐ Yes ⊠ No	
Improve Flood Management		
Flood management	⊠ Yes □ No	Reduced erosion of roadway and ditches results in less sediment in rivers and better flood management.
Improve Operational Efficiency and T	ransfers	
Conveyance – regional/local	☐ Yes ⊠ No	
System reoperation	☐ Yes ⊠ No	
Water transfers	☐ Yes ⊠ No	
Increase Water Supply		
Conjunctive management	☐ Yes ⊠ No	
Precipitation Enhancement	☐ Yes ⊠ No	
Municipal recycled water	☐ Yes ⊠ No	
Surface storage – regional/local	☐ Yes ⊠ No	

	Will the Project	Description of how PMS to be employed		
Resource Management Strategy	incorporate RMS?	Description of how RMS to be employed, if applicable		
Improve Water Quality		сърънски		
Drinking water treatment and				
distribution	☐ Yes ⊠ No			
Groundwater remediation/aquifer remediation	☐ Yes ⊠ No			
Matching water quality to water use	☐ Yes ⊠ No			
Pollution prevention	☐ Yes ⊠ No			
Salt and salinity management	☐ Yes ⊠ No			
Urban storm water runoff management	☐ Yes ⊠ No			
Practice Resource Stewardship				
Agricultural land stewardship	☐ Yes ⊠ No			
Ecosystem restoration	☐ Yes ⊠ No			
Forest management	☐ Yes ⊠ No			
Land use planning and management	☐ Yes ⊠ No			
Recharge area protection	☐ Yes ⊠ No			
Sediment management	⊠ Yes □ No	Reduced sediment in ditches, creeks & rivers		
Watershed management	☐ Yes ⊠ No			
People and Water				
Economic incentives	☐ Yes ⊠ No			
Outreach and engagement	☐ Yes ⊠ No			
Water and culture	☐ Yes ⊠ No			
Water-dependent recreation	☐ Yes ⊠ No			
Wastewater/NPDES	☐ Yes ⊠ 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 convers a pood of a DAC2: Ves. Ma						
	Project serves a need of a DAC?: □ Yes ☒ No Funding Match Waiver request?: □ Yes ☒ No					
- 41						
			Cost Share: Non-State	Cost Share:		
		Requested	Fund Source*	Other State		
		Grant	(Funding	Fund		
	Category	Amount	Match)	Source*	Total Cost	
a.	Direct Project Administration	\$16,000			\$16,000	
b.	Land Purchase/Easement					
c.	Planning/Design/Engineering / Environmental	\$20,000			\$20,000	
d.	Construction/Implementation	\$170,000			\$170,000	
e.	Environmental Compliance/ Mitigation/Enhancement	\$10,000			\$10,000	
f.	Construction Administration	\$25,000			\$25,000	
g.	Other Costs					
h.	Construction/Implementation Contingency	\$10,000			\$10,000	
i.	Grand Total (Sum rows (a) through (h) for each column)	\$251,000			\$251,000	
j.	Can the Project be phased? Yes	⊠ No If yes , p	rovide cost breakd	own by phases		
		Project Cost	O&M Cost Description of Phase			
	Phase 1					
	Phase 2					
	Phase 3					
1.	Phase 4		5din - f 00 h	A - £ + - :	:!!	
k.	Explain how operation and maintenan		Funding for O&N the Plumas Coun			
	financed for the 20-year planning period for project implementation (not grant funded).		budget.	ty Department o	I FUDIIC WOLKS	
I.	Has a Cost/Benefit analysis been completed?		☐ Yes ☒ No			
m.	Describe what impact there may be if	the project is	Continued roadway erosion and water turbidity		vater turbidity	
	not funded (300 words or less)					
*List all sources of funding.						
	Note: See Project Development Manual, Exhibit B, for assistance in completing this table					
(<u>nt</u>	(http://featherriver.org/documents/).					

VIII. PROJECT STATUS AND SCHEDULE

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**.

	Check the Current Project		Description of Activities in Eac	<u> </u>	Planned/ Actual Completion
Project Stage	Stage	Complete	d? Project Stage	Date (mm/yr)	Date (mm/yr)
a. Assessment and Evaluation	⊠	☐ Yes ⊠ No □ N/A		Upon execution of grant agreement	1 month after funding agreement
b. Final Design		☐ Yes ☑ No ☐ N/A		2 months after funding secured	4 months after funding secured
c. Environmental Documentation (CEQA / NEPA)		☐ Yes ⊠ No □ N/A		4 months after funding secured	7 months after funding secured
d. Permitting		☐ Yes ⊠ No ☐ N/A		7 months after funding secured	8.5 months after funding secured
e. Construction Contracting		☐ Yes ⊠ No □ N/A		8.5 months after funding secured	9 months after funding secured
f. Construction Implementation		☐ Yes ☑ No ☐ N/A		9 months after funding secured	12 months after funding secured
Provide explanation if more than one project stage is checked as current status		t			

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	Water Quality Control Plan for the		
	project is consistent with or supported by (e.g. General	Sacramento and San Joaquin River		
	Plans, UWMPs, GWMPs, Water Master Plan, Habitat	Basins		
	Conservation Plans, TMDLs, Basin Plans, etc.).			
b.	List technical reports and studies supporting the	NA		
	feasibility of this project.			
c.	Concisely describe the scientific basis (e.g. how much	For the protection of aquatic species		
	research has been conducted) of the proposed project in	and habitat, sediment loads (TSS,		
	300 words or less.	turbidity, etc.) in streams and rivers are		
		regulated by the Water Quality Control		
		Plan for the Sacramento and San		
		Joaquin River Basins (Basin Plan) and by		
		established TMDLs. This project will		
		reduce sediment inputs to local		
		waterways in support of compliance		
		with the Basin Plan and established		
		TMDLs.		
d.	Does the project implement green technology (e.g.	☐ Yes ☒ No ☐ N/A		
	alternate forms of energy, recycled materials, LID	If yes, please describe.		
	techniques, etc.).	ii yes, pieuse deseribe.		
	, , ,			
_	Are you an Urban Water Supplier ¹ ?	□ Vos ⊠ No □ N/A		
e.		☐ Yes ☒ No ☐ N/A		
f.	Are you are an Agricultural Water Supplier ² ?	☐ Yes ☒ No ☐ N/A		
g.	Is the project related to groundwater?	☐ Yes ☒ No ☐ N/A		
		If yes, please indicate which		
		groundwater basin.		
1				
	rban Water Supplier is defined as a supplier, either publicly of			
	unicipal purposes either directly or indirectly to more than 3,	000 customers or supplying more than		
3,000 acre-feet of water annually.				
	gricultural Water Supplier is defined as a water supplier, eith			
wa	ter to 10,000 or more irrigated acres, excluding the acreage	that receives recycled water.		

Climate Change – Project Assessment Checklist

This climate change project assessment tool allows project applicants and the planning team to assess project consistency with Proposition 84 plan standards and RWMG plan assessment standards. The tool is a written checklist that asks GHG emissions and adaptation/resiliency questions.

Name of project: MS-17: Road 311 Culvert Improvement

Project applicant: Plumas County Department of Public Works- Engineering

GHG Emissions Assessment

Project Construction Emissions (If you check any of the boxes, please see the attached worksheet)
 ☑ The project requires nonroad or off-road engines, equipment, or vehicles to complete. ☑ The project requires materials to be transported to the project site. ☑ The project requires workers to commute to the project site. ☐ The project is expected to generate GHG emissions for other reasons. ☐ The project does not have a construction phase and/or is not expected to generate GHG emissions during the construction phase.
Operating Emissions (If you check any of the boxes, please see the attached worksheet)
☐ The project requires energy to operate.
☐ The project will generate electricity.
☐ The project will proactively manage forests to reduce wildfire risk.
The project will affect wetland acreage.
The project will include new trees.
Project operations are expected to generate or reduce GHG emissions for other reasons.

Adaptation & Resiliency Assessment

Water Supply
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water supply vulnerability issues:
Not applicable ■ Not applicable Not applicable
Reduced snowmelt
Unmet local water needs (drought)
☐ Increased invasive species
Water Demand Describe how the project makes the watershed (more/less) resilient to one or more of the following
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water demand vulnerability issues:
Not applicable
Increasing seasonal water use variability
Unmet in-stream flow requirements
Climate-sensitive crops
Groundwater drought resiliency
Water curtailment effectiveness

Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water quality vulnerability issues:
Not applicable ■ Not applicable Not applicable
☐ Increasing catastrophic wildfires
 Eutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and other related water quality issues)
Seasonal low flows and limited abilities for waterbodies to assimilate pollution
Water treatment facility operations
Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold freshwater habitat, spawning habitat, wildlife habitat, etc.)
Flooding Describe how the project makes the watershed (more /less) resilient to one or more of the following
Describe how the project makes the watershed (more/less) resilient to one or more of the following
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues:
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain Insufficient flood control facilities
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain
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Water Quality

Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority ecosystem and habitat vulnerability issues:
Not applicable
Climate-sensitive fauna or flora
Recreation and economic activity
Quantified environmental flow requirements
Erosion and sedimentation
Endangered or threatened species
Fragmented habitat
The project when completed will reduce the erosion and sedimentation in roadside ditch that flows to
creeks.
Hudronouser
Hydropower Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority hydropower vulnerability issues:
Not applicable ■ Not applicable Not applicable
Reduced hydropower output

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-17: Road 311 Culvert Improvement

GHG Emissions Analysis

Project Construction Emissions

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

	Maximum		
	Number Per	Total 8-Hour Days in	
Type of Equipment	Day	Operation	Total MTCO₂e
Scrapers	1	1	1
Tractors/Loaders/Bac			
khoes	1	1	0
Dumpers/Tenders	1	1	0
Off-Highway Trucks	1	1	1
Pavers	1	1	0
Rollers	1	1	0
			0
			0
			0
			0
_		Total Emissions	3

Х	The project requires materials to be transported to the project site.	If yes:

		1 7
	Average Trip	
Total Number of	Distance	
Round Trips	(Miles)	Total MTCO₂e
5	30	0

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

Average Number Total Number Distance Traveled of Workers of Workdays (Miles) Total MTCO ₂ e	10	1	60		0
1	of Workers	of Workdays	(Miles)	Total MTCO₂e	
Average Round Trip	Average Number	Total Number	Distance Traveled		
Average Round Trip			Average Round Trip		

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

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

MS-17: Road 311 Culvert Improvement **Project Operating Emissions** The project requires energy to operate. If yes: Total MTCO₂e **Annual Energy Needed** Unit kWh (Electricity) Therm (Natural Gas) The project will generate electricity. If yes: Annual kWh Generated Total MTCO₂e 0 *A negative value indicates GHG reductions The project will proactively manage forests to reduce wildfire risk. If yes: Acres Protected from Wildfire Total MTCO₂e 0 *A negative value indicates GHG reductions The project will affect wetland acreage. If yes: Acres of Protected Wetlands Total MTCO2e *A negative value indicates GHG reductions The project will include new trees. If yes: Total MTCO₂e Acres of Trees Planted 0 *A negative value indicates GHG reductions Project operations are expected to generate or reduce GHG emissions for other reasons. If yes, **GHG Emissions Summary** 4 MTCO₂e Construction and development will generate approximately: 0 MTCO₂e In a given year, operation of the project will result in:



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 County Department of Public Works – Engineering		
Name of Primary Contact	Robert A. Perreault , Jr., Director of Public works		
Name of Secondary Contact	Robert Thorman, Engineering Technician II		
Mailing Address	1834 East Main Street, Quincy, CA 95971		
E-mail	bobperreault@countyofplumas.com		
Phone	(530) 283-6222		
Other Cooperating Agencies /	NA		
Organizations / Stakeholders			
Is your agency/organization	Yes		
committed to the project through			
completion? If not, please explain			

II. GENERAL PROJECT INFORMATION

Project Title	MS-18: Road 318 Culvert Improvements
Project Category	☐ Agricultural Land Stewardship
	☐ Floodplains/Meadows/Waterbodies
	☐ Tribal Advisory Committee
	☐ Uplands/Forest
Project Description	Seasonal flooding of Road 318 is in need of a new culvert to
(Briefly describe the project,	improve water flow, raising the road to eliminate flooding,
in 300 words or less)	and armoring the roadside ditches to prevent polluting
	adjacent lands and reduce ditch turbidity flowing to streams.
Project Location Description (e.g.,	Chester Juniper Lake Road 318 at mile marker 8.2
along the south bank of stream/river	
between river miles or miles from	
Towns/intersection and/or address):	
Latitude:	40 degrees 19' N
Longitude:	121 degrees 14' W

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.

	Will the		Quantification
	project		(e.g. acres of
	address		streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Restore natural hydrologic	☐ Yes		,
functions.			
	⊠ N/A		
Reduce potential for	☐ Yes		
catastrophic wildland fires in			
the Region.	⊠ N/A		
Build communication and	☐ Yes		
collaboration among water			
resources stakeholders in the	⊠ N/A		
Region.			
Work with DWR to develop	☐ Yes		
strategies and actions for the			
management, operation, and	⊠ N/A		
control of SWP facilities in the			
Upper Feather River			
Watershed in order to increase			
water supply, recreational, and			
environmental benefits to the			
Region.			
Encourage municipal service	☐ Yes		
providers to participate in			
regional water management	⊠ N/A		
actions that improve water			
supply and water quality.			
Continue to actively engage in	☐ Yes		
FERC relicensing of			
hydroelectric facilities in the	⊠ N/A		
Region.			
Address economic challenges	☐ Yes		
of municipal service providers			
to serve customers.	⊠ N/A		
Drotoct roctors and anhance	∇ va-	Reduced pollution entering the	Poducos turbiditu
Protect, restore, and enhance	⊠ Yes	Reduced pollution entering the	Reduces turbidity
the quality of surface and	□ N/A	surrounding lands by	from drainage
groundwater resources for all	□ N/A	eliminating the roadway flooding and reduce turbidity	ditch leading to streams.
beneficial uses, consistent with the RWQC Basin Plan.		from drainage ditches leading	Stredins.
the NWQC basili Plati.		to streams.	

	Will the		Quantification
	project		(e.g. acres of
	address		streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Address water resources and	☐ Yes		
wastewater needs of DACs and			
Native Americans.	⊠ N/A		
Coordinate management of	☐ Yes		
recharge areas and protect			
groundwater resources.	⊠ N/A		
Improve coordination of land	☐ Yes		
use and water resources			
planning.	⊠ N/A		
Maximize agricultural,	☐ Yes		
environmental and municipal			
water use efficiency.	⊠ N/A		
Effectively address climate	☐ Yes		
change adaptation and/or			
mitigation in water resources	⊠ N/A		
management.			
Improve efficiency and	☐ Yes		
reliability of water supply and			
other water-related	⊠ N/A		
infrastructure.			
Enhance public awareness and	☐ Yes		
understanding of water			
management issues and needs.	⊠ N/A		
Address economic challenges	☐ Yes		
of agricultural producers.			
	⊠ N/A		
Work with counties/	⊠ Yes	Plumas County Department of	
communities/groups to make		Public Works is committed to	
sure staff capacity exists for	□ N/A	the successful implementation	
actual administration and		of this project. We will ensure	
implementation of grant		the staff capacity exists to	
funding.		administer and implement the	
	<u> </u>	grant project.	
If no objectives are addressed, d	escribe how th	ne 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 ap	If applicable, describe benefits or impacts of the project with respect to:							
a.	Native American Tribal Communities							
		⊠ N/A						
b.	Disadvantaged Communities ¹		The project is located in a disadvantaged					
υ.	Disadvantaged communities	□ N/A	community tract and would benefit the					
			community by preventing adjacent lands					
			being polluted by the flooded roadway.					
c.	Environmental Justice ²							
		⊠ N/A						
d.	Drought Preparedness							
		⊠ N/A						
e.	Assist the region in adapting to effects of							
٠.	climate change ³	⊠ N/A						
	G	,,						
f.	Generation or reduction of greenhouse							
	gas emissions (e.g. green technology)	⊠ N/A						
			Description of the description of the second					
g.	Other expected impacts or benefits that	□ N1/A	Benefit of reduced turbidity from					
	are not already mentioned elsewhere	□ N/A	drainage ditch leading to streams.					
¹ A [Disadvantaged Community is defined as a con	nmunity wi	th an annual median household (MHI)					
	ome that is less than 80 percent of the Statew							
the	UFR website (http://featherriver.org/maps/)							
	² Environmental Justice is defined as the fair treatment of people of all races, cultures, and incomes							
	respect to the development, adoption, impl							
_	ulations and policies. An example of environm	•	·					
	. water supply, flooding, sanitation) in an area							
- Cli	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	☐ Yes	g.	Drinking water treatment and	□ \	⁄es
	conservation, water use efficiency	⊠ N/A		distribution	\boxtimes	N/A
b.	Stormwater capture, storage, clean-	☐ Yes	h.	Watershed protection and	× Y	⁄es
	up, treatment, management	⊠ N/A		management		N/A
c.	Removal of invasive non-native	☐ Yes	i.	Contaminant and salt removal	□ Y	⁄es
	species, creation/enhancement of	⊠ N/A		through reclamation/desalting,	\boxtimes 1	N/A
	wetlands,			other treatment technologies		
	acquisition/protection/restoration			and conveyance of recycled		
	of open space and watershed lands			water for distribution to users		
d.	Non-point source pollution	☐ Yes	j.	Planning and implementation of		Yes
	reduction, management and	⊠ N/A		multipurpose flood	\boxtimes 1	N/A
	monitoring			management programs		
e.	Groundwater recharge and	☐ Yes	k.	Ecosystem and fisheries		Yes
	management projects	⊠ N/A		restoration and protection	\boxtimes 1	N/A
f.	Water banking, exchange,	☐ Yes				
	reclamation, and improvement of	⊠ N/A				
	water quality					

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/).

	Will the Project incorporate	Description of how RMS to be employed,	
Resource Management Strategy	RMS?	if applicable	
Reduce Water Demand			
Agricultural Water Use Efficiency	☐ Yes ⊠ No		
Urban water use efficiency	☐ Yes ⊠ No		
Improve Flood Management			
Flood management		Reduced erosion of roadway and ditches	
	oxtimes Yes $oxtimes$ No	results in less sediment in rivers and better	
		flood management.	
Improve Operational Efficiency and T	ransfers		
Conveyance – regional/local	☐ Yes ⊠ No		
System reoperation	☐ Yes ⊠ No		
Water transfers	☐ Yes ⊠ No		
Increase Water Supply			
Conjunctive management	☐ Yes ⊠ No		
Precipitation Enhancement	☐ Yes ⊠ No		

	Will the Project	Description of how DMC to be applicated
Resource Management Strategy	incorporate RMS?	Description of how RMS to be employed, if applicable
Municipal recycled water	☐ Yes ⊠ No	п аррисале
Surface storage – regional/local	☐ Yes ⊠ No	
Improve Water Quality		
Drinking water treatment and		
distribution	☐ Yes ⊠ No	
Groundwater remediation/aquifer	☐ Yes ⊠ No	
remediation	LI TES INU	
Matching water quality to water	☐ Yes ⊠ No	
use		
Pollution prevention	☐ Yes ⊠ No	
Salt and salinity management	☐ Yes ⊠ No	
Urban storm water runoff	☐ Yes ⊠ No	
management		
Practice Resource Stewardship Agricultural land stewardship	T Vas M Na	
-	☐ Yes ⊠ No	
Ecosystem restoration	☐ Yes ⊠ No	
Forest management	☐ Yes ⊠ No	
Land use planning and	☐ Yes ⊠ No	
management Recharge area protection	☐ Yes ⊠ No	
Sediment management	☐ Yes ☐ No	Reduced sediment in ditches, creeks & rivers
Watershed management	☐ Yes ⊠ No	Reduced Sediment in ditches, creeks & rivers
People and Water	L res 🖂 ivo	
Economic incentives	☐ Yes ⊠ No	
Outreach and engagement	☐ Yes ⊠ No	
Water and culture	☐ Yes ⊠ No	
Water-dependent recreation	☐ Yes ⊠ No	
Wastewater/NPDES	☐ Yes ⊠ No	
Other RMS addressed and explanation	on:	

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						
Dro	Project serves a need of a DAC?: ☐ Yes ☒ No						
	Funding Match Waiver request?: Yes No						
	Cost Share:						
			Non-State	Cost Share:			
		Requested	Fund Source*	Other State			
	Catagomi	Grant	(Funding	Fund	Total Cost		
	Category	Amount	Match)	Source*	Cost		
a.	Direct Project Administration	\$16,000			\$16,000		
b.	Land Purchase/Easement						
C.	Planning/Design/Engineering / Environmental	\$20,000			\$20,000		
d.	Construction/Implementation	\$170,000			\$170,000		
e.	Environmental Compliance/ Mitigation/Enhancement	\$10,000			\$10,000		
f.	Construction Administration	\$25,000			\$25,000		
g.	Other Costs						
h.	Construction/Implementation Contingency	\$10,000			\$10,000		
i.	Grand Total (Sum rows (a) through (h) for each column)	\$251,000			\$251,000		
j.	Can the Project be phased? ☐ Yes	⊠ No If yes , p	rovide cost breakd	own by phases	•		
		Project Cost	O&M Cost	Descriptio	n of Phase		
	Phase 1						
	Phase 2						
	Phase 3						
	Phase 4		- " · · · · · · · · · · · · · · · · · ·				
k.	Explain how operation and maintenar		Funding for O&M of this project will come for the Plumas County Department of Public Wo				
	financed for the 20-year planning peri	od for project	budget.	ty Department o	I Public Works		
	implementation (not grant funded).		budget.				
I.	Has a Cost/Benefit analysis been com	pleted?	☐ Yes ⊠ No				
m. Describe what impact there may be if the project is not funded (300 words or less) Continued roadway erosion and was			vater turbidity				
*Lis	t all sources of funding.		•				
	te: See Project Development Manual, E	xhibit B, for assist	cance in completing	g this table			
(<u>ht</u>	(http://featherriver.org/documents/).						

VIII. PROJECT STATUS AND SCHEDULE

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	×	☐ Yes ☑ No ☐ N/A	3,333.33.0	Upon execution of grant agreement	1 month after funding agreement
b. Final Design		☐ Yes ⊠ No □ N/A		2 months after funding secured	4 months after funding secured
c. Environmental Documentation (CEQA / NEPA)		☐ Yes ⊠ No □ N/A		4 months after funding secured	7 months after funding secured
d. Permitting		☐ Yes ⊠ No □ N/A		7 months after funding secured	8.5 months after funding secured
e. Construction Contracting		☐ Yes ⊠ No □ N/A		8.5 months after funding secured	9 months after funding secured
f. Construction Implementation		☐ Yes ⊠ No □ N/A		9 months after funding secured	12 months after funding secured
Provide explanation stage is checked as c					

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	Water Quality Control Plan for the
	project is consistent with or supported by (e.g. General	Sacramento and San Joaquin River
	Plans, UWMPs, GWMPs, Water Master Plan, Habitat	Basins
	Conservation Plans, TMDLs, Basin Plans, etc.).	
b.	List technical reports and studies supporting the	NA
	feasibility of this project.	
c.	Concisely describe the scientific basis (e.g. how much	For the protection of aquatic species
	research has been conducted) of the proposed project in	and habitat, sediment loads (TSS,
	300 words or less.	turbidity, etc.) in streams and rivers are
		regulated by the Water Quality Control
		Plan for the Sacramento and San
		Joaquin River Basins (Basin Plan) and by
		established TMDLs. This project will
		reduce sediment inputs to local
		waterways in support of compliance
		with the Basin Plan and established
		TMDLs.
d.	Does the project implement green technology (e.g.	☐ Yes ☒ No ☐ N/A
	alternate forms of energy, recycled materials, LID	If yes, please describe.
	techniques, etc.).	
e.	Are you an Urban Water Supplier ¹ ?	☐ Yes ☒ No ☐ N/A
f.	Are you are an Agricultural Water Supplier ² ?	☐ Yes ☒ No ☐ N/A
g.	Is the project related to groundwater?	☐ Yes ☒ No ☐ N/A
		If yes, please indicate which
		groundwater basin.
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.		

Climate Change – Project Assessment Checklist

This climate change project assessment tool allows project applicants and the planning team to assess project consistency with Proposition 84 plan standards and RWMG plan assessment standards. The tool is a written checklist that asks GHG emissions and adaptation/resiliency questions.

Name of project: MS-18: Road 318 Culvert Improvements

Project applicant: Plumas County Department of Public Works- Engineering

GHG Emissions Assessment

Project Construction Emissions
(If you check any of the boxes, please see the attached worksheet)
The project requires nonroad or off-road engines, equipment, or vehicles to complete.
The project requires materials to be transported to the project site.
igstyle igstyle The project requires workers to commute to the project site.
The project is expected to generate GHG emissions for other reasons.
The project does not have a construction phase and/or is not expected to generate GHG emissions during the construction phase.
Operating Emissions
(If you check any of the boxes, please see the attached worksheet)
The project requires energy to operate.
The project will generate electricity.
The project will proactively manage forests to reduce wildfire risk.
The project will affect wetland acreage.
The project will include new trees.

Project operations are expected to generate or reduce GHG emissions for other reasons.

Adaptation & Resiliency Assessment

Water Supply
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water supply vulnerability issues:
Not applicable ■ Not applicable Not applicable
Reduced snowmelt
Unmet local water needs (drought)
☐ Increased invasive species
Water Demand
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water demand vulnerability issues:
Not applicable ■ Not applicable Not applicable
Increasing seasonal water use variability
☐ Unmet in-stream flow requirements
Unmet in-stream flow requirements Climate-sensitive crops
Unmet in-stream flow requirements
☐ Unmet in-stream flow requirements ☐ Climate-sensitive crops ☐ Groundwater drought resiliency
☐ Unmet in-stream flow requirements ☐ Climate-sensitive crops ☐ Groundwater drought resiliency
☐ Unmet in-stream flow requirements ☐ Climate-sensitive crops ☐ Groundwater drought resiliency
☐ Unmet in-stream flow requirements ☐ Climate-sensitive crops ☐ Groundwater drought resiliency
☐ Unmet in-stream flow requirements ☐ Climate-sensitive crops ☐ Groundwater drought resiliency
☐ Unmet in-stream flow requirements ☐ Climate-sensitive crops ☐ Groundwater drought resiliency
☐ Unmet in-stream flow requirements ☐ Climate-sensitive crops ☐ Groundwater drought resiliency
☐ Unmet in-stream flow requirements ☐ Climate-sensitive crops ☐ Groundwater drought resiliency
☐ Unmet in-stream flow requirements ☐ Climate-sensitive crops ☐ Groundwater drought resiliency
☐ Unmet in-stream flow requirements ☐ Climate-sensitive crops ☐ Groundwater drought resiliency
☐ Unmet in-stream flow requirements ☐ Climate-sensitive crops ☐ Groundwater drought resiliency

Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water quality vulnerability issues:
 Not applicable ☐ Increasing catastrophic wildfires ☐ Eutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and other related water quality issues) ☐ Seasonal low flows and limited abilities for waterbodies to assimilate pollution ☐ Water treatment facility operations Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold freshwater habitat, spawning habitat, wildlife habitat, etc.)
nasitat, spawning nasitat, whome nasitat, etc.)
Flooding Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues:
 Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain ✓ Insufficient flood control facilities
New culvert and raising the roadway will eliminate flooding of roadway and improve flood control.

Water Quality

Ecosystem and Habitat Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority ecosystem and habitat vulnerability issues:
☐ Not applicable
Climate-sensitive fauna or flora
Recreation and economic activity
Quantified environmental flow requirements
Erosion and sedimentation
Endangered or threatened species
Fragmented habitat
The project when completed will reduce the erosion and sedimentation in roadside ditch that flows to
creeks.
Hydropower
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority hydropower vulnerability issues:
Not applicable ■ Not applicable Not applicable
Reduced hydropower output

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-18: Road 318 Culvert Improvements

GHG Emissions Analysis

Project Construction Emissions

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

	Maximum		
	Number Per	Total 8-Hour Days in	
Type of Equipment	Day	Operation	Total MTCO₂e
Scrapers	1	1	1
Tractors/Loaders/Bac			
khoes	1	1	0
Dumpers/Tenders	1	1	0
Off-Highway Trucks	1	1	1
Pavers	1	1	0
Rollers	1	1	0
			0
			0
			0
			0
		Total Emissions	3

_		
Χ	The project requires materials to be transported to the project site.	If yes:

	Average Trip	
Total Number of	Distance	
Round Trips	(Miles)	Total MTCO₂e
5	30	0

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

		Average Round Trip		٦
Average Number	Total Number	Distance Traveled		
of Workers	of Workdays	(Miles)	Total MTCO₂e	
10	1	60		0

e project is exp	ected to genera	ate one emiss	Jons for other	reasons. If ye	.s, explain.	1

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

MS-18: Road 318 Culvert Improvements

Project Operating Emissions The project requires energy to operate. If yes: Total MTCO₂e Annual Energy Needed Unit kWh (Electricity) Therm (Natural Gas) The project will generate electricity. If yes: Annual kWh Generated Total MTCO₂e *A negative value indicates GHG reductions The project will proactively manage forests to reduce wildfire risk. If yes: Acres Protected from Wildfire Total MTCO₂e 0 *A negative value indicates GHG reductions The project will affect wetland acreage. If yes: Acres of Protected Wetlands Total MTCO₂e 0 *A negative value indicates GHG reductions The project will include new trees. If yes: Total MTCO₂e Acres of Trees Planted 0 *A negative value indicates GHG reductions Project operations are expected to generate or reduce GHG emissions for other reasons. If yes, **GHG Emissions Summary** Construction and development will generate approximately: 4 MTCO2e 0 MTCO₂e In a given year, operation of the project will result in:



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 County Department of Public Works – Engineering
Name of Primary Contact	Robert A. Perreault , Jr., Director of Public works
Name of Secondary Contact	Robert Thorman, Engineering Technician II
Mailing Address	1834 East Main Street, Quincy, CA 95971
E-mail	bobperreault@countyofplumas.com
Phone	(530) 283-6222
Other Cooperating Agencies /	NA
Organizations / Stakeholders	
Is your agency/organization	Yes
committed to the project through	
completion? If not, please explain	

II. GENERAL PROJECT INFORMATION

Project Title	MS-19: North Valley Road Bridge Erosion
Project Category	☐ Agricultural Land Stewardship
	☐ Floodplains/Meadows/Waterbodies
	☑ Municipal Services
	☐ Tribal Advisory Committee
	☐ Uplands/Forest
Project Description	Significant bank erosion has occurred upstream and
(Briefly describe the project,	downstream from the North Valley Road bridge on Indian
in 300 words or less)	Creek and is in need of erosion protection by means of rip rap
	to reduce the turbidity of the stream from erosion.
Project Location Description (e.g.,	North Valley Road bridge over Lights Creek.
along the south bank of stream/river	
between river miles or miles from	
Towns/intersection and/or address):	
Latitude:	40 degrees 06' 03" N
Longitude:	120 degrees 50' 22" W

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.

	Will the		Quantification
	project		(e.g. acres of
	address		streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Restore natural hydrologic	⊠ Yes	Restore hydrologic function by	Reduces significant
functions.		reducing stream bank erosion	erosion and
	□ N/A	and turbidity in Indian Creek.	turbidity.
Reduce potential for	☐ Yes	,	,
catastrophic wildland fires in			
the Region.	⊠ N/A		
Build communication and	☐ Yes		
collaboration among water			
resources stakeholders in the	⊠ N/A		
Region.	🖾 IN/ 🔼		
Work with DWR to develop	☐ Yes		
strategies and actions for the			
management, operation, and	⊠ N/A		
control of SWP facilities in the			
Upper Feather River			
Watershed in order to increase			
water supply, recreational, and			
environmental benefits to the			
Region.			
Encourage municipal service	☐ Yes		
providers to participate in			
regional water management	⊠ N/A		
actions that improve water	-		
supply and water quality.			
Continue to actively engage in	☐ Yes		
FERC relicensing of			
hydroelectric facilities in the	⊠ N/A		
Region.			
Address economic challenges	☐ Yes		
of municipal service providers			
to serve customers.	⊠ N/A		
Protect, restore, and enhance	⊠ Yes	Restore clarity of stream by	Reduces significant
the quality of surface and		reducing erosion and turbidity.	erosion in Indian
groundwater resources for all	□ N/A	Reducing erosion and turbidity	Creek and turbidity
beneficial uses, consistent with		in Indian Creek also translates	in both Indian
the RWQC Basin Plan.		into reduced turbidity in the	Creek and the
		Middle Fork of the Feather	Middle Fork of the
		River.	Feather River

	Will the project		Quantification
	address	!	(e.g. acres of streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Address water resources and	☐ Yes	-	
wastewater needs of DACs and		!	
Native Americans.	⊠ N/A		
Coordinate management of	☐ Yes		
recharge areas and protect		!	
groundwater resources.	⊠ N/A		
Improve coordination of land	☐ Yes	'	
use and water resources		!	
planning.	⊠ N/A		
Maximize agricultural,	☐ Yes	!	
environmental and municipal		!	
water use efficiency.	⊠ N/A		
Effectively address climate	☐ Yes	!	
change adaptation and/or	- · / •	!	
mitigation in water resources	⊠ N/A	!	
management. Improve efficiency and	☐ Yes		
reliability of water supply and	- 163	!	
other water-related	⊠ N/A	!	
infrastructure.		!	
Enhance public awareness and	☐ Yes		
understanding of water		!	
management issues and needs.	⊠ N/A		
Address economic challenges	☐ Yes		
of agricultural producers.		!	
	⊠ N/A		
Work with counties/	⊠ Yes	Plumas County Department of	
communities/groups to make		Public Works is committed to	
sure staff capacity exists for	□ N/A	the successful implementation	
actual administration and		of this project. We will ensure	
implementation of grant		the staff capacity exists to	
funding.		administer and implement the	
	1	grant project.	
If no objectives are addressed, de	escribe how th	ne 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 ap	oplicable, describe benefits or impacts of the	project wi	th respect to:
a.	Native American Tribal Communities		
		⊠ N/A	
b.	Disadvantaged Communities ¹		The project is located in a severely
		□ N/A	disadvantaged community tract and
			would benefit the community by
			enhancing water quality in Lights Creek
			which runs through the community.
c.	Environmental Justice ²	N N / A	
		⊠ N/A	
d.	Drought Preparedness		
	-	⊠ N/A	
e.	Assist the region in adapting to effects of climate change ³	N 11/1	
	climate change	⊠ N/A	
f.	Generation or reduction of greenhouse		
	gas emissions (e.g. green technology)	⊠ N/A	
			5. 6. 6. 1. 1. 1. 1. 1. 1. 1. 1.
g.	Other expected impacts or benefits that are not already mentioned elsewhere	□ N/A	Benefit of reduced erosion and turbidity in the creek and tributaries.
	are not already mentioned eisewhere	□ N/A	in the creek and tributaries.
¹ A [Disadvantaged Community is defined as a con	nmunity wi	th an annual median household (MHI)
inco	ome that is less than 80 percent of the Statew	ide annual	
	UFR website (http://featherriver.org/maps/)		
	vironmental Justice is defined as the fair trea		
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			
_	. water supply, flooding, sanitation) in an area	-	·
	mate change effects are likely to include incre		

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

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/).

	Will the Project	
	incorporate	Description of how RMS to be employed,
Resource Management Strategy	RMS?	if applicable
Reduce Water Demand		
Agricultural Water Use Efficiency	☐ Yes ☒ No	
Urban water use efficiency	☐ Yes ⊠ No	
Improve Flood Management		
Flood management		Reduced erosion in creeks results in less
	oxtimes Yes $oxtimes$ No	sediment in rivers and better flood
		management.
Improve Operational Efficiency and T	ransfers	
Conveyance – regional/local	☐ Yes ⊠ No	
System reoperation	☐ Yes ⊠ No	
Water transfers	☐ Yes ⊠ No	
Increase Water Supply		
Conjunctive management	☐ Yes ⊠ No	
Precipitation Enhancement	☐ Yes ⊠ No	
Municipal recycled water	☐ Yes ⊠ No	
Surface storage – regional/local	☐ Yes ⊠ No	

	Will the Project	Description of how RMS to be employed,
Resource Management Strategy	incorporate RMS?	if applicable
Improve Water Quality	TATO.	паррисале
Drinking water treatment and		
distribution	☐ Yes ⊠ No	
Groundwater remediation/aquifer	☐ Yes ☒ No	
remediation	□ res ⋈ no	
Matching water quality to water	☐ Yes ⊠ No	
use		
Pollution prevention	☐ Yes ⊠ No	
Salt and salinity management	☐ Yes ⊠ No	
Urban storm water runoff	☐ Yes ⊠ No	
management		
Practice Resource Stewardship		
Agricultural land stewardship	☐ Yes ⊠ No	
Ecosystem restoration	☐ Yes ⊠ No	
Forest management	☐ Yes ⊠ No	
Land use planning and management	☐ Yes ⊠ No	
Recharge area protection	☐ Yes ⊠ No	
Sediment management	⊠ Yes □ No	Reduced sediment in creeks & rivers
Watershed management	☐ Yes ⊠ No	
People and Water		
Economic incentives	☐ Yes ⊠ No	
Outreach and engagement	☐ Yes ⊠ No	
Water and culture	☐ Yes ⊠ No	
Water-dependent recreation	☐ Yes ⊠ No	
Wastewater/NPDES	☐ Yes ⊠ No	
Other RMS addressed and explanation	on:	

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 BUDGE	ET		
Dro	oject serves a need of a DAC?: Yes	√ No			
	nding Match Waiver request?: \square Yes				
		_ · · · ·	Cost Share:		
			Non-State	Cost Share:	
		Requested	Fund Source*	Other State	
		Grant	(Funding	Fund	
	Category	Amount	Match)	Source*	Total Cost
a.	Direct Project Administration	\$20,000			\$20,000
b.	Land Purchase/Easement				
c.	Planning/Design/Engineering / Environmental	\$25,000			\$25,000
d.	Construction/Implementation	\$490,000			\$490,000
	Environmental Compliance/	\$10,000			\$10,000
e.	Mitigation/Enhancement	310,000			\$10,000
f.	Construction Administration	\$75,000			\$75,000
g.	Other Costs				
h.	Construction/Implementation	\$50,000			\$50,000
	Contingency				
i.	Grand Total (Sum rows (a) through	\$670,000			\$670,000
	(h) for each column)				
\mathbf{j} Can the Project be phased? \square Yes \boxtimes No \square If yes, provide cost breakdown by phases					
		Project Cost	O&M Cost	Descriptio	n of Phase
	Phase 1				
	Phase 2				
	Phase 3				
	Phase 4	***************************************	5 - 11 - 1 - 00 1	A - C	
k.	Explain how operation and maintenan		Funding for O&N	• •	
	financed for the 20-year planning peri implementation (not grant funded).	od for project	the Plumas Cound budget.	ty Department o	I Public Works
I.	Has a Cost/Benefit analysis been comp	oleted?	☐ Yes ⊠ No		
m.	Describe what impact there may be if		Continued bank	erosion and wate	er turbidity
	not funded (300 words or less)	e p. ejeet is	Continued Same	or object and water	ar car brancy
	t all sources of funding.				
	te: See Project Development Manual, Ex	xhibit B, for assist	tance in completing	g this table	
(<u>ht</u>	tp://featherriver.org/documents/).				

VIII. PROJECT STATUS AND SCHEDULE

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**.

	Check the Current Project		Description of Activities in Each	Planned/ Actual Start	Planned/ Actual Completion
Project Stage	Stage	Completed?	Project Stage	Date (mm/yr)	Date (mm/yr)
a. Assessment and Evaluation		☐ Yes ⊠ No ☐ N/A		Upon execution of grant agreement	1 month after funding agreement
b. Final Design		☐ Yes ⊠ No □ N/A		2 months after funding secured	4 months after funding secured
c. Environmental Documentation (CEQA / NEPA)		☐ Yes ⊠ No □ N/A		4 months after funding secured	7 months after funding secured
d. Permitting		☐ Yes ⊠ No □ N/A		7 months after funding secured	8.5 months after funding secured
e. Construction Contracting		☐ Yes ⊠ No □ N/A		8.5 months after funding secured	9 months after funding secured
f. Construction Implementation		☐ Yes ⊠ No □ N/A		9 months after funding secured	12 months after funding secured
Provide explanation stage is checked as c					

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	Water Quality Control Plan for the
	project is consistent with or supported by (e.g. General	Sacramento and San Joaquin River
	Plans, UWMPs, GWMPs, Water Master Plan, Habitat	Basins
	Conservation Plans, TMDLs, Basin Plans, etc.).	
b.	List technical reports and studies supporting the	NA
	feasibility of this project.	
	,	
c.	Concisely describe the scientific basis (e.g. how much	For the protection of aquatic species
	research has been conducted) of the proposed project in	and habitat, sediment loads (TSS,
	300 words or less.	turbidity, etc.) in streams and rivers are
		regulated by the Water Quality Control
		Plan for the Sacramento and San
		Joaquin River Basins (Basin Plan) and by
		established TMDLs. This project will
		reduce sediment inputs to local
		waterways in support of compliance
		with the Basin Plan and established
		TMDLs.
d.	Does the project implement green technology (e.g.	☐ Yes ☒ No ☐ N/A
	alternate forms of energy, recycled materials, LID	If yes, please describe.
	techniques, etc.).	ii yes, pieuse deseribe.
e.	Are you an Urban Water Supplier ¹ ?	☐ Yes ☒ No ☐ N/A
f.	Are you are an Agricultural Water Supplier ² ?	
g.	Is the project related to groundwater?	☐ Yes ☒ No ☐ N/A
		If yes, please indicate which
		groundwater basin.
1		
	Irban Water Supplier is defined as a supplier, either publicly of	
	unicipal purposes either directly or indirectly to more than 3,	uuu customers or supplying more than
	000 acre-feet of water annually.	and marketing and making the second of the second
	gricultural Water Supplier is defined as a water supplier, eith	
Wa	iter to 10,000 or more irrigated acres, excluding the acreage	that receives recycled water.

Climate Change – Project Assessment Checklist

This climate change project assessment tool allows project applicants and the planning team to assess project consistency with Proposition 84 plan standards and RWMG plan assessment standards. The tool is a written checklist that asks GHG emissions and adaptation/resiliency questions.

Name of project: MS-19: North Valley Road Bridge Erosion

Project applicant: Plumas County Department of Public Works- Engineering

GHG Emissions Assessment

Project Construction Emissions (If you check any of the boxes, please see the attached worksheet)
 ☑ The project requires nonroad or off-road engines, equipment, or vehicles to complete. ☑ The project requires materials to be transported to the project site. ☑ The project requires workers to commute to the project site. ☑ The project is expected to generate GHG emissions for other reasons. ☑ The project does not have a construction phase and/or is not expected to generate GHG emissions during the construction phase.
Operating Emissions (If you check any of the boxes, please see the attached worksheet)
The project requires energy to operate.
The project will generate electricity.
☐ The project will proactively manage forests to reduce wildfire risk.
The project will affect wetland acreage.
The project will include new trees.
Project operations are expected to generate or reduce GHG emissions for other reasons.

Adaptation & Resiliency Assessment

Water Supply Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water supply vulnerability issues:
Not applicable ■ Not applicable Not applicable
Reduced snowmelt
Unmet local water needs (drought)
☐ Increased invasive species
Water Demand Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water demand vulnerability issues:
Not applicable ■ Not applicable Not applicable
Increasing seasonal water use variability
Unmet in-stream flow requirements
☐ Unmet in-stream flow requirements ☐ Climate-sensitive crops
Climate-sensitive crops

high priority water quality vulnerability issues:
 Not applicable ☐ Increasing catastrophic wildfires ☐ Eutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and other related water quality issues) ☐ Seasonal low flows and limited abilities for waterbodies to assimilate pollution ☐ Water treatment facility operations Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold freshwater habitat, spawning habitat, wildlife habitat, etc.)
Flooding Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues:
 Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain ✓ Insufficient flood control facilities
By reducing erosion and sedimentation, the creek will be capable of carrying increased flood waters.

Water Quality

Ecosystem and Habitat Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority ecosystem and habitat vulnerability issues:
 Not applicable □ Climate-sensitive fauna or flora □ Recreation and economic activity □ Quantified environmental flow requirements ☑ Erosion and sedimentation □ Endangered or threatened species □ Fragmented habitat
The project when completed will reduce the erosion and sedimentation in creek.
Hydropower Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority hydropower vulnerability issues: ☑ Not applicable ☐ Reduced hydropower output

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-19: North Valley Road Bridge Erosion

GHG Emissions Analysis

Project Construction Emissions

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

	Maximum		
	Number Per	Total 8-Hour Days in	
Type of Equipment	Day	Operation	Total MTCO₂e
Excavators	1	5	2
Tractors/Loaders/Bac			
khoes	2	5	3
Dumpers/Tenders	1	5	0
Off-Highway Trucks	1	5	6
			0
			0
			0
			0
			0
			0
_	•	Total Emissions	11

|--|

		1 7
	Average Trip	
Total Number of	Distance	
Round Trips	(Miles)	Total MTCO ₂ e
10	30	0

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

Average Number		Average Round Trip Distance Traveled		
of Workers	of Workdays	(Miles)	Total MTCO₂e	
5	10	60		1

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

ı	TI	he project does not have a construction phase and/or is not expected to generate GHG emissions during the
	C	onstruction phase.

MS-19: North Valley Road Bridge Erosion **Project Operating Emissions** The project requires energy to operate. If yes: Total MTCO₂e **Annual Energy Needed** Unit kWh (Electricity) Therm (Natural Gas) The project will generate electricity. If yes: Annual kWh Generated Total MTCO₂e 0 *A negative value indicates GHG reductions The project will proactively manage forests to reduce wildfire risk. If yes: Acres Protected from Wildfire Total MTCO₂e 0 *A negative value indicates GHG reductions The project will affect wetland acreage. If yes: Acres of Protected Wetlands Total MTCO2e *A negative value indicates GHG reductions The project will include new trees. If yes: Total MTCO₂e Acres of Trees Planted 0 *A negative value indicates GHG reductions Project operations are expected to generate or reduce GHG emissions for other reasons. If yes, **GHG Emissions Summary** Construction and development will generate approximately: 13 MTCO₂e 0 MTCO₂e In a given year, operation of the project will result in:



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 County Department of Public Works – Engineering		
Name of Primary Contact	Robert A. Perreault , Jr., Director of Public works		
Name of Secondary Contact	Robert Thorman, Engineering Technician II		
Mailing Address	1834 East Main Street, Quincy, CA 95971		
E-mail	bobperreault@countyofplumas.com		
Phone	(530) 283-6222		
Other Cooperating Agencies /	NA		
Organizations / Stakeholders			
Is your agency/organization	Yes		
committed to the project through			
completion? If not, please explain			

II. GENERAL PROJECT INFORMATION

Project Title	MS-20: Mill Creek Erosion	
Project Category	☐ Agricultural Land Stewardship	
	☐ Floodplains/Meadows/Waterbodies	
	☐ Tribal Advisory Committee	
	☐ Uplands/Forest	
Project Description	Eroded slopes on Mill Creek upstream from Highway 70 is in	
(Briefly describe the project,	need of erosion protection by means of rip rap to reduce the	
in 300 words or less)	turbidity of the stream from excessive erosion. The erosion is caused by the water flow under the highway 70 bridge being inadequate and water backs up causing erosion. Inadequate flow under highway 70 will be eased by addition of two new pipes adjacent the existing culvert.	
Project Location Description (e.g.,	Mill Creek upstream from Highway 70.	
along the south bank of stream/river		
between river miles or miles from		
Towns/intersection and/or address):		

Latitude:	39 degrees 56' N
Longitude:	120 degrees 54' W

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.

	Will the		Quantification
	project		(e.g. acres of
	address		streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Restore natural hydrologic	⊠ Yes	Restore hydrologic function by	Reduces significant
functions.		reducing stream bank erosion	erosion and
	□ N/A	and turbidity in Mill Creek.	turbidity.
Reduce potential for	☐ Yes		
catastrophic wildland fires in			
the Region.	⊠ N/A		
Build communication and	☐ Yes		
collaboration among water			
resources stakeholders in the	⊠ N/A		
Region.			
Work with DWR to develop	☐ Yes		
strategies and actions for the			
management, operation, and	⊠ N/A		
control of SWP facilities in the	-		
Upper Feather River			
Watershed in order to increase			
water supply, recreational, and			
environmental benefits to the			
Region.			
Encourage municipal service	☐ Yes		
providers to participate in			
regional water management	⊠ N/A		
actions that improve water			
supply and water quality.			
Continue to actively engage in	☐ Yes		
FERC relicensing of			
hydroelectric facilities in the	⊠ N/A		
Region.			
Address economic challenges	☐ Yes		
of municipal service providers			
to serve customers.	⊠ N/A		

		T	
	Will the		Quantification
	project		(e.g. acres of
	address		streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Protect, restore, and enhance	⊠ Yes	Restore clarity Mill Creek by	Reduces significant
the quality of surface and		reducing stream bank erosion	erosion in Mill
groundwater resources for all	□ N/A	and turbidity. Reducing erosion	Creek and and
beneficial uses, consistent with		and turbidity in Mill Creek also	turbidity in both
the RWQC Basin Plan.		translates into reduced	Mill Creek and
		turbidity in the Middle Fork of	Middle Fork of the
Address water re-	□ v - ·	the Feather River.	Feather River.
Address water resources and	☐ Yes		ļ
wastewater needs of DACs and			
Native Americans.	⊠ N/A		
Coordinate management of	☐ Yes		
recharge areas and protect			
groundwater resources.	⊠ N/A		
Improve coordination of land	☐ Yes		
use and water resources			
planning.	⊠ N/A		
Maximize agricultural,	☐ Yes		
environmental and municipal			
water use efficiency.	⊠ N/A		
Effectively address climate	☐ Yes		
change adaptation and/or			
mitigation in water resources	⊠ N/A		
management.			
Improve efficiency and	☐ Yes		
reliability of water supply and			
other water-related	⊠ N/A		
infrastructure.			
Enhance public awareness and	☐ Yes		
understanding of water			
management issues and needs.	⊠ N/A		
Address economic challenges	☐ Yes		
of agricultural producers.			
	⊠ N/A		
Work with counties/	⊠ Yes	Plumas County Department of	
communities/groups to make		Public Works is committed to	
sure staff capacity exists for	□ N/A	the successful implementation	
actual administration and		of this project. We will ensure	
implementation of grant		the staff capacity exists to	
funding.		administer and implement the	
1	1	grant project.	l l

	o objectives are addressed, describe how the gion:	project rela	ates to a challenge or opportunity for the
	PROJECT IMPACTS AND BENEFITS ase provide a summary of the expected project of applicable; do no leave a blank cell. Note t		
If a	pplicable, describe benefits or impacts of the	project wi	ith respect to:
a.	Native American Tribal Communities	⊠ N/A	
b.	Disadvantaged Communities ¹	□ N/A	The project is located in a disadvantaged community and would benefit the community by enhancing water quality in Mill Creek which runs through the community.
C.	Environmental Justice ²	⊠ N/A	
d.	Drought Preparedness	⊠ N/A	
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	Benefit of reduced erosion and turbidity in the creek and tributaries.
inco the ² En with regu (e.g	Disadvantaged Community is defined as a comome that is less than 80 percent of the Statew UFR website (http://featherriver.org/maps/) nvironmental Justice is defined as the fair treath respect to the development, adoption, impleulations and policies. An example of environme, water supply, flooding, sanitation) in an area imate change effects are likely to include increased ondary effects such as increased wildfire risk,	ride annual . tment of pe ementatior nental justic a of racial n eased flood	MHI. DWR's DAC mapping is available on eople of all races, cultures, and incomes and enforcement of environmental laws, ce benefit would be to improve conditions minorities. Jing, extended drought, and associated

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

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/).

	Will the Project incorporate	Description of how RMS to be employed,
Resource Management Strategy	RMS?	if applicable
Reduce Water Demand		
Agricultural Water Use Efficiency	☐ Yes ⊠ No	
Urban water use efficiency	☐ Yes ⊠ No	
Improve Flood Management		
Flood management	⊠ Yes □ No	Reduced erosion in creeks results in less sediment in rivers and better flood management.
Improve Operational Efficiency and T	ransfers	
Conveyance – regional/local	☐ Yes ⊠ No	
System reoperation	☐ Yes ⊠ No	
Water transfers	☐ Yes ⊠ No	
Increase Water Supply		
Conjunctive management	☐ Yes ⊠ No	
Precipitation Enhancement	☐ Yes ⊠ No	
Municipal recycled water	☐ Yes ⊠ No	
Surface storage – regional/local	☐ Yes ⊠ No	
Improve Water Quality		
Drinking water treatment and	☐ Yes ⊠ No	

	Will the Project	Description of how BMC to be appleced
Resource Management Strategy	incorporate RMS?	Description of how RMS to be employed, if applicable
distribution		THE STATE OF THE S
Groundwater remediation/aquifer remediation	☐ Yes ⊠ No	
Matching water quality to water use	☐ Yes ⊠ No	
Pollution prevention	☐ Yes ⊠ No	
Salt and salinity management	☐ Yes ⊠ No	
Urban storm water runoff management	⊠ Yes □ No	Increased capacity of water flow under highway 70 will reduce flooding of adjacent lands.
Practice Resource Stewardship		
Agricultural land stewardship	☐ Yes ⊠ No	
Ecosystem restoration	☐ Yes ⊠ No	
Forest management	☐ Yes ⊠ No	
Land use planning and management	☐ Yes ⊠ No	
Recharge area protection	☐ Yes ⊠ No	
Sediment management	⊠ Yes □ No	Reduced sediment in creeks & rivers
Watershed management	☐ Yes ⊠ No	
People and Water		
Economic incentives	☐ Yes ⊠ No	
Outreach and engagement	☐ Yes ⊠ No	
Water and culture	☐ Yes ⊠ No	
Water-dependent recreation	☐ Yes ⊠ No	
Wastewater/NPDES	☐ Yes ⊠ No	
Other RMS addressed and explanation	on:	

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?: $\ \square$ Yes $\ \boxtimes$ No					
Funding Match Waiver request?:					
		Cost Share:			
		Non-State	Cost Share:		
	Requested	Fund Source*	Other State		
	Grant	(Funding	Fund		
Category	Amount	Match)	Source*	Total Cost	
a. Direct Project Administration	\$20,000			\$20,000	
b. Land Purchase/Easement					
c. Planning/Design/Engineering / Environmental	\$50,000			\$50,000	
d. Construction/Implementation	\$600,000			\$600,000	
e. Environmental Compliance/ Mitigation/Enhancement	\$15,000			\$15,000	
f. Construction Administration	\$90,000			\$90,000	
g. Other Costs					
h. Construction/Implementation Contingency	\$60,000			\$60,000	
i. Grand Total (Sum rows (a) through (h) for each column)	\$835,000			\$835,000	
j. Can the Project be phased? ☐ Yes	j. Can the Project be phased? ☐ Yes ☒ No ☐ If yes, provide cost breakdown by phases				
	Project Cost	O&M Cost	Descriptio	n of Phase	
Phase 1					
Phase 2					
Phase 3					
Phase 4		- "			
k. Explain how operation and maintenar		Funding for O&M of this project will come from			
, , ,	financed for the 20-year planning period for project implementation (not grant funded).		the Plumas County Department of Public Works budget.		
	Has a Cost/Benefit analysis been completed?		☐ Yes ☒ No		
m. Describe what impact there may be if not funded (300 words or less)			Continued bank erosion, water turbidity, and flooding.		
*List all sources of funding.					
Note: See Project Development Manual, Exhibit B, for assistance in completing this table					
(http://featherriver.org/documents/).					

VIII. PROJECT STATUS AND SCHEDULE

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		☐ Yes ☑ No ☐ N/A	r roject stage	Upon execution of grant agreement	1 month after funding agreement
b. Final Design		☐ Yes☒ No☐ N/A		2 months after funding secured	4 months after funding secured
c. Environmental Documentation (CEQA / NEPA)		☐ Yes☒ No☐ N/A		4 months after funding secured	7 months after funding secured
d. Permitting		☐ Yes☒ No☐ N/A		7 months after funding secured	8.5 months after funding secured
e. Construction Contracting		☐ Yes☒ No☐ N/A		8.5 months after funding secured	9 months after funding secured
f. Construction Implementation		☐ Yes☒ No☐ N/A		9 months after funding secured	12 months after funding secured
Provide explanation stage is checked as c					

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	Water Quality Control Plan for the		
	project is consistent with or supported by (e.g. General	Sacramento and San Joaquin River		
	Plans, UWMPs, GWMPs, Water Master Plan, Habitat	Basins		
	Conservation Plans, TMDLs, Basin Plans, etc.).			
b.	List technical reports and studies supporting the	NA		
	feasibility of this project.			
c.	Concisely describe the scientific basis (e.g. how much	For the protection of aquatic species		
	research has been conducted) of the proposed project in	and habitat, sediment loads (TSS,		
	300 words or less.	turbidity, etc.) in streams and rivers are		
		regulated by the Water Quality Control		
		Plan for the Sacramento and San		
		Joaquin River Basins (Basin Plan) and by		
		established TMDLs. This project will		
		reduce sediment inputs to local		
		waterways in support of compliance		
		with the Basin Plan and established		
		TMDLs.		
d.	Does the project implement green technology (e.g.	☐ Yes ☒ No ☐ N/A		
	alternate forms of energy, recycled materials, LID	If yes, please describe.		
	techniques, etc.).			
e.	Are you an Urban Water Supplier ¹ ?	☐ Yes ☒ No ☐ N/A		
f.	Are you are an Agricultural Water Supplier ² ?	☐ Yes ☒ No ☐ N/A		
g.	Is the project related to groundwater?	☐ Yes ☒ No ☐ N/A		
		If yes, please indicate which		
		groundwater basin.		
¹ U	rban Water Supplier is defined as a supplier, either publicly of	or privately owned, providing water for		
mι	municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than			
	000 acre-feet of water annually.			
² A	gricultural Water Supplier is defined as a water supplier, eith	ner publicly or privately owned, providing		
wa	water to 10 000 or more irrigated acres, excluding the acreage that receives recycled water			

Climate Change – Project Assessment Checklist

This climate change project assessment tool allows project applicants and the planning team to assess project consistency with Proposition 84 plan standards and RWMG plan assessment standards. The tool is a written checklist that asks GHG emissions and adaptation/resiliency questions.

Name of project: MS-20: Mill Creek Erosion

Project applicant: County Department of Public Works- Engineering

GHG Emissions Assessment

Project Construction Emissions (If you check any of the boxes, please see the attached worksheet)
 ☑ The project requires nonroad or off-road engines, equipment, or vehicles to complete. ☑ The project requires materials to be transported to the project site. ☑ The project requires workers to commute to the project site. ☐ The project is expected to generate GHG emissions for other reasons.
The project is expected to generate GNG emissions for other reasons. The project does not have a construction phase and/or is not expected to generate GHG emissions during the construction phase.
Operating Emissions (If you check any of the boxes, please see the attached worksheet)
The project requires energy to operate.
The project will generate electricity.
☐ The project will proactively manage forests to reduce wildfire risk.
The project will affect wetland acreage.
The project will include new trees.

Project operations are expected to generate or reduce GHG emissions for other reasons.

Adaptation & Resiliency Assessment

Water Supply
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water supply vulnerability issues:
Not applicable ■ Not applicable Not applicable
Reduced snowmelt
Unmet local water needs (drought)
☐ Increased invasive species
Water Demand
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water demand vulnerability issues:
Not applicable
Increasing seasonal water use variability
Unmet in-stream flow requirements
Climate-sensitive crops
Groundwater drought resiliency
Water curtailment effectiveness

high priority water quality vulnerability issues:
 Not applicable ☐ Increasing catastrophic wildfires ☐ Eutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and other related water quality issues) ☐ Seasonal low flows and limited abilities for waterbodies to assimilate pollution
Water treatment facility operations Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold freshwater habitat, spawning habitat, wildlife habitat, etc.)
Flooding Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues:
 Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain ✓ Insufficient flood control facilities
By reducing erosion and sedimentation, the creek will be capable of carrying increased flood waters.

Water Quality

Ecosystem and Habitat Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority ecosystem and habitat vulnerability issues:
☐ Not applicable ☐ Climate-sensitive fauna or flora
Recreation and economic activity
Quantified environmental flow requirements
Erosion and sedimentation
☐ Endangered or threatened species
Fragmented habitat
The project when completed will reduce the erosion and sedimentation in creek.
, p. ojest o p. o
Hydropower
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority hydropower vulnerability issues:
Not applicable ■ Not applicable Not applicable
Reduced hydropower output

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-20: Mill Creek Erosion

GHG Emissions Analysis

Project Construction Emissions

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

	Maximum		
	Number Per	Total 8-Hour Days in	
Type of Equipment	Day	Operation	Total MTCO₂e
Excavators	1	5	2
Tractors/Loaders/Bac			
khoes	2	5	3
Dumpers/Tenders	1	5	0
Off-Highway Trucks	1	5	6
			0
			0
			0
			0
			0
			0
		Total Emissions	11

Χ	The project requires materials to be transported to the project site. If yes:

	<u> </u>	1 7	
	Average Trip		1
Total Number of	Distance		ļ
Round Trips	(Miles)	Total MTCO₂e	
10	30	0)

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

		Average Round Trip		
Average Number	Total Number	Distance Traveled		
of Workers	of Workdays	(Miles)	Total MTCO₂e	
	5 10	60		1

The project	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-20: Mill Creek Erosion Page 1

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-20: Mill Creek Erosion **Project Operating Emissions** The project requires energy to operate. If yes: **Annual Energy Needed** Unit Total MTCO₂e kWh (Electricity) 0 Therm (Natural Gas) The project will generate electricity. If yes: Annual kWh Generated Total MTCO₂e 0 *A negative value indicates GHG reductions The project will proactively manage forests to reduce wildfire risk. If yes: Acres Protected from Wildfire Total MTCO₂e 0 *A negative value indicates GHG reductions The project will affect wetland acreage. If yes: Acres of Protected Wetlands Total MTCO₂e 0 *A negative value indicates GHG reductions The project will include new trees. If yes: Acres of Trees Planted Total MTCO₂e 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** 13 MTCO₂e Construction and development will generate approximately: 0 MTCO₂e In a given year, operation of the project will result in:

MS-20: Mill Creek Erosion Page 2



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 County Department of Public Works – Engineering
Name of Primary Contact	Robert A. Perreault , Jr., Director of Public works
Name of Secondary Contact	Robert Thorman, Engineering Technician II
Mailing Address	1834 East Main Street, Quincy, CA 95971
E-mail	bobperreault@countyofplumas.com
Phone	(530) 283-6222
Other Cooperating Agencies /	NA
Organizations / Stakeholders	
Is your agency/organization	Yes
committed to the project through	
completion? If not, please explain	

II. GENERAL PROJECT INFORMATION

Project Title	MS-21: Smith Creek erosion
Project Category	☐ Agricultural Land Stewardship
	☐ Floodplains/Meadows/Waterbodies
	☐ Tribal Advisory Committee
	☐ Uplands/Forest
Project Description	The buildup of gravel from erosion upstream and downstream
(Briefly describe the project,	of the bridge is causing the creek to overflow over the
in 300 words or less)	Johnsville-Graeagle Road bridge and the gravel buildup needs
	to be removed.
Project Location Description (e.g.,	Upstream and downstream from Johnsville-Graeagle Road
along the south bank of stream/river	bridge on Smith Creek.
between river miles or miles from	
Towns/intersection and/or address):	
Latitude:	39 degrees 46' N
Longitude:	120 degrees 37' W

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.

	Will the		Quantification
	project address		(e.g. acres of
Hamay Faathay Birray IBNA/BA		Duief conference of musicat	streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Restore natural hydrologic	⊠ Yes	Restore hydrologic function by	Increase stream
functions.		removing the gravel buildup in	flow under bridge.
	□ N/A	Smith Creek.	
Reduce potential for	☐ Yes		
catastrophic wildland fires in			
the Region.	⊠ N/A		
Build communication and	☐ Yes		
collaboration among water			
resources stakeholders in the	⊠ N/A		
Region.	,		
Work with DWR to develop	☐ Yes		
strategies and actions for the			
management, operation, and	⊠ N/A		
control of SWP facilities in the			
Upper Feather River			
Watershed in order to increase			
water supply, recreational, and			
environmental benefits to the			
Region.			
Encourage municipal service	☐ Yes		
providers to participate in			
regional water management	⊠ N/A		
actions that improve water			
supply and water quality.			
Continue to actively engage in	□ Yes		
FERC relicensing of			
hydroelectric facilities in the	⊠ N/A		
Region.	⁽²⁾ 1 1 1 / 1		
Address economic challenges	☐ Yes		
of municipal service providers			
to serve customers.	⊠ N/A		
to serve editorners.			
Protect, restore, and enhance	⊠ Yes	Reduced pollution entering the	Reduces pollution
the quality of surface and	□ □ 1€3	creek and tributaries by	from Johnsonville-
groundwater resources for all	□ N/A	eliminating the overtopping of	Graeagle bridge to
beneficial uses, consistent with	□ N/A	the bridge. Improve freshwater	Smith creek.
			Jilliul Cleek.
the RWQC Basin Plan.		habitat.	

	Will the		Quantification
	project	ļ ,	(e.g. acres of
	address		streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Address water resources and	☐ Yes		
wastewater needs of DACs and		ļ	
Native Americans.	⊠ N/A		
Coordinate management of	☐ Yes		
recharge areas and protect			
groundwater resources.	⊠ N/A		
Improve coordination of land	☐ Yes		
use and water resources			
planning.	⊠ N/A		
Maximize agricultural <u>,</u>	☐ Yes		
environmental and municipal			
water use efficiency.	⊠ N/A		
Effectively address climate	☐ Yes		
change adaptation and/or			
mitigation in water resources	⊠ N/A		
management.			
Improve efficiency and	☐ Yes		
reliability of water supply and			
other water-related	⊠ N/A		
infrastructure.			
Enhance public awareness and	☐ Yes		
understanding of water			
management issues and needs.	⊠ N/A		
Address economic challenges	☐ Yes		
of agricultural producers.			
	⊠ N/A		
Work with counties/	⊠ Yes	Plumas County Department of	
communities/groups to make		Public Works is committed to	
sure staff capacity exists for	□ N/A	the successful implementation	
actual administration and		of this project. We will ensure	
implementation of grant		the staff capacity exists to	
funding.		administer and implement the	
		grant project.	
If no objectives are addressed d	escribe how th	ne project relates to a challenge or o	annortunity for the
Region:	escribe now th	e project relates to a chancinge of t	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 ap	oplicable, describe benefits or impacts of the	project wi	th respect to:
a.	Native American Tribal Communities	N N / A	
		⊠ N/A	
b.	Disadvantaged Communities ¹		The project is located in a disadvantaged
		□ N/A	community and would benefit the community by enhancing water quality
			in Smith Creek which runs through the
			community.
c.	Environmental Justice ²		
		⊠ N/A	
d.	Drought Preparedness		
u.	Drought Frepareuness	⊠ N/A	
e.	Assist the region in adapting to effects of		
	climate change ³	⊠ N/A	
£	Consention or reduction of annual con-		
f.	Generation or reduction of greenhouse gas emissions (e.g. green technology)	⊠ N/A	
	gas emissions (e.g. green technology)	□ N/A	
g.	Other expected impacts or benefits that		Benefit of reduced pollution entering
	are not already mentioned elsewhere	□ N/A	the creek and tributaries by eliminating
			the overtopping of the bridge.
¹ A I	Disadvantaged Community is defined as a con	l nmunity wi	l th an annual median household (MHI)
	ome that is less than 80 percent of the Statew		
	UFR website (http://featherriver.org/maps/)		
_	vironmental Justice is defined as the fair trea		eople of all races, cultures, and incomes
	respect to the development, adoption, imple	•	•
regu	ulations and policies. An example of environm	ental justic	ce benefit would be to improve conditions

³ Climate change effects are likely to include increased flooding, extended drought, and associated

(e.g. water supply, flooding, sanitation) in an area of racial minorities.

secondary effects such as increased wildfire risk, erosion, and sedimentation.

Upper Feather River IRWM Project Information Form

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

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/).

	Will the Project	
	incorporate	Description of how RMS to be employed,
Resource Management Strategy	RMS?	if applicable
Reduce Water Demand		
Agricultural Water Use Efficiency	☐ Yes ⊠ No	
Urban water use efficiency	☐ Yes ⊠ No	
Improve Flood Management		
Flood management	⊠ Yes □ No	Restore hydrologic function by removing the
		gravel buildup in the stream.
Improve Operational Efficiency and Transfers		
Conveyance – regional/local	☐ Yes ⊠ No	
System reoperation	☐ Yes ⊠ No	
Water transfers	☐ Yes ⊠ No	
Increase Water Supply		
Conjunctive management	☐ Yes ⊠ No	
Precipitation Enhancement	☐ Yes ⊠ No	
Municipal recycled water	☐ Yes ⊠ No	
Surface storage – regional/local	☐ Yes ⊠ No	
Improve Water Quality		

	Will the Project	
	incorporate	Description of how RMS to be employed,
Resource Management Strategy	RMS?	if applicable
Drinking water treatment and distribution	☐ Yes ⊠ No	
Groundwater remediation/aquifer remediation	☐ Yes ⊠ No	
Matching water quality to water use	☐ Yes ⊠ No	
Pollution prevention	⊠ Yes □ No	Reduced pollution entering the creek and tributaries by eliminating the overtopping of the bridge
Salt and salinity management	☐ Yes ⊠ No	
Urban storm water runoff management	☐ Yes ⊠ No	
Practice Resource Stewardship		
Agricultural land stewardship	☐ Yes ⊠ No	
Ecosystem restoration	☐ Yes ⊠ No	
Forest management	☐ Yes ⊠ No	
Land use planning and management	☐ Yes ⊠ No	
Recharge area protection	☐ Yes ⊠ No	
Sediment management	⊠ Yes □ No	Remove gravel buildup in creek
Watershed management	☐ Yes ⊠ No	
People and Water		
Economic incentives	☐ Yes ⊠ No	
Outreach and engagement	☐ Yes ⊠ No	
Water and culture	☐ Yes ⊠ No	
Water-dependent recreation	☐ Yes ⊠ No	
Wastewater/NPDES	☐ Yes ⊠ No	
Other RMS addressed and explanation	on:	

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 BUDGE	ET		
Dro	oject serves a need of a DAC?: Yes	⊠ No			
	nding Match Waiver request?: \Box Yes				
			Cost Share:		
			Non-State	Cost Share:	
		Requested	Fund Source*	Other State	
		Grant	(Funding	Fund	
	Category	Amount	Match)	Source*	Total Cost
a.	Direct Project Administration	\$8,000			\$8,000
b.	Land Purchase/Easement				
c.	Planning/Design/Engineering	\$8,000			\$8,000
	/ Environmental				
d.	Construction/Implementation	\$65,000			\$65,000
e.	Environmental Compliance/	\$8,000			\$8,000
f.	Mitigation/Enhancement Construction Administration	\$8,000			\$8,000
		\$8,000			\$8,000
g.	Other Costs				
h.	Construction/Implementation	\$8,000			\$8,000
	Contingency	4.07.000			4407.000
i.	Grand Total (Sum rows (a) through (h) for each column)	\$105,000			\$105,000
	(ii) for each column)				
j.	Can the Project be phased? ☐ Yes	⊠ No If yes , p	rovide cost breakd		
	_	Project Cost	O&M Cost	Descriptio	n of Phase
	Phase 1				
	Phase 2 Phase 3				
	Phase 4				
k.	Explain how operation and maintenar	nce costs will be	Funding for O&N	l of this project w	vill come from
	financed for the 20-year planning peri		the Plumas Coun		
	implementation (not grant funded).	, .,	budget.		
		1 . 12			
I.	Has a Cost/Benefit analysis been com	•	☐ Yes ⊠ No		
m.	Describe what impact there may be if not funded (300 words or less)	the project is	Continued bridge entering the cree		d pollution
*Lis	*List all sources of funding.				
Note: See Project Development Manual, Exhibit B, for assistance in completing this table					
(<u>ht</u>	tp://featherriver.org/documents/).				

VIII. PROJECT STATUS AND SCHEDULE

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**.

	Check the Current Project			Description of Activities in Ea	=	Planned/ Actual Completion
Project Stage	Stage	Comple	ted?	Project Stage	Date (mm/yr)	Date (mm/yr)
a. Assessment and Evaluation		☐ Yes No)		Upon execution of grant agreement	1 month after funding agreement
b. Final Design		☐ Ye ⊠ No)		2 months after funding secured	4 months after funding secured
c. Environmental Documentation (CEQA / NEPA)		☐ Ye ⊠ No □ N/)		4 months after funding secured	7 months after funding secured
d. Permitting		☐ Ye ⊠ No)		7 months after funding secured	8.5 months after funding secured
e. Construction Contracting		☐ Ye ⊠ No)		8.5 months after funding secured	9 months after funding secured
f. Construction Implementation		☐ Ye ⊠ No)		9 months after funding secured	12 months after funding secured
Provide explanation stage is checked as			ect			

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	Water Quality Control Plan for the
	project is consistent with or supported by (e.g. General	Sacramento and San Joaquin River
	Plans, UWMPs, GWMPs, Water Master Plan, Habitat	Basins
	Conservation Plans, TMDLs, Basin Plans, etc.).	
b.	List technical reports and studies supporting the	NA
	feasibility of this project.	
c.	Concisely describe the scientific basis (e.g. how much	Sediment becomes trapped in gravel
	research has been conducted) of the proposed project in	beds and may be flushed into the creek
	300 words or less.	during flood events. For the protection
		of aquatic species and habitat,
		sediment loads (TSS, turbidity, etc.) in
		streams and rivers are regulated by the
		Water Quality Control Plan for the
		Sacramento and San Joaquin River
		Basins (Basin Plan) and by established
		TMDLs. This project will reduce
		sediment and gravel in Smith Creek,
		which also improves cold freshwater
		habitat and contributes to compliance
		with the Basin Plan and established
		TMDLs.
d.	Does the project implement green technology (e.g.	☐ Yes ☒ No ☐ N/A
	alternate forms of energy, recycled materials, LID	If yes, please describe.
	techniques, etc.).	
e.	Are you an Urban Water Supplier ¹ ?	☐ Yes ☒ No ☐ N/A
f.	Are you are an Agricultural Water Supplier ² ?	☐ Yes ⊠ No ☐ N/A
g.	Is the project related to groundwater?	☐ Yes ☒ No ☐ N/A
		If yes, please indicate which
		groundwater basin.
	rban Water Supplier is defined as a supplier, either publicly of	
	inicipal purposes either directly or indirectly to more than 3,	000 customers or supplying more than
	000 acre-feet of water annually.	
	gricultural Water Supplier is defined as a water supplier, eith	
wa	ter to 10,000 or more irrigated acres, excluding the acreage	that receives recycled water.

Climate Change – Project Assessment Checklist

This climate change project assessment tool allows project applicants and the planning team to assess project consistency with Proposition 84 plan standards and RWMG plan assessment standards. The tool is a written checklist that asks GHG emissions and adaptation/resiliency questions.

Name of project: MS-21: Smith Creek Erosion

Project applicant: Plumas County Department of Public Works- Engineering

GHG Emissions Assessment

Project Construction Emissions (If you check any of the boxes, please see the attached worksheet)
 ☑ The project requires nonroad or off-road engines, equipment, or vehicles to complete. ☑ The project requires materials to be transported to the project site. ☑ The project requires workers to commute to the project site.
The project is expected to generate GHG emissions for other reasons.
The project does not have a construction phase and/or is not expected to generate GHG emissions during the construction phase.
Operating Emissions
(If you check any of the boxes, please see the attached worksheet)
☐ The project requires energy to operate.
The project will generate electricity.
The project will proactively manage forests to reduce wildfire risk.
The project will affect wetland acreage.
The project will include new trees.

Project operations are expected to generate or reduce GHG emissions for other reasons.

Adaptation & Resiliency Assessment

Water Supply
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water supply vulnerability issues:
Not applicable □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □
Reduced snowmelt
Unmet local water needs (drought)
Increased invasive species
Water Demand Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water demand vulnerability issues:
Not applicable ■ Not applicable Not applicable
Increasing seasonal water use variability
Unmet in-stream flow requirements
Climate-sensitive crops
Groundwater drought resiliency
Water curtailment effectiveness

Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water quality vulnerability issues:
 Not applicable ☐ Increasing catastrophic wildfires ☐ Eutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and other related water quality issues) ☐ Seasonal low flows and limited abilities for waterbodies to assimilate pollution ☐ Water treatment facility operations Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold freshwater habitat, spawning habitat, wildlife habitat, etc.)
Flooding Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues:
 Not applicable ☐ Aging critical flood protection ☐ Wildfires ☐ Critical infrastructure in a floodplain ☑ Insufficient flood control facilities
By reducing erosion and sedimentation, the creek will be capable of carrying increased flood waters.

Water Quality

Ecosystem and Habitat Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority ecosystem and habitat vulnerability issues:
 Not applicable □ Climate-sensitive fauna or flora □ Recreation and economic activity □ Quantified environmental flow requirements ⋈ Erosion and sedimentation □ Endangered or threatened species □ Fragmented habitat
The project when completed will reduce the erosion and sedimentation in creek.
Hydropower Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority hydropower vulnerability issues: Not applicable Reduced hydropower output

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-21: Smith Creek Erosion

GHG Emissions Analysis

Project Construction Emissions

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

	Maximum		
	Number Per	Total 8-Hour Days in	
Type of Equipment	Day	Operation	Total MTCO₂e
			0
Tractors/Loaders/Bac			
khoes	2	4	2
Dumpers/Tenders	1	4	0
Off-Highway Trucks	1	4	5
			0
			0
			0
			0
			0
			0
	•	Total Emissions	7

Χ	The project requires materials to be transported to the project site.	If yes:

	Average Trip	
Total Number of	Distance	
Round Trips	(Miles)	Total MTCO ₂ e
5	10	0

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

 et requires tremers to commute to the project often in year				
		Average Round Trip		
Average Number	Total Number	Distance Traveled		
of Workers	of Workdays	(Miles)	Total MTCO₂e	
5	5	60		1

The projec	t is expected to generate GHG emissions for other reasons. If yes, explain:	
The pueles	t door not have a construction phase and for is not expected to generate CHC	omissions durin

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

MS-21: Smith Creek Erosion Page 1

MS-21: Smith Creek Erosion

Unit	Total MTCO₂e
kWh (Electricity)	0
Therm (Natural Gas)	0
I====	1
Total MTCO ₂ e	
0	
eductions	
reduce wildfire risk. If	yes:
Total MTCO₂e	
0	
eductions	-
1	•
Total MTCO₂e	
0	
eductions	
Total MTCO₂e	1
_	
	1
or reduce GHG emission	ns for other reasons. If yes,
approximately:	8 MTCO₂e
	0 MTCO₂e
	kWh (Electricity) Therm (Natural Gas) Total MTCO ₂ e ductions reduce wildfire risk. If Total MTCO ₂ e ductions Total MTCO ₂ e Total MTCO ₂ e Occurrence O

MS-21: Smith Creek Erosion Page 2



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 County Department of Public Works – Engineering
Name of Primary Contact	Robert A. Perreault , Jr., Director of Public works
Name of Secondary Contact	Robert Thorman, Engineering Technician II
Mailing Address	1834 East Main Street, Quincy, CA 95971
E-mail	bobperreault@countyofplumas.com
Phone	(530) 283-6222
Other Cooperating Agencies /	NA
Organizations / Stakeholders	
Is your agency/organization	Yes
committed to the project through	
completion? If not, please explain	

II. GENERAL PROJECT INFORMATION

Project Title	MS-22:Wapaunsie Creek Erosion			
Project Category	☐ Agricultural Land Stewardship			
	☐ Floodplains/Meadows/Waterbodies			
	☐ Tribal Advisory Committee			
	☐ Uplands/Forest			
Project Description	Eroded creek bank on Wapaunsie Creek and Snake Lake Road			
(Briefly describe the project,	is in need of erosion protection by means of rip rap and			
in 300 words or less)	mechanically stabilized embankment to reduce the turbidity			
	of water flowing to Spanish Creek from excessive erosion.			
Project Location Description (e.g.,	Approximately 150 yards west of Smith Lake Road on Snake			
along the south bank of stream/river	Lake Road at Wapaunsie Creek.			
between river miles or miles from				
Towns/intersection and/or address):				
Latitude:	39 degrees 58' N			
Longitude:	121 degrees 01' W			

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.

	Will the project		Quantification (e.g. acres of
	address		streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Restore natural hydrologic	⊠ Yes	Restore hydrologic function by	Reduces significant
functions.		reducing stream bank erosion	erosion and
	□ N/A	and turbidity in Wapaunsie	turbidity.
	·	Creek.	
Reduce potential for	☐ Yes		
catastrophic wildland fires in			
the Region.	⊠ N/A		
Build communication and	☐ Yes		
collaboration among water			
resources stakeholders in the	⊠ N/A		
Region.			
Work with DWR to develop	☐ Yes		
strategies and actions for the			
management, operation, and	⊠ N/A		
control of SWP facilities in the Upper Feather River			
Watershed in order to increase			
water supply, recreational, and			
environmental benefits to the			
Region.			
Encourage municipal service	☐ Yes		
providers to participate in			
regional water management	⊠ N/A		
actions that improve water			
supply and water quality.			
Continue to actively engage in	☐ Yes		
FERC relicensing of			
hydroelectric facilities in the	⊠ N/A		
Region.			
Address economic challenges	☐ Yes		
of municipal service providers			
to serve customers.	⊠ N/A		
Protect, restore, and enhance	⊠ Yes	Restore clarity in Wapaunsie	Reduces significant
the quality of surface and	-	Creek by reducing stream bank	erosion in
groundwater resources for all	□ N/A	erosion and turbidity. Reducing	Wapaunsie Creek
beneficial uses, consistent with	-	erosion and turbidity in	and turbidity in
the RWQC Basin Plan.		Wapaunsie Creek also	Wapaunsie Creek,

		1013 22. 00	rapaunsie Creek Erosioi
	Will the		Quantification
	project		(e.g. acres of
	address		streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
		translates into reduced	Spanish Creek and
		turbidity in Spanish Creek and	the Middle Fork of
		the Middle Fork of the Feather	the Feather River.
		River.	
Address water resources and	☐ Yes		
wastewater needs of DACs and			
Native Americans.	⊠ N/A		
Coordinate management of	☐ Yes		
recharge areas and protect			
groundwater resources.	⊠ N/A		
Improve coordination of land	□ Yes		
use and water resources	□ 1es		
planning.	NI/A		
	⊠ N/A		
Maximize agricultural,	☐ Yes		
environmental and municipal			
water use efficiency.	⊠ N/A		
Effectively address climate	☐ Yes		
change adaptation and/or			
mitigation in water resources	⊠ N/A		
management.			
Improve efficiency and	☐ Yes		
reliability of water supply and			
other water-related	⊠ N/A		
infrastructure.			
Enhance public awareness and	☐ Yes		
understanding of water			
management issues and needs.	⊠ N/A		
Address economic challenges	☐ Yes		
of agricultural producers.			
	⊠ N/A		
Work with counties/	⊠ Yes	Plumas County Department of	
communities/groups to make		Public Works is committed to	
sure staff capacity exists for	□ N/A	the successful implementation	
actual administration and		of this project. We will ensure	
implementation of grant		the staff capacity exists to	
funding.		administer and implement the	
		grant project.	
	<u>l</u>	Prant broject.	<u> </u>

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 a	If applicable, describe benefits or impacts of the project with respect to:					
a.	Native American Tribal Communities	⊠ N/A				
b.	Disadvantaged Communities ¹	□ N/A	The project is located in a disadvantaged community and would benefit the community by enhancing water quality in Wapaunsie Creek, which runs through the community.			
C.	Environmental Justice ²	⊠ N/A				
d.	Drought Preparedness	⊠ N/A				
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	Benefit of reduced erosion and turbidity in the creek and tributaries.			
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	☐ Ye	'es	g.	Drinking water treatment and	☐ Yes
	conservation, water use efficiency	\boxtimes N	I/A		distribution	⊠ N/A
b.	Stormwater capture, storage, clean-	□ Ye	'es	h.	Watershed protection and	☐ Yes
	up, treatment, management	\boxtimes N	I/A		management	⊠ N/A
c.	Removal of invasive non-native	□ Ye	'es	i.	Contaminant and salt removal	☐ Yes
	species, creation/enhancement of	\boxtimes N	I/A		through reclamation/desalting,	⊠ N/A
	wetlands,				other treatment technologies	
	acquisition/protection/restoration				and conveyance of recycled	
	of open space and watershed lands				water for distribution to users	
d.	Non-point source pollution	□ Ye	'es	j.	Planning and implementation of	☐ Yes
	reduction, management and	\boxtimes N	I/A		multipurpose flood	⊠ N/A
	monitoring				management programs	<u> </u>
e.	Groundwater recharge and	□ Ye	'es	k.	Ecosystem and fisheries	⊠ Yes
	management projects	⊠N	I/A		restoration and protection	□ N/A
f.	Water banking, exchange,	□ Ye	'es			
	reclamation, and improvement of	⊠N	I/A			
	water quality					

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/).

	Will the Project incorporate	Description of how RMS to be employed,
Resource Management Strategy	RMS?	if applicable
Reduce Water Demand		
Agricultural Water Use Efficiency	☐ Yes ⊠ No	
Urban water use efficiency	☐ Yes ⊠ No	
Improve Flood Management		
Flood management		Reduced erosion in creeks results in less
	⊠ Yes □ No	sediment in rivers and better flood
		management.
Improve Operational Efficiency and Transfers		
Conveyance – regional/local	☐ Yes ⊠ No	
System reoperation	☐ Yes ⊠ No	
Water transfers	☐ Yes ⊠ No	
Increase Water Supply		
Conjunctive management	☐ Yes ⊠ No	
Precipitation Enhancement	☐ Yes ⊠ No	
Municipal recycled water	☐ Yes ⊠ No	
Surface storage – regional/local	☐ Yes ⊠ No	

	Will the Project incorporate	Description of how RMS to be employed,
Resource Management Strategy	RMS?	if applicable
Improve Water Quality	T	
Drinking water treatment and distribution	☐ Yes ⊠ No	
Groundwater remediation/aquifer remediation	☐ Yes ⊠ No	
Matching water quality to water use	☐ Yes ⊠ No	
Pollution prevention	☐ Yes ⊠ No	
Salt and salinity management	☐ Yes ⊠ No	
Urban storm water runoff management	☐ Yes ⊠ No	
Practice Resource Stewardship		
Agricultural land stewardship	☐ Yes ⊠ No	
Ecosystem restoration	⊠ Yes □ No	Reduced stream bank erosion and reduced sedimentation and turbidity improve cold freshwater habitat and spawning grounds.
Forest management	☐ Yes ⊠ No	
Land use planning and management	☐ Yes ⊠ No	
Recharge area protection	☐ Yes ⊠ No	
Sediment management	⊠ Yes □ No	Reduced sediment in creeks & rivers
Watershed management	☐ Yes ⊠ No	
People and Water		
Economic incentives	☐ Yes ⊠ No	
Outreach and engagement	☐ Yes ⊠ No	
Water and culture	☐ Yes ⊠ No	
Water-dependent recreation	☐ Yes ⊠ No	
Wastewater/NPDES	☐ Yes ⊠ No	
Other RMS addressed and explanation	on:	

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						
Dro							
	Project serves a need of a DAC?: □ Yes ☒ No Funding Match Waiver request?: □ Yes ☒ No						
ı uı							
			Cost Share:	Cook Chaus			
		Requested	Non-State Fund Source*	Cost Share: Other State			
		Grant	(Funding	Fund			
	Category	Amount	Match)	Source*	Total Cost		
a.	Direct Project Administration	\$20,000	,		\$20,000		
b.	Land Purchase/Easement						
c.	Planning/Design/Engineering	\$30,000			\$30,000		
.	/ Environmental	,			433,000		
d.	Construction/Implementation	\$300,000			\$300,000		
e.	Environmental Compliance/	\$12,000			\$12,000		
	Mitigation/Enhancement						
f.	Construction Administration	\$45,000			\$45,000		
g.	Other Costs						
h.	Construction/Implementation	\$20,000			\$20,000		
	Contingency						
i.	Grand Total (Sum rows (a) through	\$427,000			\$427,000		
	(h) for each column)						
j.	Can the Project be phased? ☐ Yes	⊠ No If yes , p	rovide cost breakd	own by phases			
		Project Cost	O&M Cost	Descriptio	n of Phase		
	Phase 1						
	Phase 2						
	Phase 3 Phase 4						
k.	Explain how operation and maintenan	ce costs will be	Funding for O&N	of this project v	vill come from		
κ.	financed for the 20-year planning peri		the Plumas Coun				
	implementation (not grant funded).	ou ioi piojooi	budget.	o, 2 opareo			
I.			☐ Yes ☒ No				
m.	Describe what impact there may be if	the project is	Continued bank erosion and water turbidity				
4	not funded (300 words or less)						
	*List all sources of funding.						
	Note: See Project Development Manual, Exhibit B, for assistance in completing this table (http://featherriver.org/documents/).						
(110	(http://reathernver.org/documents/).						

VIII. PROJECT STATUS AND SCHEDULE

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	×	☐ Yes ☑ No ☐ N/A	3,333.33.0	Upon execution of grant agreement	1 month after funding agreement
b. Final Design		☐ Yes ⊠ No □ N/A		2 months after funding secured	4 months after funding secured
c. Environmental Documentation (CEQA / NEPA)		☐ Yes ⊠ No □ N/A		4 months after funding secured	7 months after funding secured
d. Permitting		☐ Yes ⊠ No □ N/A		7 months after funding secured	8.5 months after funding secured
e. Construction Contracting		☐ Yes ⊠ No □ N/A		8.5 months after funding secured	9 months after funding secured
f. Construction Implementation		☐ Yes ⊠ No □ N/A		9 months after funding secured	12 months after funding secured
Provide explanation stage is checked as c					

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	Water Quality Control Plan for the			
	project is consistent with or supported by (e.g. General	Sacramento and San Joaquin River			
	Plans, UWMPs, GWMPs, Water Master Plan, Habitat	Basins			
	Conservation Plans, TMDLs, Basin Plans, etc.).				
b.	List technical reports and studies supporting the	NA			
	feasibility of this project.				
	, , ,				
c.	Concisely describe the scientific basis (e.g. how much	For the protection of aquatic species			
	research has been conducted) of the proposed project in	and habitat, sediment loads (TSS,			
	300 words or less.	turbidity, etc.) in streams and rivers are			
		regulated by the Water Quality Control			
		Plan for the Sacramento and San			
		Joaquin River Basins (Basin Plan) and by			
		established TMDLs. This project will			
		reduce sediment inputs to local			
		waterways in support of compliance			
		with the Basin Plan and established			
		TMDLs.			
d.	Does the project implement green technology (e.g.	☐ Yes ☒ No ☐ N/A			
	alternate forms of energy, recycled materials, LID	If yes, please describe.			
	techniques, etc.).	ii yes, pieuse deseribe.			
	• • •				
e.	Are you an Urban Water Supplier ¹ ?	☐ Yes ☒ No ☐ N/A			
f.	Are you are an Agricultural Water Supplier ² ?	☐ Yes ☒ No ☐ N/A			
g.	Is the project related to groundwater?	☐ Yes ☒ No ☐ N/A			
3.		If yes, please indicate which			
		groundwater basin.			
		0. 5			
1 []	rban Water Supplier is defined as a supplier, either publicly o	or privately owned, providing water for			
	inicipal purposes either directly or indirectly to more than 3,				
	3,000 acre-feet of water annually.				
	gricultural Water Supplier is defined as a water supplier, eith	ner publicly or privately owned, providing			
	ter to 10,000 or more irrigated acres, excluding the acreage				

Climate Change – Project Assessment Checklist

This climate change project assessment tool allows project applicants and the planning team to assess project consistency with Proposition 84 plan standards and RWMG plan assessment standards. The tool is a written checklist that asks GHG emissions and adaptation/resiliency questions.

Name of project: MS-22: Wapaunsie Creek Erosion

Project applicant: Plumas County Department of Public Works- Engineering

GHG Emissions Assessment

Project Construction Emissions (If you check any of the boxes, please see the attached worksheet)
 ☑ The project requires nonroad or off-road engines, equipment, or vehicles to complete. ☑ The project requires materials to be transported to the project site. ☑ The project requires workers to commute to the project site. ☑ The project is expected to generate GHG emissions for other reasons. ☑ The project does not have a construction phase and/or is not expected to generate GHG emissions during the construction phase.
Operating Emissions (If you check any of the boxes, please see the attached worksheet)
The project requires energy to operate.
The project will generate electricity.
The project will proactively manage forests to reduce wildfire risk.
The project will affect wetland acreage.
The project will include new trees.
Project operations are expected to generate or reduce GHG emissions for other reasons.

Adaptation & Resiliency Assessment

Water Supply
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water supply vulnerability issues:
Not applicable □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □
Reduced snowmelt
Unmet local water needs (drought)
Increased invasive species
Water Demand Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water demand vulnerability issues:
Not applicable ■ Not applicable Not applicable
Increasing seasonal water use variability
Unmet in-stream flow requirements
Climate-sensitive crops
Groundwater drought resiliency
Water curtailment effectiveness

Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water quality vulnerability issues:
 Not applicable ☐ Increasing catastrophic wildfires ☐ Eutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and
other related water quality issues) Seasonal low flows and limited abilities for waterbodies to assimilate pollution Water treatment facility operations Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold freshwater
habitat, spawning habitat, wildlife habitat, etc.)
Flooding Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues:

Water Quality

Upper Feather River Integrated Regional Water Management Plan Climate Change- Project Assessment Tool

Ecosystem and Habitat Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority ecosystem and habitat vulnerability issues:
 Not applicable □ Climate-sensitive fauna or flora □ Recreation and economic activity □ Quantified environmental flow requirements ⋈ Erosion and sedimentation □ Endangered or threatened species □ Fragmented habitat
The project when completed will reduce the erosion and sedimentation in creek.
Hydropower Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority hydropower vulnerability issues: Not applicable Reduced hydropower output

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-22: Wapaunsie Creek Erosion

GHG Emissions Analysis

Project Construction Emissions

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

	Maximum		
	Number Per	Total 8-Hour Days in	
Type of Equipment	Day	Operation	Total MTCO₂e
Excavators	1	5	2
Tractors/Loaders/Bac			
khoes	2	5	3
Dumpers/Tenders	1	5	0
Off-Highway Trucks	1	5	6
			0
			0
			0
			0
			0
			0
		Total Emissions	11

_	
Х	The project requires materials to be transported to the project site. If yes:

	Average Trip	
Total Number of	Distance	
Round Trips	(Miles)	Total MTCO₂e
10	30	0

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

		Average Round Trip		
Average Number of Workers		Distance Traveled (Miles)	Talah MTCO	
or workers	of Workdays	(ivilles)	Total MTCO₂e	
	10	60		1

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-22: Wapaunsie Creek Erosion							
Project Op	Project Operating Emissions							
The projec	The project requires energy to operate. If yes:							
_	Annual Energy Needed	Unit	Total MTCO₂e					
		kWh (Electricity)	0					
		Therm (Natural Gas)	0					
The projec	The project will generate electricity. If yes:							
	Annual kWh Generated	Total MTCO₂e						
		0						
	*A negative value indicates GHG re	ductions						
The projec	t will proactively manage forests to		yes:					
	Acres Protected from Wildfire	Total MTCO₂e						
		0						
	*A negative value indicates GHG re-	ductions						
The projec	t will affect wetland acreage. If yes:		1					
	Acres of Protected Wetlands	Total MTCO₂e						
0								
	*A negative value indicates GHG re-	ductions						
The projec	t will include new trees. If yes:							
. ,	Acres of Trees Planted	Total MTCO₂e]					
	0							
	*A negative value indicates GHG re		J					
	.0							
Project ope	erations are expected to generate o	r reduce GHG emissior	ns for other reasons. If yes,					
explain:								
								
GHG Emissions Summary								
	on and development will generate a	nnroximately:	13 MTCO ₂ e					
	ear, operation of the project will re		0 MTCO ₂ e					
iii a giveli y	in a given year, operation of the project will result in.							



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 County Department of Public Works – Engineering		
Name of Primary Contact	Robert A. Perreault , Jr., Director of Public works		
Name of Secondary Contact	Robert Thorman, Engineering Technician II		
Mailing Address	1834 East Main Street, Quincy, CA 95971		
E-mail	bobperreault@countyofplumas.com		
Phone	(530) 283-6222		
Other Cooperating Agencies /	NA		
Organizations / Stakeholders			
Is your agency/organization	Yes		
committed to the project through			
completion? If not, please explain			

II. GENERAL PROJECT INFORMATION

Project Title	MS-23: Stampfli Lane Bridge Erosion
Project Category	☐ Agricultural Land Stewardship
	☐ Floodplains/Meadows/Waterbodies
	☐ Tribal Advisory Committee
	☐ Uplands/Forest
Project Description (Briefly describe the project, in 300 words or less)	Significant bank erosion has occurred upstream and downstream from the Stampfli Lane bridge on Indian Creek and is in need of erosion protection by means of rip rap to reduce the turbidity of the stream from erosion.
Project Location Description (e.g., along the south bank of stream/river between river miles or miles from Towns/intersection and/or address):	Upstream and downstream from the Stampfli Lane bridge on Indian Creek
Latitude:	40 degrees 06' 29" N
Longitude:	120 degrees 51' 40" W

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.

	Will the project		Quantification (e.g. acres of
	address		streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Restore natural hydrologic	⊠ Yes	Restore hydrologic function by	Reduces significant
functions.		reducing stream bank erosion	erosion and
	□ N/A	and turbidity in Indian Creek.	turbidity.
Reduce potential for	☐ Yes		
catastrophic wildland fires in			
the Region.	⊠ N/A		
Build communication and	☐ Yes		
collaboration among water			
resources stakeholders in the	⊠ N/A		
Region.			
Work with DWR to develop	☐ Yes		
strategies and actions for the			
management, operation, and	⊠ N/A		
control of SWP facilities in the			
Upper Feather River			
Watershed in order to increase			
water supply, recreational, and			
environmental benefits to the			
Region. Encourage municipal service	☐ Yes		
providers to participate in	⊔ res		
regional water management	⊠ N/A		
actions that improve water	M N/A		
supply and water quality.			
Continue to actively engage in	☐ Yes		
FERC relicensing of			
hydroelectric facilities in the	⊠ N/A		
Region.			
Address economic challenges	☐ Yes		
of municipal service providers			
to serve customers.	⊠ N/A		
	·		
Protect, restore, and enhance	⊠ Yes	Restore clarity Indian Creek by	Reduces significant
the quality of surface and		reducing stream bank erosion	erosion in Indian
groundwater resources for all	□ N/A	and turbidity. Reducing erosion	Creek and turbidity
beneficial uses, consistent with		and turbidity in Indian Creek	in both Indian
the RWQC Basin Plan.		also translates into reduced	Creek and Middle
		turbidity in the Middle Fork of	Fork of the Feather

	Will the		Quantification
	project address		(e.g. acres of
Linnar Footbar Divor IDM/M	the	Priof cyplomation of project	streams/wetlands restored or
Upper Feather River IRWM		Brief explanation of project	enhanced)
Objectives:	objective?	linkage to selected Objective the Feather River.	River.
		the reather kiver.	River.
Address water resources and	☐ Yes		
wastewater needs of DACs and			
Native Americans.	⊠ N/A		
Coordinate management of	☐ Yes		
recharge areas and protect			
groundwater resources.	⊠ N/A		
Improve coordination of land	☐ Yes		
use and water resources			
planning.	⊠ N/A		
Maximize agricultural <u>,</u>	☐ Yes		
environmental and municipal			
water use efficiency.	⊠ N/A		
Effectively address climate	☐ Yes		
change adaptation and/or			
mitigation in water resources	⊠ N/A		
management.			
Improve efficiency and	☐ Yes		
reliability of water supply and			
other water-related	⊠ N/A		
infrastructure.			
Enhance public awareness and	☐ Yes		
understanding of water			
management issues and needs.	⊠ N/A		
Address economic challenges	☐ Yes		
of agricultural producers.			
	⊠ N/A		
Work with counties/	⊠ Yes	Plumas County Department of	
communities/groups to make		Public Works is committed to	
sure staff capacity exists for	□ N/A	the successful implementation	
actual administration and		of this project. We will ensure	
implementation of grant		the staff capacity exists to	
funding.		administer and implement the	
		grant project.	
If no objectives are addressed, d Region:	escribe how th	ne project relates to a challenge or	opportunity for the

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	⊠ N/A		
b.	Disadvantaged Communities ¹		The project is located in a severely	
		□ N/A	disadvantaged community tract and would benefit the community by	
			enhancing water quality in Indian Creek	
			which runs through the community.	
c.	Environmental Justice ²			
		⊠ N/A		
d.	Drought Preparedness			
		⊠ N/A		
e.	Assist the region in adapting to effects of climate change ³	⊠ NI/A		
	cimate change	⊠ N/A		
f.	Generation or reduction of greenhouse			
	gas emissions (e.g. green technology)	⊠ N/A		
g.	Other expected impacts or benefits that		Benefit of reduced erosion and turbidity	
	are not already mentioned elsewhere	□ N/A	in the creek and tributaries.	
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 En	² Environmental Justice is defined as the fair treatment of people of all races, cultures, and incomes			

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

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/).

	Will the Project	
	incorporate	Description of how RMS to be employed,
Resource Management Strategy	RMS?	if applicable
Reduce Water Demand		
Agricultural Water Use Efficiency	☐ Yes ☒ No	
Urban water use efficiency	☐ Yes ⊠ No	
Improve Flood Management		
Flood management		Reduced erosion in creeks results in less
	oxtimes Yes $oxtimes$ No	sediment in rivers and better flood
		management.
Improve Operational Efficiency and T	ransfers	
Conveyance – regional/local	☐ Yes ⊠ No	
System reoperation	☐ Yes ⊠ No	
Water transfers	☐ Yes ⊠ No	
Increase Water Supply		
Conjunctive management	☐ Yes ⊠ No	
Precipitation Enhancement	☐ Yes ⊠ No	
Municipal recycled water	☐ Yes ⊠ No	
Surface storage – regional/local	☐ Yes ⊠ No	

	Will the Project incorporate	Description of how RMS to be employed,					
Resource Management Strategy	RMS?	if applicable					
Improve Water Quality	T						
Drinking water treatment and	☐ Yes ⊠ No						
distribution Groundwater remediation/aquifer							
remediation	☐ Yes ⊠ No						
Matching water quality to water use	☐ Yes ☒ No						
Pollution prevention	☐ Yes ⊠ No						
Salt and salinity management	☐ Yes ⊠ No						
Urban storm water runoff management	☐ Yes ⊠ No						
Practice Resource Stewardship							
Agricultural land stewardship	☐ Yes ⊠ No						
Ecosystem restoration	☐ Yes ⊠ No						
Forest management	☐ Yes ⊠ No						
Land use planning and management	☐ Yes ⊠ No						
Recharge area protection	☐ Yes ⊠ No						
Sediment management	⊠ Yes □ No	Reduced sediment in creeks & rivers					
Watershed management	☐ Yes ⊠ No						
People and Water							
Economic incentives	☐ Yes ⊠ No						
Outreach and engagement	☐ Yes ⊠ No						
Water and culture	☐ Yes ⊠ No						
Water-dependent recreation	☐ Yes ⊠ No						
Wastewater/NPDES	☐ Yes ⊠ 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?: ☐ Yes ☒ No								
Funding Match Waiver request?: Yes 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	\$20,000			\$20,000			
b.	Land Purchase/Easement							
c.	Planning/Design/Engineering / Environmental	\$25,000			\$25,000			
d.	Construction/Implementation	\$300,000			\$300,000			
e.	Environmental Compliance/ Mitigation/Enhancement	\$10,000			\$10,000			
f.	Construction Administration	\$45,000			\$45,000			
g.	Other Costs							
h.	Construction/Implementation Contingency	\$32,000			\$32,000			
i.	Grand Total (Sum rows (a) through (h) for each column)	\$432,000			\$432,000			
j.	· Can the Project be phased? ☐ Yes ☒ 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).		Funding for O&M of this project will come from the Plumas County Department of Public Works budget.					
l.	Has a Cost/Benefit analysis been completed?		☐ Yes ☒ No					
m.	n. Describe what impact there may be if the project is not funded (300 words or less)		Continued bank erosion and water turbidity					
*List all sources of funding.								
Note: See Project Development Manual, Exhibit B, for assistance in completing this table								
(http://featherriver.org/documents/).								

VIII. PROJECT STATUS AND SCHEDULE

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**.

Businest Change	Check the Current Project	Complete d2	Description of Activities in Each	Planned/ Actual Start	Planned/ Actual Completion
Project Stage		Completed?	Project Stage	Date (mm/yr)	Date (mm/yr) 1 month after
a. Assessment a Evaluation		☐ Yes ☑ No ☐ N/A		Upon execution of grant agreement	funding agreement
b. Final Design		☐ Yes ⊠ No □ N/A		2 months after funding secured	4 months after funding secured
c. Environmenta Documentati (CEQA / NEPA	on 🗆	☐ Yes ⊠ No □ N/A		4 months after funding secured	7 months after funding secured
d. Permitting		☐ Yes ⊠ No □ N/A		7 months after funding secured	8.5 months after funding secured
e. Construction Contracting		☐ Yes ⊠ No □ N/A		8.5 months after funding secured	9 months after funding secured
f. Construction Implementat	ion 🗆	☐ Yes ⊠ No □ N/A		9 months after funding secured	12 months after funding secured
•	tion if more than 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	Water Quality Control Plan for the
	project is consistent with or supported by (e.g. General	Sacramento and San Joaquin River
	Plans, UWMPs, GWMPs, Water Master Plan, Habitat	Basins
	Conservation Plans, TMDLs, Basin Plans, etc.).	
b.	List technical reports and studies supporting the	NA
	feasibility of this project.	
c.	Concisely describe the scientific basis (e.g. how much	For the protection of aquatic species
	research has been conducted) of the proposed project in	and habitat, sediment loads (TSS,
	300 words or less.	turbidity, etc.) in streams and rivers are
		regulated by the Water Quality Control
		Plan for the Sacramento and San
		Joaquin River Basins (Basin Plan) and by
		established TMDLs. This project will
		reduce sediment inputs to local
		waterways in support of compliance
		with the Basin Plan and established
		TMDLs.
d.	Does the project implement green technology (e.g.	☐ Yes ☒ No ☐ N/A
	alternate forms of energy, recycled materials, LID	If yes, please describe.
	techniques, etc.).	
e.	Are you an Urban Water Supplier ¹ ?	☐ Yes ☒ No ☐ N/A
f.	Are you are an Agricultural Water Supplier ² ?	☐ Yes ☒ No ☐ N/A
g.	Is the project related to groundwater?	☐ Yes ☒ No ☐ N/A
	. ,	If yes, please indicate which
		groundwater basin.
		g, canada a a a a a a a a a a a a a a a a a
1		
¹ U	rban Water Supplier is defined as a supplier, either publicly o	pr privately owned, providing water for
	rban Water Supplier is defined as a supplier, either publicly on incipal purposes either directly or indirectly to more than 3,	· · · · · · · · · · · · · · · · · · ·
mι	inicipal purposes either directly or indirectly to more than 3,0	· · · · · · · · · · · · · · · · · · ·
mu 3,0		000 customers or supplying more than

Climate Change – Project Assessment Checklist

This climate change project assessment tool allows project applicants and the planning team to assess project consistency with Proposition 84 plan standards and RWMG plan assessment standards. The tool is a written checklist that asks GHG emissions and adaptation/resiliency questions.

Name of project: MS-23: Stampfli Lane Bridge Erosion

Project applicant: Plumas County Department of Public Works- Engineering

GHG Emissions Assessment

Project Construction Emissions (If you check any of the boxes, please see the attached worksheet)
 ☑ The project requires nonroad or off-road engines, equipment, or vehicles to complete. ☑ The project requires materials to be transported to the project site. ☑ The project requires workers to commute to the project site. ☐ The project is expected to generate GHG emissions for other reasons. ☐ The project does not have a construction phase and/or is not expected to generate GHG emissions during the construction phase.
Operating Emissions (If you check any of the boxes, please see the attached worksheet)
The project requires energy to operate.
The project will generate electricity.
The project will proactively manage forests to reduce wildfire risk.
The project will affect wetland acreage.
The project will include new trees.
Project operations are expected to generate or reduce GHG emissions for other reasons.

Adaptation & Resiliency Assessment

Water Supply
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water supply vulnerability issues:
Not applicable ■ Not applicable Not applicable
Reduced snowmelt
Unmet local water needs (drought)
☐ Increased invasive species
Water Demand
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water demand vulnerability issues:
Not applicable ■ Not applicable Not applicable
☐ Increasing seasonal water use variability
Unmet in-stream flow requirements
Climate-sensitive crops
Groundwater drought resiliency
Water curtailment effectiveness

Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water quality vulnerability issues:
Not applicable ■ Not applicable Not applicable
☐ Increasing catastrophic wildfires
Eutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and other related water quality issues)
Seasonal low flows and limited abilities for waterbodies to assimilate pollution
Water treatment facility operations
Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold freshwater habitat, spawning habitat, wildlife habitat, etc.)
Flooding Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain Insufficient flood control facilities
By reducing erosion and sedimentation, the creek will be capable of carrying increased flood waters.

Water Quality

Upper Feather River Integrated Regional Water Management Plan Climate Change- Project Assessment Tool

Ecosystem and Habitat Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority ecosystem and habitat vulnerability issues:
 Not applicable □ Climate-sensitive fauna or flora □ Recreation and economic activity □ Quantified environmental flow requirements ☑ Erosion and sedimentation
☐ Endangered or threatened species ☐ Fragmented habitat
The project when completed will reduce the erosion and sedimentation in creek.
Hydropower Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority hydropower vulnerability issues: Not applicable Reduced hydropower output

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-23: Stampfli Lane Bridge Erosion

GHG Emissions Analysis

Project Construction Emissions

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

	Maximum		
	Number Per	Total 8-Hour Days in	
Type of Equipment	Day	Operation	Total MTCO₂e
Excavators	1	5	2
Tractors/Loaders/Bac			
khoes	2	5	3
Dumpers/Tenders	1	5	0
Off-Highway Trucks	1	5	6
			0
			0
			0
			0
			0
			0
		Total Emissions	11

Χ	The project requires materials to be transported to the project site.	If yes:

	Average Trip	
Total Number of	Distance	
Round Trips	(Miles)	Total MTCO₂e
10	30	0

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

 e requires trainers to commute to the project site in year					
		Average Round Trip			
Average Number	Total Number	Distance Traveled			
of Workers	of Workdays	(Miles)	Total MTCO₂e		
5	10	60	_	1	

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

MS-23: Stampfli Lane Bridge Erosion **Project Operating Emissions** The project requires energy to operate. If yes: Total MTCO₂e Annual Energy Needed Unit kWh (Electricity) Therm (Natural Gas) The project will generate electricity. If yes: Annual kWh Generated Total MTCO₂e *A negative value indicates GHG reductions The project will proactively manage forests to reduce wildfire risk. If yes: Acres Protected from Wildfire Total MTCO₂e 0 *A negative value indicates GHG reductions The project will affect wetland acreage. If yes: Acres of Protected Wetlands Total MTCO₂e 0 *A negative value indicates GHG reductions The project will include new trees. If yes: Total MTCO₂e Acres of Trees Planted 0 *A negative value indicates GHG reductions Project operations are expected to generate or reduce GHG emissions for other reasons. If yes, **GHG Emissions Summary** Construction and development will generate approximately: 13 MTCO2e 0 MTCO₂e In a given year, operation of the project will result in:



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 County Department of Public Works – Engineering		
Name of Primary Contact	Robert A. Perreault , Jr., Director of Public works		
Name of Secondary Contact	Robert Thorman, Engineering Technician II		
Mailing Address	1834 East Main Street, Quincy, CA 95971		
E-mail	bobperreault@countyofplumas.com		
Phone	(530) 283-6222		
Other Cooperating Agencies /	NA		
Organizations / Stakeholders			
Is your agency/organization	Yes		
committed to the project through			
completion? If not, please explain			

II. GENERAL PROJECT INFORMATION

Project Title	MS-24:Walker Ranch CSD Infrastructure Improvements
Project Category	☐ Agricultural Land Stewardship
	☐ Floodplains/Meadows/Waterbodies
	☐ Tribal Advisory Committee
	☐ Uplands/Forest
Project Description	The aging water supply system has leaks resulting in
(Briefly describe the project,	significant water losses.
in 300 words or less)	The system needs an exfiltration water study to determine
	definitively the extent of water loss.
	W. H. B. L. G
Project Location Description (e.g.,	Walker Ranch Community Services District is located on the
along the south bank of stream/river	Lake Almanor Peninsula near State Route 36 and County Road
between river miles or miles from	A13.
Towns/intersection and/or address):	
Latitude:	40 degrees 17' North
Longitude:	120 degrees 8' West

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	Will the project address the	Brief explanation of project	Quantification (e.g. acres of streams/wetlands restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Restore natural hydrologic	☐ Yes		
functions.			
	⊠ N/A		
Reduce potential for	☐ Yes		
catastrophic wildland fires in			
the Region.	⊠ N/A		
Build communication and	☐ Yes		
collaboration among water			
resources stakeholders in the	⊠ N/A		
Region.			
Work with DWR to develop	☐ Yes		
strategies and actions for the			
management, operation, and	⊠ N/A		
control of SWP facilities in the			
Upper Feather River			
Watershed in order to increase			
water supply, recreational, and environmental benefits to the			
Region.	☐ Yes		
Encourage municipal service providers to participate in	□ Yes		
regional water management	N N/A		
actions that improve water	⊠ N/A		
supply and water quality.			
Continue to actively engage in	☐ Yes		
FERC relicensing of			
hydroelectric facilities in the	⊠ N/A		
Region.			
Address economic challenges	☐ Yes		
of municipal service providers			
to serve customers.	⊠ N/A		
Protect, restore, and enhance	☐ Yes		
the quality of surface and			
groundwater resources for all	⊠ N/A		
beneficial uses, consistent with			
the RWQC Basin Plan.			

Upper Feather River IRWM	Will the project address the	Brief explanation of project	Quantification (e.g. acres of streams/wetlands restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Address water resources and	☐ Yes		
wastewater needs of DACs and			
Native Americans.	⊠ N/A		
Coordinate management of	☐ Yes		
recharge areas and protect			
groundwater resources.	⊠ N/A		
Improve coordination of land use and water resources	☐ Yes		
planning.	⊠ N/A		
Maximize agricultural,	⊠ Yes	Reduced water loss through the	10 miles of water
environmental and municipal		distribution system making the	mains and laterals
water use efficiency.	□ N/A	system more water efficient	tested for leaks.
		and conserving water by	
		eliminating the loss.	
Effectively address climate	☐ Yes		
change adaptation and/or			
mitigation in water resources management.	⊠ N/A		
Improve efficiency and	⊠ Yes	Improve efficiency by reduced	10 miles of water
reliability of water supply and		water loss making the system	mains and laterals
other water-related	□ N/A	more water efficient and	tested for leaks.
infrastructure.		conserving water by eliminating	
		the loss.	
Enhance public awareness and understanding of water	☐ Yes		
management issues and needs.	⊠ N/A		
Address economic challenges	☐ Yes		
of agricultural producers.			
	⊠ N/A		
Work with counties/	⊠ Yes	Plumas County Department of	
communities/groups to make		Public Works and Walker Ranch	
sure staff capacity exists for	□ N/A	CSD are committed to the	
actual administration and		successful implementation of	
implementation of grant		this project. We will ensure the	
funding.		staff capacity exists to	
		administer and implement the	
		grant project.	

If no objectives are addressed, describe how the Region:	project rela	ates to a challenge or opportunity for the
IV. PROJECT IMPACTS AND BENEFITS Please provide a summary of the expected proje if not applicable; do no leave a blank cell. Note		
If applicable, describe benefits or impacts of the	e project w	ith respect to:
a. Native American Tribal Communities	⊠ N/A	
b. Disadvantaged Communities ¹	□ N/A	The project is located in a disadvantaged community and would benefit the community by reducing water loss in the water system at Walker Ranch CSD.
c. Environmental Justice ²	□ N/A	
d. Drought Preparedness	□ N/A	Reduced water loss in the system equates to more water available during a drought.
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 consincome that is less than 80 percent of the Statew the UFR website (http://featherriver.org/maps/) ² Environmental Justice is defined as the fair treat with respect to the development, adoption, implied regulations and policies. An example of environm (e.g. water supply, flooding, sanitation) in an are ³ Climate change effects are likely to include incresseondary effects such as increased wildfire risk.	vide annual atment of pole lementation mental justic a of racial r reased flood	MHI. DWR's DAC mapping is available on eople of all races, cultures, and incomes and enforcement of environmental laws, ce benefit would be to improve conditions minorities.

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

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/).

	Will the Project	
	incorporate	Description of how RMS to be employed,
Resource Management Strategy	RMS?	if applicable
Reduce Water Demand		
Agricultural Water Use Efficiency	☐ Yes ⊠ No	
Urban water use efficiency	⊠ Yes □ No	Water efficiency by eliminating the loss
Improve Flood Management		
Flood management	☐ Yes ⊠ No	
Improve Operational Efficiency and Transfers		
Conveyance – regional/local	⊠ Yes □ No	Study will result in repairs and
	⊠ res □ NO	improvements to infrastructure
System reoperation	⊠ Yes □ No	More efficient water use to reduce demand
	△ res ⊔ no	on groundwater.
Water transfers	☐ Yes ⊠ No	
Increase Water Supply		
Conjunctive management	☐ Yes ⊠ No	
Precipitation Enhancement	☐ Yes ⊠ No	
Municipal recycled water	☐ Yes ⊠ No	
Surface storage – regional/local	☐ Yes ⊠ No	

Resource Management Strategy	Will the Project incorporate RMS?	Description of how RMS to be employed, if applicable
Improve Water Quality	IXIVIS:	п аррпсавте
Drinking water treatment and distribution	□ Yes ⊠ No	
Groundwater remediation/aquifer remediation	□ Yes ⊠ No	
Matching water quality to water use	□ Yes ⊠ No	
Pollution prevention	⊠ Yes □ No	Repairing leaks will prevent possible contamination
Salt and salinity management	☐ Yes ⊠ No	
Urban storm water runoff management	□ Yes ⊠ No	
Practice Resource Stewardship		
Agricultural land stewardship	☐ Yes ⊠ No	
Ecosystem restoration	☐ Yes ⊠ No	
Forest management	☐ Yes ⊠ No	
Land use planning and management	□ Yes ⊠ No	
Recharge area protection	☐ Yes ⊠ No	
Sediment management	☐ Yes ⊠ No	
Watershed management	☐ Yes ⊠ No	
People and Water		
Economic incentives	☐ Yes ⊠ No	
Outreach and engagement	☐ Yes ⊠ No	
Water and culture	☐ Yes ⊠ No	
Water-dependent recreation	☐ Yes ⊠ No	
Wastewater/NPDES	☐ Yes ⊠ No	
Other RMS addressed and explanation	n:	

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?: ☐ Yes ☒ No					
Funding Match Waiver request?: ☐ Yes ☒ 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	\$10,000			\$10,000	
b. Land Purchase/Easement					
c. Planning/Design/Engineering / Environmental	\$10,000			\$10,000	
d. Construction/Implementation	\$63,000			\$63,000	
e. Environmental Compliance/ Mitigation/Enhancement	\$3,000			\$3,000	
f. Construction Administration	\$10,000			\$10,000	
g. Other Costs					
h. Construction/Implementation Contingency	\$4,000			\$4,000	
i. Grand Total (Sum rows (a) through (h) for each column)	\$100,000			\$100,000	
j. Can the Project be phased? ☐ Yes	⊠ No If yes , p	rovide cost breakd	own by phases		
	Project Cost	O&M Cost	Descriptio	n of Phase	
Phase 1					
Phase 2					
Phase 3 Phase 4					
k. Explain how operation and maintenar	ce costs will be	The evaluation w	ill result in repai	rs and	
financed for the 20-year planning peri		improvements to	•		
implementation (not grant funded).		maintained with	ratepayer's fees.		
I. Has a Cost/Benefit analysis been comp	oleted?	☐ Yes ⊠ No			
m. Describe what impact there may be if	the project is	Continued loss of	water through t	the distribution	
not funded (300 words or less) *List all sources of funding.		system.			
Note: See Project Development Manual, E.	xhibit B, for assist	cance in completing	this table		
(http://featherriver.org/documents/).	-		-		

VIII. PROJECT STATUS AND SCHEDULE

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	Com	pleted?	Description of Activities in Each Project Stage	Planned/ Actual Start Date (mm/yr)	Planned/ Actual Completion Date (mm/yr)
a. Assessment and	Juage		Yes	Project Stage	Upon execution	3 months after
Evaluation			No		of grant	funding
			N/A		agreement	agreement
b. Final Design			Yes		4 months after	6 months after
		\boxtimes	No		funding secured	funding secured
			N/A			
c. Environmental			Yes		7 months after	9 months after
Documentation		\boxtimes	No		funding secured	funding secured
(CEQA / NEPA)			N/A			
d. Permitting			Yes		10 months after	12 months after
		\boxtimes	No		funding secured	funding secured
			N/A			
e. Construction			Yes		13 months after	14 months after
Contracting		\boxtimes	No		funding secured	funding secured
			N/A			
f. Construction			Yes		15 months after	18 months after
Implementation		\boxtimes	No		funding secured	funding secured
			N/A			
Provide explanation if more than one project					•	
stage is checked as c	urrent status	i				

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	NA
	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	NA
	feasibility of this project.	
c.	Concisely describe the scientific basis (e.g. how much	Water loss is documented by the
	research has been conducted) of the proposed project in	difference between well meter readings
	300 words or less.	and end user meter readings. The
		analysis will identify the locations of the
		leaks so they can be repaired.
d.	Does the project implement green technology (e.g.	☐ Yes ☒ No ☐ N/A
	alternate forms of energy, recycled materials, LID	If yes, please describe.
	techniques, etc.).	in yes, piedse desembe.
e.	Are you an Urban Water Supplier ¹ ?	☐ Yes ☒ No ☐ N/A
f.	Are you are an Agricultural Water Supplier ² ?	☐ Yes ☒ No ☐ N/A
g.	Is the project related to groundwater?	⊠ Yes □ No □ N/A
		If yes, please indicate which
		groundwater basin.
1		Lake Almanor basin
	rban Water Supplier is defined as a supplier, either publicly	
	unicipal purposes either directly or indirectly to more than 3,	000 customers or supplying more than
	000 acre-feet of water annually.	and the form of the first of the second of t
	gricultural Water Supplier is defined as a water supplier, eith	
wa	ter to 10,000 or more irrigated acres, excluding the acreage	mar receives recycled Water.

Climate Change – Project Assessment Checklist

This climate change project assessment tool allows project applicants and the planning team to assess project consistency with Proposition 84 plan standards and RWMG plan assessment standards. The tool is a written checklist that asks GHG emissions and adaptation/resiliency questions.

Name of project: MS-24 Walker Ranch CSD Infrastructure Improvements

Project applicant: Plumas County Department of Public Works- Engineering

GHG Emissions Assessment

GITG EITHSSIOTIS ASSESSMENT
Project Construction Emissions (If you check any of the boxes, please see the attached worksheet)
 ☐ The project requires nonroad or off-road engines, equipment, or vehicles to complete. ☑ The project requires materials to be transported to the project site. ☑ The project requires workers to commute to the project site. ☐ The project is expected to generate GHG emissions for other reasons. ☐ The project does not have a construction phase and/or is not expected to generate GHG emissions during the construction phase.
Operating Emissions (If you check any of the boxes, please see the attached worksheet)
The project requires energy to operate.
The project will generate electricity.
The project will proactively manage forests to reduce wildfire risk.
The project will affect wetland acreage.
The project will include new trees.
Project operations are expected to generate or reduce GHG emissions for other reasons.

Adaptation & Resiliency Assessment

Water Supply Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water supply vulnerability issues:
 Not applicable Reduced snowmelt Unmet local water needs (drought) Increased invasive species
Water Demand Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water demand vulnerability issues:
☐ Not applicable
☐ Increasing seasonal water use variability
Unmet in-stream flow requirements
Climate-sensitive crops
Groundwater drought resiliency
Water curtailment effectiveness
Decreasing the amount of water loss in the water system requires less water to be pumped from the ground.

Water Quality Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water quality vulnerability issues:
Not applicable
Increasing catastrophic wildfires
Eutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and other related water quality issues)
Seasonal low flows and limited abilities for waterbodies to assimilate pollution
Water treatment facility operations
Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold freshwater habitat, spawning habitat, wildlife habitat, etc.)
Project has beneficial use of saving domestic water by eliminating the loss in the distribution system.
Flooding Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues:
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues:
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues:
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires

Ecosystem and Habitat
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority ecosystem and habitat vulnerability issues:
Not applicable ■ Not applicable Not applicable
Climate-sensitive fauna or flora
Recreation and economic activity
Quantified environmental flow requirements
Erosion and sedimentation
☐ Endangered or threatened species
Fragmented habitat
Hydropower Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority hydropower vulnerability issues:
Not applicable
Reduced hydropower output

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-24: Walker Ranch CSD Infrastructure Improvements

GHG Emissions Analysis

Project Construction Emissions

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

	Maximum		
	Number Per	Total 8-Hour Days in	
Type of Equipment	Day	Operation	Total MTCO₂e
Tractors/Loaders/Bac			
khoes	1	10	3
Other Construction			
Equipment	2	10	2
			0
			0
			0
			0
			0
			0
			0
			0
	_	Total Emissions	4

Χ	The project requires materials to be transported to the project site. If y	es

		<u>' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' </u>
	Average Trip	
Total Number of	Distance	
Round Trips	(Miles)	Total MTCO₂e
4	60	0

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

J	Total Number	Average Round Trip Distance Traveled		
of Workers	of Workdays	(Miles)	Total MTCO₂e	
3	10	60		1

		ng emissions for c	other reasons. If yes,	explain:	
			•	•	
The project does not have construction phase.	a construct	ion phase and/or i	is not expected to ge	nerate GHG	emissions during t

MS-24: Walker Ranch CSD Infrastructure Improvements **Project Operating Emissions** The project requires energy to operate. If yes: Total MTCO₂e Annual Energy Needed Unit kWh (Electricity) Therm (Natural Gas) The project will generate electricity. If yes: Annual kWh Generated Total MTCO₂e *A negative value indicates GHG reductions The project will proactively manage forests to reduce wildfire risk. If yes: Acres Protected from Wildfire Total MTCO₂e 0 *A negative value indicates GHG reductions The project will affect wetland acreage. If yes: Acres of Protected Wetlands Total MTCO₂e 0 *A negative value indicates GHG reductions The project will include new trees. If yes: Total MTCO₂e Acres of Trees Planted 0 *A negative value indicates GHG reductions Project operations are expected to generate or reduce GHG emissions for other reasons. If yes, **GHG Emissions Summary** Construction and development will generate approximately: 5 MTCO₂e 0 MTCO₂e In a given year, operation of the project will result in:



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 County Department of Public Works – Engineering			
Name of Primary Contact	Robert A. Perreault , Jr., Director of Public works			
Name of Secondary Contact	Robert Thorman, Engineering Technician II			
Mailing Address	1834 East Main Street, Quincy, CA 95971			
E-mail	bobperreault@countyofplumas.com			
Phone	(530) 283-6222			
Other Cooperating Agencies /	NA			
Organizations / Stakeholders				
Is your agency/organization	Yes			
committed to the project through				
completion? If not, please explain				

II. GENERAL PROJECT INFORMATION

Project Title	MS-25:Humbug Valley Road 307 Culvert Improvements		
Project Category	☐ Agricultural Land Stewardship		
	☐ Floodplains/Meadows/Waterbodies		
	☐ Tribal Advisory Committee		
	☐ Uplands/Forest		
Project Description	Seasonal flooding of Road 307 at three locations are in need of		
(Briefly describe the project,	new culverts to improve water flow, raising the road to		
in 300 words or less)	eliminate flooding, and armoring the roadside ditches to		
	prevent polluting adjacent lands and reduce ditch turbidity		
	flowing to streams.		
Project Location Description (e.g.,	Humbug Road 307 at mile marker 3.9, 5.1, and 6.8-6.9		
along the south bank of stream/river			
between river miles or miles from			
Towns/intersection and/or address):			
Latitude:	40 degrees 8' N		
Longitude:	121 degrees 15' W		

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.

	Will the		Quantification
	project		(e.g. acres of
	address		streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Restore natural hydrologic	☐ Yes	-	
functions.			
	⊠ N/A		
Reduce potential for	☐ Yes		
catastrophic wildland fires in			
the Region.	⊠ N/A		
Build communication and	☐ Yes		
collaboration among water			
resources stakeholders in the	⊠ N/A		
Region.	•		
Work with DWR to develop	☐ Yes		
strategies and actions for the			
management, operation, and	⊠ N/A		
control of SWP facilities in the			
Upper Feather River			
Watershed in order to increase			
water supply, recreational, and			
environmental benefits to the			
Region.			
Encourage municipal service	☐ Yes		
providers to participate in			
regional water management	⊠ N/A		
actions that improve water			
supply and water quality.			
Continue to actively engage in	☐ Yes		
FERC relicensing of			
hydroelectric facilities in the	⊠ N/A		
Region.			
Address economic challenges	☐ Yes		
of municipal service providers			
to serve customers.	⊠ N/A		
Protect, restore, and enhance	⊠ Yes	Reduced pollution entering the	Reduces turbidity
the quality of surface and	_	surrounding lands by	from drainage
groundwater resources for all	□ N/A	eliminating the roadway	ditch leading to
beneficial uses, consistent with		flooding and reduce turbidity	streams.
the RWQC Basin Plan.		from drainage ditches leading	
		to streams.	

	Will the		Quantification
	project		(e.g. acres of
	address		streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Address water resources and	☐ Yes		
wastewater needs of DACs and			
Native Americans.	⊠ N/A		
Coordinate management of	☐ Yes		
recharge areas and protect			
groundwater resources.	⊠ N/A		
Improve coordination of land use and water resources	☐ Yes		
planning.	⊠ N/A		
Maximize agricultural,	☐ Yes		
environmental and municipal			
water use efficiency.	⊠ N/A		
Effectively address climate	☐ Yes		
change adaptation and/or			
mitigation in water resources	⊠ N/A		
management.	,		
Improve efficiency and	☐ Yes		
reliability of water supply and			
other water-related	⊠ N/A		
infrastructure.			
Enhance public awareness and	☐ Yes		
understanding of water			
management issues and needs.	⊠ N/A		
Address economic challenges	☐ Yes		
of agricultural producers.			
	⊠ N/A		
Work with counties/	⊠ Yes	Plumas County Department of	
communities/groups to make		Public Works is committed to	
sure staff capacity exists for	□ N/A	the successful implementation	
actual administration and		of this project. We will ensure	
implementation of grant		the staff capacity exists to	
funding.		administer and implement the	
		grant project.	
If no objectives are addressed, d Region:	escribe how th	ne project relates to a challenge or	opportunity for the

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	⊠ N/A				
b. Disadvantaged Communities ¹	⊠ N/A				
c. Environmental Justice ²	⊠ N/A				
d. Drought Preparedness	⊠ N/A				
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	Benefit of reduced turbidity from drainage ditch leading to streams.			
¹ A Disadvantaged Community is defined as a comincome that is less than 80 percent of the Statewithe UFR website (http://featherriver.org/maps/) ² Environmental Justice is defined as the fair treat with respect to the development, adoption, imple regulations and policies. An example of environm	ide annual tment of pe ementatior	MHI. DWR's DAC mapping is available on eople of all races, cultures, and incomes and enforcement of environmental laws,			

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

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/).

	Will the Project incorporate	Description of how RMS to be employed,
Resource Management Strategy	RMS?	if applicable
Reduce Water Demand		
Agricultural Water Use Efficiency	☐ Yes ☒ No	
Urban water use efficiency	☐ Yes ⊠ No	
Improve Flood Management		
Flood management		Reduced erosion of roadway and ditches
	oxtimes Yes $oxtimes$ No	results in less sediment in rivers and better
		flood management.
Improve Operational Efficiency and T	ransfers	
Conveyance – regional/local	☐ Yes ⊠ No	
System reoperation	☐ Yes ☒ No	
Water transfers	☐ Yes ⊠ No	
Increase Water Supply		
Conjunctive management	☐ Yes ⊠ No	
Precipitation Enhancement	☐ Yes ⊠ No	
Municipal recycled water	☐ Yes ⊠ No	
Surface storage – regional/local	☐ Yes ⊠ No	

	Will the Project			
	incorporate	Description of how RMS to be employed,		
Resource Management Strategy	RMS?	if applicable		
Improve Water Quality				
Drinking water treatment and	☐ Yes ⊠ No			
distribution				
Groundwater remediation/aquifer remediation	☐ Yes ⊠ No			
Matching water quality to water use	☐ Yes ⊠ No			
Pollution prevention	☐ Yes ⊠ No			
Salt and salinity management	☐ Yes ⊠ No			
Urban storm water runoff management	☐ Yes ⊠ No			
Practice Resource Stewardship				
Agricultural land stewardship	☐ Yes ⊠ No			
Ecosystem restoration	☐ Yes ⊠ No			
Forest management	☐ Yes ⊠ No			
Land use planning and	☐ Yes ☒ No			
management	☐ Yes ⊠ No			
Recharge area protection	☐ Yes ⊠ No			
Sediment management	⊠ Yes □ No	Reduced sediment in ditches, creeks & rivers		
Watershed management	☐ Yes ⊠ No			
People and Water				
Economic incentives	☐ Yes ⊠ No			
Outreach and engagement	☐ Yes ⊠ No			
Water and culture	☐ Yes ⊠ No			
Water-dependent recreation	☐ Yes ⊠ No			
Wastewater/NPDES	☐ Yes ⊠ No			
Other RMS addressed and explanation	on:			

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 BUDGI	ET		
Dre	significant compacts and of a DAC2. Ves	√ No			
Project serves a need of a DAC?: ☐ Yes ☒ No Funding Match Waiver request?: ☐ Yes ☒ No					
- i ui	rung waten waiver request:.	I 110	T a		1
			Cost Share: Non-State	Cost Share:	
		Requested	Fund Source*	Other State	
		Grant	(Funding	Fund	
	Category	Amount	Match)	Source*	Total Cost
a.	Direct Project Administration	\$20,000			\$20,000
b.	Land Purchase/Easement				
c.	Planning/Design/Engineering / Environmental	\$40,000			\$40,000
d.	Construction/Implementation	\$540,000			\$540,000
e.	Environmental Compliance/ Mitigation/Enhancement	\$15,000			\$15,000
f.	Construction Administration	\$81,000			\$81,000
g.	Other Costs				
h.	Construction/Implementation Contingency	\$32,000			\$32,000
i.	Grand Total (Sum rows (a) through (h) for each column)	\$728,000			\$728,000
j.	Can the Project be phased? Yes	⊠ No If yes , p	rovide cost breakd	own by phases	
		Project Cost	O&M Cost	Description of Phase	
	Phase 1				
	Phase 2				
	Phase 3				
	Phase 4		5 - 1: - C - OOA	A - C - L	
k. Explain how operation and maintenance costs will be financed for the 20-year planning period for project the Plumas County Department of Public Works					
	implementation (not grant funded).	od for project	budget.	ty Department o	I Public Works
I.	Has a Cost/Benefit analysis been comp	pleted?	☐ Yes ⊠ No		
m.	Describe what impact there may be if	the project is	Continued roadw	ay erosion and v	vater turbidity
	not funded (300 words or less)				
*List all sources of funding.					
Note: See Project Development Manual, Exhibit B, for assistance in completing this table					
(http://featherriver.org/documents/).					

VIII. PROJECT STATUS AND SCHEDULE

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	×	☐ Yes ⊠ No ☐ N/A	3,333.33.0	Upon execution of grant agreement	1 month after funding agreement
b. Final Design		☐ Yes ⊠ No □ N/A		2 months after funding secured	4 months after funding secured
c. Environmental Documentation (CEQA / NEPA)		☐ Yes ⊠ No □ N/A		4 months after funding secured	7 months after funding secured
d. Permitting		☐ Yes ⊠ No □ N/A		7 months after funding secured	8.5 months after funding secured
e. Construction Contracting		☐ Yes ⊠ No □ N/A		8.5 months after funding secured	9 months after funding secured
f. Construction Implementation		☐ Yes ⊠ No □ N/A		9 months after funding secured	12 months after funding secured
Provide explanation stage is checked as c					

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	Water Quality Control Plan for the Sacramento and San Joaquin River		
	Plans, UWMPs, GWMPs, Water Master Plan, Habitat Conservation Plans, TMDLs, Basin Plans, etc.).	Basins		
b.	List technical reports and studies supporting the feasibility of this project.	NA		
c.	Concisely describe the scientific basis (e.g. how much research has been conducted) of the proposed project in 300 words or less.	For the benefit of aquatic species and habitat, sediment loads (TSS, turbidity, etc.) in streams and rivers are regulated by the Water Quality Control Plan for the Sacramento and San Joaquin River Basins (Basin Plan) and by established TMDLs. This project will reduce sediment inputs to local waterways in support of compliance with the Basin Plan and established TMDLs.		
d.	Does the project implement green technology (e.g. alternate forms of energy, recycled materials, LID techniques, etc.).	☐ Yes ☒ No ☐ N/A If yes, please describe.		
e.	Are you an Urban Water Supplier ¹ ?	☐ Yes ☒ No ☐ N/A		
f.	Are you are an Agricultural Water Supplier ² ?	☐ Yes ☒ No ☐ N/A		
g.	Is the project related to groundwater?	☐ Yes ☒ No ☐ N/A If yes, please indicate which groundwater basin.		
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.				

Climate Change – Project Assessment Checklist

This climate change project assessment tool allows project applicants and the planning team to assess project consistency with Proposition 84 plan standards and RWMG plan assessment standards. The tool is a written checklist that asks GHG emissions and adaptation/resiliency questions.

Name of project: MS-25: Humbug Valley Road 307 Culvert Improvements

Project applicant: Plumas County Department of Public Works- Engineering

GHG Emissions Assessment

Project Construction Emissions If you check any of the boxes, please see the attached worksheet)	
 The project requires nonroad or off-road engines, equipment, or vehicles to complete. The project requires materials to be transported to the project site. The project requires workers to commute to the project site. The project is expected to generate GHG emissions for other reasons. The project does not have a construction phase and/or is not expected to generate GHG emission during the construction phase. 	าร
Operating Emissions If you check any of the boxes, please see the attached worksheet)	
The project requires energy to operate.	
The project will generate electricity.	
The project will proactively manage forests to reduce wildfire risk.	
The project will affect wetland acreage.	
The project will include new trees.	
Project operations are expected to generate or reduce GHG emissions for other reasons.	

Adaptation & Resiliency Assessment

Water Supply
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water supply vulnerability issues:
Not applicable ■ Not applicable Not applicable
Reduced snowmelt
Unmet local water needs (drought)
☐ Increased invasive species
Water Demand
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water demand vulnerability issues:
Not applicable ■ Not applicable Not applicable
☐ Increasing seasonal water use variability
Unmet in-stream flow requirements
Climate-sensitive crops
Groundwater drought resiliency
Water curtailment effectiveness

high priority water quality vulnerability issues: Not applicable Increasing catastrophic wildfires
Increasing catastrophic wildfires
 Eutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and other related water quality issues)
Seasonal low flows and limited abilities for waterbodies to assimilate pollution
Water treatment facility operations
Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold freshwater habitat, spawning habitat, wildlife habitat, etc.)
Flooding
Describe how the project makes the watershed (more/less) resilient to one or more of the following
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues:
high priority flooding vulnerability issues:
high priority flooding vulnerability issues: Not applicable
high priority flooding vulnerability issues: Not applicable Aging critical flood protection
high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires
high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain
high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain Insufficient flood control facilities
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high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain Insufficient flood control facilities

Water Quality

Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority ecosystem and habitat vulnerability issues:
☐ Not applicable
Climate-sensitive fauna or flora
Recreation and economic activity
Quantified environmental flow requirements
Erosion and sedimentation
Endangered or threatened species
Fragmented habitat
The project when completed will reduce the erosion and sedimentation in roadside ditch that flows to
creeks.
Hydropower
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority hydropower vulnerability issues:
⊠ Not applicable
Reduced hydropower output

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-25 Humbug Valley Road 307 Culvert Improvements

GHG Emissions Analysis

Project Construction Emissions

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

	Maximum		
	Number Per	Total 8-Hour Days in	
Type of Equipment	Day	Operation	Total MTCO₂e
Scrapers	1	1	1
Tractors/Loaders/Bac			
khoes	1	1	0
Dumpers/Tenders	1	3	0
Off-Highway Trucks	1	3	4
Pavers	1	2	1
Rollers	1	2	0
			0
			0
			0
			0
_		Total Emissions	6

		' '	
	Average Trip		
Total Number of	Distance		
Round Trips	(Miles)	Total MTCO₂e	
5	30		0

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

		Average Round Trip		٦
Average Number	Total Number	Distance Traveled		ı
of Workers	of Workdays	(Miles)	Total MTCO₂e	
10	2	60	C)

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-25 Humbug Valley Road 307 Culvert Improvements

Project Operating Emissions

The project requires energy to operate. If yes:

Annual Energy Needed	Unit	Total MTCO₂e		
	kWh (Electricity)	0		
	Therm (Natural Gas)	0		

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

The project	t will generate electricity. If yes:		
	Annual kWh Generated	Total MTCO₂e	
		0	
	*A negative value indicates GHG re	ductions	
The project	t will projectively manage forests to	raduce wildfire rick If yes	
The project	t will proactively manage forests to	i	
	Acres Protected from Wildfire	Total MTCO₂e	
	*A negative value indicates GHG re	ductions	
	A negative value indicates directe	ductions	
The projec	t will affect wetland acreage. If yes:		
	Acres of Protected Wetlands	Total MTCO₂e	
		0	
	*A negative value indicates GHG re	ductions	
The project	t will include new trees. If yes:		
me projec	Acres of Trees Planted	Total MTCO₂e	
	(C		
	*A negative value indicates GHG re	ductions	
Project op explain:	erations are expected to generate o	r reduce GHG emissions for other re	easons. If yes,
GHG Emiss	sions Summary		
Constructi	on and development will generate a	approximately:	7 MTCO₂e
In a given	year, operation of the project will re	esult in:	0 MTCO₂e



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	Yes. The Project is dependent on funding.
committed to the project through	
completion? If not, please explain	

II. GENERAL PROJECT INFORMATION

Project Title	MS-26: Municipal Well #3	
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,	The Plumas Eureka CSD "Preliminary Engineering Report for	
in 300 words or less)	the 2015 Water System Improvements" identifies the need to	
	increase the water supply volume for future use. The new 500	
	gallon per minute well would also have an arsenic removal	
	system.	
Project Location Description (e.g.,		
along the south bank of stream/river	New municipal well will be located within the Plumas Eureka	
between river miles or miles from	CSD service area.	
Towns/intersection and/or address):		
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.	N/A	,	,
Reduce potential for catastrophic wildland fires in the Region.	Yes	New well will increase available water volume in a wild fire event.	Volume increase could be up to 500 gallons per minute.
Build communication and collaboration among water resources stakeholders in the Region.	N/A		
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	N/A		
Region. Encourage municipal service providers to participate in regional water management actions that improve water supply and water quality.	Yes	PECSD is a municipal service provider. This project will improve water supply and drinking water quality (arsenic removal) for the local community.	
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.	Yes	This project is dependent on grant funding to increase reliability of present and future water supplies and assuring the delivered water meets all federal and State water standards.	
Protect, restore, and enhance the quality of surface and groundwater resources for all	Yes	Through careful hydrologic studies and planning the most suitable water source would be	

	14/11 -1		Quantification
	Will the		(e.g. acres of
	project		streams/wetlands
Upper Feather River IRWM	address the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
beneficial uses, consistent with		determined. The new water	
the RWQC Basin Plan.		source would provide direct	
		benefit to the community	
		through enhanced quality and	
		sustainability.	
Address water resources and			
wastewater needs of DACs and	N/A		
Native Americans.			
Coordinate management of			
recharge areas and protect			
groundwater resources.	N/A		
Improve coordination of land			
use and water resources	N/A		
planning.			
Maximize agricultural,			
environmental and municipal	N/A		
water use efficiency.			
Effectively address climate			
change adaptation and/or	N/A		
mitigation in water resources			
management.			
Improve efficiency and		Increase reliability of present and	Insures the water
reliability of water supply and		future water supplies and the	quantity and
other water-related	Yes	new well will be equipped with	quality for future
infrastructure.		an arsenic removal system to	buildout of the
		meet State and Federal drinking	Plumas Eureka CSD
		water standards.	service area.
Enhance public awareness and			
understanding of water	N/A		
management issues and needs.			
Address economic challenges of			
agricultural producers.	N/A		
Work with counties/		PECSD is prepared to work with	
communities/groups to make	Yes	the IRWM and the County to	
sure staff capacity exists for		administer any resultant grant	
actual administration and		and see this project through to	
implementation of grant		completion. We are prepared to	
funding.		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 a	oplicable, describe benefits or impacts of the	project wit	h respect to:
	•	project Wit	ii respect to.
а.	Native American Tribal Communities	N/A	
b.	Disadvantaged Communities ¹	N/A	
c.	Environmental Justice ²		PECSD ensures fair and equal services regardless of race, culture, income, or any other cultural factors.
d.	Drought Preparedness	N/A	
e.	Assist the region in adapting to effects of climate change ³		The new well will increase available water volume for emergency fire protection/suppression.
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			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

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

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/).

	Will the Project incorporate	Description of how RMS to be employed,
Resource Management Strategy	RMS?	if applicable
Reduce Water Demand		
Agricultural Water Use Efficiency	No	
Urban water use efficiency	No	
Improve Flood Management		
Flood management	No	
Improve Operational Efficiency and Tr	ansfers	
Conveyance – regional/local	⊠ Yes □ No	Improve conveyance of water from locally developed sources to the end users located within the same watershed.
System reoperation	⊠ Yes □ No	Improvement of operations and management procedures of water facilities to meet needs more efficiently and reliably.
Water transfers	No	
Increase Water Supply		
Conjunctive management	No	
Precipitation Enhancement	No	
Municipal recycled water	No	

Resource Management Strategy	Will the Project incorporate RMS?	Description of how RMS to be employed, if applicable
Surface storage – regional/local	No	
Improve Water Quality		
Drinking water treatment and distribution	Yes	Increases reliability of present and future water supplies and the new well will be equipped with an arsenic removal system to meet State and Federal drinking water standards.
Groundwater remediation/aquifer remediation	No	
Matching water quality to water use	No	
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	
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

		Requested Grant	Cost Share: Non-State Fund Source* (Funding	Cost Share: Other State Fund	
	Category	Amount	Match)	Source*	Total Cost
a.	Direct Project Administration	\$356,100	\$356,100		\$712,200
b.	Land Purchase/Easement				
c.	Planning/Design/Engineering / Environmental	\$108,500	\$108,500		\$217,000
d.	Construction/Implementation	\$585,400	\$585,400		\$1,170,800
e.	Environmental Compliance/ Mitigation/Enhancement				
f.	Construction Administration				
g.	Other Costs				
h.	Construction/Implementation Contingency				
i.	Grand Total (Sum rows (a) through (h) for each column)	\$1,050,000	\$1,050,000		\$2,100,000
j.	Can the Project be phased? No If y	es , provide cost b	reakdown by phas	ses	
		Project Cost	O&M Cost	Description	n of Phase
	Phase 1				
	Phase 2				
	Phase 3				
	Phase 4		_		
k.	Explain how operation and maintenan financed for the 20-year planning periodimplementation (not grant funded).		Service rates wou costs when need		to meet O&M
ı.	Has a Cost/Benefit analysis been comp	No			
m.	Describe what impact there may be if not funded (300 words or less)	Possible building Eureka CSD servi		nin the Plumas	

^{*}List all sources of funding.

Note: See Project Development Manual, Exhibit B, for assistance in completing this table (http://featherriver.org/documents/).

VIII. PROJECT STATUS AND SCHEDULE

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	х	Yes	Well necessity identified via 2015 Preliminary Engineering Report Well location needs to be assessed.	2015	4 months after funding agreement
b. Final Design		No	Engineering and design	4 months after funding secured	7 months after funding secured
c. Environmental Documentation (CEQA / NEPA)		No		7 months after funding secured	10 months after funding secured
d. Permitting		No		10 months after funding secured	12 months after funding secured
e. Construction Contracting		No		12 months after funding secured	13 months after funding secured
f. Construction Implementation		No	Drill well and install necessary pumping and filtration equipment	13 months after funding secured	15 months after funding secured

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	Plumas Eureka CSD
	project is consistent with or supported by (e.g. General	"Preliminary Engineering Report for the
	Plans, UWMPs, GWMPs, Water Master Plan, Habitat	2015 Water System Improvements"
	Conservation Plans, TMDLs, Basin Plans, etc.).	completed by Stantec Engineering.
b.	List technical reports and studies supporting the	"Hydrologic Controls of Arsenic
	feasibility of this project.	Occurrence in Plumas Eureka CSD
		Wells" completed by Plumas Geo-
		Hydrology
c.	Concisely describe the scientific basis (e.g. how much	Well flow data analysis from 2005 –
	research has been conducted) of the proposed project in	2015 demonstrates there will not be
	300 words or less.	sufficient drinking for the Plumas
		Eureka CSD service area at full buildout.
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
		Mohawk Valley Groundwater basin

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.

Climate Change – Project Assessment Checklist

This climate change project assessment tool allows project applicants and the planning team to assess project consistency with Proposition 84 plan standards and RWMG plan assessment standards. The tool is a written checklist that asks GHG emissions and adaptation/resiliency questions.

Name of project: MS-26: Municipal Well No.3

Project applicant: Plumas Eureka Community Services District

GHG Emissions Assessment

If you check any of the boxes, please see the attached worksheet)
$\overline{igwedge}$ The project requires nonroad or off-road engines, equipment, or vehicles to complete.
$oxed{\sum}$ The project requires materials to be transported to the project site.
$oxed{\sum}$ The project requires workers to commute to the project site.
$oxed{\sum}$ The project is expected to generate GHG emissions for other reasons.
The project does not have a construction phase and/or is not expected to generate GHG emissions during the construction phase.

Operating Emissions

If you check any of the boxes, please see the attached worksheet)
∑ The project requires energy to operate.
The project will generate electricity.
The project will proactively manage forests to reduce wildfire risk.
The project will affect wetland acreage.
The project will include new trees.
Project operations are expected to generate or reduce GHG emissions for other reasons

Adaptation & Resiliency Assessment

Water Supply Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water supply vulnerability issues:
 Not applicable Reduced snowmelt Unmet local water needs (drought) Increased invasive species
Water Demand Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water demand vulnerability issues:
 Not applicable ✓ Increasing seasonal water use variability ☐ Unmet in-stream flow requirements ☐ Climate-sensitive crops ☐ Groundwater drought resiliency ☐ Water curtailment effectiveness
Project will provide the necessary amount of groundwater usage for drinking and landscape irrigation purposes as the Plumas Eureka community reaches build-out.

Water Quality
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water quality vulnerability issues:
☐ Not applicable
☐ Increasing catastrophic wildfires
 Eutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and other related water quality issues)
Seasonal low flows and limited abilities for waterbodies to assimilate pollution
☐ Water treatment facility operations
☐ Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold freshwater habitat, spawning habitat, wildlife habitat, etc.)
Project will include the operation of an arsenic removal plant. Project will assure the volume of drinking
water and irrigation water at full build-out of the Plumas Eureka community.
Flooding
Describe how the project makes the watershed (more/less) resilient to one or more of the following
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues:
high priority flooding vulnerability issues:
high priority flooding vulnerability issues:
high priority flooding vulnerability issues: Not applicable Aging critical flood protection
high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires
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Ecosystem and Habitat
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority ecosystem and habitat vulnerability issues:
Not applicable ■ Not applicable Not applicable
Climate-sensitive fauna or flora
Recreation and economic activity
Quantified environmental flow requirements
Erosion and sedimentation
☐ Endangered or threatened species
Fragmented habitat
Undergroup
Hydropower Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority hydropower vulnerability issues:
Not applicable ■ The state of t
Reduced hydropower output

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-26: Municipal Well #3

GHG Emissions Analysis

Project Construction Emissions

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

t requires non-road or off-road engines, equipment, or venicles to complete				
	Maximum			
	Number Per	Total 8-Hour Days in		
Type of Equipment	Day	Operation	Total MTCO₂e	
	4	ı		
Surfacing Equipment	1	5	4	
Paving Equipment	2	1	1	
Bore/Drill Rigs	1	7	7	
Cement and Mortar				
Mixers	1	1	0	
Tractors/Loaders/Bac				
khoes	1	4	1	
			0	
			0	
			0	
			0	
			0	
		Total Emissions	12	

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

	6	170	2
	Round Trips	(Miles)	Total MTCO₂e
	Total Number of	Distance	
		Average Trip	
Ĭ	'	<u>'</u>	a to the project site. I

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

of Workers	of Workdays	(Miles)	Total MTCO₂e	
3	10	750	1000111110020	<u>8</u>

Χ	The project is expected to generate GHG emissions for other reasons. If yes, explain:				
Completed project will require electricity to operate					

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

MS-26: Municipal Well #3 Page 1

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-26: Municipal Well #3

The project requires energy to operate. If yes: Annual Energy Needed		erating Emissions		
The project will generate electricity. If yes: Annual kWh Generated Total MTCO2e	The project			
The project will generate electricity. If yes: Annual kWh Generated Total MTCO2e *A negative value indicates GHG reductions The project will proactively manage forests to reduce wildfire risk. If yes: Acres Protected from Wildfire Total MTCO2e Acres Protected from Wildfire Total MTCO2e *A negative value indicates GHG reductions The project will affect wetland acreage. If yes: Acres of Protected Wetlands Total MTCO2e *A negative value indicates GHG reductions The project will include new trees. If yes: Acres of Trees Planted Total MTCO2e O O *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: 22 MTCO2e		Annual Energy Needed	Unit	Total MTCO₂e
The project will generate electricity. If yes: Annual kWh Generated Total MTCO2e *A negative value indicates GHG reductions The project will proactively manage forests to reduce wildfire risk. If yes: Acres Protected from Wildfire Total MTCO2e Acres of Protected Wetlands Total MTCO2e Acres of Protected Wetlands Total MTCO2e *A negative value indicates GHG reductions The project will include new trees. If yes: Acres of Trees Planted Total MTCO2e Acres of Trees Planted Total MTCO2e O *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: 22 MTCO2e		215,000	kWh (Electricity)	42
Annual kWh Generated Total MTCO2e *A negative value indicates GHG reductions The project will proactively manage forests to reduce wildfire risk. If yes: Acres Protected from Wildfire Total MTCO2e *A negative value indicates GHG reductions The project will affect wetland acreage. If yes: Acres of Protected Wetlands Total MTCO2e Acres of Protected Wetlands Total MTCO2e *A negative value indicates GHG reductions The project will include new trees. If yes: Acres of Trees Planted Total MTCO2e 0 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: 22 MTCO2e			Therm (Natural Gas)	0
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		•		=

MS-26: Municipal Well #3 Page 2



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	Project completion would be dependent on funding		
committed to the project through	alternatives.		
completion? If not, please explain			

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	When completed, the Plumas Eureka CSD "Treated		
(Briefly describe the project,	Wastewater Effluent Feasibility Study", performed by Bastian		
in 300 words or less)	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	New reclamation systems will be installed in the existing		
between river miles or miles from	wastewater treatments within Plumas Eureka CSD.		
Towns/intersection and/or address):			
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.

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

Protect, restore, and enhance the quality of surface and groundwater resources for all beneficial uses, consistent with the RWQC Basin Plan. Address water resources and wastewater needs of DACs and	N/A Yes	Treated wastewater reuse will decrease the amount of surface	Groundwater aquafers will be
Native Americans.		water and groundwater currently used for irrigation purposes by as much as 20%.	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/		PECSD is prepared to work with	
communities/groups to make	Yes	the IRWM and the County to	
sure staff capacity exists for		administer any resultant grant	
actual administration and		and see this project through to	
implementation of grant		completion. We are prepared to	
funding.		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 a _l	pplicable, describe benefits or impacts of the	project wit	h 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.
4	Drought Preparedness		Treated wastewater reuse would greatly
۵.	Drought repareuness		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	A1 / A	
	are not already mentioned elsewhere	N/A	

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

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.

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 Tr	ransfers	
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	No	
management	NU	
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

Project serves a need of a DAC?: No

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

	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

		Project Cost	O&M Cost	Description of Phase		
	Phase 1					
	Phase 2					
	Phase 3					
	Phase 4					
k.	Explain how operation and maintenan	ce costs will be	Service rates woul	d be increased to meet O&M		
	financed for the 20-year planning perio	anced for the 20-year planning period for project		costs when needed. O&M costs could be offset		
	implementation (not grant funded).		by charging a fee for the use of treated			
			wastewater.			
I.	Has a Cost/Benefit analysis been comp	oleted?	No			
m.	Describe what impact there may be if	the project is	Depletion of aquif	er and inadequate surface		
	not funded (300 words or less)		water supplies du	ring times of extreme drought		
			and over time witl	h climate change. Shorter		
			lifespan of existing	g community leachfield.		
*I ic	t all sources of funding.					

(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.

	Check the Current Project		Description of Activities in Each	Planned/ Actual Start	Planned/ Actual Completion
Project Stage	Stage	Completed?	Project Stage	Date (mm/yr)	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 stage is checked as c					

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	Plumas Eureka CSD
	studies supporting the	"Treated Wastewater Effluent Feasibility Study" by Bastian
	feasibility of this project.	Engineering (pending completion)
c.	Concisely describe the	Research on reclamation system compatible with the district's STEP
	scientific basis (e.g. how	primary treatment systems has been completed. Wastewater
	much research has been	disposal capacity analysis has been conducted.
	conducted) of the proposed	
	project in 300 words or less.	
d.	Does the project implement	
	green technology (e.g.	
	alternate forms of energy,	
	recycled materials, LID	No
	techniques, etc.).	
e.	Are you an Urban Water	
	Supplier ¹ ?	No
f.	Are you are an Agricultural	N-
	Water Supplier ² ?	No
g.	Is the project related to	Yes
	groundwater?	5-60 Humbug Valley
1	whom Matau Commitau is defined a	s a supplier of the publicly or privately ewood, providing water for

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.

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS 27: Treated Wastewater Reuse

GHG Emissions Analysis

Project Construction Emissions

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

	Maximum		
	Number Per	Total 8-Hour Days in	
Type of Equipment	Day	Operation	Total MTCO₂e
Tractors/Loaders/Bac			
khoes	1	5	1
Other Construction			
Equipment	2	10	2
			0
			0
			0
			0
			0
			0
			0
			0
		Total Emissions	3

Χ	The projec	t requires mate	rials to be tra	nsported t	to the project site.	If yes:
	_		A., a.s.a.a.a	Twim		

•	•	
	Average Trip	
Total Number of	Distance	
Round Trips	(Miles)	Total MTCO₂e
6	100	1

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

A Ni		Average Round Trip		
Average Number of Workers	of Workdays	Distance Traveled (Miles)	Total MTCO₂e	
3	10	200		2

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

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

MS 27: Treated Wastewater Reuse

The project requires energy to operate. If yes: Annual Energy Needed Unit Total MTCO₂e							
otal MTCO₂e							
20							
0							
es:							
for other reasons. If yes,							
for other reasons. If yes,							
for other reasons. If yes,							
for other reasons. If yes,							
for other reasons. If yes,							
for other reasons. If yes,							
for other reasons. If yes,							
for other reasons. If yes,							
for other reasons. If yes,							
for other reasons. If yes,							



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	Project completion would be dependent on funding		
committed to the project through	alternatives.		
completion? If not, please explain			

II. GENERAL PROJECT INFORMATION

Project Title	MS-28: Water Meter Installation		
Project Category	Water Supply/Water Quality		
	Community Water/Wastewater		
Project Description			
(Briefly describe the project,	Water Meter Installation		
in 300 words or less)	The Plumas Eureka CSD "Preliminary Engineering Report for the 2015 Water System Improvements" recommends the installation of water meters throughout the Plumas Eureka community. Approximately 645 radio read meters would be installed and new computer software to monitor/read the system.		
Project Location Description (e.g.,			
along the south bank of stream/river	New water meters will be installed to all service connections		
between river miles or miles from	within Plumas Eureka CSD's service area.		
Towns/intersection and/or address):			
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.

	Will the		Quantification (e.g. acres of
Upper Feather River IRWM Objectives:	project address the objective?	Brief explanation of project linkage to selected Objective	streams/wetlands restored or enhanced)
Restore natural hydrologic functions.	N/A		
Reduce potential for	14/74		
catastrophic wildland fires in the Region.	N/A		
Build communication and collaboration among water resources stakeholders in the Region.	N/A		
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.	N/A		
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.	N/A		

	ı		I
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)
Coordinate management of recharge areas and protect groundwater resources.	N/A		
Improve coordination of land use and water resources planning.	N/A		
Maximize agricultural, environmental and municipal water use efficiency.	N/A		
Effectively address climate change adaptation and/or mitigation in water resources management.	N/A		
Improve efficiency and reliability of water supply and other water-related infrastructure.	Yes	Increases water conservation, the ability to identify leaks, and make system repairs to prevent water losses in the distribution system.	Could reduce overall water losses by as much as 15%.
Enhance public awareness and understanding of water management issues and needs.	Yes	Customers would have direct feedback on the amount of water they use that would assist them in managing their own water uses.	Overall water savings up to 10% per customer.
Address economic challenges of agricultural producers.	N/A		
Work with counties/ communities/groups to make sure staff capacity exists for actual administration and implementation of grant funding.	N/A		

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 a	If applicable, describe benefits or impacts of the project with respect to:					
a.	Native American Tribal Communities	N/A				
b.	Disadvantaged Communities ¹	N/A				
c.	Environmental Justice ²	N/A				
d.	Drought Preparedness		Accurate water usage amounts would assist CSD staff and customers in developing the criteria necessary to reduce water use.			
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		g.	Drinking water treatment and	
	conservation, water use efficiency	Yes		distribution	Yes
b.	Stormwater capture, storage, clean-		h.	Watershed protection and	
	up, treatment, management	N/A		management	N/A
c.	Removal of invasive non-native		i.	Contaminant and salt removal	
	species, creation/enhancement of	N/A		through reclamation/desalting,	
	wetlands,			other treatment technologies and	N/A
	acquisition/protection/restoration			conveyance of recycled water for	
	of open space and watershed lands			distribution to users	
d.	Non-point source pollution		j.	Planning and implementation of	
	reduction, management and	N/A		multipurpose flood management	N/A
	monitoring			programs	
e.	Groundwater recharge and	N/A	k.	Ecosystem and fisheries	
	management projects			restoration and protection	N/A
f.	Water banking, exchange,				
	reclamation, and improvement of	N/A			
	water quality				

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/).

	Will the Project incorporate	Description of how RMS to be employed,			
Resource Management Strategy	RMS?	if applicable			
Reduce Water Demand					
Agricultural Water Use Efficiency	No				
Urban water use efficiency		Establish best management practices for			
	Yes	distribution system monitoring. Increase			
		public awareness of water usage.			
Improve Flood Management					
Flood management	No				
Improve Operational Efficiency and Transfers					
Conveyance – regional/local	No				
System reoperation		Meters would assist the operational staff by			
	Yes	identifying distribution system leaks in a more			
		timely fashion.			
Water transfers	No				
Increase Water Supply					
Conjunctive management	No				
Precipitation Enhancement	No				
Municipal recycled water	No				
Surface storage – regional/local	No				
Improve Water Quality					

	Will the Project incorporate	Description of how RMS to be employed,
Resource Management Strategy	RMS?	if applicable
Drinking water treatment and distribution	Yes	Improves distribution system operations.
Groundwater remediation/aquifer remediation	No	
Matching water quality to water use	No	
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	
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

	Catagoni	Requested Grant	Cost Share: Non-State Fund Source* (Funding	Cost Share: Other State Fund	Total Cost
_	Category	Amount	Match)	Source*	Total Cost
a.	Direct Project Administration				
b.	Land Purchase/Easement	0	0	0	0
c.	Planning/Design/Engineering / Environmental	74205	24750	0	99000
d.	Construction/Implementation	744000	248000		992000
e.	Environmental Compliance/ Mitigation/Enhancement				
f.	Construction Administration	59250	19750	0	79000
g.	Other Costs				
h.	Construction/Implementation Contingency	111750	37250	0	149000
i.	Grand Total (Sum rows (a) through (h) for each column)				1319000
j.	Can the Project be phased? No lf ye	es , provide cost b	reakdown by phas	ses	
		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		Service rates would be increased to meet O&M		
	financed for the 20-year planning period for project implementation (not grant funded).		costs when needed.		
l.	Has a Cost/Benefit analysis been completed?		No		
m.	Describe what impact there may be if not funded (300 words or less)				

^{*}List all sources of funding.

Note: See Project Development Manual, Exhibit B, for assistance in completing this table (http://featherriver.org/documents/).

VIII. PROJECT STATUS AND SCHEDULE

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	хх	Yes	Water meter installation identified via 2015 Preliminary Engineering Report	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	Plumas Eureka CSD
	project is consistent with or supported by (e.g. General	"Preliminary Engineering Report for the
	Plans, UWMPs, GWMPs, Water Master Plan, Habitat	2015 Water System Improvements"
	Conservation Plans, TMDLs, Basin Plans, etc.).	completed by Stantec Engineering.
b.	List technical reports and studies supporting the	
	feasibility of this project.	
c.	Concisely describe the scientific basis (e.g. how much	
	research has been conducted) of the proposed project in	
	300 words or less.	
d.	Does the project implement green technology (e.g.	
	alternate forms of energy, recycled materials, LID	No
	techniques, etc.).	
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
		Mohawk Valley Groundwater basin

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.

Climate Change – Project Assessment Checklist

This climate change project assessment tool allows project applicants and the planning team to assess project consistency with Proposition 84 plan standards and RWMG plan assessment standards. The tool is a written checklist that asks GHG emissions and adaptation/resiliency questions.

Name of project: MS-28: Water Meter Installation

Project applicant: Plumas Eureka Community Services District

GHG Emissions Assessment

Project Construction Emissions (If you check any of the boxes, please see the attached worksheet)
(i) you check any of the boxes, please see the attached worksheet)
igstyle igstyle The project requires nonroad or off-road engines, equipment, or vehicles to complete.
igstyle igstyle The project requires materials to be transported to the project site.
The project requires workers to commute to the project site.
The project is expected to generate GHG emissions for other reasons.
The project does not have a construction phase and/or is not expected to generate GHG emissions during the construction phase.
Operating Emissions
(If you check any of the boxes, please see the attached worksheet)
The project requires energy to operate.
The project will generate electricity.
The project will proactively manage forests to reduce wildfire risk.
The project will affect wetland acreage.
The project will include new trees.
Project operations are expected to generate or reduce GHG emissions for other reasons.

Adaptation & Resiliency Assessment

Water Supply
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water supply vulnerability issues:
Not applicable ■ Not applicable Not applicable
Reduced snowmelt
Unmet local water needs (drought)
☐ Increased invasive species
Water Demand Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water demand vulnerability issues:
☐ Not applicable
☐ Increasing seasonal water use variability
Unmet in-stream flow requirements
Climate-sensitive crops
Groundwater drought resiliency
Water curtailment effectiveness
Installing water meters will decrease the amount of water used by individuals. They will also help to identify areas of the distribution system that may have water loss issues.

Water Quality
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water quality vulnerability issues:
Not applicable
☐ Increasing catastrophic wildfires
 Eutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and other related water quality issues)
Seasonal low flows and limited abilities for waterbodies to assimilate pollution
Water treatment facility operations
\boxtimes Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold freshwater habitat, spawning habitat, wildlife habitat, etc.)
Decreased water losses and use by individuals as a result of outreach and education and the financial effects of metering water will result in reduced demand on the water supply.
Flooding
Flooding Describe how the project makes the watershed (more/less) resilient to one or more of the following
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues:
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain
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Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain

Upper Feather River Integrated Regional Water Management Plan Climate Change- Project Assessment Tool

Ecosystem and Habitat
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority ecosystem and habitat vulnerability issues:
⊠ Not applicable
Climate-sensitive fauna or flora
Recreation and economic activity
Quantified environmental flow requirements
Erosion and sedimentation
Endangered or threatened species
Fragmented habitat
Hydropower
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority hydropower vulnerability issues:
Not englished
Not applicable Deduced by drag a very contract
Reduced hydropower output

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-28: Water Meter Installation

GHG Emissions Analysis

Project Construction Emissions

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

	Maximum		
	Number Per	Total 8-Hour Days in	
Type of Equipment	Day	Operation	Total MTCO₂e
Tractors/Loaders/Bac			
khoes	1	75	20
			0
			0
			0
			0
			0
			0
			0
			0
			0
		Total Emissions	20

					0	
	of Workers	of Workdays	(Miles)	Total MTCO₂e		
	Average Number	Total Number	Distance Traveled			
			Average Round Trip			
: projec	oroject requires workers to commute to the project site. If yes.					

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.

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-28: Water Meter Installation **Project Operating Emissions** The project requires energy to operate. If yes: **Annual Energy Needed** Unit Total MTCO₂e kWh (Electricity) Therm (Natural Gas) 0 The project will generate electricity. If yes: Total MTCO₂e Annual kWh Generated *A negative value indicates GHG reductions The project will proactively manage forests to reduce wildfire risk. If yes: Acres Protected from Wildfire Total MTCO2e 0 *A negative value indicates GHG reductions The project will affect wetland acreage. If yes: Acres of Protected Wetlands Total MTCO2e 0 *A negative value indicates GHG reductions The project will include new trees. If yes: Total MTCO₂e Acres of Trees Planted 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: 22 MTCO₂e ₀ MTCO₂e In a given year, operation of the project will result in:



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	Yes. Project completion will be dependent on funding.		
committed to the project through			
completion? If not, please explain			

II. GENERAL PROJECT INFORMATION

Project Title	MS-29: Water Storage Tank Replacement		
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,	Water Storage Tank Replacement		
in 300 words or less)	The Plumas Eureka CSD "Preliminary Engineering Report for		
	the 2015 Water System Improvements" recommended the		
	replacement of an existing 190,000-gallon storage tank due to		
	seismic concerns and existing steel construction.		
Project Location Description (e.g.,			
along the south bank of stream/river	Work will be performed on an existing land parcel that is		
between river miles or miles from	under a Special Use Permit issued by the United States Forest		
Towns/intersection and/or address):	Service.		
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.	N/A		
Reduce potential for catastrophic wildland fires in the Region.	Yes	New storage tank will increase available water volume in a wild fire event.	Volume increase will be 210,000 gallons.
Build communication and collaboration among water resources stakeholders in the Region.	N/A		
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	PECSD is a municipal service provider. A new water tank will improve the water supply now and through buildout.	
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		

			0
			Quantification
	Will the		(e.g. acres of
	project		streams/wetlands
Upper Feather River IRWM	address the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Address water resources and			
wastewater needs of DACs and	N/A		
Native Americans.			
Coordinate management of		Additional water storage	
recharge areas and protect	Yes	provides greater flexibility in	
groundwater resources.		managing groundwater pumping	
		from wells.	
Improve coordination of land			
use and water resources	N/A		
planning.			
Maximize agricultural,			
environmental and municipal	N/A		
water use efficiency.			
Effectively address climate		Increased water storage is	
change adaptation and/or	Yes	beneficial for use during times of	
mitigation in water resources		water shortages due to extended	
management.		drought.	
Improve efficiency and		Increases water storage capacity	Insures the water
reliability of water supply and		and ability of tank to withstand a	quantity for future
other water-related	Yes	major seismic event.	buildout of the
infrastructure.			Plumas Eureka CSD
			service area.
Enhance public awareness and			
understanding of water	N/A		
management issues and needs.			
Address economic challenges of			
agricultural producers.	N/A		
Work with counties/		PECSD is prepared to work with	
communities/groups to make	Yes	the IRWM and the County to	
sure staff capacity exists for		administer any resultant grant	
actual administration and		and see this project through to	
implementation of grant		completion. We are prepared to	
funding.		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 a	oplicable, describe benefits or impacts of the	project wit	th respect to:
а.		N/A	·
b.	Disadvantaged Communities ¹	N/A	
c.	Environmental Justice ²	N/A	PECSD ensures fair and equal services regardless of race, culture, income, or any other cultural factors. The new water storage will benefit all water users in the service area.
d.	Drought Preparedness	YES	Additional capacity will allow groundwater wells more "rest time" which reduces hydraulic strain on surrounding aquifer.
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		g.	Drinking water treatment and	
	conservation, water use efficiency	Yes		distribution	Yes
b.	Stormwater capture, storage, clean-		h.	Watershed protection and	
	up, treatment, management	N/A		management	N/A
c.	Removal of invasive non-native		i.	Contaminant and salt removal	
	species, creation/enhancement of			through reclamation/desalting,	
	wetlands,	N/A		other treatment technologies and	N/A
	acquisition/protection/restoration			conveyance of recycled water for	
	of open space and watershed lands			distribution to users	
d.	Non-point source pollution		j.	Planning and implementation of	
	reduction, management and	N/A		multipurpose flood management	N/A
	monitoring			programs	
e.	Groundwater recharge and	N/A	k.	Ecosystem and fisheries	
	management projects			restoration and protection	N/A
f.	Water banking, exchange,				
	reclamation, and improvement of	N/A			
	water quality				

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/).

Description Management Streets	Will the Project incorporate RMS?	Description of how RMS to be employed,		
Resource Management Strategy	RIVISE	if applicable		
Reduce Water Demand	T			
Agricultural Water Use Efficiency	No			
Urban water use efficiency	No			
Improve Flood Management				
Flood management	No			
Improve Operational Efficiency and Tr	Improve Operational Efficiency and Transfers			
Conveyance – regional/local	Yes	System stability and efficiency improvement		
System reoperation	Yes	Improvement of existing operations and water facilities to meet needs more efficiently and reliably		
Water transfers	No			
Increase Water Supply				
Conjunctive management	No			
Precipitation Enhancement	No			
Municipal recycled water	No			
Surface storage – regional/local	No			

	Will the Project incorporate	Description of how RMS to be employed,
Resource Management Strategy	RMS?	if applicable
Improve Water Quality		
Drinking water treatment and	Yes	New tank increases available water storage by
distribution	res	210,000 gallons (47.5 % increase).
Groundwater remediation/aquifer	No	
remediation	NO	
Matching water quality to water use	No	
Pollution prevention	No	
Salt and salinity management	No	
Urban storm water runoff	No	
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	
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 explan	nation:	

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

		Requested Grant	Cost Share: Non-State Fund Source* (Funding	Cost Share: Other State Fund	
	Category	Amount	Match)	Source*	Total Cost
a.	Direct Project Administration	15,000	5,000	0	20,000
b.	Land Purchase/Easement	0	0	0	0
c.	Planning/Design/Engineering / Environmental	60,750	20,250	0	81,000
d.	Construction/Implementation	288,750	96,250	0	385,000
e.	Environmental Compliance/ Mitigation/Enhancement	15,000	5,000	0	20,000
f.	Construction Administration	60,750	20,250	0	81,000
g.	Other Costs	0	0	0	0
h.	Construction/Implementation Contingency	91,500	30,500	0	122,000
i.	Grand Total (Sum rows (a) through (h) for each column)	531,750	177,250	0	709,000
j.	Can the Project be phased? No lf y	es , provide cost b	reakdown by phas	ses	
		Project Cost	O&M Cost	Description	n of Phase
	Phase 1				
	Phase 2				
	Phase 3				
k.	Phase 4 Explain how operation and maintenan	re costs will be	Service rates will	he increased to	meet O&M
r.	financed for the 20-year planning periorimplementation (not grant funded).		costs when need		neet Odivi
l.	Has a Cost/Benefit analysis been comp	oleted?	No		
m.	. Describe what impact there may be if the project is not funded (300 words or less)		Loss of 190,000-g seismic activity.		

^{*}List all sources of funding.

Note: See Project Development Manual, Exhibit B, for assistance in completing this table (http://featherriver.org/documents/).

VIII. PROJECT STATUS AND SCHEDULE

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**.

	Check the Current Project		Description of Activities in Each	Planned/ Actual Start	Planned/ Actual Completion
Project Stage	Stage	Completed?	Project Stage	Date (mm/yr)	Date (mm/yr)
a. Assessment and Evaluation	хх	Yes	New Tank necessity identified via 2015 Preliminary Engineering Report	2015	1 month after funding agreement
b. Final Design		No	TBD	2 months after funding secured	4 months after funding secured
c. Environmental Documentation (CEQA / NEPA)		No	TBD	4 months after funding secured	6 months after funding secured
d. Permitting		No	TBD	7 months after funding secured	8.5 months after funding secured
e. Construction Contracting		No	TBD	8.5 months after funding secured	9 months after funding secured
f. Construction Implementation		No	TBD	9 months after funding secured	12 months after funding secured
Provide explanation stage is checked as c					

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	Plumas Eureka CSD
	project is consistent with or supported by (e.g. General	"Preliminary Engineering Report for the
	Plans, UWMPs, GWMPs, Water Master Plan, Habitat	2015 Water System Improvements"
	Conservation Plans, TMDLs, Basin Plans, etc.).	completed by Stantec Engineering.
b.	List technical reports and studies supporting the	Preliminary Engineering Report
	feasibility of this project.	
c.	Concisely describe the scientific basis (e.g. how much	The current water storage tank is
	research has been conducted) of the proposed project in	vulnerable to seismic activity. In the
	300 words or less.	event of tank failure, there would be
		devastating water shortages to the local
		residents and businesses. In addition
		the current volume of storage is
		insufficient for build out in the area.
d.	Does the project implement green technology (e.g.	No
	alternate forms of energy, recycled materials, LID	
	techniques, etc.).	
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?	No
11.		

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.

Climate Change – Project Assessment Checklist

This climate change project assessment tool allows project applicants and the planning team to assess project consistency with Proposition 84 plan standards and RWMG plan assessment standards. The tool is a written checklist that asks GHG emissions and adaptation/resiliency questions.

Name of project: MS-29 Water Storage Tank Replacement

Project applicant: Plumas Eureka Community Services District

GHG Emissions Assessment

Project Construction Emissions (If you check any of the boxes, please see the attached worksheet)
☑ The project requires nonroad or off-road engines, equipment, or vehicles to complete. ☑ The project requires materials to be transported to the project site.
The project requires workers to commute to the project site.The project is expected to generate GHG emissions for other reasons.
The project does not have a construction phase and/or is not expected to generate GHG emissions during the construction phase.
Operating Emissions (If you check any of the boxes, please see the attached worksheet)
The project requires energy to operate.
The project will generate electricity.
The project will proactively manage forests to reduce wildfire risk.
The project will affect wetland acreage.
The project will include new trees.
Project operations are expected to generate or reduce GHG emissions for other reasons

Adaptation & Resiliency Assessment

Water Supply Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water supply vulnerability issues:
Not applicable ■ Not applicable Not applicable
Reduced snowmelt
Unmet local water needs (drought)
☐ Increased invasive species
Water Demand Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water demand vulnerability issues:
Not applicable ■ Not applicable Not applicable
☐ Increasing seasonal water use variability
Unmet in-stream flow requirements
Climate-sensitive crops
Groundwater drought resiliency
Water curtailment effectiveness

Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water quality vulnerability issues:
 Not applicable ☐ Increasing catastrophic wildfires ☐ Eutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and other related water quality issues) ☐ Seasonal low flows and limited abilities for waterbodies to assimilate pollution ☐ Water treatment facility operations ☐ Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold freshwater habitat, spawning habitat, wildlife habitat, etc.)
Flooding Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain Insufficient flood control facilities

Water Quality

Upper Feather River Integrated Regional Water Management Plan Climate Change- Project Assessment Tool

Ecosystem and Habitat
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority ecosystem and habitat vulnerability issues:
Not applicable ■ Not applicable Not applicable
Climate-sensitive fauna or flora
Recreation and economic activity
Quantified environmental flow requirements
Erosion and sedimentation
Endangered or threatened species
Fragmented habitat
Hydropower
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority hydropower vulnerability issues:
Not applicable
Not applicable ■ Reduced hydropower output
 ✓ Not applicable ☐ Reduced hydropower output

4

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS 29: Water Storage Tank Replacement

GHG Emissions Analysis

Project Construction Emissions

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

	Maximum		
	Number Per	Total 8-Hour Days in	
Type of Equipment	Day	Operation	Total MTCO₂e
Other Construction			
Equipment	1	15	1
Excavators	1	3	1
Cranes	1	10	8
Rough Terrain			
Forklifts	1	3	1
			0
			0
			0
			0
			0
			0
	-	Total Emissions	11

Total Number of Round Trips	Distance (Miles)	Total MTCO₂e	
10	, ,	_	
Average Number	Total Number	Average Round Trip	
Average Number	Total Number	Distance Traveled	
of Workers	of Workdays	(Miles)	Total MTCO₂e

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

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

Project Or	MS 29: Wat perating Emissions	iter Storage Tank Replac	tement
	ct requires energy to operate. If yes:	<u></u> _	
	Annual Energy Needed	Unit	Total MTCO₂e
		kWh (Electricity)	0
ı		Therm (Natural Gas)	0
The projec	ct will generate electricity. If yes:		
1116 6, -	Annual kWh Generated	Total MTCO ₂ e	1
ı	Alliqui Revii Gene. 333.	0	1
ı	*A negative value indicates GHG re		1
The projec	ct will proactively manage forests to		yes:
· 	Acres Protected from Wildfire	Total MTCO₂e	
ı		0	<u>,</u>
	*A negative value indicates GHG re	eductions	
The projec	ct will affect wetland acreage. If yes:	-	
The project	Acres of Protected Wetlands		٦
	Acres of Protected Wedanus	Total MTCO ₂ e	4
•	*A negative value indicates GHG re	eductions 0	<u> </u>
	"A negative value muicates on one	ductions	
The projec	ct will include new trees. If yes:		
	Acres of Trees Planted	Total MTCO₂e	1
		0 0	<u>,</u>
•	*A negative value indicates GHG re		1
_	-		_
Project ope explain:	perations are expected to generate of	r reduce GHG emission	is for other reasons. If yes,
Ελρια			
,			
•			
,			
	sions Summary		
	ion and development will generate a	,	13 MTCO ₂ e
ا In a given	In a given year, operation of the project will result in: 0 MTC		



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	Yes. The project is dependent on funding.			
committed to the project through				
completion? If not, please explain				

II. GENERAL PROJECT INFORMATION

Project Title	MS-30: Wastewater Treatment Plant #6 Upgrade		
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,	Wastewater treatment plant #6 is approximately 35 years old.		
in 300 words or less)	An engineering report needs to be done to identify the		
	possible upgrades needed and/or the necessity for a complete		
	plant replacement. Current treatment methods may not be		
	sufficient to meet unrestricted reuse of treated wastewater		
	for irrigation purposes.		
Project Location Description (e.g.,			
along the south bank of stream/river	Work will be performed at existing wastewater treatment		
between river miles or miles from	plant #6, which is at the end of West Ponderosa Drive.		
Towns/intersection and/or address):			
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.	N/A		
Reduce potential for catastrophic wildland fires in the Region.	N/A		
Build communication and collaboration among water resources stakeholders in the Region.	N/A		
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	PECSD is a municipal service provider. The upgraded/new treatment facility will reduce the risk of raw sewage contamination to the Middle Fork of the Feather River, and will improve the quality of effluent being released into the river after treatment. Additionally the treated wastewater will be reused for irrigating a local golf course making the equivalent amount of irrigation water for other supply needs.	

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)
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.	Yes	Treatment plant upgrade or replacement will ensure that all raw sewage collected from the community is properly treated and disposed of. Improvements will also decrease the risk of raw sewage flowing into the Middle Fork of the Feather River.	Unknown
Address water resources and wastewater needs of DACs and Native Americans.	N/A		
Coordinate management of recharge areas and protect groundwater resources.	N/A		
Improve coordination of land use and water resources planning.	N/A		
Maximize agricultural, environmental and municipal water use efficiency.	N/A		
Effectively address climate change adaptation and/or mitigation in water resources management.	N/A		
Improve efficiency and reliability of water supply and other water-related infrastructure.	Yes	The treated wastewater will be reused for irrigation in a local golf course. The community will benefit from reduced dependence on "clean" surface/ground water for irrigation during drought years.	
Enhance public awareness and understanding of water management issues and needs.	N/A		
Address economic challenges of agricultural producers.	N/A		

	Will the project		Quantification (e.g. acres of streams/wetlands
Upper Feather River IRWM	address the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Work with counties/		PECSD is prepared to work with	
communities/groups to make	Yes	the IRWM and the County to	
sure staff capacity exists for		administer any resultant grant	
actual administration and		and see this project through to	
implementation of grant		completion. We are prepared to	
funding.		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 a	oplicable, describe benefits or impacts of the	project wit	h respect to:
a.	Native American Tribal Communities	N/A	
b.	Disadvantaged Communities ¹	N/A	
C.	Environmental Justice ²	Yes	PECSD ensures fair and equal services regardless of race, culture, income, or any other cultural factors. The upgraded/new wastewater treatment facility will improve sanitation for all members of the community as well as tourists.
d.	Drought Preparedness	Yes	The treated wastewater will be reused for irrigation in a local golf course. The community will benefit from reduced dependence on "clean" surface/ground water for irrigation during drought years.
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/).

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

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.

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	No	
Urban water use efficiency	Yes	Improvements made would provide recycled wastewater for irrigation, thereby reducing the need of surface water supplies.
Improve Flood Management		
Flood management	No	
Improve Operational Efficiency and Ti	ransfers	
Conveyance – regional/local	No	
System reoperation	No	
Water transfers	No	
Increase Water Supply		
Conjunctive management	No	
Precipitation Enhancement	No	
Municipal recycled water	Yes	Recycled water can be directly used for irrigation on the Plumas Pines Golf Course and surrounding open space areas.
Surface storage – regional/local	No	
Improve Water Quality		
Drinking water treatment and distribution	No	
Groundwater remediation/aquifer remediation	Yes	
Matching water quality to water use	Yes	Recycled water can be directly used for irrigation on the Plumas Pines Golf Course and surrounding open space areas.
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	
Watershed management	No	

Resource Management Strategy	Will the Project incorporate RMS?	Description of how RMS to be employed, if applicable
People and Water		
Economic incentives	No	
Outreach and engagement	No	
Water and culture	No	
Water-dependent recreation	No	
Wastewater/NPDES		Use of recycled water would require a
	Yes	discharge permit from the State Water
		Resources Control Board.

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	100%	0	0	Unknown
b.	Land Purchase/Easement	100%	0	0	Unknown
c.	Planning/Design/Engineering / Environmental	100%	0	0	Unknown
d.	Construction/Implementation	100%	0	0	Unknown
e.	Environmental Compliance/ Mitigation/Enhancement	100%	0	0	Unknown
f.	Construction Administration	100%	0	0	Unknown
g.	Other Costs	100%	0	0	Unknown
h.	Construction/Implementation Contingency	100%	0	0	Unknown
i.	Grand Total (Sum rows (a) through (h) for each column)	Unknown	Unknown	Unknown	Unknown
j.	Can the Project be phased? No If y	es , provide cost l	oreakdown by phas	ses	1

		Project Cost	O&M Cost	Description of Phase
	Phase 1			
	Phase 2			
	Phase 3			
	Phase 4			
k.	Explain how operation and maintenan	ce costs will be	Service rates wor	uld be increased to meet O&M
	financed for the 20-year planning period for project		costs when needed.	
	implementation (not grant funded).			
I.	Has a Cost/Benefit analysis been comp	oleted?	No	
m.	Describe what impact there may be if	the project is	Failure to adequately treat sewage flows and	
	not funded (300 words or less)		possible pollution	n of the Middle Fork of the
			Feather River.	
*Lis	t all sources of funding.		•	
Note: See Project Development Manual, Exhibit B, for assista			ance in completing	g this table
(<u>ht</u>	tp://featherriver.org/documents/).			

VIII. PROJECT STATUS AND SCHEDULE

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**.

	Check the Current Project		Description of Activities in Each	Planned/ Actual Start	Planned/ Actual Completion
Project Stage	Stage	Completed?	Project Stage	Date (mm/yr)	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 stage is checked as c					

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.).	Unknown number of plans related to wastewater collection, treatment, and disposal. Name/numbers of regulations for water quality of treated water? Water Quality Control Plan for the Sacramento and San Joaquin River Basins
b.	List technical reports and studies supporting the feasibility of this project.	None
C.	Concisely describe the scientific basis (e.g. how much research has been conducted) of the proposed project in 300 words or less.	Wastewater treatment plant #6 is approximately 35 years old, and is urgent need of retrofitting or replacement in order to comply with State and Federal regulations. In addition, the retrofitted/new wastewater treatment facility will be equipped for reclamation of the water for irrigation of a local golf course. Reuse of treated wastewater improves water supply in the area.
d.	Does the project implement green technology (e.g. alternate forms of energy, recycled materials, LID techniques, etc.).	Yes Treated wastewater will be recycled for irrigation of the Plumas Pines Golf Course and surrounding open space areas.
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?	No

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.

Climate Change – Project Assessment Checklist

This climate change project assessment tool allows project applicants and the planning team to assess project consistency with Proposition 84 plan standards and RWMG plan assessment standards. The tool is a written checklist that asks GHG emissions and adaptation/resiliency questions.

Name of project: MS-30:Wastewater Treatment Plant No.6 Upgrade

Project applicant: Plumas Eureka Community Services District

GHG Emissions Assessment

GITG ETHISSIONS / ISSESSITIENT
Project Construction Emissions (If you check any of the boxes, please see the attached worksheet)
 □ The project requires nonroad or off-road engines, equipment, or vehicles to complete. □ The project requires materials to be transported to the project site. □ The project requires workers to commute to the project site. □ The project is expected to generate GHG emissions for other reasons. □ The project does not have a construction phase and/or is not expected to generate GHG emissions during the construction phase.
Operating Emissions (If you check any of the boxes, please see the attached worksheet)
∑ The project requires energy to operate.
The project will generate electricity.
☐ The project will proactively manage forests to reduce wildfire risk.
The project will affect wetland acreage.
The project will include new trees.
Project operations are expected to generate or reduce GHG emissions for other reasons.

Adaptation & Resiliency Assessment

Water Supply Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water supply vulnerability issues:
☐ Not applicable
Reduced snowmelt
□ Unmet local water needs (drought)
Increased invasive species
Reuse of treated wastewater for irrigation will help meet local water needs during drought.
Water Demand Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water demand vulnerability issues:
☐ Not applicable
☐ Increasing seasonal water use variability
Unmet in-stream flow requirements
Climate-sensitive crops
Groundwater drought resiliency
Water curtailment effectiveness
???
Water Quality Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water quality vulnerability issues: Not applicable Increasing catastrophic wildfires

Upper Feather River Integrated Regional Water Management Plan Climate Change- Project Assessment Checklist
Eutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and other related water quality issues)
Seasonal low flows and limited abilities for waterbodies to assimilate pollution
✓ Water treatment facility operations
☐ Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold freshwater habitat, spawning habitat, wildlife habitat, etc.)
The upgraded/new treatment facility will reduce the risk of raw sewage contamination to the Middle Fork of the Feather River, and will improve the quality of effluent being released into the river after treatment. Additionally the treated wastewater will be reused for irrigating a local golf course making the equivalent amount of irrigation water for other supply needs.
Flooding Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues:
 Not applicable ☐ Aging critical flood protection ☐ Wildfires ☐ Critical infrastructure in a floodplain ☐ Insufficient flood control facilities
Ecosystem and Habitat Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority ecosystem and habitat vulnerability issues:
✓ Not applicable✓ Climate-sensitive fauna or flora

Quantified environmental flow requirements

Recreation and economic activity

Climate Change- P	roject Assessment Tool
Erosion and sec	dimentation
Endangered or	threatened species
Fragmented ha	bitat
Hydropower	
	project makes the watershed (more/less) resilient to one or more of the following
high priority hydro	power vulnerability issues:
Not applicable	
Not applicable Reduced hydro	power output
	power output

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

		Maximum Number Per	Total 9 Hour Days in		yes:
Type of Eq	uipment		Total 8-Hour Days in Operation	Total MTCO₂e	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
			Total Emissions	0	
		•	d to the project site. If	1	
Total Num Round Trip		Average Trip Distance (Miles)	Total MTCO₂e		
		Distance	Total MTCO ₂ e		
Round Trip	os 5	Distance (Miles)	-		
Round Trip project requires w Average No	os 5 vorkers to umber	Distance (Miles) 100 commute to the Total Number	e project site. If yes: Average Round Trip Distance Traveled		
Round Trip	vorkers to umber s	Distance (Miles) 100 commute to the Total Number of Workdays	e project site. If yes: Average Round Trip Distance Traveled (Miles)	Total MTCO₂e	
Round Trip project requires w Average No	os 5 vorkers to umber	Distance (Miles) 100 commute to the Total Number	e project site. If yes: Average Round Trip Distance Traveled (Miles)	Total MTCO₂e 2	
Round Trip project requires w Average No of Workers	vorkers to umber s	Distance (Miles) 100 commute to th Total Number of Workdays 30	e project site. If yes: Average Round Trip Distance Traveled (Miles)	2	

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

MS-30 Wastewater Treatment Plant 6 Upgrade

construction phase.

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-30 Wastewater Treatment Plant 6 Upgrade **Project Operating Emissions** The project requires energy to operate. If yes: **Annual Energy Needed** Unit Total MTCO₂e 35,000 kWh (Electricity) Therm (Natural Gas) 0 The project will generate electricity. If yes: Total MTCO₂e Annual kWh Generated *A negative value indicates GHG reductions The project will proactively manage forests to reduce wildfire risk. If yes: Acres Protected from Wildfire Total MTCO2e 0 *A negative value indicates GHG reductions The project will affect wetland acreage. If yes: Acres of Protected Wetlands Total MTCO2e 0 *A negative value indicates GHG reductions The project will include new trees. If yes: Acres of Trees Planted Total MTCO₂e 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: 3 MTCO₂e 7 MTCO₂e In a given year, operation of the project will result in:



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	Project completion would be dependent on funding
committed to the project through	alternatives.
completion? If not, please explain	

II. GENERAL PROJECT INFORMATION

Project Title	MS-31: Wastewater Treatment Plant #7 Lift Station			
	Replacement			
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,	The Wastewater treatment plant #7 lift station is approaching			
in 300 words or less)	35 years old. It was identified in 2005 as needing to be			
	replaced during the treatment plant upgrade project of 2007.			
	The lift station work was cut from the original treatment plant			
	project due to overall project costs. The existing location of			
	the lift station borders a residence's front yard and raw			
	sewage could flow into the Middle Fork of the Feather River if			
	an overflow occurs. The replacement project will move the lift			
	station to a more appropriate location and provide for 12,000			
	gallons of emergency storage of raw sewage.			
Project Location Description (e.g.,				
along the south bank of stream/river	Project will remove the existing lift station at 226 Sequoia			
between river miles or miles from	Circle and build the new across the street at 239 Sequoia			

Towns/intersection and/or address):	Circle.
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.	N/A		
Reduce potential for catastrophic wildland fires in the Region.	N/A		
Build communication and collaboration among water resources stakeholders in the Region.	N/A		
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	PECSD is a municipal service provider. The new, relocated, lift station with 12,000 gallons of emergency storage of raw sewage will reduce the risk of raw sewage contamination to the Middle Fork of the Feather River and a resident's yard.	Potential reduction of 12,000 gallons of raw sewage spilling into the Middle Fork of the Feather River and an resident's yard.
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.	Yes	Grant funding is necessary to implement this project, which will increase reliability of present	

MS-31: Wastewater Treatment Plant No.7 Lift Station Replacement

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)
-	-	and future collection and	
		treatment of raw sewage.	
Protect, restore, and enhance the quality of surface and groundwater resources for all beneficial uses, consistent with the RWQC Basin Plan.	Yes	New lift station would increase the protection of the Middle Fork of the Feather River from raw sewage.	12,000 gallons of emergency storage of raw sewage
Address water resources and wastewater needs of DACs and Native Americans.	N/A		
Coordinate management of recharge areas and protect groundwater resources.	N/A		
Improve coordination of land use and water resources planning.	N/A		
Maximize agricultural, environmental and municipal water use efficiency.	N/A		
Effectively address climate change adaptation and/or mitigation in water resources management.	N/A		
Improve efficiency and reliability of water supply and other water-related infrastructure.	N/A		
Enhance public awareness and understanding of water management issues and needs.	N/A		
Address economic challenges of agricultural producers.	N/A		
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 a	oplicable, describe benefits or impacts of the	project wi	th respect to:
а.	Native American Tribal Communities	N/A	
b.	Disadvantaged Communities ¹	N/A	
c.	Environmental Justice ²	Yes	PECSD ensures fair and equal services regardless of race, culture, income, or any other cultural factors. The new, relocated, lift will improve sanitation for the service area.
d.	Drought Preparedness	N/A	
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/).

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		g. Drinking water treatment and	
	conservation, water use efficiency	N/A	distribution	N/A
b.	Stormwater capture, storage, clean-		h. Watershed protection and	
	up, treatment, management	N/A	management	Yes
c.	Removal of invasive non-native	NI/A	i. Contaminant and salt removal	
	species, creation/enhancement of	N/A	through reclamation/desalting,	

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.

MS-31: Wastewater Treatment Plant No.7 Lift Station Replacement

	wetlands,		other treatment technologies and	N/A
	acquisition/protection/restoration		conveyance of recycled water for	
	of open space and watershed lands		distribution to users	
d.	Non-point source pollution		j. Planning and implementation of	
	reduction, management and	Yes	multipurpose flood management	N/A
	monitoring		programs	IN/A
e.	Groundwater recharge and	N/A	k. Ecosystem and fisheries	
	management projects	IN/A	restoration and protection	N/A
f.	Water banking, exchange,			
	reclamation, and improvement of	NI/A		
	water quality	N/A		

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	INIVIS:	партивые
Agricultural Water Use Efficiency	No	
Urban water use efficiency	No	
Improve Flood Management		
Flood management	No	
Improve Operational Efficiency and Tr	ansfers	
Conveyance – regional/local	No	
System reoperation	No	
Water transfers	No	
Increase Water Supply		
Conjunctive management	No	
Precipitation Enhancement	No	
Municipal recycled water	No	
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	No	
Pollution prevention	Yes	Protects the Middle Fork of the Feather River from raw sewage overflows.
Salt and salinity management	No	
Urban storm water runoff management	No	

MS-31: Wastewater Treatment Plant No.7 Lift Station Replacement

Resource Management Strategy	Will the Project incorporate RMS?	Description of how RMS to be employed, if applicable
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	
Watershed management	No	
People and Water		
Economic incentives	No	
Outreach and engagement	No	
Water and culture	No	
Water-dependent recreation	No	
Wastewater/NPDES	Yes	Adding safeguards to ensure the Middle Fork of the Feather River does not get contaminated with raw sewage.

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

		1			
		Requested Grant	Cost Share: Non-State Fund Source* (Funding	Cost Share: Other State Fund	7.110.1
_	Category	Amount	Match)	Source*	Total Cost
а.	Direct Project Administration	75%	25%	0	Unknown
b.	Land Purchase/Easement	75%	25%	0	Unknown
c.	Planning/Design/Engineering / Environmental	75%	25%	0	Unknown
d.	Construction/Implementation	75%	25%	0	Unknown
e.	Environmental Compliance/ Mitigation/Enhancement	75%	25%	0	Unknown
f.	Construction Administration	75%	25%	0	Unknown
g.	Other Costs	75%	25%	0	Unknown
h.	Construction/Implementation Contingency	75%	25%	0	Unknown
i.	Grand Total (Sum rows (a) through (h) for each column)				1,000,000 (Estimate based on 2005 costs)
j.	Can the Project be phased? No If y	es , provide cost b	reakdown by phas	ses	
		Project Cost	O&M Cost	Descriptio	n of Phase
	Phase 1				
	Phase 2				
	Phase 3				
	Phase 4				
k.	Explain how operation and maintenan		Service rates wou		to meet O&M
	financed for the 20-year planning peri implementation (not grant funded).	od for project	costs when need	ed.	
I.	Has a Cost/Benefit analysis been comp	oleted?	No		
m.	Describe what impact there may be if not funded (300 words or less)	the project is	Possible lift station overflow into the River.		-

^{*}List all sources of funding.

Note: See Project Development Manual, Exhibit B, for assistance in completing this table (http://featherriver.org/documents/).

VIII. PROJECT STATUS AND SCHEDULE

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**.

	Check the Current Project		Description of Activities in Each	Planned/ Actual Start	Planned/ Actual Completion
Project Stage	Stage	Completed?	Project Stage	Date (mm/yr)	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 c	urrent 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	2005 Preliminary Engineering Report
	project is consistent with or supported by (e.g. General	(PER) "PECSD Wastewater Treatment
	Plans, UWMPs, GWMPs, Water Master Plan, Habitat	Plant #7 Improvement Project"
	Conservation Plans, TMDLs, Basin Plans, etc.).	prepared by Shaw Engineering.
b.	List technical reports and studies supporting the	The PER would need to be updated to
	feasibility of this project.	reflect current PECSD conditions.
c.	Concisely describe the scientific basis (e.g. how much	The Wastewater treatment plant #7 lift
	research has been conducted) of the proposed project in	station is approaching 35 years old. It
	300 words or less.	was identified in 2005 as needing to be
		replaced during the treatment plant
		upgrade project of 2007. The lift station
		work was cut from the original
		treatment plant project due to overall
		project costs. The existing location of
		the lift station borders a residence's
		front yard and raw sewage could flow
		into the Middle Fork of the Feather
		River if an overflow occurs.
d.	Does the project implement green technology (e.g.	
	alternate forms of energy, recycled materials, LID	No
	techniques, etc.).	
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?	No
1	tale a Martina Caracha at a definition and a call a catherina blest	and the state of t

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.

Climate Change – Project Assessment Checklist

This climate change project assessment tool allows project applicants and the planning team to assess project consistency with Proposition 84 plan standards and RWMG plan assessment standards. The tool is a written checklist that asks GHG emissions and adaptation/resiliency questions.

Name of project: MS-31 Wastewater Treatment Plant No. 7 Lift Station

Project applicant: Plumas Eureka Community Services District

GHG Emissions Assessment

Project Construction Emissions (If you check any of the boxes, please see the attached worksheet)
 ☑ The project requires nonroad or off-road engines, equipment, or vehicles to complete. ☑ The project requires materials to be transported to the project site. ☑ The project requires workers to commute to the project site. ☑ The project is expected to generate GHG emissions for other reasons. ☑ The project does not have a construction phase and/or is not expected to generate GHG emissions during the construction phase.
Operating Emissions (If you check any of the boxes, please see the attached worksheet)
The project requires energy to operate.
The project will generate electricity.
The project will proactively manage forests to reduce wildfire risk.
The project will affect wetland acreage.
The project will include new trees.
Project operations are expected to generate or reduce GHG emissions for other reasons.

Adaptation & Resiliency Assessment

Water Supply Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water supply vulnerability issues:
Not applicable ■ Not applicable Not applicable
Reduced snowmelt
Unmet local water needs (drought)
☐ Increased invasive species
Water Demand
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water demand vulnerability issues:
Not applicable ■ Not applicable Not applicable
☐ Increasing seasonal water use variability
Unmet in-stream flow requirements
Climate-sensitive crops
Groundwater drought resiliency
Water curtailment effectiveness

Water Quality
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water quality vulnerability issues:
☐ Not applicable
Increasing catastrophic wildfires
 Eutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and other related water quality issues)
Seasonal low flows and limited abilities for waterbodies to assimilate pollution
Water treatment facility operations
Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold freshwater habitat, spawning habitat, wildlife habitat, etc.)
The new, relocated, lift station with 12,000 gallons of emergency storage of raw sewage will reduce the
risk of raw sewage contamination to the Middle Fork of the Feather River and a resident's yard.
Flooding
Flooding Describe how the project makes the watershed (more/less) resilient to one or more of the following
Describe how the project makes the watershed (more/less) resilient to one or more of the following
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues:
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain
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Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain

Ecosystem and Habitat
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority ecosystem and habitat vulnerability issues:
Not applicable ■ Not applicable Not applicable
Climate-sensitive fauna or flora
Recreation and economic activity
Quantified environmental flow requirements
Erosion and sedimentation
☐ Endangered or threatened species
Fragmented habitat
Hydropower Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority hydropower vulnerability issues:
Not applicable
Reduced hydropower output

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-31: Wastewater Treatment Plant No.7 Lift Station Replacement

GHG Emissions Analysis

Project Construction Emissions

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

		Total Emissions	11
			0
			0
			0
			0
khoes	1	10	3
Tractors/Loaders/Bac		10	1
Skid Steer Loaders	1	10	1
Crushing/Proc. Equipment	1	2	1
Crushing/Dros	1	5	4
Mixers	1	1	0
Cement and Mortar			
Surfacing Equipment	1	4	3
Type of Equipment	Day	Operation	Total MTCO₂e
	Number Per	Total 8-Hour Days in	
	Maximum		

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

•	•	<u> </u>
	Average Trip	
Total Number of	Distance	
Round Trips	(Miles)	Total MTCO₂e
5	100	1

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

Average Number		Average Round Trip Distance Traveled		
			Total MTCO₂e	
2	30	100		2

The project	t 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.

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

Project On	MS-31: Wastewater Trea erating Emissions	tment Plant No.7 Lift S	Station Replacement
	t requires energy to operate. If yes:		
	Annual Energy Needed	Unit	Total MTCO₂e
	7,000	kWh (Electricity)	1
		Therm (Natural Gas)	0
The project	t will generate electricity. If yes:	Tatal NATCO	1
	Annual kWh Generated	Total MTCO ₂ e	
	*A negative value indicates GHG rec	ductions U	
	A negative value mulcates directed	ductions	
The project	t will proactively manage forests to r	reduce wildfire risk. If	yes:
	Acres Protected from Wildfire	Total MTCO₂e	
		0]
	*A negative value indicates GHG red	ductions	
The project	will affect wetland acrosse. If you		
The project	will affect wetland acreage. If yes: Acres of Protected Wetlands	Total MTCO₂e]
	Acres of Protected Wetlands	10tai W17CO ₂ e	
	*A negative value indicates GHG rec	_	I
	C		
The project	will include new trees. If yes:		-
	Acres of Trees Planted	Total MTCO₂e	
	0		
	*A negative value indicates GHG rec	ductions	
Project ope	erations are expected to generate or	reduce GHG emission	s for other reasons. If ves.
explain:	, 5		, ,
GHG Emissions Summary			
Construction	on and development will generate a	oproximately:	14 MTCO ₂ e
In a given y	In a given year, operation of the project will result in: 1 MTCO ₂ e		



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	Quincy Community Services District (QCSD)	
Name of Primary Contact	Larry Sullivan, General Manager	
Name of Secondary Contact		
Mailing Address	900 Spanish Creek Road, Qunicy, CA, 95971	
E-mail	larry@quincycsd.com	
Phone	(530) 283-0836	
Other Cooperating Agencies /		
Organizations / Stakeholders		
Is your agency/organization	Yes	
committed to the project through		
completion? If not, please explain		

II. GENERAL PROJECT INFORMATION

Project Title	MS-32: Water System Improvements			
Project Category	☐ Agricultural Land Stewardship			
	☐ Floodplains/Meadows/Waterbodies			
	Municipal Services			
	Water Supply/Water Quality			
	Community Water/Wastewater			
	☐ Tribal Advisory Committee			
	☐ Uplands/Forest			
Project Description	The proposed project consists of four elements that can be			
(Briefly describe the project,	implemented as one project or individually. Project			
in 300 words or less)	components relative to the District boundary are shown on			
	Figure 1. Individual components are described as follows:			
	Spring UV Disinfection Project: The District has applied for			
	project funding through the Interim Emergency Drinking			
	Water Funding program and was denied. The project consists			
	of construction of a 192-square-foot building to house one 6-			
	inch UV Module, piping, turbidimeter, magnetic flowmeter,			
	electrical/telemetry, and controls, and with site piping			
	modifications to tie into the existing system. Refer to Figures			
	2 and 3.			

Project Location Description (e.g., along the south bank of stream/river between river miles or miles from Towns/intersection and/or address):	Wildland Fuel Reduction Project: The project consists of removing surface and ladder fuels within a 100-foot-wide swath along the District's property boundary adjacent to residential areas, 50 feet on each side of the District's spring supply pipeline, and 100 feet all around the District's Goodwin and Boyle Water Tanks. The clearing work will be performed by hand, in accordance with an approved Timber Harvest Plan. It is estimated the total fuel reduction area is about 16 acres. Refer to Figure 4. South Quincy Pressure Zone Feasibility Study: The feasibility study will consist of developing a GIS-based hydraulic model of the District's water system, utilizing recent water consumption data. The District's 2001 Master Water Plan will be utilized to determine appropriate consumption peaking factors and growth conditions. Using flows and pressures generated by the model, alternatives would be considered and modelled to determine their viability for correcting the low water pressure and substandard fire flows in the vicinity of the Goodwin and Boyle Tanks. After the best alternative is determined using a decision matrix considering monetary and non-monetary factors, the District will seek funding to design and construct the improvements. Refer to Figure 5 for delineation of the low water pressure area in Southern Quincy. Central/Edwards/Summerfield Waterline Replacement Project: This project consists of replacing approximately 1,700 feet of existing small-diameter water main with new 6-inch PVC water main and appurtenances on Center, Edwards, Summerfield, and North Church Streets. In addition, four new fire hydrants, eight 6-inch gate valves, and two 2-inch gate valves will be installed. Refer to Figure 1.
Latitude:	120.9481° W
Longitude:	39.9364° N
- 0	

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: Restore natural hydrologic functions.	Will the project address the objective?	Brief explanation of project linkage to selected Objective	Quantification (e.g. acres of streams/wetlands restored or enhanced)
Turictions.	🛛 N/A		
Reduce potential for catastrophic wildland fires in the Region.	☑ Yes □ N/A	Reduction of surface and ladder fuels along the District's southern urban wildland interface, adjacent to the existing residential area. Expected flame lengths will be reduced to 2 to 4 feet in the treated areas. It is hoped the fuel reduction will allow fire fighters to establish a defensive line along this boundary should a wildfire burn from the heavily-vegetated southern forested area. An additional goal of the fuel reduction is to protect the District's tanks and other water infrastructure if a wild fire occurs.	Approx. 16 acres
Build communication and collaboration among water resources stakeholders in the Region.	☐ Yes		
Work with DWR to develop strategies and actions for the management, operation, and control of SWP facilities in the	☐ Yes		
Upper Feather River Watershed in order to increase water supply, recreational, and environmental benefits to the Region.	LAJ 19/A		
Encourage municipal service providers to participate in regional water management actions that improve water supply and water quality.	☐ Yes ☐ N/A	QCSD is a municipal service provider. The UV disinfection project will improve water quality and create a more reliable water supply, and the feasibility study	0.12 MGD

Upper Feather River IRWM Objectives: Continue to actively engage in FERC relicensing of hydroelectric facilities in the	Will the project address the objective?	Brief explanation of project linkage to selected Objective will lead to implementation projects that will improve water supply to deficient areas.	Quantification (e.g. acres of streams/wetlands restored or enhanced)
Region.	☑ N/A		
Address economic challenges of municipal service providers to serve customers.	☐ Yes ☐ N/A	Quincy, CA is designated as a disadvantaged community. Infrastructure projects require a significant financial undertaking. Without grant funding the infrastructure projects place an additional burden on the people of a community already struggling financially.	1,728 population
Protect, restore, and enhance the quality of surface and groundwater resources for all beneficial uses, consistent with the RWQC Basin Plan.	☐ N/A	Installation of UV disinfection system will improve water quality of the existing spring source.	0.12 MGD
Address water resources and wastewater needs of DACs and Native Americans.	☐ N/A	Quincy, CA is designated as a disadvantaged community. The water system improvement projects will improve drinking water quality and delivery needs in the community.	1,728 population
Coordinate management of recharge areas and protect groundwater resources.	☐ Yes		
Improve coordination of land use and water resources planning.	☐ Yes		
Maximize agricultural, environmental and municipal water use efficiency.	☐ N/A	Replacement of leaking and undersized water mains that have met their useful service life will reduce leakage in the distribution system, allowing more spring water to discharge into the Feather River for downstream users.	0.45 MG/YR

			Quantification
	Will the		(e.g. acres of
	project		streams/wetlands
Upper Feather River IRWM	address the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Effectively address climate	X Yes	Replacing leaking water mains	0.45 MG/YR
change adaptation and/or	_	that have met their useful service	Approx. 16 acres
mitigation in water resources	□ N/A	life prevents catastrophic leaks	
management.		and allows more spring water to	
		remain in the natural flow to the	
		Feather River. These benefits	
		improve the water distribution	
		system and increase the	
		availability of clean potable water	
		for downstream beneficial use	
		during a time of severe drought and mandatory water restrictions.	
		Impacts on the spring supply will	
		be reduced thus better preparing	
		the District for extended drought	
		conditions. The project also	
		reduces wildland fire fuels nearby	
		the District, reducing the wild fire	
		risk to District residents.	
Improve efficiency and	X Yes	Installation of a UV disinfection	0.12 MGD
reliability of water supply and		system will improve water quality	
other water-related	□ N/A	of the existing spring source to	
infrastructure.		allow it to once again supply	
		water to the District.	
		Replacement of leaking and	
		undersized water mains that have	
		met their useful service life will	
		reduce leakage and improve	
		efficiency of the distribution	
		system. The proposed project also	
		investigates the water system in	
		the southern portion of the	
		District which experiences low pressures to determine a solution	
		to the problem, leading to	
		implementation projects to	
		improve reliability and correct	
		deficiencies in the existing water	
		system.	
Enhance public awareness and	X Yes	Public education to system users	1,728 population
understanding of water		throughout project development	, , , , , , , , , , , , , , , , , , , ,
management issues and needs.	□ N/A	will occur regarding water use	
	_	and conservation measures.	
Address economic challenges of	☐ Yes		

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)
agricultural producers.	X N/A		
Work with counties/ communities/groups to make sure staff capacity exists for actual administration and implementation of grant funding.	☐ N/A	Quincy CSD will work with other stakeholders within the region to administer grant funding and ensure successful implementation of the project.	
If no objectives are addressed, de Region:	escribe how the	e project relates to a challenge or opp	portunity for the

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 of	If applicable, describe benefits or impacts of the project with respect to:				
a. Native American Tribal Com	residents have reliable access water. By eliminating leaks in system, more water will be a Feather River and Sacrament important to Native America	s to pure, clean In the distribution Ilowed to enter the O River, which is			
b. Disadvantaged Communities	Quincy, CA is designated by Description the proposed project will be community with more reliable water service.	nefit the whole			
c. Environmental Justice ²	The proposed project would positive social and economic improving the District's wate throughout the District. QCSI treatment and provides servi the area regardless of age, ra origin, or income.	impacts by r system operation D ensures fair ce to all people in			
d. Drought Preparedness	The UV disinfection system we potable water source for all use of available clean pot reduce the need to develop wells.	isers, and astructure will make able water and			

			MS-32: Water System Impr	ovements
e.	Assist the region in adapting to effects of climate change ³ Generation or reduction of greenhouse gas	□ N/A	The wildland fuel reduction will reduction bistrict infrastructure and residents of Quincy. Water system improvement the availability of clean potable water downstream beneficial uses thus between preparing the District for extended disconditions. The proposed UV disinfection system	of the City of will increase r for ter rought
	emissions (e.g. green technology)	□ N/A	lower overall energy requirement that groundwater from a new well, which preferred alternative if UV installation occur.	is the
g.	Other expected impacts or benefits that	□ NI/A		
¹ Λ Ι	are not already mentioned elsewhere Disadvantaged Community is defined as a co	N/A	th an annual median household (MHI) in	ncome that
is le (htt ² En resp and floo ³ Cli	ss than 80 percent of the Statewide annual In p://featherriver.org/maps/). vironmental Justice is defined as the fair treatest to the development, adoption, implement policies. An example of environmental justice ding, sanitation) in an area of racial minorities mate change effects are likely to include incommanded to the control of t	MHI. DWR's I atment of pe entation and ce benefit wo es. reased floodi and sediment	DAC mapping is available on the UFR we cople of all races, cultures, and incomes enforcement of environmental laws, recould be to improve conditions (e.g. watering, extended drought, and associated station.	with gulations er supply, secondary
	a. Water supply reliability, water conservation, water use efficiency	X Yes { □ N/A	g. Drinking water treatment and distribution	X Yes ☐ N/A
=		☐ Yes I	h. Watershed protection and management	☐ Yes ☐ N/A
		X Yes i	i. Contaminant and salt removal through reclamation/desalting, other treatment technologies and conveyance of recycled water for distribution to users	☐ Yes ☑ N/A
-	d. Non-point source pollution reduction, management and monitoring	☐ Yes j 図 N/A	 Planning and implementation of multipurpose flood management programs 	☐ Yes Yhya N/A
	e. Groundwater recharge and management projects	☐ Yes I ☑ N/A	k. Ecosystem and fisheries restoration and protection	☐ Yes ☑ N/A
	f. Water banking, exchange,	☐ Yes ☐ N/A	·	

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/).

	Will the Project	
B	incorporate	Description of how RMS to be employed,
Resource Management Strategy	RMS?	if applicable
Reduce Water Demand		
Agricultural Water Use Efficiency	∐ Yes ∐ No	
Urban water use efficiency	☑ Yes □ No	Replacement of leaking and undersized water mains that have met their useful service life will reduce leakage in the distribution system allowing more spring water to discharge into the Feather River for downstream users. The UV disinfection project will improve an existing water supply source, reducing the need to secure other sources such as new water supply wells.
Improve Flood Management		
Flood management	Yes No	
Improve Operational Efficiency and Tr Conveyance – regional/local	ansfers	The proposed project will increase the
	⊠ Yes □ No	District's ability to reliably deliver water service without threat of the public health hazards associated with depressurized water mains. The feasibility study will identify and present solutions for mitigating low water pressures on the south side of the District.
System reoperation	☑ Yes □ No	Installation of a UV disinfection system will improve water quality of the existing spring source to allow it to once again supply water to the District. The proposed project also looks to investigate the water system of the southern portion of the District which experiences low pressures to determine implementation project that will mitigate the problem.
Water transfers	☐ Yes 🗓 No	
Increase Water Supply		
Conjunctive management	☐ Yes ☒ No	
Precipitation Enhancement	☐ Yes X No	
Municipal recycled water	☐ Yes X No	
Surface storage – regional/local	☐ Yes ☐ No	

	14011.1 5 1 .	
Resource Management Strategy	Will the Project incorporate RM%?	Description of how RMS to be employed, if applicable
	I/IAI%:	п аррпсавіе
Improve Water Quality Drinking water treatment and		The proposed project will install a UV
distribution	☑ Yes □ No	disinfection system to improve the water quality of the existing spring source to allow it to once again be available to supply water for the District. The project will also increase the District's ability to reliably deliver water service without threat of the public health hazards associated with depressurized water mains.
Groundwater remediation/aquifer remediation	☐ Yes ☒ No	
Matching water quality to water use	X Yes □ No	The proposed project will install a UV disinfection to provide clean disinfected drinking water for users without the risk of disinfection byproducts.
Pollution prevention	☐ Yes ☒ No	,,
Salt and salinity management	☐ Yes ☒ No	
Urban storm water runoff	☐ Yes ☒ No	
management		
Practice Resource Stewardship		
Agricultural land stewardship	☐ Yes ☒ No	
Ecosystem restoration	☐ Yes ☒ No	
Forest management	X Yes □ No	The proposed project will reduce surface and ladder fuels on 16 acres along the District's southern urban wildland interface, adjacent to the existing residential area. Expected flame lengths will be reduced to 2 to 4 feet in the treated areas. A goal of the fuel reduction is to allow fire fighters to establish a defensive line along this boundary should a wildfire burn from the heavily-vegetated southern forested area.
Land use planning and management	Yes X No	
Recharge area protection	Yes X No	
Sediment management	☐ Yes ☒ No	
Watershed management	☑ Yes ☐ No	The proposed project will reduce surface and ladder fuels on 16 acres along the District's southern urban wildland interface, adjacent to the existing residential area. Expected flame lengths will be reduced to 2 to 4 feet in the treated areas. A goal of the fuel reduction is to allow fire fighters to establish a defensive line along this boundary should a wildfire burn from the heavily-vegetated southern forested area.

	Will the Project			
	incorporate	Description of how RMS to be employed,		
Resource Management Strategy	RMS?	if applicable		
People and Water				
Economic incentives	☐ Yes 🙀 No			
Outreach and engagement		Public education to system users throughout		
	X Yes ☐ No	project development will occur regarding		
		water use and conservation measures.		
Water and culture	☐ Yes ☒ No			
Water-dependent recreation	☐ Yes ☒ No			
Wastewater/NPDES	☐ Yes ☒ 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					
Pro	Project serves a need of a DAC?: ☒ Yes ☐ No					
Fur	nding Match Waiver request?: 🏻 Yes	□ No				
		Requested Grant	Cost Share: Non-State Fund Source* (Funding	Cost Share: Other State		
	Category	Amount	Match)	Fund Source*	Total Cost	
а.	Direct Project Administration	\$11,500	\$3,500		\$15,000	
b.	Land Purchase/Easement					
c.	Planning/Design/Engineering / Environmental	\$90,000	\$45,000		\$135,000	
d.	Construction/Implementation	\$363,000	\$201,000		\$565,000	
e.	Environmental Compliance/ Mitigation/Enhancement	\$2,000			\$2,000	
f.	Construction Administration	\$55,000	\$25,000		\$80,000	
g.	Other Costs					
h.	Construction/Implementation Contingency	\$67,000			\$67,000	
i.	Grand Total (Sum rows (a) through (h) for each column)	\$589,000	\$295,000		\$884,000	

		Project Cost	O&M Cost	Description of Phase
	Phase 1	\$372,000	\$5,750	Spring UV Disinfection
	Phase 2	\$80,000		Wildland Fuel Reduction
	Phase 3	\$42,000		South Quincy Pressure Zone
				Feasibility Study
	Phase 4	\$390,000		Central/Edwards/Summerfield
				Waterline Replacement
k.	Explain how operation and main			vered under the current rate
	financed for the 20-year planning period for project		structure for the District	
	implementation (not grant funde	•		
I.	Has a Cost/Benefit analysis been completed?		☐ Yes ☒ No	
m.	Describe what impact there may be if the project is		The District will have to pursue funding	
	not funded (300 words or less)			e they continue purchasing 18%
	of the District's water needs from East Qu		•	
			CSD until the Spring UV disinfection system is	
				ater loss would continue to
			_	eaks in antiquated pipelines
			_	f drought and mandatory water
				k of fire danger would be
				trict residents and important eeded to fight fires. Public health
				ted with depressurized water
				Il be a threat in South Qunicy.
	t all sources of funding.		Thairis would sti	in be a timeat in South Quilley.

Note: See Project Development Manual, Exhibit B, for assistance in completing this table (http://featherriver.org/documents/).

VIII. PROJECT STATUS AND SCHEDULE

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		☐ Yes ☐ No ☐ N/A			
b. Final Design	X	☐ Yes ဩ No ☐ N/A	Engineering Design Feasibility Study Prepare Bid documents	4/1/16	7/1/15* 6/30/16
c. Environmental Documentation (CEQA / NEPA)		☐ Yes ☑ No ☐ N/A	Prepare Negative Declaration	4/1/16	6/30/16
d. Permitting		☐ Yes ☑ No ☐ N/A	Apply and Obtain Timber Harvest Permit	6/1/16	6/30/16
e. Construction Contracting		☐ Yes ☑ No ☐ N/A	Public bidding/award/contract execution	8/1/15* 7/1/16	8/31/15* 8/14/16
f. Construction Implementation		☐ Yes ဩ No ☐ N/A	Construct UV Disinfection Construct Waterline Project Execute Wildland Fuel Reduction Project	9/1/15* 8/15/16	10/31/15* 10/31/16
Provide explanation if more than one project stage is checked as current status			*Central/Edwards/Summerfield Waterline Replacement Project is currently under construction to be completed by the end of 2015. All other project elements are waiting for funding commitments to begin final design.		

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	District's 2001 Master Water Plan; 1992
	project is consistent with or supported by (e.g. General	QCSD Watershed Project Management
	Plans, UWMPs, GWMPs, Water Master Plan, Habitat	Plan. Basin Plan for Sacramento River
	Conservation Plans, TMDLs, Basin Plans, etc.).	and San Joaquin River
b.	List technical reports and studies supporting the	1995 Technical Fuels Report, 2012
D.	, , , ,	• •
	feasibility of this project.	Quincy CSD Consumer Confidence
		Report

c.	Concisely describe the scientific basis (e.g. how much research has been conducted) of the proposed project in 300 words or less. Does the project implement green technology (e.g.	A hydraulic model was utilized for the 2001 Master Water Plan (MWP) that identified the low pressure area in the southern portions of Quincy, more specifically on Boyle Street and the upper portion of Coburn Street. The feasibility study will further investigate the low pressure problem to determine necessary improvements. Based on the District's leak repair history and the 2001 MWP, the Central/Edwards/Summerfield Waterline was recommended to be replaced and upsized to an 8" to provide adequate flows. The 2012 Quincy CSD Consumer Confidence Report summarizes the testing and findings that determined the presence of total coliform bacteria in the Claremont Spring. Thinning and fuel reduction along urban wildland interface has been a high priority in the Lassen, Plumas, and Tahoe National Forests for a number of years, as indicated in the 1992 QCSD Watershed Project Management Plan. Further, fuel reduction in the subject project area was recommended as part of a Community Defense Zone in the <i>Technical Fuels Report</i> , dated July 1995. Quincy is on the Federal Register wildfire hazard community list. Thus, the subject area is on most existing fuels reduction priority lists from federal and state agencies. Due to the urban wildland interface with the large residential area in southern Quincy, the District considers fuel reduction in this area to be a top priority.
u.	alternate forms of energy, recycled materials, LID techniques, etc.).	If yes, please describe.
e.	Are you an Urban Water Supplier ¹ ?	X Yes □ No □ N/A

 $\chi\,$ MS-32: Water System Improvements

f. Are you are an Agricultural Water Supplier ² ?	☐ Yes 🗓 No 🗌 N/A			
g. Is the project related to groundwater?	☐ Yes ☒ No ☐ N/A			
	If yes, please indicate which			
	groundwater basin.			
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, eith	ner publicly or privately owned, providing			
water to 10,000 or more irrigated acres, excluding the acreage	that receives recycled water.			

Climate Change – Project Assessment Checklist

This climate change project assessment tool allows project applicants and the planning team to assess project consistency with Proposition 84 plan standards and RWMG plan assessment standards. The tool is a written checklist that asks GHG emissions and adaptation/resiliency questions.

Name of project: MS-32: Water System Improvements

Project applicant: <u>Quincy Community Services District</u>

GHG Emissions Assessment

Project Construction Emissions
(If you check any of the boxes, please see the attached worksheet)
The project requires nonroad or off-road engines, equipment, or vehicles to complete.
igstyle igstyle The project requires materials to be transported to the project site.
The project requires workers to commute to the project site.
The project is expected to generate GHG emissions for other reasons.
The project does not have a construction phase and/or is not expected to generate GHG emissions during the construction phase.
Operating Emissions
(If you check any of the boxes, please see the attached worksheet)
The project requires energy to operate.
The project will generate electricity.
The project will proactively manage forests to reduce wildfire risk.
The project will affect wetland acreage.
The project will include new trees.
Project operations are expected to generate or reduce GHG emissions for other reasons

Adaptation & Resiliency Assessment

Water Supply Describe how the president makes the watershed (many /less) resilient to one or many of the following
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water supply vulnerability issues:
☐ Not applicable
Reduced snowmelt
☐ Unmet local water needs (drought)
☐ Increased invasive species
The proposed UV disinfection project will improve the quality of the District's existing spring water
supply by eliminating harmful bacteria and making the source available to satisfy local municipal water
demands, and augment its existing water supply that has seen reduced yield during the drought.
Water Demand
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water demand vulnerability issues:
☐ Not applicable
☐ Increasing seasonal water use variability
Unmet in-stream flow requirements
Climate-sensitive crops
Groundwater drought resiliency
Water curtailment effectiveness
By establishing the District's existing spring supply as a reliable source, the impact on area wells is
reduced. The water system feasibility study will evaluate and make recommendations to correct
existing deficiencies within the water system along the south side of the District. It is expected
improvements will lead to more efficient use of the existing water supply through use of more effective
controls and booster pumping facilities.

Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water quality vulnerability issues:
☐ Not applicable
Eutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and other related water quality issues)
Seasonal low flows and limited abilities for waterbodies to assimilate pollution
Water treatment facility operations
Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold freshwater habitat, spawning habitat, wildlife habitat, etc.)
The Wildland Fuel Reduction portion of the project will treat 16 acres of lands south and adjacent to the
District's existing water supply infrastructure and protect homes residing on the south side of the District.
Adding disinfection facilities to the District's existing spring will reduce its reliance on the other system
groundwater wells and the need to purchase water from neighboring East Quincy Services District.
Flooding Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues:
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues:
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain Insufficient flood control facilities
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain Insufficient flood control facilities The Wildland Fuel Reduction Project will help to prevent spread of catastrophic wildfires in the region,
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain Insufficient flood control facilities The Wildland Fuel Reduction Project will help to prevent spread of catastrophic wildfires in the region, thereby reducing the erosion and water quality degradation associated with floods and major
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain Insufficient flood control facilities The Wildland Fuel Reduction Project will help to prevent spread of catastrophic wildfires in the region,
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain Insufficient flood control facilities The Wildland Fuel Reduction Project will help to prevent spread of catastrophic wildfires in the region, thereby reducing the erosion and water quality degradation associated with floods and major
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain Insufficient flood control facilities The Wildland Fuel Reduction Project will help to prevent spread of catastrophic wildfires in the region, thereby reducing the erosion and water quality degradation associated with floods and major
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain Insufficient flood control facilities The Wildland Fuel Reduction Project will help to prevent spread of catastrophic wildfires in the region, thereby reducing the erosion and water quality degradation associated with floods and major

Water Quality

Upper Feather River Integrated Regional Water Management Plan Climate Change- Project Assessment Tool

Ecosystem and Habitat
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority ecosystem and habitat vulnerability issues:
☐ Not applicable
Climate-sensitive fauna or flora
Recreation and economic activity
Quantified environmental flow requirements
Erosion and sedimentation
☐ Endangered or threatened species
Fragmented habitat
The Wildland Fuel Reduction Project will reduce the chances of catastrophic wildfires, and associated erosion and sedimentation caused from rainfall on freshly burned areas. In addition, local fauna and flora will be better protected from catastrophic wildfire.
Hydropower Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority hydropower vulnerability issues:
Not applicable ■ Not applicable Not applicable
Reduced hydropower output
N/A.

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-32: Water System Improvements

GHG Emissions Analysis

Project Construction Emissions

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

	Maximum		
	Number Per	Total 8-Hour Days in	
Type of Equipment	Day	Operation	Total MTCO₂e
Plate Compactors	1	27	0
Excavators	1	10	4
Off-Highway Trucks	1	37	46
Rubber Tired Loaders	1	10	4
Skid Steer Loaders	1	15	1
Tractors/Loaders/Bac khoes	1	11	3
Other Construction Equipment	9	20	15
			0
			0
			0
	•	Total Emissions	73

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

Round Trips	(Miles)	Total MTCO₂e
	Distance	
	Average Trip	

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

 		' '		
		Average Round Trip		
Average Number	Total Number	Distance Traveled		
of Workers	of Workdays	(Miles)	Total MTCO₂e	
10	50	30		5

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-32: Water System Improvements

Project Operating Emissions	,	
The project requires energy to operate. If you shall be supported in the project requires energy to operate. If you shall be supported in the project requires energy to operate. If you shall be supported in the project requires energy to operate. If you shall be supported in the project requires energy to operate. If you shall be supported in the project requires energy to operate. If you shall be supported in the project requires energy to operate and the project requires energy to operate an	es: Unit	Total MTCO₂e
		
9,	100 kWh (Electricity) Therm (Natural Gas)	2
	merin (Natural Gas)	, v
The project will generate electricity. If yes:		
Annual kWh Generated	Total MTCO₂e	
*A negative value indicates GHG	reductions	_
X The project will proactively manage forests	to reduce wildfire risk. If	yes:
Acres Protected from Wildfire	e Total MTCO₂e	
	16 -101	Ī
*A negative value indicates GHG	reductions	_
The project will affect wetland acreage. If your Acres of Protected Wetlands	Total MTCO₂e]
*A negative value indicates GHG The project will include new trees. If yes:	o reductions	
Acres of Trees Planted	Total MTCO ₂ e	
	0 (-
*A negative value indicates GHG	reductions	_
Project operations are expected to generate explain:	e or reduce GHG emission	ns for other reasons. If yes,
GHG Emissions Summary		
Construction and development will generat	81 MTCO ₂	
In a given year, operation of the project wil	-99 MTCO ₂	



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	Sierra County Road Department
Name of Primary Contact	Tim Beals
Name of Secondary Contact	Bryan Davey
Mailing Address	P.O. Box 98 Downieville, CA 95936
E-mail	tbeals@sierracounty.ca.gov
Phone	530-289-3201
Other Cooperating Agencies /	US Forest Service, SVRCD, CA Fish and Wildlife
Organizations / Stakeholders	
Is your agency/organization	Yes
committed to the project through	
completion? If not, please explain	

II. GENERAL PROJECT INFORMATION

Project Title	MS-33:Sierra County Road Improvements		
Project Category	☐ Agricultural Land Stewardship		
	☐ Floodplains/Meadows/Waterbodies		
	☐ Tribal Advisory Committee		
	☐ Uplands/Forest		
Project Description	Drain stormwater on several County roads by installing		
(Briefly describe the project,	culverts and drains, building small detention basins, creating		
in 300 words or less)	drainages, implementing stream bank and land erosion		
	control measures and reestablishing historic flows.		
Project Location Description (e.g.,	Sierra County County maintained roads: Smithneck Road,		
along the south bank of stream/river	Antelope Road, Old Truckee Road, Lemon Canyon Road,		
between river miles or miles from	Campbell Hot Springs Road, Henness Pass Road (Little Truckee		
Towns/intersection and/or address):	OHV), West Willow, A-23, Heriot Lane, A-24, Calpine Cutoff		
Latitude:	39.47327		
Longitude:	-120.84616		

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.

	Will the project		Quantification (e.g. acres of
	address		streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Restore natural hydrologic	⊠ Yes	Restore historic flows and	,
functions.		restore meadow/wetlands.	
	□ N/A	Implement stabilization	
		measures to stream banks and	
		hillsides to reduce erosion and	
		resulting sedimentation and	
		turbidity in local creeks and the	
		North Fork of the Feather River.	
Reduce potential for catastrophic wildland fires in	☐ Yes		
the Region.	⊠ N/A		
Build communication and	⊠ Yes	This project is a collaborative	
collaboration among water		effort of the following	
resources stakeholders in the	□ N/A	entities/agencies: USFS,	
Region.		California FWS, SVRCD, who all	
		support and contribute to	
		improvements to Public Land Resources.	
Work with DWR to develop	☐ Yes	Resources.	
strategies and actions for the	□ 162		
management, operation, and	⊠ N/A		
control of SWP facilities in the	□ M/A		
Upper Feather River			
Watershed in order to increase			
water supply, recreational, and			
environmental benefits to the			
Region.			
Encourage municipal service	☐ Yes		
providers to participate in			
regional water management	⊠ N/A		
actions that improve water			
supply and water quality.			
Continue to actively engage in	☐ Yes		
FERC relicensing of			
hydroelectric facilities in the	⊠ N/A		
Region.	□ Vac		
Address economic challenges	☐ Yes		

_	I	ivis-55. Sierra Cour	
	Will the		Quantification
	project		(e.g. acres of
	address		streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
of municipal service providers		,	,
to serve customers.	⊠ N/A		
to serve eastorners.	N//\		
Protect, restore, and enhance	⊠ Yes	Install storm runoff control	
the quality of surface and		management practices and	
groundwater resources for all	□ N/A	sediment traps, restore flows	
beneficial uses, consistent with	I IN/A	truncated by roads, improve	
the RWQC Basin Plan.		water quality, and implement	
the KWQC Basiii i laii.		meadow restoration. The	
		project benefits wildlife and	
		fisheries.	
Address water resources and	☐ Yes	noncreo.	
wastewater needs of DACs and			
Native Americans.	⊠ N/A		
Coordinate management of	⊠ Yes	Many road drainages are	
recharge areas and protect		adjacent to recharge areas and	
groundwater resources.	□ N/A	meadows. These meadows and	
8	L N/A	wetlands will be restored and	
		protected by this project,	
Improve coordination of land	⊠ Yes	County, State and Federal	
use and water resources		Agencies will coordinate efforts	
planning.	□ N/A	to benefit natural resources	
		through this project.	
Maximize agricultural,	☐ Yes	-	
environmental and municipal			
water use efficiency.	⊠ N/A		
Effectively address climate	☐ Yes		
change adaptation and/or			
mitigation in water resources	⊠ N/A		
management.	,		
Improve efficiency and	☐ Yes		
reliability of water supply and			
other water-related	⊠ N/A		
infrastructure.			
Enhance public awareness and	☐ Yes		
understanding of water			
management issues and needs.	⊠ N/A		
Address economic challenges	☐ Yes		
of agricultural producers.			
	⊠ N/A		
Work with counties/	⊠ Yes	Sierra County Road	
communities/groups to make		Department, and our	
sure staff capacity exists for	□ N/A	collaborators, US Forest	
and a state of the			

	Will the		Quantification
	project		(e.g. acres of
	address		streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
actual administration and		Service, SVRCD, CA Fish and	
implementation of grant		Wildlife Service, will ensure the	
funding.		staff capacity to successfully	
		administer and implement of	
		this grant project.	

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 proje if not applicable; do no leave a blank cell. Note				
If applicable, describe benefits or impacts of th	e project w	ith respect to:		
a. Native American Tribal Communities	⊠ N/A			
b. Disadvantaged Communities ¹	⊠ N/A			
c. Environmental Justice ²	⊠ N/A			
d. Drought Preparedness	□ N/A	Improvements will restore and/or direct previously impaired systems into watercourses or meadow areas.		
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			

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

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.

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/).

	Will the Project	
Resource Management Strategy	incorporate RMS?	Description of how RMS to be employed, if applicable
Reduce Water Demand	KIVI3:	п аррисаріе
Agricultural Water Use Efficiency	☐ Yes ⊠ No	
Urban water use efficiency	☐ Yes ☒ No	
Improve Flood Management		
Flood management	⊠ Yes □ No	Reduced erosion and sediment in waterways and better flood management through
		improved drainages guiding water to meadows/wetlands.
Improve Operational Efficiency and T	ransfers	
Conveyance – regional/local	☐ Yes ⊠ No	
System reoperation	☐ Yes ⊠ No	
Water transfers	☐ Yes ⊠ No	
Increase Water Supply		
Conjunctive management	☐ Yes ⊠ No	
Precipitation Enhancement	☐ Yes ⊠ No	
Municipal recycled water	☐ Yes ⊠ No	
Surface storage – regional/local	☐ Yes ⊠ No	
Improve Water Quality		
Drinking water treatment and distribution	☐ Yes ⊠ No	
Groundwater remediation/aquifer remediation	□ Yes ⊠ No	
Matching water quality to water use	☐ Yes ⊠ No	
Pollution prevention	☐ Yes ⊠ No	
Salt and salinity management	☐ Yes ⊠ No	
Urban storm water runoff management	⊠ Yes □ No	Road drainages will be better controlled and properly discharged.
Practice Resource Stewardship		
Agricultural land stewardship	☐ Yes ⊠ No	
Ecosystem restoration		Reduced stream bank erosion and reduced
	⊠ Yes □ No	sedimentation and turbidity in Indian Creek improve cold freshwater habitat and spawning grounds.
Forest management	☐ Yes ⊠ No	
Land use planning and management	⊠ Yes □ No	Best Management Practices (BMPs) will be implemented, and the operation and maintenance of those BMPs will foster

	Will the Project incorporate	Description of how RMS to be employed,
Resource Management Strategy	RMS?	if applicable
		coordination among various agencies.
Recharge area protection	☐ Yes ⊠ No	
Sediment management	⊠ Yes □ No	Reduced sediment in creeks & rivers
Watershed management	⊠ Yes □ No	Improved management of drainages and meadows/wetlands will result in improved watershed health and values
People and Water		
Economic incentives	☐ Yes ⊠ No	
Outreach and engagement	☐ Yes ☒ No	
Water and culture	☐ Yes ⊠ No	
Water-dependent recreation	☐ Yes ⊠ No	
Wastewater/NPDES	☐ Yes ⊠ No	

Other RMS addressed ar	nd explanation:
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Water Quality improvements, reduce or eliminate drainage overflow onto County Roads, improve floodplain function

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							
Pro	Project serves a need of a DAC?: ☐ Yes ☒ No							
	Funding Match Waiver request?: Yes No							
		Requested	Cost Share: Non-State Fund Source*	Cost Share: Other State				
		Grant	(Funding	Fund	Total			
	Category Direct Project Administration	\$5,000	Match) 10,000	Source*	\$15,000			
a.	Direct Project Administration	\$3,000	County Road Fund	U	\$13,000			
b.	Land Purchase/Easement	0	0	0	0			
c.	Planning/Design/Engineering / Environmental	\$25,000	0	0	\$25,000			
d.	Construction/Implementation	\$400,000	0	0	\$400,000			
e.	Environmental Compliance/ Mitigation/Enhancement	\$5,000	5,000 County Road Fund	0	\$10,000			
f.	Construction Administration	\$15,000	0	0	\$15,000			
g.	Other Costs	0	0	0	0			
h.	Construction/Implementation Contingency	\$45,000	1,500 County Road Fund	0	\$46,500			
			(10% of to	1	T 4			
i.	Grand Total (Sum rows (a) through (h) for each column)	\$495,000	16,500 Sierra County Road Fund	0	\$511,500			
j.	Can the Project be phased? ⊠ Yes	□ No If yes , p	rovide cost breakd	lown by phases				
		Project Cost	O&M Cost	Description	of Phase			
	Phase 1	\$170,500	No O&M anticipated during first year	Year 1: Approxi of implemental culverts, drain rap, and other enhance water function and re flooding of som	cion: install pipes, rip BMPs to shed duce ne County			
		4170 500	700	roads included project.				
	Phase 2	\$170,500	TBD	Year 2: Approxication of implemental culverts, drain praps, and other enhance water function and reflooding of som	cion: install pipes, rip BMPs to shed duce			
				roads included				

				project.
	Phase 3	\$170,500	TBD	Year 1: Approximately 1/3 of implementation: install culverts, drain pipes, rip rap, and other BMPs to enhance watershed function and reduce flooding of some County roads included in this project.
	Phase 4			
k.	Explain how operation and maintenan financed for the 20-year planning periodic implementation (not grant funded).		Annual County b	oudget
I.	Has a Cost/Benefit analysis been comp	oleted?	☐ Yes ⊠ No	
m.	Describe what impact there may be if not funded (300 words or less)	Continued bank and flooding.	erosion, water turbidity,	
*List all sources of funding. Note: See Project Development Manual, Exhibit B, for assistance in completing this table (http://featherriver.org/documents/).				

VIII. **PROJECT STATUS AND SCHEDULE**

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.

	Check the Current			Description of	Planned/ Actual Start	Planned/ Actual
	Project			Activities in Each	Date	Completion
Project Stage	Stage	Con	npleted?	Project Stage	(mm/yr)	Date (mm/yr)
a. Assessment and			Yes	Specific site ID,	Within 60	1-3 years after
Evaluation	\boxtimes	\boxtimes	No	Agency coordination,	days of grant	grant funding
			N/A	develop scope of work	procurement	secured
b. Final Design			Yes	Implementation plans	Within 180	1-3 years after
		\boxtimes	No	and materials lists	days of grant	grant funding secured
			N/A		procurement	secureu
c. Environmental	_		Yes	Anticipated	Within 365	1-3 years after
Documentation		\boxtimes	No	exemption(s)	days of grant	grant funding
(CEQA / NEPA)			N/A		procurement	secured
d. Permitting			Yes	TBD	TBD	1-3 years after
		\boxtimes	No			grant funding
			N/A			secured
e. Construction			Yes	N/A Agency work – no	N/A Force	1-3 years after
Contracting		\boxtimes	No	contracting required	Account	grant funding
			N/A			secured

						MS-33: Sier	ra County Roa	ad Improvements
f.	Construction Implementation			Yes No	TBD		TBD	3 years after grant funding secured
				N/A				
	ovide explanation			project				
sta	age is checked as c	urrent status	}					
					•			
IX.	PROJECT TE	CHNICAL FE	ASIB	ILITY				
Ple	ase provide any re	elated docum	ents (date, title	, author, and	page numbe	ers) that desc	ribe and confirm
	e technical feasibili					_		
	thered on the UFR					<i></i>		
a.	List the adopted	planning doc	umer	nts the pro	pposed	Sierra Cou	ntv General F	Plan, RCD Plan,
	project is consist			-	-		•	CB Basin Plan for
	Plans, UWMPs, G			• •	-		•	n Joaquin Rivers
	Conservation Plans, TMDLs, Basin Plans, etc.).				·			
b.	List technical reports and studies supporting the		Smithneck Wildlife Area EIR					
	feasibility of this project.			Antelope a	and Smithned	k CRMP		
c.	Concisely describ	e the scientif	fic ba	sis (e.g. ho	ow much	For the pr	otection of a	quatic species
	research has been	-	of th	e propose	ed project in		at, sediment l	•
	300 words or less	S.					=	ns and rivers are
					_	•	Quality Control	
						ne Sacrament		
						-	asin Plan) and by	
								is project will
							diment inputs	
							• •	of compliance
							asin Plan and	established
d.	Does the project	implement a	roon	tachnalac	nu lo a	TMDLs.		
u.	alternate forms o			_			¬ N	•
	techniques, etc.).		ycieu	materiais,	LID		□ No □ N/	А
	teeriniques, etc.).					ir yes, piea	ase describe.	
						Recycled a	schalt	
						necycleu a	13 pilait	
e.	Are you an Urba	n Water Supp	olier¹ î	?		☐ Yes □	⊠ No □ N/	′A
f.	Are you are an A	gricultural W	ater S	Supplier ² ?		☐ Yes 🛭	⊠ No □ N/	′A

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.

g. Is the project related to groundwater?

 \square Yes \boxtimes No \square N/A If yes, please indicate which

groundwater basin.

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.

Climate Change – Project Assessment Checklist

This climate change project assessment tool allows project applicants and the planning team to assess project consistency with Proposition 84 plan standards and RWMG plan assessment standards. The tool is a written checklist that asks GHG emissions and adaptation/resiliency questions.

Name of project: MS-33: Sierra County Road Improvements

Project applicant: Sierra County Road Department

GHG Emissions Assessment

The project will generate electricity.

The project will include new trees.

The project will affect wetland acreage.

The project will proactively manage forests to reduce wildfire risk.

Project Construction Emissions (If you check any of the boxes, please see the attached worksheet)
 ☑ The project requires nonroad or off-road engines, equipment, or vehicles to complete. ☑ The project requires materials to be transported to the project site. ☑ The project requires workers to commute to the project site. ☑ The project is expected to generate GHG emissions for other reasons. ☑ The project does not have a construction phase and/or is not expected to generate GHG emissions during the construction phase.
Operating Emissions (If you check any of the boxes, please see the attached worksheet)
The project requires energy to operate.

Project operations are expected to generate or reduce GHG emissions for other reasons.

Adaptation & Resiliency Assessment

Water Supply
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water supply vulnerability issues:
Not applicable ■ Not applicable Not applicable
Reduced snowmelt
Unmet local water needs (drought)
☐ Increased invasive species
Water Demand
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water demand vulnerability issues:
Not applicable ■ Not applicable Not applicable
☐ Increasing seasonal water use variability
Unmet in-stream flow requirements
Climate-sensitive crops
Groundwater drought resiliency
Water curtailment effectiveness

Water Quality Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water quality vulnerability issues:
 Not applicable Increasing catastrophic wildfires Eutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and other related water quality issues) Seasonal low flows and limited abilities for waterbodies to assimilate pollution Water treatment facility operations Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold freshwater habitat, spawning habitat, wildlife habitat, etc.)
Reduced sediment loads and turbidity result in improved cold freshwater habitat and spawning habitat.
Flooding Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: ☐ Not applicable ☐ Aging critical flood protection ☐ Wildfires ☐ Critical infrastructure in a floodplain ☐ Insufficient flood control facilities
Culverts and BMPs will be implemented to reduce flooding of County roads and runoff of sediment and other possible contaminants into local waterways. The project will reduce erosion and sedimentation and direct drainage water into retention basins/meadows/wetlands for flood management.

Upper Feather River Integrated Regional Water Management Plan Climate Change- Project Assessment Tool

Ecosystem and Habitat Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority ecosystem and habitat vulnerability issues:
 Not applicable □ Climate-sensitive fauna or flora □ Recreation and economic activity □ Quantified environmental flow requirements ☑ Erosion and sedimentation □ Endangered or threatened species □ Fragmented habitat
The project when completed will reduce the erosion and sedimentation in waterways, and will restore natural watercourses and meadows/wetlands to improve ecosystem function and habitat for wildlife and fisheries.
Hydropower Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority hydropower vulnerability issues: Not applicable Reduced hydropower output

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-33: Sierra County Road Improvements

GHG Emissions Analysis

Project Construction Emissions

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

	Maximum		
	Number Per	Total 8-Hour Days in	
Type of Equipment	Day	Operation	Total MTCO₂e
Excavators	1	5	2
Tractors/Loaders/Bac			
khoes	2	5	3
Dumpers/Tenders	1	5	0
Off-Highway Trucks	1	5	6
			0
			0
			0
			0
			0
			0
_	•	Total Emissions	11

Χ	The project requires materials to be transported to the project site. I	f yes:

		<u> </u>
	Average Trip	
Total Number of	Distance	
Round Trips	(Miles)	Total MTCO ₂ e
1	0 30	0

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

"	Total Number	Average Round Trip Distance Traveled	T	
of Workers	of Workdays 10	(Miles) 60	Total MTCO₂e	1

The projec	t 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-33: Sierra County Road Improvements					
	erating Emissions				
The projec	t requires energy to operate. If yes: Annual Energy Needed	Unit	Total MTCO₂e		
	Author Energy Needed	kWh (Electricity)	Total WireO2C	0	
		Therm (Natural Gas)		0	
		,	•		
The projec	t will generate electricity. If yes:		-		
	Annual kWh Generated	Total MTCO₂e			
		0	<u> </u>		
	*A negative value indicates GHG re-	ductions			
The project	t will proactively manage forests to	reduce wildfire risk. If	ves:		
The project	Acres Protected from Wildfire	Total MTCO₂e	1		
	7.0.00 1.0000000 1.011 17.110.11	0	-		
l	*A negative value indicates GHG re-	ductions	_		
The projec	t will affect wetland acreage. If yes:	•	7		
	Acres of Protected Wetlands	Total MTCO₂e			
		0	1		
	*A negative value indicates GHG re-	ductions			
The projec	t will include new trees. If yes:				
	Acres of Trees Planted	Total MTCO ₂ e	1		
	C				
!	*A negative value indicates GHG re-	ductions	-		
			6		
explain:	erations are expected to generate or	r reduce GHG emission	is for other reas	ons. If yes,	
ехріант.					
GHG Emiss	sions Summary				
	on and development will generate a	nnroximately:		13 MTCO ₂ e	
				$0 \text{ MTCO}_2 e$	
In a given year, operation of the project will result in: 0 MTCO₂e					



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	Sierraville Public Utility District
Name of Primary Contact	Nanci Davis
Name of Secondary Contact	Laura Read
Mailing Address	PO Box 325, Sierraville, CA 96126
E-mail	nancidavis212@gmail.com
	readwriteshoot@gmail.com
Phone	530-574-8331
Other Cooperating Agencies /	
Organizations / Stakeholders	
Is your agency/organization	Yes, providing adequate funding is ensured
committed to the project through	
completion? If not, please explain	

II. GENERAL PROJECT INFORMATION

Project Title	MS-35: Alternative Water Source Analysis and Development				
Project Category	☐ Agricultural Land Stewardship				
	☐ Floodplains/Meadows/Waterbodies				
	☑ Municipal Services				
	☐ Tribal Advisory Committee				
	☐ Uplands/Forest				
Project Description (Briefly describe the project, in 300 words or less)	Currently the community of Sierraville is served by one spring located on National Forest Land. SPUD would not be able to meet health and safety needs of the community if the single source of water was contaminated, ran dry, lost due to curtailment or water rights issues or damaged or destroyed in a natural disaster. SPUD has been directed by DWR to research and develop an alternative water source. We know we have adjudicated rights to Webber Creek water, but no means to filter, pump and deliver the water. There may also be potential for development of a well somewhere in the vicinity. Phase 1. Hire a consultant to research options and requirements for development of each option. The				

	consultant will identify and explore potential sources including an assessment of volume of water to be produced, quality of water, water rights implications and infrastructure requirements. The study will focus on using adjudicated water rights held by the district referenced in the Sierra Valley Decree of 1940 and developing wells in compliance with the local ground water district.
	Phase 2. Implement the best option recommended by the consultant. Design and construct. Initiate design, engineering, determine cost and schedule, select contractors and construct the facilities.
	Development of alternative or complementary sources of domestic water will ensure that service would not be interrupted if there is curtailment of use from springs or if the springs stop producing adequate water or if there is damage or destruction of springs.
Project Location Description (e.g., along the south bank of stream/river	Within the Sierraville Public Utility District service area, Sierraville, Ca
between river miles or miles from	
Towns/intersection and/or address):	
Latitude:	
Longitude:	

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.

	Will the		Quantification
	project		(e.g. acres of
	address		streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Restore natural hydrologic	☐ Yes		
functions.			
	⊠ N/A		
Reduce potential for	⊠ Yes	SPUD provides fire suppression	
catastrophic wildland fires in		water to local firefighting	
the Region.	□ N/A	agencies. An additional source	
		of water will provide more	
		reliable water supply for	
		emergency fire response.	
Build communication and	⊠ Yes	SPUD is a collaboration of	

	1	S-35: Alternative Water Source And	· ·
	Will the		Quantification
	project		(e.g. acres of
	address		streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
collaboration among water		water resource stakeholders	
resources stakeholders in the	□ N/A	and improvements will serve all	
Region.		stakeholders in the district	
Work with DWR to develop	⊠ Yes	We are following direction from	
strategies and actions for the		the DWR to research an	
management, operation, and	□ N/A	alternative water supply.	
control of SWP facilities in the			
Upper Feather River			
Watershed in order to increase			
water supply, recreational, and			
environmental benefits to the			
Region.	57.7	CDUD is a musticed.	
Encourage municipal service	⊠ Yes	SPUD is a municipal service	
providers to participate in		provider. Research of an	
regional water management	□ N/A	alternative water supply is a	
actions that improve water		regional water management	
supply and water quality.		action specifically orchestrated to improve water supply and	
		ensure quality	
Continue to actively engage in	☐ Yes	ensure quanty	
FERC relicensing of	□ res		
hydroelectric facilities in the	⊠ N/A		
Region.	🖾 IN/A		
Address economic challenges	⊠ Yes	We are a disadvantaged	
of municipal service providers		community and our ratepayers	
to serve customers.	□ N/A	have been unable to fund a	
to serve oustomers.	- 10/A	study without assistance	
Protect, restore, and enhance	⊠ Yes	The study and implementation	
the quality of surface and		of alternative water supply	
groundwater resources for all	□ N/A	would be designed to protect,	
beneficial uses, consistent with	,,	restore and enhance the quality	
the RWQC Basin Plan.		of water resources	
Address water resources and	⊠ Yes	Sierraville is a DAC	
wastewater needs of DACs and			
Native Americans.	□ N/A		
Coordinate management of	☐ Yes		
recharge areas and protect			
groundwater resources.	⊠ N/A		
Improve coordination of land	⊠ Yes	A hydrogeology base study and	
use and water resources		engineering analysis report	
planning.	□ N/A	would guarantee this objective	
	,,		

	Will the		Quantification
	project		(e.g. acres of
	address		streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Maximize agricultural,	⊠ Yes	This is one of our objectives in	
environmental and municipal		the study	
water use efficiency.	□ N/A		
Effectively address climate	⊠ Yes	SPUD will potentially become	
change adaptation and/or		less dependent on seasonally	
mitigation in water resources	□ N/A	impacted water sources if a	
management.		well is developed	
Improve efficiency and	⊠ Yes	The Alternative source study	
reliability of water supply and		and implementation will be	
other water-related	□ N/A	designed to improve efficiency	
infrastructure.		and reliability of water supply	
Enhance public awareness and	⊠ Yes	SPUD will engage community	
understanding of water		outreach and strive for	
management issues and needs.	□ N/A	effective communication with	
		all stakeholders	
Address economic challenges	⊠ Yes	If the study determines that a	
of agricultural producers.		well is viable this will allow	
	□ N/A	more surface water to become	
		available downstream in Sierra	
		Valley and below for use or	
		aquifer recharge.	
Work with counties/	⊠ Yes	SPUD Board of Directors is a	
communities/groups to make		volunteer organization	
sure staff capacity exists for	□ N/A	committed to the completion	
actual administration and		of this project.	
implementation of grant			
funding.			

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 pro	ject w	th respect to:	
a. Native American Tribal Communities		N/A		
b. Disadvantaged Communities ¹		N/A	Sierraville is a Disadvantaged Community	
c. Environmental Justice ²		N/A	SPUD ensures fair and equal ser regardless of race, culture, inco any other cultural factors. A ne supply will benefit all water use service district.	me, or w water
d. Drought Preparedness		N/A	An alternative water source wil community more versatility in t of continued drought	_
e. Assist the region in adapting to effect climate change ³		N/A	An alternative water source wil community more versatility in t of continued climate change	_
f. Generation or reduction of greenhous gas emissions (e.g. green technology)		N/A		
g. Other expected impacts or benefits the 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 □ N/A	d	rinking water treatment and istribution	⊠ Yes □ N/A
b. Stormwater capture, storage, clean- up, treatment, management	□ Yes ⊠ N/A		Vatershed protection and nanagement	⊠ Yes □ N/A

c.	Removal of invasive non-native	☐ Yes	i.	Contaminant and salt removal	☐ Yes
	species, creation/enhancement of	⊠ N/A		through reclamation/desalting,	⊠ N/A
	wetlands,			other treatment technologies	
	acquisition/protection/restoration			and conveyance of recycled	
	of open space and watershed lands			water for distribution to users	
d.	Non-point source pollution	☐ Yes	j.	Planning and implementation of	☐ Yes
	reduction, management and	⊠ N/A		multipurpose flood	⊠ N/A
	monitoring			management programs	
e.	Groundwater recharge and	☐ Yes	k.	Ecosystem and fisheries	☐ Yes
	management projects	⊠ N/A		restoration and protection	⊠ N/A
f.	Water banking, exchange,	☐ Yes			
	reclamation, and improvement of	⊠ N/A			
	water quality	•			

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 ⊠ No	
Urban water use efficiency	⊠ Yes □ No	Rural water use efficiency
Improve Flood Management		
Flood management	☐ Yes ⊠ No	
Improve Operational Efficiency and T	ransfers	
Conveyance – regional/local	⊠ Yes □ No	A new water supply will result in operational flexibility and more reliable water conveyance to our customers.
System reoperation	⊠ Yes □ No	An additional source will incorporate flexibility into the system to respond to climate change events that could reduce the reliability of the current source. Downstream users will benefit from additional surface water availability.
Water transfers	☐ Yes ⊠ No	
Increase Water Supply		
Conjunctive management	☐ Yes ⊠ No	
Precipitation Enhancement	☐ Yes ⊠ No	
Municipal recycled water	☐ Yes ⊠ No	
Surface storage – regional/local	☐ Yes ⊠ No	

Resource Management Strategy	Will the Project incorporate RMS?	Description of how RMS to be employed, if applicable			
Improve Water Quality	KIVI3:	п аррпсавіе			
Drinking water treatment and		Developing an alternative water source			
distribution	⊠ Yes □ No	helps insure reliable distribution of safe drinking water.			
Groundwater remediation/aquifer remediation	☐ Yes ⊠ No				
Matching water quality to water use	⊠ Yes □ No				
Pollution prevention	☐ Yes ⊠ No				
Salt and salinity management	☐ Yes ⊠ No				
Urban storm water runoff management	☐ Yes ⊠ No				
Practice Resource Stewardship					
Agricultural land stewardship	☐ Yes ⊠ No				
Ecosystem restoration	☐ Yes ⊠ No				
Forest management	☐ Yes ⊠ No				
Land use planning and management	☐ Yes ⊠ No				
Recharge area protection	☐ Yes ⊠ No				
Sediment management	☐ Yes ⊠ No				
Watershed management	☐ Yes ⊠ No				
People and Water					
Economic incentives	⊠ Yes □ No				
Outreach and engagement	⊠ Yes □ No				
Water and culture	⊠ Yes □ No				
Water-dependent recreation	☐ Yes ⊠ No				
Wastewater/NPDES	☐ Yes ⊠ 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					
Pro	Project serves a need of a DAC?: ⊠ Yes □ No					
	Funding Match Waiver request?: 🗵 Yes 🗆 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	5,000			5,000	
b.	Land Purchase/Easement	50,000			50,000	
C.	Planning/Design/Engineering / Environmental	85,000			85,000	
d.	Construction/Implementation	305,000			305,000	
e.	Environmental Compliance/ Mitigation/Enhancement	10,000			10,000	
f.	Construction Administration	5,000			5,000	
g.	Other Costs –drilling test well & analysis	200,000			200,000	
h.	Construction/Implementation Contingency					
i.	Grand Total (Sum rows (a) through (h) for each column)	660,000			660,000	
j.	Can the Project be phased? ⊠ Yes	□ No If yes , p	rovide cost breakc	lown by phases		
		Project Cost	O&M Cost	Descriptio	n of Phase	
	Phase 1	290,000		Analysis and de		
	Phase 2	370,000		Implementation	า	
	Phase 3					
	Phase 4					
k.	Explain how operation and maintenar financed for the 20-year planning peri implementation (not grant funded).		Monthly rate pa	yer fees and from	reserves.	
I.	Has a Cost/Benefit analysis been comp	pleted?	☐ Yes ⊠ No			
m.	m. Describe what impact there may be if the project is not funded (300 words or less) Inability to meet the domestic water health are safety needs of the community of Sierraville					
No	*List all sources of funding. Note: See Project Development Manual, Exhibit B, for assistance in completing this table (http://featherriver.org/documents/).					

VIII. PROJECT STATUS AND SCHEDULE

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	Con	npleted?	Description of Activities in Each Project Stage	Planned/ Actual Start Date (mm/yr)	Planned/ Actual Completion Date (mm/yr)
a. Assessment and Evaluation	⊠ ⊠		Yes No N/A	Hire a consultant to identify and explore potential water sources.	Upon securing grant funding	6 months after funding secured
b. Final Design			Yes No N/A	Design and engineering of consultant recommended source	6 months after funding secured	9 months after funding secured
c. Environmental Documentation (CEQA / NEPA)			Yes No N/A		9 months after funding secured	11 months after funding secured
d. Permitting			Yes No N/A		11 months after funding secured	14 months after funding secured
e. Construction Contracting			Yes No N/A		14 months after funding secured	15 months after funding secured
f. Construction Implementation			Yes No N/A		15 months after funding secured	17 months after funding is secured
Provide explanation if more than one project stage is checked as current status		Exploratory drilling and hydro analysis needed to determine best location. Need to secure property. Bidding and construction.				

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	Curtailment order from DWS
	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	Preliminary Engineering Report from
	feasibility of this project.	Walters Engineering
c.	Concisely describe the scientific basis (e.g. how much	The community of Sierraville is served
	research has been conducted) of the proposed project in	by one spring located on National
	300 words or less.	Forest Land. SPUD would not be able to
		meet health and safety needs of the
		community if the single source of water
		was contaminated, ran dry, lost due to
		curtailment or water rights issues or
		damaged or destroyed in a natural
		disaster.
		SPUD has been directed by DWR to
		research and develop an alternative water source.
		water source.
d.	Does the project implement green technology (e.g.	☐ Yes ☐ No ☐ N/A
	alternate forms of energy, recycled materials, LID	If yes, please describe.
	techniques, etc.).	ii yes, piedse describe.
	, , ,	
		To be determined
e.	Are you an Urban Water Supplier ¹ ?	☐ Yes ☒ No ☐ N/A
f.	Are you are an Agricultural Water Supplier ² ?	☐ Yes ☒ No ☐ N/A
g.	Is the project related to groundwater?	⊠ Yes □ No □ N/A
		If yes, please indicate which
		groundwater basin.
		5-12 Sierra Valley
¹ U	rban Water Supplier is defined as a supplier, either publicly of	or privately owned, providing water for
mι	inicipal purposes either directly or indirectly to more than 3,	000 customers or supplying more than
	000 acre-feet of water annually.	
² A	gricultural Water Supplier is defined as a water supplier, eith	ner publicly or privately owned, providing
wa	ter to 10,000 or more irrigated acres, excluding the acreage	that receives recycled water.



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	Westwood CSD
Name of Primary Contact	Susan Coffi
Name of Secondary Contact	Randy Buchanan
Mailing Address	P.O. Box 319, Westwood, CA 96137
E-mail	office@westwoodcsd.org
Phone	530-256-3211
Other Cooperating Agencies /	State Department of Environmental Health, Redding office.
Organizations / Stakeholders	
Is your agency/organization	Yes
committed to the project through	
completion? If not, please explain	

II. GENERAL PROJECT INFORMATION

Project Title	MS-36: Water Storage Project				
Project Category	☐ Agricultural Land Stewardship				
	☐ Floodplains/Meadows/Waterbodies				
	Municipal Services				
	☐ Tribal Advisory Committee				
	☐ Uplands/Forest				
Project Description	Construct a one (1) million gallon water storage tank to bring				
(Briefly describe the project,	the Westwood Community Services District (WWCSD) up to				
in 300 words or less)	minimum state requirements: the Waterworks Standards				
	require systems with less than 1,000 service connections to				
	have source and storage capacity equal to or greater than the				
	maximum day demand (MDD). As shown in the Inspection				
	Report, the District's treated water storage capacity is				
	insufficient to meet its estimated MDD. The District has one				
	active water source and one 500,000 water storage tank, and				
	therefore does not have a second source of supply or				
	sufficient storage to meet the source/storage capacity criteria.				
	, , , , , , , , , , , , , , , , , , , ,				
Project Location Description (e.g.,	The District's water source is Walker Spring, located adjacent				
along the south bank of stream/river	to the Hamilton Branch of the Feather River, about 3-miles				
between river miles or miles from	west of Westwood near the community of Clear Creek.				

Towns/interse	ction and/or address):	The District's existing water storage tank is located about ½ mile northeast of the District (north of Highway 36 and east of County Road A-21.
Source:	Latitude:	40°-16' W
	Longitude:	121°-04' N
Storage:	Latitude:	40°-18' W
	Longitude:	120°-58' N

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	Will the	Brief explanation of project	Quantification
Objectives:	project	linkage to selected Objective	(e.g. acres of
	address the		streams/wetlands
	objective?		restored or
			enhanced)
Restore natural hydrologic functions.	☐ Yes		
	☑ N/A		
Reduce potential for		The project will provide	Unknown
catastrophic wildland fires in	🛽 Yes	approximately	
the Region.		4.5 additional hours of fire	
	□ N/A	suppression capability in the	
		mountain community of	
		Westwood and immediate area.	
Build communication and			
collaboration among water	☐ Yes		
resources stakeholders in the			
Region.	☑ N/A		
Work with DWR to develop			
strategies and actions for the	☐ Yes		
management, operation, and			
control of SWP facilities in the	☑ N/A		
Upper Feather River Watershed			
in order to increase water			
supply, recreational, and			
environmental benefits to the			
Region.			

			vater storage rioject
Encourage municipal service providers to participate in regional water management actions that improve water supply and water quality.		Westwood CSD is a municipal service provider. This project will increase water storage and publicity to the residents of the increased water storage and the reasons for it, will encourage the water users to conserve water and alert them of the need to be vigilant of their water use.	Unknown
Continue to actively engage in FERC relicensing of hydroelectric facilities in the Region.	☐ Yes		
Address economic challenges of municipal service providers to serve customers.	✓ Yes	Grant funding for this project is necessary to ensure that Westwood CSD will be able to meet current State requirements for water storage for serving users and a water supply for emergency fire protection.	Increase water storage by 1,000,000 gallons
Protect, restore, and enhance the quality of surface and groundwater resources for all beneficial uses, consistent with the RWQC Basin Plan.	☐ Yes ☑ N/A		
Address water resources and wastewater needs of DACs and Native Americans.		The project will encourage all the users to conserve water and will provide needed storage capacity.	Increase water storage by 1,000,000 gallons
Coordinate management of recharge areas and protect groundwater resources.	☐ Yes	,	, , ,
Improve coordination of land use and water resources planning.	Yes N/A		
Maximize agricultural, environmental and municipal water use efficiency.	✓ Yes	Additional storage will provide sufficient water storage to meet State source/storage criteria and enhance the fire suppressing capability of the local Fire Dept.	Unknown
Effectively address climate change adaptation and/or mitigation in water resources management.	□Yes ☑ N/A	· · · · · · · · · · · · · · · · · · ·	
Improve efficiency and reliability of water supply and other water-related infrastructure.		Additional storage will provide sufficient water storage to meet State source/storage criteria and enhance the fire suppressing capability of the local Fire Dept.	Unknown

Enhance public awareness and understanding of water management issues and needs.		increased w reasons for water users and alert the	the residents of the ater storage and the it, will encourage the to conserve water em of the need to be neir water use.	Unknown		
Address economic challenges of agricultural producers.	☐ Yes	J				
Work with counties/ communities/groups to make sure staff capacity exists for actual administration and implementation of grant funding.	☐ Yes					
If no objectives are addressed, de Region:	scribe how the	project relat	es to a challenge or op	portunity for the		
IV. PROJECT IMPACTS AND Please provide a summary of the if not applicable; do no leave a bl	expected proje					
If applicable, describe benefits or impacts of the project with respect to:						
a. Native American Tribal Com	munities	□ N/A				
b. Disadvantaged Communities	51	□ N/A	Bring district up to mi requirements: the Wa requires systems with service connections to capacity equal to or g maximum day deman	aterworks Standards a less than 1,000 o have storage reater than		
c. Environmental Justice ²		□ N/A	The Westwood CSD e services regardless of income, or any other	race, culture,		
d. Drought Preparedness		□ N/A	Increased storage allomanagement of wate conditions			

climate change ³			\square	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		
inco UFF ² Er res reg (e.g	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					
DW	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	X Ye		_	Drinking water treatment, distribution and/or storage	
b.	Stormwater capture, storage, clean- up, treatment, management	☐ Yes	;	h. \	Watershed protection and management	☐ Yes
C.	Removal of invasive non-native species, creation/enhancement of wetlands, acquisition/protection/restoration of open space and watershed lands	Yes	;	i. (Contaminant and salt removal through reclamation/desalting, other treatment technologies and conveyance of recycled water for distribution to users	Yes N/A
d.	Non-point source pollution reduction, management and monitoring	☐ Yes ☑ N/		١	Planning and implementation of multipurpose flood management programs	☐ Yes ☐ N/A
e.	management projects	☐ Yes ☐ N/	Α		Ecosystem and fisheries restoration and protection	☐ Yes ☑ N/A
f.	Water banking, exchange, reclamation, and improvement of water quality	☐ Yes ☑ N/				

e. Assist the region in adapting to effects of

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/).

	Will the Project	
	incorporate	Description of how RMS to be employed,
Resource Management Strategy	RMS?	if applicable
Reduce Water Demand		
Agricultural Water Use Efficiency	☐ Yes 🗔 No	
Urban water use efficiency	☐ Yes 🗔 No	
Improve Flood Management		
Flood management	☐ Yes 🗔 No	
Improve Operational Efficiency and Ti	ransfers	
Conveyance – regional/local	☐ Yes 🗔 No	
System reoperation	☐ Yes 🗔 No	
Water transfers	☐ Yes 🗔 No	
Increase Water Supply		
Conjunctive management	☐ Yes 🗔 No	
Precipitation Enhancement	☐ Yes 🗔 No	
Municipal recycled water	☐ Yes 🗔 No	
Surface storage – regional/local		Increasing existing water storage capacity to
		comply with State source/storage
		requirements for drinking water.
Improve Water Quality		
Drinking water treatment and	☐ Yes 🗓 No	
distribution	L res & ito	
Groundwater remediation/aquifer	☐ Yes 🗔 No	
remediation		
Matching water quality to water use	Yes 🔀 No	
Pollution prevention	Yes 🛭 No	
Salt and salinity management	Yes 🕍 No	
Urban storm water runoff	☐ Yes ☑ No	
management		
Practice Resource Stewardship		
Agricultural land stewardship	Yes 🛽 No	
Ecosystem restoration	☐ Yes 🗔 No	
Forest management	☐ Yes 🗔 No	
Land use planning and management	☐ Yes 🗔 No	
Recharge area protection	☐ Yes 🗔 No	
Sediment management	☐ Yes 🗔 No	
Watershed management	☐ Yes 🗔 No	
People and Water		
Economic incentives		Users will be encouraged through newsletters
	☐ Yes☐ No	and billing statements to conserve water and
		more closely comply with the State's mandate
		to practice water conservation measures.

	Will the Project			
	incorporate	Description of how RMS to be employed,		
Resource Management Strategy	RMS?	if applicable		
Outreach and engagement		The District will keep the users abreast of the		
	s Yes □ No	proposed project and encourage them to		
		comply with the State regulations.		
Water and culture		Water conservation is everyone's		
	□ Vaa□ Na	responsibility and this theme will be solicited		
	Lxl Yes∟ No	to the users via newsletters and billing		
		statements.		
Water-dependent recreation	☐ Yes 🗔 No			
Wastewater/NPDES	☐ Yes 🗔 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.

Sources of funding:

PROJECT BUDGET

- 1. State Revolving Loan Fund (SRLF) administered by the State of California Department of Environmental Health.
- 2. USDA-Rural Development (Loan or grant).
- 3. State of California Community Development Block Grant (CDBG).

O & M costs for the new tank will be included in the District's current water rate structure as is currently the case for the existing water tank and other features of the District's water system; i.e. pumping plant, water source, pipelines, valves, meters, etc.

	Project serves a need of a DAC?: Wes No Funding Match Waiver request?: X Yes No							
	Category	Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Source*	Total Cost			
_	<u> </u>	\$10,000	0	0	\$10,000			
a.	Direct Project Administration	\$10,000	U	U	\$10,000			
b.	Land Purchase/Easement	\$ 5,000	0	0	\$ 5,000			
C.	Planning/Design/Engineering / Environmental	\$60,000	0	0	\$60,000			
d.	Construction/Implementation	\$600,000	0	0	\$600,000			
e.	Environmental Compliance/ Mitigation/Enhancement	\$ 2,000	0	0	\$ 2,000			

f.	Construction Administration	\$ 10,000	0	0	\$ 10,000	
g.	Other Costs (Const. Inspection)	\$ 3,000	0	0	\$ 3,000	
h.	Construction/Implementation Contingency	\$60,000	0	0	\$ 60,000	
i.	Grand Total (Sum rows (a) through (h) for each column)	\$750,000	0	0	\$750,000	
j.	Can the Project be phased? Yes	No If yes, p	provide cost break	down by phase	S	
		Project Cost	O&M Cost	Description of Phase		
	Phase 1					
	Phase 2					
	Phase 3					
k.	Phase 4 Explain how operation and maintenantenantenantenantenantenantenante				and operates its	
	implementation (not grant funded).	The user fees schedule includes components for operation, maintenance, capital improvements, replacement, and depreciation. The new tank will be factored into the user fee calculations and adjustments to the fees will be made as determined necessary.				
l.	Has a Cost/Benefit analysis been comp	☐ Yes ☐ No				
m.	Describe what impact there may be if not funded (300 words or less)	The District is obligated to seek funding for a new water storage tank from a State or Federal funding agency. The State DHS has expressed to the District (in writing) that additional storage is required. It is the responsibility of the District to pursue and obtain the funds to implement the project.				
No	t all sources of funding. te: See Project Development Manual, Extp://featherriver.org/documents/).	xhibit B, for assist	,	g this table		

VIII. PROJECT STATUS AND SCHEDULE

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**.

	Check the Current Project		Description of Activities in Each	Planned/ Actual Start Date	Planned/ Actual Completion
Project Stage	Stage	Completed?	Project Stage	(mm/yr)	Date (mm/yr)
a. Assessment and Evaluation		□ Yes □ No □ N/A	The necessity for additional water storage was a directive from the State Department of Environmental Health. Additional storage can be constructed adjacent to the existing water tank and connected to the existing tank to allow both tanks to function as either one tank (in parallel) or separately to allow one tank to be taken out of service	06/2015	07/2015
b. Final Design		☐ Yes ☐ No ☐ N/A	for repairs, etc. Final design will not be completed until funding is obtained.	Two months after funding is secured	Four months After funding Is secured
c. Environmental Documentation (CEQA / NEPA)		☐ Yes ☐ No ☐ N/A	It is anticipated that the environmental documents will be in the form of a Mitigated Negative Declaration, similar to when the existing tank was constructed in 1975.	02/2015	03/2016
d. Permitting		☐ Yes ☐ No ☑ N/A	There are no permits anticipated from other agencies. The land is flat and open requiring minimal clearing and grading.	N/A	N/A

e. Construction Contracting		☐ Yes ☐ No	The project will be subject to public bid	07/2016	09/2016
		□ N/A	and prevailing wages will apply.		
f. Construction Yes No N/A		Construction implementation (i.e. inspection and contract administration) will be accomplished by the WWCSD staff and their consultant engineer.	07/2016	09/2016	
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	The project is consistent with the	
	project is consistent with or supported by (e.g. General	Westwood CSD master water plan.	
	Plans, UWMPs, GWMPs, Water Master Plan, Habitat	Budget constraints in 1975 (when the	
	Conservation Plans, TMDLs, Basin Plans, etc.).	existing water system was constructed),	
		limited the volume of water storage. A	
		second water tank of comparable size	
		was considered a viable component of	
		the overall system for redundancy and	
		required storage volume.	
b.	List technical reports and studies supporting the	The necessity for additional water	
	feasibility of this project.	storage is substantiated by the State of	
		California Drinking Water Standards,	
		wherein water suppliers with 1,000 or	
		fewer customers shall have	
		source/storage equivalent to the	
		maximum daily demand, which in	
		Westwood's case if 1,500,000-gallons.	
c.	Concisely describe the scientific basis (e.g. how much	The need for additional water storage is	
	research has been conducted) of the proposed project in	derived from the State Standards for	
	300 words or less.	small water systems, wherein the	
		storage capacity should be equivalent	
		to the Maximum Daily Demand (MDD),	
		which in Westwood's case is 1,500,000	
		gallons.	
_	Describe and estimate and an established and for		
d.	Does the project implement green technology (e.g.		
	alternate forms of energy, recycled materials, LID	☐ Yes 🗵 No 🗌 N/A	
	techniques, etc.).	If yes, please describe.	
		, , ,	
	A		
	Are you an Urban Water Supplier ¹ ?	Yes No N/A	
f.	Are you are an Agricultural Water Supplier ² ?	Yes X No N/A	
g.	Is the project related to groundwater?	☐ Yes ☑ No ☐ N/A If yes, please indicate which	
		groundwater basin.	
		groundwater basin.	
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.			

Climate Change – Project Assessment Checklist

This climate change project assessment tool allows project applicants and the planning team to assess project consistency with Proposition 84 plan standards and RWMG plan assessment standards. The tool is a written checklist that asks GHG emissions and adaptation/resiliency questions.

Name of project: MS-36: Water Storage Project

Project applicant: Westwood

GHG Emissions Assessment

Project Construction Emissions
(If you check any of the boxes, please see the attached worksheet)
The project requires nonroad or off-road engines, equipment, or vehicles to complete.
The project requires materials to be transported to the project site.
The project requires workers to commute to the project site.
The project is expected to generate GHG emissions for other reasons.
The project does not have a construction phase and/or is not expected to generate GHG emissions during the construction phase.
Operating Emissions
(If you check any of the boxes, please see the attached worksheet)
The project requires energy to operate.
The project will generate electricity.
The project will proactively manage forests to reduce wildfire risk.
The project will affect wetland acreage.
The project will include new trees.
Project operations are expected to generate or reduce GHG emissions for other reasons.

Adaptation & Resiliency Assessment

Water Supply Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water supply vulnerability issues:
 Not applicable Reduced snowmelt Unmet local water needs (drought) Increased invasive species
Additional storage capacity for the community of Westwood's domestic water use. The additional water storage has been requested by the State of California, Department of Environmental Services, Drinking Water Division, to comply with State Water System(s) regulations. Additional water storage will provide increased fire protection capability, increased emergency storage requirements during power outages, which occur frequently in mountainous areas, and reduced power consumption needs at the water source.
Water Demand Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water demand vulnerability issues:
 Not applicable Increasing seasonal water use variability Unmet in-stream flow requirements Climate-sensitive crops Groundwater drought resiliency Water curtailment effectiveness
The additional water storage will reduce the pumping cycles at the water source, lessening the power requirements somewhat. Westwood's water source of supply is dependent on electrical power to operate the turbine pumps that supply water to the community.

Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water quality vulnerability issues:
 Not applicable ☐ Increasing catastrophic wildfires ☐ Eutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and other related water quality issues) ☐ Seasonal low flows and limited abilities for waterbodies to assimilate pollution ☐ Water treatment facility operations ☐ Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold freshwater habitat, spawning habitat, wildlife habitat, etc.)
Flooding
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain Insufficient flood control facilities

Water Quality

Ecosystem and Habitat
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority ecosystem and habitat vulnerability issues:
Not applicable ■ Not applicable Not applicable
Climate-sensitive fauna or flora
Recreation and economic activity
Quantified environmental flow requirements
Erosion and sedimentation
☐ Endangered or threatened species
Fragmented habitat
Undergroup
Hydropower Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority hydropower vulnerability issues:
Not applicable ■ The state of t
Reduced hydropower output

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-36: Water Storage Project

GHG Emissions Analysis Project Construction Emissions

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

	Maximum		
	Number Per	Total 8-Hour Days in	
Type of Equipment	Day	Operation	Total MTCO₂e
Tractors/Loaders/Bac			
khoes	1	2	1
Graders	1	1	0
Dumpers/Tenders	1	1	0
Cranes	1	5	4
			0
			0
			0
			0
			0
			0
		Total Emissions	5

х	The project requires materials to be transported to the project site. If yes:

	Average Trip	
Total Number of	Distance	
Round Trips	(Miles)	Total MTCO₂e
1	. 500	1

x The project requires workers to commute to the project site. If yes:

		Average Round Trip		
Average Number	Total Number	Distance Traveled		
of Workers	of Workdays	(Miles)	Total MTCO₂e	
4	5	2		0

The projec	t 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.

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-36: Water Storage Project **Project Operating Emissions** The project requires energy to operate. If yes: Total MTCO₂e **Annual Energy Needed** Unit kWh (Electricity) 0 Therm (Natural Gas) The project will generate electricity. If yes: Annual kWh Generated Total MTCO₂e *A negative value indicates GHG reductions The project will proactively manage forests to reduce wildfire risk. If yes: Acres Protected from Wildfire Total MTCO2e 0 *A negative value indicates GHG reductions The project will affect wetland acreage. If yes: Acres of Protected Wetlands Total MTCO2e *A negative value indicates GHG reductions The project will include new trees. If yes: Acres of Trees Planted Total MTCO₂e *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 MTCO₂e 0 MTCO2e In a given year, operation of the project will result in:



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	LAWG/Maidu Summit Consortium/Sierra Institute
Name of Primary Contact	Carl Felts
Name of Secondary Contact	Lorena Gorbet/Courtney Gomola
Mailing Address	5231 Quarry Rd
E-mail	carlnrita@frontier.com
Phone	530/284-7982
Other Cooperating Agencies /	Westwood Sanitation/Plumas County Environmental Sciences
Organizations / Stakeholders	Department/Pacific Gas and Electric.
Is your agency/organization	Yes
committed to the project through	
completion? If not, please explain	

II. GENERAL PROJECT INFORMATION

Project Title	MS-37: Almanor Basin Solid and Wastewater Treatment Plant
Project Category	☐ Agricultural Land Stewardship
	☐ Floodplains/Meadows/Waterbodies
	X Municipal Services
	☐ Tribal Advisory Committee
	☐ Uplands/Forest
Project Description	
(Briefly describe the project, in 300 words or less)	This project will be the first phase of a two-phase project. This phase is to develop an integrated, basin-wide solid waste and wastewater management system for communities around Lake Almanor. The second phase will be the construction of the approved system.
Project Location Description (e.g., along the south bank of stream/river between river miles or miles from Towns/intersection and/or address):	Around Lake Almanor including the surrounding communities.
Latitude:	40° N
Longitude:	120° 48′W

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.

	Will the project address		Quantification (e.g. acres of streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Restore natural hydrologic	☐ Yes		
functions.			
Dadwa a stantial for	X N/A		
Reduce potential for catastrophic wildland fires in	☐ Yes		
the Region.	X N/A		
Build communication and	X Yes	Developing an integrated basin-	Lake Almanor and
collaboration among water	X 1C3	wide solid waste and	its surrounding
resources stakeholders in the	□ N/A	wastewater management	communities.
Region.		system for communities around	
		Lake Almanor will require the	
		existing communities to	
		collaborate.	
Work with DWR to develop	X Yes	As an integrated basin-wide	Lake Almanor and
strategies and actions for the		solid waste and wastewater	its surrounding
management, operation, and	□ N/A	management system is	communities.
control of SWP facilities in the		identified all stakeholders,	
Upper Feather River Watershed in order to increase		including DWR will be involved	
water supply, recreational, and		in the identification of potential solutions, planning for	
environmental benefits to the		implementation and	
Region.		participation in implementation	
		of projects.	
Encourage municipal service	X Yes	As an integrated basin-wide	Lake Almanor and
providers to participate in		solid waste and wastewater	its surrounding
regional water management	□ N/A	management system is	communities.
actions that improve water		identified all stakeholders,	
supply and water quality.		including DWR, will be involved	
		in the identification of potential	
		solutions, planning for implementation and	
		participation in implementation	
		of projects.	
Continue to actively engage in	X Yes	Members of LAWG have been	Lake Almanor and
FERC relicensing of		actively engaged in the FERC	its surrounding
hydroelectric facilities in the	□ N/A	relicensing of Lake Almanor	communities.
Region.		since it started. Despite	
		detailed documentation	

		Τ	
	Will the		Quantification
	project		(e.g. acres of
	address		streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
		provided by LAWG	
		demonstrating recent increases	
		in nutrients and blue-green	
		algae in Lake Almanor, this	
		issue was not addressed in the	
		EIR recently released for FERC	
		2105.	
Address economic challenges	X Yes	At present all municipal service	Lake Almanor and
of municipal service providers		providers act as separate	its surrounding
to serve customers.	□ N/A	entities which produce	communities.
		economic challenges. Having an	
		integrated system will reduce	
		those challenges.	
		_	
Protect, restore, and enhance	X Yes	This project (completion of	Lake Almanor and
the quality of surface and		phase 1 and 2) will be designed	its surrounding
groundwater resources for all	□ N/A	to help protect, restore and	communities.
beneficial uses, consistent with	,	enhance the quality of water in	
the RWQC Basin Plan.		the Almanor Basin watershed.	
Address water resources and	X Yes	This project (completion of	Lake Almanor and
wastewater needs of DACs and		phase 1 and 2) will be designed	its surrounding
Native Americans.	□ N/A	to address water resources and	communities.
	·	wastewater needs of DACs and	
		Native Americans in the region.	
Coordinate management of	X Yes	At present all municipal service	Lake Almanor and
recharge areas and protect		providers act as separate	its surrounding
groundwater resources.	□ N/A	entities which produce	communities.
		challenges. Having an	
		integrated system will reduce	
		those challenges.	
Improve coordination of land	X Yes	At present all municipal service	Lake Almanor and
use and water resources		providers act as separate	its surrounding
planning.	□ N/A	entities which produce	communities.
		challenges. Having an	
		integrated system will reduce	
		those challenges.	
Maximize agricultural,	☐ Yes		
environmental and municipal			
water use efficiency.	X N/A		
,	,		
	L	<u>l</u>	

<u></u>	WIS-37: Almanor Basin Sono and Wastewater Treatment P						
	Will the		Quantification				
	project		(e.g. acres of				
	address		streams/wetlands				
Upper Feather River IRWM	the	Brief explanation of project	restored or				
Objectives:	objective?	linkage to selected Objective	enhanced)				
Effectively address climate	X Yes	As an integrated basin-wide	Lake Almanor and				
change adaptation and/or		solid waste and wastewater	its surrounding				
mitigation in water resources	□ N/A	management system is	communities.				
management.		identified all stakeholders,					
		including DWR, will be involved					
		in the identification of potential					
		solutions, planning for					
		implementation and					
		participation in implementation					
		of projects. Without this project					
		effects of nutrient deposition					
		due to human waste and other					
		sources will be exacerbated by					
		warmer temperatures and drier					
		years. Therefore, identifying					
		sources of nutrient deposition					
		and avenues for mitigating					
		these impacts will help combat					
		the effects of climate change					
		on these variables.					
Improve efficiency and	☐ Yes						
reliability of water supply and							
other water-related	X N/A						
infrastructure.							
Enhance public awareness and	X Yes	During the implementation of	Lake Almanor and				
understanding of water		this project public meetings will	its surrounding				
management issues and needs.	□ N/A	be held to address public needs	communities.				
		and awareness.					
Address economic challenges	☐ Yes						
of agricultural producers.							
	X N/A						
Work with counties/	X Yes	The cooperating entities are	Lake Almanor and				
communities/groups to make		committed to ensuring the	its surrounding				
sure staff capacity exists for	□ N/A	successful implementation of	communities.				
actual administration and	,	this project.					
implementation of grant							
funding.							
			1				

If no objectives are addressed, describe how the project relates to a challenge or opportunity for the Region:	<u>)</u>

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 a	oplicable, describe benefits or impacts of the	project wi	th respect to:			
a.	Native American Tribal Communities	□ N/A	Improve water quality in Lake Almanor, its surrounding communities and the			
			Upper Fork of the Feather River.			
b.	Disadvantaged Communities ¹		Improve water quality in Lake Almanor,			
		□ N/A	its surrounding communities and the			
			Upper Fork of the Feather River.			
c.	Environmental Justice ²		Improved water quality in Lake Almanor,			
		□ N/A	will benefit all local residents,			
			businesses, and tourists regardless of all			
			race, culture, or income			
d.	Drought Preparedness					
		X N/A				
e.	Assist the region in adapting to effects of	N N / A				
	climate change ³	X N/A				
f.	Generation or reduction of greenhouse					
١.	gas emissions (e.g. green technology)	X N/A				
	Bas cimosions (c.B. B. cc.) tecimology	X 11,71				
g.	Other expected impacts or benefits that					
	are not already mentioned elsewhere	X N/A				
	Disadvantaged Community is defined as a con	•				
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						
seco	ondary effects such as increased wildfire risk,	erosion, an	a seaimentation.			

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	X Yes	g.	Drinking water treatment and	X Yes
	conservation, water use efficiency	□ N/A		distribution	□ N/A
b.	Stormwater capture, storage, clean-	X Yes	h.	Watershed protection and	☐ Yes
	up, treatment, management	□ N/A		management	X N/A
c.	Removal of invasive non-native	☐ Yes	i.	Contaminant and salt removal	☐ Yes
	species, creation/enhancement of	X N/A		through reclamation/desalting,	X N/A
	wetlands,			other treatment technologies	

	acquisition/protection/restoration of open space and watershed lands			and conveyance of recycled water for distribution to users	
d.	Non-point source pollution reduction, management and monitoring	X Yes	j.	Planning and implementation of multipurpose flood management programs	X Yes
e.	Groundwater recharge and management projects	☐ Yes X N/A	k.	Ecosystem and fisheries protection	x Yes
f.	Water banking, exchange, reclamation, and improvement of water quality	X 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/).

	Will the Project incorporate	Description of how RMS to be employed,
Resource Management Strategy	RMS?	if applicable
Reduce Water Demand		
Agricultural Water Use Efficiency	☐ Yes X No	
Urban water use efficiency	☐ Yes X No	
Improve Flood Management		
Flood management	X Yes □ No	Wastewater management.
Improve Operational Efficiency and T	ransfers	
Conveyance – regional/local	☐ Yes X No	
System reoperation	☐ Yes X No	
Water transfers	☐ Yes X No	
Increase Water Supply		
Conjunctive management	☐ Yes X No	
Precipitation Enhancement	☐ Yes X No	
Municipal recycled water	X Yes □ No	Wastewater management.
Surface storage – regional/local	□ Yes X No	
Improve Water Quality		
Drinking water treatment and distribution	☐ Yes X No	
Groundwater remediation/aquifer remediation	☐ Yes X No	
Matching water quality to water use	☐ Yes X No	
Pollution prevention	X Yes □ No	Solid waste and wastewater management.
Salt and salinity management	☐ Yes X No	
Urban storm water runoff	☐ Yes X No	Rural storm water runoff will be addressed.

Resource Management Strategy	Will the Project incorporate RMS?	Description of how RMS to be employed, if applicable			
management	KIVI3:	п аррпсавіе			
Practice Resource Stewardship					
Agricultural land stewardship	☐ Yes X No				
Ecosystem restoration	☐ Yes X No				
Forest management	☐ Yes X No				
Land use planning and management	☐ Yes X No				
Recharge area protection	☐ Yes X No				
Sediment management	X Yes □ No	Wastewater management.			
Watershed management	X Yes □ No	Wastewater management.			
People and Water					
Economic incentives	☐ Yes X No				
Outreach and engagement	X Yes □ No	Stakeholder involvement.			
Water and culture	X Yes □ No	Stakeholder involvement.			
Water-dependent recreation	X Yes □ No	Cleaner water in Lake Almanor which at present is being polluted. Better for the fish, better for the humans.			
Wastewater/NPDES	X Yes □ No	Wastewater management.			
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					
5						
	Project serves a need of a DAC?: X Yes No					
Fui	Funding Match Waiver request?: X Yes No					
		Requested Grant	Cost Share: Non-State Fund Source* (Funding	Cost Share: Other State Fund		
	Category	Amount	Match)	Source*	Total Cost	
a.	Direct Project Administration	\$10,000			\$10,000	
b.	Land Purchase/Easement					
c.	Planning/Design/Engineering / Environmental	\$125,000			\$125,000	
d.	Construction/Implementation	Depends on			Phase 1	
e.	Environmental Compliance/ Mitigation/Enhancement					
f.	Construction Administration					
g.	Other Costs					
h.	Construction/Implementation Contingency					
i.	Grand Total (Sum rows (a) through (h) for each column)	\$135,000			\$135,000	
j.	Can the Project be phased? X Yes	No If yes , pro	ovide cost breakdo	own by phases	•	
		Project Cost	O&M Cost	Descriptio	n of Phase	
	Phase 1	\$135,000		Study and Plani	ning	
	Phase 2	Depends on 1		Construction		
	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).			Home owners that use the system. Businesses that use the system.		n. Businesses	
I.						
m.					•	
	*List all sources of funding.					
	Note: See Project Development Manual, Exhibit B, for assistance in completing this table					
(http://featherriver.org/documents/).						

VIII. PROJECT STATUS AND SCHEDULE

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		☐ Yes X No ☐ N/A	Phase 1-Study and design	ASAP	ASAP
b. Final Design		☐ Yes X No ☐ N/A	Phase 1 will be a study of the problem and the recommendation of a system to correct the problem.	ASAP	6 months after start of phase 1.
c. Environmental Documentation (CEQA / NEPA)		☐ Yes X No ☐ N/A	Depends on award date.	NA	NA
d. Permitting		☐ Yes X No ☐ N/A	Depends on award date.	NA	NA
e. Construction Contracting		☐ Yes X No ☐ N/A	Depends on award date.	NA	NA
f. Construction Implementation		☐ Yes X No ☐ N/A	Depends on award date.	NA	NA
Provide explanation stage is checked as c					

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	The intent of phase 1 is to produce such				
	project is consistent with or supported by (e.g. General	a document to support the conclusions				
	Plans, UWMPs, GWMPs, Water Master Plan, Habitat	of the Lake Almanor Watershed				
	Conservation Plans, TMDLs, Basin Plans, etc.).	Assessment Report done in 2007 by				
		EARTHWORKS Restoration Inc. and				
		CH2MHill.				
b.	List technical reports and studies supporting the	Lake Almanor Watershed Assessment				
	feasibility of this project.	Report done in 2007 by EARTHWORKS				
		Restoration Inc. and CH2MHill. Plumas				
		County Environmental Health				
		Department.				
c.	Concisely describe the scientific basis (e.g. how much	Lake Almanor Watershed Assessment				
	research has been conducted) of the proposed project in	Report done in 2007 by EARTHWORKS				
	300 words or less.	Restoration Inc. and CH2MHill. Also				
		evaluations conducted by the Plumas				
		County Environmental Health				
		Department.				
d.	Does the project implement green technology (e.g.	X Yes □ No □ N/A				
	alternate forms of energy, recycled materials, LID	During the study and design phase				
	techniques, etc.).	green technology will be used where				
		possible such as solar panels to energize				
		flow instruments in the pipe lines.				
e.	• • • • • • • • • • • • • • • • • • • •	☐ Yes X No ☐ N/A				
f.	Are you are an Agricultural Water Supplier ² ?	☐ Yes X No ☐ N/A				
g.	Is the project related to groundwater?	X Yes □ No □ N/A				
		Many homes in the Lake Almanor				
		Watershed use septic systems which				
		have an effect on groundwater. This				
		system would eliminate that source.				
¹ U	rban Water Supplier is defined as a supplier, either publicly	or privately owned, providing water for				
mι	unicipal purposes either directly or indirectly to more than 3,	,000 customers or supplying more than				
3,0	000 acre-feet of water annually.					
² A	² Agricultural Water Supplier is defined as a water supplier, either publicly or privately owned, providing					
wa	water to 10,000 or more irrigated acres, excluding the acreage that receives recycled water.					

Climate Change – Project Assessment Checklist

This climate change project assessment tool allows project applicants and the planning team to assess project consistency with Proposition 84 plan standards and RWMG plan assessment standards. The tool is a written checklist that asks GHG emissions and adaptation/resiliency questions.

Name of project: MS-37: Almanor Basin Solid and Wastewater Treatment Plant

Project applicant: Carl Felts

GHG Emissions Assessment

GHG Emissions Assessment
Project Construction Emissions (If you check any of the boxes, please see the attached worksheet)
 The project requires nonroad or off-road engines, equipment, or vehicles to complete. The project requires materials to be transported to the project site. The project requires workers to commute to the project site. The project is expected to generate GHG emissions for other reasons. The project does not have a construction phase and/or is not expected to generate GHG emissions during the construction phase.
Operating Emissions (If you check any of the boxes, please see the attached worksheet)
The project requires energy to operate.
The project will generate electricity.
The project will proactively manage forests to reduce wildfire risk.
The project will affect wetland acreage.
The project will include new trees.
Project operations are expected to generate or reduce GHG emissions for other reasons.

Adaptation & Resiliency Assessment

Water Supply Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water supply vulnerability issues:
X Not applicable Reduced snowmelt Unmet local water needs (drought) Increased invasive species
Water Demand Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water demand vulnerability issues:
X Not applicable Increasing seasonal water use variability Unmet in-stream flow requirements Climate-sensitive crops Groundwater drought resiliency Water curtailment effectiveness

Water Quality Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water quality vulnerability issues:
X Not applicable Increasing catastrophic wildfires
 Eutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and other related water quality issues)
Seasonal low flows and limited abilities for waterbodies to assimilate pollution
Water treatment facility operations
Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold freshwater habitat, spawning habitat, wildlife habitat, etc.)
Flooding Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues:
X Not applicable
Aging critical flood protection
Wildfires
Critical infrastructure in a floodplain
Insufficient flood control facilities

Ecosystem and Habitat

Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority ecosystem and habitat vulnerability issues:
X Not applicable
Climate-sensitive fauna or flora
Recreation and economic activity
Quantified environmental flow requirements
Erosion and sedimentation
☐ Endangered or threatened species
Fragmented habitat
Hydropower
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority hydropower vulnerability issues:
X Not applicable
Reduced hydropower output
Reduced Hydropower output



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	Sierraville Public Utility District			
Name of Primary Contact	Nanci Davis			
Name of Secondary Contact	Laura Read			
Mailing Address	PO Box 325, Sierraville, CA 96126			
E-mail	nancidavis212@gmail.com			
	readwriteshoot@gmail.com			
Phone	530-574-8331			
Other Cooperating Agencies /				
Organizations / Stakeholders				
Is your agency/organization	Yes, providing adequate funding is ensured			
committed to the project through				
completion? If not, please explain				

II. GENERAL PROJECT INFORMATION

Project Title	MS-38: Leak Detection and Repair			
Project Category	☐ Agricultural Land Stewardship			
	☐ Floodplains/Meadows/Waterbodies			
	☐ Tribal Advisory Committee			
	☐ Uplands/Forest			
Project Description	Our water delivery system is aging and numerous leaks have			
(Briefly describe the project,	been discovered and repaired during routine maintenance.			
in 300 words or less)	We are certain that there are significant additional			
	undiscovered leaks in the system and repair of those leaks			
	would greatly contribute to our water conservation efforts.			
Building Burning	Change the Bully 1989 Block to be and also			
Project Location Description (e.g.,	Sierraville Public Utility District boundaries			
along the south bank of stream/river	Town of Sierraville			
between river miles or miles from				
Towns/intersection and/or address):				
Latitude:	39.5897° N			
Longitude:	120.3675° W			

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.

	Will the		Quantification
	project		(e.g. acres of
	address		streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Restore natural hydrologic	☐ Yes		,
functions.			
	⊠ N/A		
Reduce potential for	⊠ Yes	SPUD provides fire suppression	
catastrophic wildland fires in		water to local fire fighting	
the Region.	□ N/A	agencies. Eliminating water	
	,,	lost to leaks increases the	
		water supply available for fire	
		suppression.	
Build communication and	⊠ Yes	SPUD is a collaboration of	
collaboration among water		water resource stakeholders	
resources stakeholders in the	□ N/A	and improvements will serve all	
Region.		stakeholders in the district	
Work with DWR to develop	⊠ Yes	We are following direction from	
strategies and actions for the		the DWR to find ways to	
management, operation, and	□ N/A	conserve water	
control of SWP facilities in the			
Upper Feather River			
Watershed in order to increase			
water supply, recreational, and			
environmental benefits to the			
Region.			
Encourage municipal service	⊠ Yes	Repair of damaged delivery	
providers to participate in		system is a regional water	
regional water management	□ N/A	management action specifically	
actions that improve water		orchestrated to improve water	
supply and water quality.		supply and ensure quality	
Continue to actively engage in	☐ Yes		
FERC relicensing of			
hydroelectric facilities in the	⊠ N/A		
Region.		We are the desired	
Address economic challenges	⊠ Yes	We are a disadvantaged	
of municipal service providers		community and our ratepayers	
to serve customers.	□ N/A	have been unable to fund a	
		study or repairs without	
		assistance	

		T	
	Will the		Quantification
	project		(e.g. acres of
	address		streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Protect, restore, and enhance	⊠ Yes	A leak detection study and	
the quality of surface and		repair program will be designed	
groundwater resources for all	□ N/A	to protect, restore and enhance	
beneficial uses, consistent with		the quality of water resources	
the RWQC Basin Plan.			
Address water resources and	⊠ Yes	Sierraville is a DAC. Repairing	
wastewater needs of DACs and		leaks in the water system	
Native Americans.	□ N/A	makes more water available to	
		users, and reduces operating	
		costs.	
Coordinate management of	☐ Yes		
recharge areas and protect			
groundwater resources.	⊠ N/A		
Improve coordination of land	☐ Yes		
use and water resources			
planning.	⊠ N/A		
Maximize agricultural,	⊠ Yes	Repair of leaks maximizes water	
environmental and municipal		use efficiency	
water use efficiency.	□ N/A		
Effectively address climate	☐ Yes		
change adaptation and/or			
mitigation in water resources	⊠ N/A		
management.	_ ,		
Improve efficiency and	⊠ Yes	Our aging water-related	
reliability of water supply and		infrastructure has not been	
other water-related	□ N/A	closely examined or repaired in	
infrastructure.	,	a long time. Repair of leaks	
		maximizes water use efficiency.	
Enhance public awareness and	⊠ Yes	SPUD will engage community	
understanding of water		outreach and strive for	
management issues and needs.	□ N/A	effective communication with	
		all stakeholders.	
Address economic challenges	☐ Yes		
of agricultural producers.			
	⊠ N/A		
Work with counties/	⊠ Yes	The volunteer Board of SPUD is	
communities/groups to make		acting in the best interests of	
sure staff capacity exists for	□ N/A	the district. SPUD and the	
actual administration and	,	Board are dedicated to the	
implementation of grant		successful implementation of	
funding.		this project.	
runulig.		uns project.	

If no objectives are addressed, describe how the project relates to a challenge or opportunity for the Region:				
IV. PROJECT IMPACTS AND BENEF				
		and impacts in the table below or check N/A		
if not applicable; do no leave a blank cell.				
If applicable, describe benefits or impact	s of the project w	rith respect to:		
a. Native American Tribal Communities	s ⊠ N/A			
b. Disadvantaged Communities ¹	□ N/A	Sierraville is a Disadvantaged Community		
c. Environmental Justice ²				
	⊠ N/A	All water users, regardless of race,		
		culture, or income, will benefit from system repairs that make water		
		conveyance more efficient and reliable.		
d. Drought Preparedness	□ N/A	Repairing leaks creates water conservation		
e. Assist the region in adapting to effect climate change ³	cts of ⊠ N/A			
f. Generation or reduction of greenhood gas emissions (e.g. green technology				
g. Other expected impacts or benefits are not already mentioned elsewher				
A Disadvantaged Community is defined a				
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 inclu-				
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	⊠ Ye	es.	g.	Drinking water treatment and	⊠ Yes
	conservation, water use efficiency	□ N/	/Α		distribution	□ N/A
b.	Stormwater capture, storage, clean-	☐ Ye	es e	h.	Watershed protection and	☐ Yes
	up, treatment, management	⊠ N/	/A		management	□ N/A
c.	Removal of invasive non-native	☐ Ye	S:	i.	Contaminant and salt removal	☐ Yes
	species, creation/enhancement of	⊠ N/	/A		through reclamation/desalting,	⊠ N/A
	wetlands,				other treatment technologies	
	acquisition/protection/restoration				and conveyance of recycled	
	of open space and watershed lands				water for distribution to users	
d.	Non-point source pollution	☐ Ye	S	j.	Planning and implementation of	☐ Yes
	reduction, management and	⊠ N/	/A		multipurpose flood	⊠ N/A
	monitoring				management programs	
e.	Groundwater recharge and	☐ Ye	S	k.	Ecosystem and fisheries	☐ Yes
	management projects	⊠ N/	/Α		restoration and protection	⊠ N/A
f.	Water banking, exchange,	☐ Ye	!S			
	reclamation, and improvement of	⊠ N/	/A			
	water quality					

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/).

	Will the Project incorporate	Description of how RMS to be employed,		
Resource Management Strategy	RMS?	if applicable		
Reduce Water Demand	T			
Agricultural Water Use Efficiency	☐ Yes ⊠ No			
Urban water use efficiency	⊠ Yes □ No	Rural water use efficiency		
Improve Flood Management				
Flood management	☐ Yes ☒ No			
Improve Operational Efficiency and T	ransfers			
Conveyance – regional/local	☐ Yes ⊠ No	Repair and improve infrastructure		
System reoperation	⊠ Yes ⊠ No	More efficient water use to reduce demand on groundwater.		
Water transfers	☐ Yes ⊠ No			
Increase Water Supply				
Conjunctive management	☐ Yes ⊠ No			
Precipitation Enhancement	☐ Yes ⊠ No			
Municipal recycled water	☐ Yes ⊠ No			
Surface storage – regional/local	☐ Yes ⊠ No			
Improve Water Quality				
Drinking water treatment and distribution	⊠ Yes □ No	Addresses inadequacies in the distribution system		

	Will the Project	
	incorporate	Description of how RMS to be employed,
Resource Management Strategy	RMS?	if applicable
Groundwater remediation/aquifer	☐ Yes ⊠ No	
remediation		
Matching water quality to water use	☐ Yes ⊠ No	
Pollution prevention	☐ Yes ⊠ No	
Salt and salinity management	☐ Yes ⊠ No	
Urban storm water runoff	☐ Yes ☒ No	
management	□ Yes ⋈ No	
Practice Resource Stewardship		
Agricultural land stewardship	☐ Yes ⊠ No	
Ecosystem restoration	☐ Yes ⊠ No	
Forest management	☐ Yes ⊠ No	
Land use planning and	☐ Yes ☒ No	
management	□ res ⋈ no	
Recharge area protection	☐ Yes ⊠ No	
Sediment management	☐ Yes ⊠ No	
Watershed management	☐ Yes ⊠ No	
People and Water		
Economic incentives	☐ Yes ⊠ No	
Outreach and engagement	⊠ Yes □ No	SPUD will send flyers to the public about the
		project and water conservation.
Water and culture	☐ Yes ⊠ No	
Water-dependent recreation	☐ Yes ⊠ No	
Wastewater/NPDES	☐ Yes ⊠ No	
Other RMS addressed and explanation	on:	

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							
Due instrument and of a DAC2. Myor DAG								
	Project serves a need of a DAC?: ⊠ Yes □ No Funding Match Waiver request?: ⊠ Yes □ No							
Fui								
	Category	Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Source*	Total Cost			
a.	Direct Project Administration	Amount	Wiaterry	Jource	Total Cost			
b.	Land Purchase/Easement							
	-	5000			5000			
C.	Planning/Design/Engineering / Environmental	5000			5000			
d.	Construction/Implementation	150,000			150,000			
e.	Environmental Compliance/ Mitigation/Enhancement							
f.	Construction Administration							
g.	Other Costs							
h.	Construction/Implementation Contingency							
i.	Grand Total (Sum rows (a) through (h) for each column)	155,500			155,250			
j.	j. Can the Project be phased? ☐ Yes ☐ No If yes, provide cost breakdown by phases							
		Project Cost	O&M Cost	Description of Phase				
	Phase 1	2500		Leak detection	service			
	Phase 2	150,000		Repair of identi	fied leaks			
	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).		From fees collected from rate payers and from reserve					
I.	Has a Cost/Benefit analysis been completed?		☐ Yes ⊠ No					
m.	Describe what impact there may be if not funded (300 words or less)	Continued undiscovered, underground leaking of domestic water						
*Lis	t all sources of funding.			- -				
No	te: See Project Development Manual, E	xhibit B, for assist	tance in completin	g this table				
(<u>ht</u>	(http://featherriver.org/documents/).							

VIII. PROJECT STATUS AND SCHEDULE

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	Con	npleted?	Description of Activities in Each Project Stage	Planned/ Actual Start Date (mm/yr)	Planned/ Actual Completion Date (mm/yr)
a. Assessment and Evaluation	⊠		Yes No N/A	Ongoing assessment of infrastructure as repairs are performed. Additional leak assessment needed.	Ongoing	2 months after securement of grant funding.
b. Final Design			Yes No N/A		3 months after securement of grant funding.	5 months after securement of grant funding.
c. Environmental Documentation (CEQA / NEPA)			Yes No N/A		3 months after securement of grant funding.	5 months after securement of grant funding.
d. Permitting			Yes No N/A		3 months after securement of grant funding.	4 months after securement of grant funding.
e. Construction Contracting			Yes No N/A		3 months after securement of grant funding.	4 months after securement of grant funding.
f. Construction Implementation			Yes No N/A		5 months after securement of grant funding.	7 months after securement of grant funding.
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	SPUD master plan.
	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	Review of infrastructure age warrants
	feasibility of this project.	replacement.
c.	Concisely describe the scientific basis (e.g. how much	
	research has been conducted) of the proposed project in	Leaks in the water system reduce the
	300 words or less.	water volume available for users, and
		provide a source of possible
		contamination to drinking water.
		Comparison studies of water produced
		to water consumed indicates
		discrepancies warranting investigation
		and pipeline replacement.
d.	Does the project implement green technology (e.g.	☐ Yes ⊠ No ☐ N/A
	alternate forms of energy, recycled materials, LID	If yes, please describe.
	techniques, etc.).	in yes, preuse deserrae.
e.	Are you an Urban Water Supplier ¹ ?	☐ Yes ☒ No ☐ N/A
f.	Are you are an Agricultural Water Supplier ² ?	☐ Yes ☒ No ☐ N/A
g.	Is the project related to groundwater?	☐ Yes ☒ No ☐ N/A
3.		If yes, please indicate which
		groundwater basin.
		B. Garrattater basin
Ur	ban Water Supplier is defined as a supplier, either publicly o	r privately owned, providing water for
	unicipal purposes either directly or indirectly to more than 3,	
	1000 acre-feet of water annually.	2.2.2.2.2.2.2.2.2.2.4.00000.
	gricultural Water Supplier is defined as a water supplier, eith	ner publicly or privately owned, providing
	ter to 10,000 or more irrigated acres, excluding the acreage	
	in an analysis of the delease	

Climate Change – Project Assessment Checklist

This climate change project assessment tool allows project applicants and the planning team to assess project consistency with Proposition 84 plan standards and RWMG plan assessment standards. The tool is a written checklist that asks GHG emissions and adaptation/resiliency questions.

Name of project: MS-38: Leak Detection and Repair

Project applicant: Sierraville Public Utility District

GHG Emissions Assessment

Project Construction Emissions (If you check any of the boxes, please see the attached worksheet)
 The project requires nonroad or off-road engines, equipment, or vehicles to complete. The project requires materials to be transported from outside of the UFR watershed. The project requires workers from outside of the UFR watershed. The project is expected to generate GHG emissions for other reasons. The project does not have a construction phase and/or is not expected to generate GHG emissions during the construction phase.
Operating Emissions (If you check any of the boxes, please see the attached worksheet)
The project requires energy to operate.
The project will generate electricity. The project will proactively manage forests to reduce wildfire risk.
☐ The project will affect wetland acreage. ☐ The project will include new trees.

Adaptation & Resiliency Assessment

Water Supply
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water supply vulnerability issues:
☐ Not applicable
Reduced snowmelt
☐ Unmet local water needs (drought)
☐ Increased invasive species
The project will allow for conservation of the District's source water thus, making more source runoff
available to the watershed.
Water Demand
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water demand vulnerability issues:
Mat applicable
Not applicable
☐ Increasing seasonal water use variability
Unmet in-stream flow requirements
Climate-sensitive crops
Groundwater drought resiliency
Water curtailment effectiveness

Water Quality	
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water quality vulnerability issues:	
Not applicable	
Increasing catastrophic wildfiresEutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and	
other related water quality issues)	
Seasonal low flows and limited abilities for waterbodies to assimilate pollution	
Water treatment facility operations	
Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold freshwater habitat, spawning habitat, wildlife habitat, etc.)	
The project will effect a reduction on treatment facility operation and energy consumption.	
Flooding	
Describe how the project makes the watershed (more/less) resilient to one or more of the following	
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues:	
high priority flooding vulnerability issues:	
high priority flooding vulnerability issues: Not applicable	
high priority flooding vulnerability issues:	
high priority flooding vulnerability issues: Not applicable Aging critical flood protection	
high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires	
high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain	•
high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain	
high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain	_
high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain	
high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain	
high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain	
high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain	

Upper Feather River Integrated Regional Water Management Plan Climate Change- Project Assessment Tool

Ecosystem and Habitat
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority ecosystem and habitat vulnerability issues:
Not applicable Climate sensitive fours or flore
☐ Climate-sensitive fauna or flora ☐ Recreation and economic activity
Quantified environmental flow requirements
Erosion and sedimentation
☐ Endangered or threatened species
Fragmented habitat
Hydropower
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority hydropower vulnerability issues:
⊠ Not applicable
Reduced hydropower output

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

N 4C 20		D	
IVIS-38	Leak	Detection	and Repair

GHG Emissions Analysis

Proi	iect	Constr	uction	Fmis	sions
		COLISCI	action	LIIII	310113

	Χ	The project requires non-road	d or off-road engines.	equipment.	or vehicles to	complete. If	ve
--	---	-------------------------------	------------------------	------------	----------------	--------------	----

	Maximum		
	Number Per	Total 8-Hour Days in	
Type of Equipment	Day	Operation	Total MTCO₂e
Tractors/Loaders/Bac			
khoes	1	10	3
Dumpers/Tenders	1	10	0
Other Construction			
Equipment	1	2	0
			0
			0
			0
			0
			0
_			0
			0
		Total Emissions	3

ı	V	The project requires materials to be transported from outside of the UFR watershed. If yes	٠.
	Х	The project requires materials to be transported from outside of the OFR watershed. If yes	5.

	Average Trip	
Total Number of	Distance	
Round Trips	(Miles)	Total MTCO₂e
20	40	1

The project requires workers from outside of the UFR watershed. If yes:

		Average Round Trip		
Average Number	Total Number	Distance Traveled		
of Workers	of Workdays	(Miles)	Total MTCO₂e	
2	1	200		0

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

I	The project does	not have a construction	phase and/or is not	expected to genera	te GHG emissions d	uring
	the construction	phase.				

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-38: Leak Detection and Repair **Project Operating Emissions** The project requires energy to operate. If yes: **Annual Energy Needed** Total MTCO₂e Unit kWh (Electricity) Therm (Natural Gas) 0 The project will generate electricity. If yes: Annual kWh Generated Total MTCO₂e 0 *A negative value indicates GHG reductions The project will proactively manage forests to reduce wildfire risk. If yes: Acres Protected from Wildfire Total MTCO₂e 0 *A negative value indicates GHG reductions The project will affect wetland acreage. If yes: Acres of Protected Wetlands Total MTCO₂e 0 *A negative value indicates GHG reductions The project will include new trees. If yes: Total MTCO₂e Acres of Trees Planted 0 *A negative value indicates GHG reductions **GHG Emissions Summary** Construction and development will generate approximately: 5 MTCO₂e 0 MTCO₂e In a given year, operation of the project will result in:



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	Sierraville Public Utility District
Name of Primary Contact	Nanci Davis
Name of Secondary Contact	Laura Read
Mailing Address	PO Box 325, Sierraville, CA 96126
E-mail	nancidavis212@gmail.com
Phone	530-574-8331
Other Cooperating Agencies /	
Organizations / Stakeholders	
Is your agency/organization committed to	yes
the project through completion? If not,	
please explain	

II. GENERAL PROJECT INFORMATION

Project Title	MS-39: Meter Replacement
Project Category Project Description (Briefly describe the project, in 300 words or less)	Agricultural Land Stewardship Floodplains/Meadows/Waterbodies Municipal Services Tribal Advisory Committee Uplands/Forest SPUD has old meters of differing makes and models with unreliable accuracy. Reading becomes difficult due to snow accumulation and rodent damage. It has been difficult to hire and insure a meter reader. Remote read meters with smart technology will allow us to greatly increase water conservation with accurate and immediate leak detection
Project Location Description (e.g., along the south bank of stream/river between river miles or miles from Towns/intersection and/or address):	ability. The town of Sierraville

Latitude:	39° 35′ 19.80 N
Longitude:	120° 21′ 54.85 W

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.

	Will the project		Quantification (e.g. acres of
	address		streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Restore natural hydrologic	☐ Yes		
functions.			
	⊠ N/A		
Reduce potential for	☐ Yes		
catastrophic wildland fires in			
the Region.	⊠ N/A		
Build communication and	☐ Yes		
collaboration among water			
resources stakeholders in the	⊠ N/A		
Region.			
Work with DWR to develop	☐ Yes		
strategies and actions for the			
management, operation, and	⊠ N/A		
control of SWP facilities in the			
Upper Feather River			
Watershed in order to increase			
water supply, recreational, and			
environmental benefits to the			
Region.	∇ vas	As a municipal comice provider	
Encourage municipal service	⊠ Yes	As a municipal service provider the new meters will enable us	
providers to participate in regional water management	□ N/A	to detect leaks sooner and take	
actions that improve water	□ N/A	actions to conserve water more	
supply and water quality.		efficiently.	
Continue to actively engage in	☐ Yes	emocnuy.	
FERC relicensing of	□ 163		
hydroelectric facilities in the	⊠ N/A		
Region.	≧ IV/A		
Address economic challenges	⊠ Yes	This project cannot be	
of municipal service providers		completed without grant	
to serve customers.	□ N/A	funding. The new meters will	
		provide more consistent	

	14/11 - 1	T	59. Meter Replacemen
	Will the		Quantification
	project		(e.g. acres of
Liver on Footh on Diver IDVA/B4	address	Duinf annian ation of mariant	streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
		information about our	
		customers' usage and the	
		ability to locate and repair leaks	
		promptly so that water is used	
		more efficiently. As we provide	
		the water usage data and information about how to	
		conserve water to residents in	
		their invoices it creates an	
		opportunity for them to	
		conserve more water and see	
		their monthly bills decrease as	
		a direct result of their	
		conservation efforts.	
		conscivation enorts.	
Protect, restore, and enhance	☐ Yes		
the quality of surface and			
groundwater resources for all	⊠ N/A		
beneficial uses, consistent with			
the RWQC Basin Plan.			
Address water resources and	⊠ Yes	Sierraville is a DAC	
wastewater needs of DACs and			
Native Americans.	□ N/A		
Coordinate management of	☐ Yes		
recharge areas and protect			
groundwater resources.	⊠ N/A		
Improve coordination of land	⊠ Yes	Better and more complete	
use and water resources		information about water use	
planning.	□ N/A	allows for better planning.	
Maximize agricultural,	⊠ Yes	Immediate leak detection and	
environmental and municipal		more information about water	
water use efficiency.	□ N/A	use increase efficiency.	
Effectively address climate	☐ Yes		
change adaptation and/or			
mitigation in water resources	⊠ N/A		
management.			
Improve efficiency and	⊠ Yes	Immediate leak detection and	
reliability of water supply and		more information about water	
other water-related	□ N/A	use increase efficiency.	
infrastructure.			
Enhance public awareness and	⊠ Yes	As we provide the water usage	
understanding of water		data and information about	
management issues and needs.	□ N/A	how to conserve water to	

			33. Meter Kepiacement
	Will the		Quantification
	project		(e.g. acres of
	address		streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
		residents in their invoices it	
		creates an opportunity for	
		them to participate in the	
		responsible management of	
		water resources through their	
		individual conservation efforts.	
Address economic challenges	☐ Yes		
of agricultural producers.			
	⊠ N/A		
Work with counties/	⊠ Yes	The volunteer Board of	
communities/groups to make		Directors of SPUD is committed	
sure staff capacity exists for	□ N/A	to the implementation and	
actual administration and		completion of this project.	
implementation of grant			
funding.			
If no objectives are addressed, d Region:	escribe how th	ne project relates to a challenge or	opportunity for the

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 a _l	If applicable, describe benefits or impacts of the project with respect to:				
а.	Native American Tribal Communities	⊠ N/A			
b.	Disadvantaged Communities ¹	□ N/A	Sierraville is a DAC. The new meters will provide data for immediate leak detection and more information about water use to increase system efficiency and reduce customer waste. The community members will be able to see their monthly bills decrease as a direct result of their conservation efforts.		

c.	Environmental Justice ²	⊠ N/A	As we provide the water usage data and information about how to conserve water to residents in their invoices it creates an opportunity for them to participate in the responsible management of water resources through their individual conservation efforts. SPUD provides services to all people regardless of race, culture or income.
d.	Drought Preparedness	□ N/A	More efficient use of water with fewer losses to leaks, along with customer awareness is an important step in drought preparedness.
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	Reduction of use of vehicles to go to each meter to read it every month
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	⊠ Yes	g.	g. Drinking water treatment and		Yes
	conservation, water use efficiency	□ N/A		distribution		N/A
b.	Stormwater capture, storage, clean-	☐ Yes	h.	Watershed protection and		Yes
	up, treatment, management	⊠ N/A		management	\boxtimes	N/A
c.	Removal of invasive non-native	☐ Yes	i.	Contaminant and salt removal		Yes
	species, creation/enhancement of	⊠ N/A		through reclamation/desalting,	\boxtimes	N/A
	wetlands,			other treatment technologies		
	acquisition/protection/restoration			and conveyance of recycled		
	of open space and watershed lands			water for distribution to users		
d.	Non-point source pollution	☐ Yes	j.	Planning and implementation of		Yes
	reduction, management and	⊠ N/A		multipurpose flood	\boxtimes	N/A
	monitoring			management programs		
e.	Groundwater recharge and	☐ Yes	k.	Ecosystem and fisheries		Yes
	management projects	⊠ N/A		restoration and protection	\boxtimes	N/A
f.	Water banking, exchange,	☐ Yes				
	reclamation, and improvement of	⊠ N/A				
	water quality					

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/).

	Will the Project incorporate	Description of how RMS to be employed,
Resource Management Strategy	RMS?	if applicable
Reduce Water Demand		
Agricultural Water Use Efficiency	☐ Yes ⊠ No	
Urban water use efficiency	☐ Yes ⊠ No	Rural water use efficiency
Improve Flood Management		
Flood management	☐ Yes ⊠ No	
Improve Operational Efficiency and T	ransfers	
Conveyance – regional/local	⊠ Yes □ No	Immediate leak detection and repairs improves efficiency of conveyance and eliminates possible sources of contamination.
System reoperation	☐ Yes ⊠ No	
Water transfers	☐ Yes ⊠ No	
Increase Water Supply		
Conjunctive management	☐ Yes ⊠ No	
Precipitation Enhancement	☐ Yes ⊠ No	
Municipal recycled water	☐ Yes ⊠ No	

	Will the Project	
	incorporate	Description of how RMS to be employed,
Resource Management Strategy	RMS?	if applicable
Surface storage – regional/local	☐ Yes ⊠ No	
Improve Water Quality		
Drinking water treatment and distribution		Immediate leak detection and repairs
distribution	⊠ Yes □ No	improves efficiency of conveyance and eliminates possible sources of
		contamination.
Groundwater remediation/aquifer		contamination.
remediation	☐ Yes ⊠ No	
Matching water quality to water	☐ Yes ☒ No	
use	☐ Yes ☒ No	
Pollution prevention	☐ Yes ⊠ No	
Salt and salinity management	☐ Yes ⊠ No	
Urban storm water runoff	☐ Yes ⊠ No	
management		
Practice Resource Stewardship		
Agricultural land stewardship	☐ Yes ⊠ No	
Ecosystem restoration	☐ Yes ⊠ No	
Forest management	☐ Yes ⊠ No	
Land use planning and	☐ Yes ⊠ No	
management Recharge area protection	☐ Yes ⊠ No	
Sediment management	☐ Yes ☒ No	
Watershed management	☐ Yes ☒ No	
People and Water	☐ res ☐ NO	
Economic incentives		More reliable readings will save users cost
		when they conserve their use. Additionally,
	⊠ Yes □ No	reduced operating costs are ultimately
		realized by the users.
Outreach and engagement		Customer outreach in the form of
	⊠ Yes □ No	newsletters and encouragement to engage
		the District in advising on conservation.
Water and culture	☐ Yes ⊠ No	
Water-dependent recreation	☐ Yes ⊠ No	
Wastewater/NPDES	☐ Yes ⊠ No	
Other DNAC addressed and analysis		
Other RMS addressed and explanation	on:	

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					
Droject corpus a peed of a DAC2: M Vos. M No.						
	Project serves a need of a DAC?: \boxtimes Yes \square No Funding Match Waiver request?: \boxtimes Yes \square No					
- 41	ium B materi reducesti. — res		Cont Share			
			Cost Share: Non-State	Cost Share:		
		Requested	Fund Source*	Other State		
		Grant	(Funding	Fund		
	Category	Amount	Match)	Source*	Total Cost	
a.	Direct Project Administration	8,000			8,000	
b.	Land Purchase/Easement					
c.	Planning/Design/Engineering					
	/ Environmental					
	Documentation					
d.	Construction/Implementation	178,000			178,000	
e.	Environmental Compliance/					
f.	Mitigation/Enhancement Construction Administration	8,000			8,000	
		8,000			8,000	
g.	Other Costs					
h.	Construction/Implementation Contingency					
i.	Grand Total (Sum rows (a) through	194,000			194,000	
	(h) for each column)					
j.	Can the Project be phased? ☐ Yes	⊠ No If yes , pı	rovide cost breakd	own by phases		
		Project Cost	O&M Cost	Descriptio	n of Phase	
	Phase 1					
	Phase 2					
	Phase 3					
	Phase 4					
k.	Explain how operation and maintenan		From rate payer f	fees and reserve	account	
	financed for the 20-year planning peri	od for project				
I.	implementation (not grant funded). Has a Cost/Benefit analysis been comp	nleted?	□ Vos. ⋈ No.			
, , , , , , , , , , , , , , , , , , , ,			re water less			
m. Describe what impact there may be if the project is not funded (300 words or less)		the project is				
not funded (300 words or less) due to undetected leaks, liability exposure meter reader			enposure ror			
*List	t all sources of funding.					
Note: See Project Development Manual, Exhibit B, for assistance in completing this table						
(http://featherriver.org/documents/).						

VIII. PROJECT STATUS AND SCHEDULE

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		✓ Yes☐ No☐ N/A	Evaluate need and options	6/15	8/15
b. Final Design		☐ Yes ⊠ No □ N/A	Select meter type and draft proposal planning docs to apply for grant funding as the opportunity arises	8/15	8/15
c. Environmental Documentation (CEQA / NEPA)		☐ Yes☐ No☑ N/A			
d. Permitting		☐ Yes ☐ No ☑ N/A			
e. Construction Contracting		☐ Yes☒ No☐ N/A	Pre-construction field work, prepare contract docs, bidding	1 month after procurement of grant funding	2 months after procurement of grant funding
f. Construction Implementation		☐ Yes☒ No☐ N/A	Purchase and installation of meters	3 months after procurement of grant funding	4 months after procurement of grant funding
Provide explanation stage is checked as c					

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.).	SPUD General Plan
b.	List technical reports and studies supporting the feasibility of this project.	
c.	Concisely describe the scientific basis (e.g. how much research has been conducted) of the proposed project in 300 words or less.	SPUD has old meters of differing makes and models with unreliable accuracy. The District has researched several meter brands and has a good understanding of the new meter reading technology. Reading becomes inconsistent due to snow accumulation and rodent damage. Remote read meters with smart technology will allow us to greatly increase water conservation with accurate readings and immediate leak detection, as well as greater ease of billing.
d.	Does the project implement green technology (e.g. alternate forms of energy, recycled materials, LID techniques, etc.).	 ✓ Yes □ No □ N/A If yes, please describe. Remote read meters with smart technology result in reduced use of vehicles for monthly meter reading
e.	Are you an Urban Water Supplier ¹ ?	☐ Yes ☒ No ☐ N/A
f.	Are you are an Agricultural Water Supplier ² ?	☐ Yes ☒ No ☐ N/A
g.	Is the project related to groundwater?	☐ Yes ☒ No ☐ N/A If yes, please indicate which groundwater basin.
3,0 ² A	rban Water Supplier is defined as a supplier, either publicly of unicipal purposes either directly or indirectly to more than 3, 1000 acre-feet of water annually. gricultural Water Supplier is defined as a water supplier, either to 10,000 or more irrigated acres, excluding the acreage	000 customers or supplying more than ner publicly or privately owned, providing

Climate Change – Project Assessment Checklist

This climate change project assessment tool allows project applicants and the planning team to assess project consistency with Proposition 84 plan standards and RWMG plan assessment standards. The tool is a written checklist that asks GHG emissions and adaptation/resiliency questions.

Name of project: MS-39: Meter Replacement

Project applicant: Sierraville Public Utility District

GHG Emissions Assessment

Project Construction Emissions
(If you check any of the boxes, please see the attached worksheet)
$oxed{\boxtimes}$ The project requires nonroad or off-road engines, equipment, or vehicles to complete.
igstyle igstyle The project requires materials to be transported from outside of the UFR watershed.
The project requires workers from outside of the UFR watershed.
The project is expected to generate GHG emissions for other reasons.
The project does not have a construction phase and/or is not expected to generate GHG emissions during the construction phase.
Operating Emissions
(If you check any of the boxes, please see the attached worksheet)
The project requires energy to operate.
The project will generate electricity.
The project will proactively manage forests to reduce wildfire risk.
The project will affect wetland acreage.
The project will include new trees.

Adaptation & Resiliency Assessment

Water Supply				
Describe how the project makes the watershed (more/less) resilient to one or more of the following				
high priority water supply vulnerability issues:				
Not applicable ■ Not applicable Not applicable				
Reduced snowmelt				
Unmet local water needs (drought)				
☐ Increased invasive species				
Water Demand				
Describe how the project makes the watershed (more/less) resilient to one or more of the following				
high priority water demand vulnerability issues:				
Not applicable				
☐ Not applicable				
☐ Increasing seasonal water use variability				
Unmet in-stream flow requirements				
Climate-sensitive crops				
Groundwater drought resiliency				
Water curtailment effectiveness				
The project will allow the District to better track customer usage and conservation and, use this				
information to educate and regulate its customers.				

Water Quality
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water quality vulnerability issues:
☐ Not applicable
Increasing catastrophic wildfires
Eutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and
other related water quality issues)
Seasonal low flows and limited abilities for waterbodies to assimilate pollution
Water treatment facility operations
\boxtimes Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold freshwater habitat, spawning habitat, wildlife habitat, etc.)
This project is an effective conservation tool allowing more discharge from the District's source to
migrate to the watershed as surface water.
Flooding
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority flooding vulnerability issues:
Not applicable ■ Not applicable Not applicable
Aging critical flood protection
☐ Wildfires
Critical infrastructure in a floodplain
Insufficient flood control facilities

Ecosystem and Habitat
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority ecosystem and habitat vulnerability issues:
Not applicable ■ Not applicable Not applicable
Climate-sensitive fauna or flora
Recreation and economic activity
Quantified environmental flow requirements
Erosion and sedimentation
☐ Endangered or threatened species
Fragmented habitat
Hydropower
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority hydropower vulnerability issues:
Not applicable ■ Not applicable Not applicable
Reduced hydropower output

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MC 20.	Motor	Replacement
11013-39:	weter	Replacement

GHG Emissions Analysis
Project Construction Emissions

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

ct requires non-road or on-road engines, equipment, or venicles to complete. If				
	Maximum			
	Number Per	Total 8-Hour Days in		
Type of Equipment	Day	Operation	Total MTCO₂e	
Tractors/Loaders/Bac				
khoes	1	3	1	
Plate Compactors	1	1	0	
Paving Equipment	1	1	0	
Concrete/Industrial				
Saws	1	1	0	
Dumpers/Tenders	1	5	0	
Other Construction				
Equipment	1	4	0	
			0	
			0	
			0	
			0	
		Total Emissions	2	

-				
The projec	t requires materials t	to be transporte	d from outside of the	UFR watershed. If y
		Average Trip		
	Total Number of	Distance		
	Round Trips	(Miles)	Total MTCO₂e	
	4	75	0	1
	Accesses November	Takal Nissaala as	Average Round Trip	
	Average Number	Total Number	Distance Traveled	
	Average Number	TOTAL NUMBER	Distance Haveled	
	_		4 3	
	of Workers	of Workdays	(Miles)	Total MTCO₂e
	_	of Workdays	(Miles)	Total MTCO₂e
	_	of Workdays	(Miles)	
The projec	of Workers	,	(Miles) ions for other reasons	0
The projec	of Workers	,	,	0

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

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-39: Meter Replacement **Project Operating Emissions** The project requires energy to operate. If yes: **Annual Energy Needed** Total MTCO₂e Unit kWh (Electricity) Therm (Natural Gas) The project will generate electricity. If yes: Annual kWh Generated Total MTCO2e *A negative value indicates GHG reductions The project will proactively manage forests to reduce wildfire risk. If yes: Acres Protected from Wildfire Total MTCO₂e 0 *A negative value indicates GHG reductions The project will affect wetland acreage. If yes: Acres of Protected Wetlands Total MTCO2e *A negative value indicates GHG reductions The project will include new trees. If yes: Acres of Trees Planted Total MTCO₂e *A negative value indicates GHG reductions **GHG Emissions Summary**

Construction and development will generate approximately:

In a given year, operation of the project will result in:

2 MTCO₂e

0 MTCO₂e



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	Sierraville Public Utility District
Name of Primary Contact	Nanci Davis
Name of Secondary Contact	Laura Read
Mailing Address	PO Box 325, Sierraville, CA 96126
E-mail	nancidavis212@gmail.com
Phone	530-574-8331
Other Cooperating Agencies /	
Organizations / Stakeholders	
Is your agency/organization	Yes
committed to the project through	
completion? If not, please explain	

II. GENERAL PROJECT INFORMATION

Project Title	MS-40 Pumphouse Improvement			
Project Category	☐ Agricultural Land Stewardship			
	☐ Floodplains/Meadows/Waterbodies			
	☐ Tribal Advisory Committee			
	☐ Uplands/Forest			
Project Description	Upgrade pump house to adhere to OSHA standards, to house			
(Briefly describe the project,	new pump and new secondary pump, to isolate chlorine			
in 300 words or less)	storage, to adequately ventilate and heat, to secure from			
	rodent intrusion, to install eye wash station and for electrical			
	and control upgrades.			
	Depending on results of alternative water source analysis it is			
	possible that the pump house would be designed to house a			
	filtration system.			
Project Location Description (e.g.,	NW ¼ NE ¼ of section 25, T.20N. R.14E. MDM			
along the south bank of stream/river	US Forest Service Property under the authority of the Federal			
between river miles or miles from	Land Policy and Management Act - October 21, 1976			
Towns/intersection and/or address):	Special Use Permit Authorization No SVD106401A			
Latitude:	39° 33′ 48.06″ N			
Longitude:	120° 22′ 15.88 W			

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.

	Will the		Quantification
	project		(e.g. acres of
	address		streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Restore natural hydrologic	☐ Yes		
functions.	S		
	⊠ N/A		
Reduce potential for	⊠ Yes	A reliable delivery system will	
catastrophic wildland fires in		provide a more dependable	
the Region.	□ N/A	source of fire suppression	
		water to support initial attack activities	
Build communication and	⊠ Yes	Will provide more reliable	134 hook-ups
collaboration among water	∠ 1€3	domestic water to SPUD	10- 1100K up3
resources stakeholders in the	□ N/A	members throughout the town	
Region.		of Sierraville	
Work with DWR to develop	⊠ Yes	Creates a more dependable	300,000 gallons
strategies and actions for the		water supply for service area.	
management, operation, and	□ N/A		
control of SWP facilities in the		Currently pump often falls out	
Upper Feather River		of service and requires	
Watershed in order to increase		maintenance and repair	
water supply, recreational, and			
environmental benefits to the			
Region.			
Encourage municipal service	⊠ Yes	Provides more efficient	
providers to participate in		chlorination, better monitoring	
regional water management	□ N/A	of water quality, more efficient	
actions that improve water		pumping, rodent and pest free	
supply and water quality.		environment	
Continue to actively engage in	☐ Yes		
FERC relicensing of hydroelectric facilities in the	N N/A		
Region.	⊠ N/A		
Address economic challenges	⊠ Yes	Sierraville residents cannot	
of municipal service providers		afford this necessary project	
to serve customers.	□ N/A	without financial assistance.	
	,	This project creates a more cost	
		effective, energy efficient and,	
		reliable delivery system for this	

	T	1715 10:1 4	mpnouse improvemen
	Will the		Quantification
	project		(e.g. acres of
	address		streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
		community.	
Protect, restore, and enhance	⊠ Yes	Creates a cleaner and more	
the quality of surface and		cost-effective and energy	
groundwater resources for all	□ N/A	efficient delivery system.	
beneficial uses, consistent with			
the RWQC Basin Plan.			
Address water resources and	⊠ Yes	Sierraville is a Severely	
wastewater needs of DACs and		Disadvantaged Community	
Native Americans.	□ N/A	serviced by the SPUD	
		conveyance system. A more	
		reliable conveyance system is	
		needed.	
Coordinate management of	☐ Yes		
recharge areas and protect			
groundwater resources.	⊠ N/A		
Improve coordination of land	☐ Yes		
use and water resources			
planning.	⊠ N/A		
Maximize agricultural,	⊠ Yes	A new pump house will ensure	
environmental and municipal		pumping capabilities to meet	
water use efficiency.	□ N/A	the needs of the system	
Effectively address climate	☐ Yes		
change adaptation and/or			
mitigation in water resources	⊠ N/A		
management.			
Improve efficiency and	⊠ Yes	Improves water quality	
reliability of water supply and		monitoring, improves reliability	
other water-related	□ N/A	and energy efficiency of water	
infrastructure.	∇ va-	delivery system. SPUD will communicate with	
Enhance public awareness and	⊠ Yes		
understanding of water	□ N/A	members about impacts of the	
management issues and needs.	□ N/A	improvements and engage and educate the public in water	
		conservation.	
Address economic challenges	☐ Yes	Conservation.	
of agricultural producers.	163		
o. agricultural producers.	⊠ N/A		
Work with counties/	⊠ Yes	SPUD Board of Directors is a	
communities/groups to make	□ 🖂 1€3	volunteer group committed to	
sure staff capacity exists for	□ N/A	assuring responsible	
actual administration and		management of the district.	
implementation of grant			
pierrierration of grant	<u>I</u>	l .	

	Will the		Quantification
	project		(e.g. acres of
	address		streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
funding.			

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	⊠ N/A		
b.	Disadvantaged Communities ¹	□ N/A	Sierraville is a Severely Disadvantaged Community dependent solely on SPUD services for drinking water. This project will benefit the community by strengthening the ability to deliver water consistently for the long term.	
c.	Environmental Justice ²	□ N/A	The project provides a safer, more reliable water supply for all of our customers regardless of race, culture or income.	
d.	Drought Preparedness	□ N/A	A more efficient delivery system improves monitoring capabilities and reduces loss from leaks	
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	The new facility will be designed using energy efficient equipment and fixtures, and supplemented with solar power If feasible. Increased reliability will reduce vehicle use and power generation for operation and maintenance.	

g. Other expected impacts or benefits that				
are not already mentioned elsewhere	⊠ N/A			
¹ A Disadvantaged Community is defined as a con	nmunity wi	th an annual median household (MHI)		
income that is less than 80 percent of the Statew	ide 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, imple	ementation	and enforcement of environmental laws,		
regulations and policies. An example of environm	ental justic	ce 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, an	d 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	⊠ Yes	g.	Drinking water treatment and	⊠ Yes
	conservation, water use efficiency	□ N/A		distribution	□ N/A
b.	Stormwater capture, storage, clean-	☐ Yes	h.	Watershed protection and	☐ Yes
	up, treatment, management	⊠ N/A		management	⊠ N/A
c.	Removal of invasive non-native	☐ Yes	i.	Contaminant and salt removal	☐ Yes
	species, creation/enhancement of	⊠ N/A		through reclamation/desalting,	⊠ N/A
	wetlands,			other treatment technologies	
	acquisition/protection/restoration			and conveyance of recycled	
	of open space and watershed lands			water for distribution to users	
d.	Non-point source pollution	☐ Yes	j.	Planning and implementation of	☐ Yes
	reduction, management and	⊠ N/A		multipurpose flood	⊠ N/A
	monitoring			management programs	
e.	Groundwater recharge and	☐ Yes	k.	Ecosystem and fisheries	☐ Yes
	management projects	⊠ N/A		restoration and protection	⊠ N/A
f.	Water banking, exchange,	☐ Yes			
	reclamation, and improvement of	⊠ N/A			
	water quality	,			

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/).

	Will the Project	
	incorporate	Description of how RMS to be employed,
Resource Management Strategy	RMS?	if applicable
Reduce Water Demand	1	
Agricultural Water Use Efficiency	☐ Yes ⊠ No	
Urban water use efficiency	⊠ Yes □ No	Creates a more efficient delivery system for the rural community.
Improve Flood Management		
Flood management	☐ Yes ⊠ No	
Improve Operational Efficiency and T	ransfers	
Conveyance – regional/local	⊠ Yes □ No	Cleaner and more reliable conveyance system.
System reoperation	⊠ Yes □ No	Improvement of existing operations and management procedures of water facilities to meet needs more efficiently and reliably.
Water transfers	☐ Yes ⊠ No	
Increase Water Supply		
Conjunctive management	☐ Yes ⊠ No	
Precipitation Enhancement	☐ Yes ⊠ No	
Municipal recycled water	☐ Yes ⊠ No	
Surface storage – regional/local	☐ Yes ⊠ No	
Improve Water Quality		
Drinking water treatment and	⊠ Yes □ No	Includes installation of safe chlorination
distribution		system and improves monitoring capabilities
Groundwater remediation/aquifer remediation	☐ Yes ⊠ No	
Matching water quality to water	⊠ Yes □ No	
use		
Pollution prevention	☐ Yes ⊠ No	
Salt and salinity management	☐ Yes ⊠ No	
Urban storm water runoff	☐ Yes ☒ No	
management		
Practice Resource Stewardship	T	
Agricultural land stewardship	☐ Yes ⊠ No	
Ecosystem restoration	☐ Yes ⊠ No	
Forest management	☐ Yes ⊠ No	
Land use planning and	☐ Yes ⊠ No	
management		
Recharge area protection	☐ Yes ⊠ No	
Sediment management	☐ Yes ⊠ No	
Watershed management	☐ Yes ⊠ No	

	Will the Project incorporate	Description of how RMS to be employed,
Resource Management Strategy	RMS?	if applicable
People and Water		
Economic incentives	☐ Yes ⊠ No	
Outreach and engagement	⊠ Yes □ No	SPUD regularly distributes newsletters with information about system operation and water conservation efforts, and tips for individuals.
Water and culture	⊠ Yes □ No	
Water-dependent recreation	☐ Yes ⊠ No	
Wastewater/NPDES	☐ Yes ⊠ No	
Other RMS addressed and explanation	on:	

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?: ⊠ Yes □ No Funding Match Waiver request?: ⊠ Yes □ 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	10,000			10,000
b.	Land Purchase/Easement	n/a			n/a
c.	Planning/Design/Engineering / Environmental	52,900			52,900
d.	Construction/Implementation	154,500			154,500
e.	Environmental Compliance/ Mitigation/Enhancement	3,500			3,500
f.	Construction Administration	5,000			5,000
g.	Other Costs	0			0
h.	Construction/Implementation Contingency	17,500			17,500
i.	Grand Total (Sum rows (a) through (h) for each column)	243,400			243,400
j.	j. Can the Project be phased? ☐ Yes ☒ 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.	k. Explain how operation and maintenance costs will be financed for the 20-year planning period for project implementation (not grant funded).		From rate-payers monthly payments and reserve – maintenance costs should be reduced as compared to current operation because of increased efficiencies	
I.	Has a Cost/Benefit analysis been comp	oleted?	☐ Yes ☒ No	
m.			Continued use of dilapidated, unsafe and unreliable pump house and antiquated equipment. Chlorine storage and use in close proximity to controls will eventually destroy electrical system. During periods of difficult access in winter months the District runs the risk of being unable to refill its storage tank due to not having backup generation onsite, or access to replace the single pump that currently serves the District. If one of these short-term fixes fails SPUD will not be able to supply water for health and safety or fire protection.	
	t all sources of funding.			
	te: See Project Development Manual, Ex	khibit B, for assist	ance in completing	g this table
l (ht	http://featherriver.org/documents/).			

VIII. PROJECT STATUS AND SCHEDULE

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	⊠	☐ Yes ⊠ No □ N/A	Review with water system operator of problems of existing pump house; alternative water source analysis	4/15	1 month after securement of grant funding
b. Final Design	×	☐ Yes ⊠ No □ N/A		5/15	1 month after securement of grant funding
c. Environmental Documentation (CEQA / NEPA)			Internal scoping has been completed by the Forest Service. An Environmental Assessment/Categor		

				I	I .
d. Permitting		Yes No N/A	ical Exclusion (documented in a Decision Memo) is expected soon	5/15	8/15
e. Construction Contracting		Yes No N/A			
f. Construction Implementation		Yes No N/A	Construct new building and underground piping. Install new pump and new secondary pump. Install new service panel and electrical panels and motor controls. Isolate chlorine storage, adequately ventilate and heat structure. Install eye wash station,	1 month after securement of grant funding	3 months after securement of grant funding
Provide explanation stage is checked as c	-	oroject			

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	SPUD General Plan
	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	Water System Upgrades report.
	feasibility of this project.	Preliminary Engineering Report from
		Walters Engineering
c.	Concisely describe the scientific basis (e.g. how much	Licensed water system operator has
	research has been conducted) of the proposed project in	defined the need based on his expertise
	300 words or less.	and familiarity with the current system
		condition. Operator has consulted with
		the District's current engineer, including
		preliminary sketches of proposed new
		facilities. District board has evaluated
		proposed upgrades with operator and
		engineer and researched building
		structure options.
d.	Does the project implement green technology (e.g.	⊠ Yes □ No □ N/A
	alternate forms of energy, recycled materials, LID	If yes, please describe.
	techniques, etc.).	Increased energy efficiency
		supplemented with solar
e.	Are you an Urban Water Supplier ¹ ?	☐ Yes ☒ No ☐ N/A
f.	Are you are an Agricultural Water Supplier ² ?	☐ Yes ☒ No ☐ N/A
g.	Is the project related to groundwater?	☐ Yes ☒ No ☐ N/A
		If yes, please indicate which
		groundwater basin.
¹ U	Irban Water Supplier is defined as a supplier, either publicly o	or privately owned, providing water for
mι	unicipal purposes either directly or indirectly to more than 3,	000 customers or supplying more than
3,0	000 acre-feet of water annually.	
² A	gricultural Water Supplier is defined as a water supplier, eith	ner publicly or privately owned, providing
wa	ter to 10,000 or more irrigated acres, excluding the acreage	that receives recycled water.

Climate Change – Project Assessment Checklist

This climate change project assessment tool allows project applicants and the planning team to assess project consistency with Proposition 84 plan standards and RWMG plan assessment standards. The tool is a written checklist that asks GHG emissions and adaptation/resiliency questions.

Name of project: MS-40 Pumphouse Improvements

Project applicant: Sierraville Public Utility District

GHG Emissions Assessment

GITG ETTIGSTOTIS / GSCSSTTICTIC
Project Construction Emissions (If you check any of the boxes, please see the attached worksheet)
 The project requires nonroad or off-road engines, equipment, or vehicles to complete. The project requires materials to be transported from outside of the UFR watershed. The project requires workers from outside of the UFR watershed. The project is expected to generate GHG emissions for other reasons. The project does not have a construction phase and/or is not expected to generate GHG emissions during the construction phase.
Operating Emissions (If you check any of the boxes, please see the attached worksheet)
The project requires energy to operate.
The project will generate electricity.
☐ The project will proactively manage forests to reduce wildfire risk.
The project will affect wetland acreage.
The project will include new trees.

Adaptation & Resiliency Assessment

Water Supply Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water supply vulnerability issues:
Not applicable☐ Reduced snowmelt
Unmet local water needs (drought)Increased invasive species
Water Demand Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water demand vulnerability issues:
Not applicable
Increasing seasonal water use variability
Unmet in-stream flow requirements
Climate-sensitive crops
Groundwater drought resiliency Water curtailment effectiveness
water cartainment circulations

Water Quality Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water quality vulnerability issues:
 Not applicable Increasing catastrophic wildfires Eutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and other related water quality issues) Seasonal low flows and limited abilities for waterbodies to assimilate pollution Water treatment facility operations
☐ Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold freshwater habitat, spawning habitat, wildlife habitat, etc.)
Building and outdated and current size of building does not allow adequate space for OSHA requirements for chlorination facilities or additional pump. Pump House is in a remote area for which winter access is difficult. Pumping redundancy and backup generation is needed to maintain reliability in winter months. Electrical equipment is outdated and must be brought up to current codes. A new building would maximize efficiency in heating and cooling, saving on overall energy costs.
Flooding Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues:
Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain Insufficient flood control facilities

Upper Feather River Integrated Regional Water Management Plan Climate Change- Project Assessment Tool

Ecosystem and Habitat
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority ecosystem and habitat vulnerability issues:
Not applicable ■ Not applicable Not applicable
Climate-sensitive fauna or flora
Recreation and economic activity
Quantified environmental flow requirements
Erosion and sedimentation
☐ Endangered or threatened species
Fragmented habitat
Undergroup
Hydropower Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority hydropower vulnerability issues:
Not applicable ■ The state of t
Reduced hydropower output

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-40.	Pumnho	use Impro	vement
1V13-4U.	runipilo	use iiiipio	vennent

GHG Emissions Analysis

Pro	iect	Constr	uction	Fmis	sions
		COLISCI	action	LIIII	310113

	Χ	The project requires non-road	or off-road engines,	equipment,	or vehicles to	complete. If	ves
--	---	-------------------------------	----------------------	------------	----------------	--------------	-----

	Maximum		
	Number Per	Total 8-Hour Days in	
Type of Equipment		Operation	Total MTCO₂e
Tractors/Loaders/Bac			
khoes	1	5	1
Dumpers/Tenders	1	3	0
Other Construction			
Equipment	1	1	0
			0
			0
			0
			0
			0
			0
			0
		Total Emissions	2

Χ	The project requires materials to be transported from outside of the UFR watershed. If yes:

	Average Trip	
Total Number of	Distance	
Round Trips	(Miles)	Total MTCO₂e
6	60	1

The project requires workers from outside of the UFR watershed. If yes:

		Average Round Trip		
Average Number	Total Number	Distance Traveled		
of Workers	of Workdays	(Miles)	Total MTCO₂e	
4	20	50		1

The projec	t is expected to generate GHG emissions for other reasons. If yes, explain:

I	The project d	loes not have a construction	phase and/or is not ex	xpected to generate GH	G emissions during the
	construction	phase.			

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

The project requires energy to operate. If yes: Annual Energy Needed Unit Total MTCO2e 9,000 kWh (Electricity) Therm (Natural Gas) The project will generate electricity. If yes: Annual kWh Generated Total MTCO2e *A negative value indicates GHG reductions The project will proactively manage forests to reduce wildfire risk. If yes: Acres Protected from Wildfire Total MTCO2e

0

MS-40 Pumphouse Improvement

The project will affect wetland acreage. If yes:

Project Operating Emissions

Acres of Protected Wetlands	Total MTCO ₂ e
	0

^{*}A negative value indicates GHG reductions

*A negative value indicates GHG reductions

The project will include new trees. If yes:

Acres of Trees Planted	Total MTCO ₂ e	
		0

^{*}A negative value indicates GHG reductions

GHG Emissions Summary

Construction and development will generate approximately:	3 MTCO ₂ e
In a given year, operation of the project will result in:	2 MTCO₂e



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	Sierraville Public Utility District
Name of Primary Contact	Nanci Davis
Name of Secondary Contact	Laura Read
Mailing Address	PO Box 325
E-mail	nancidavis212@gmail.com
Phone	530-414-1257
Other Cooperating Agencies /	
Organizations / Stakeholders	
Is your agency/organization	yes
committed to the project through	
completion? If not, please explain	

II. GENERAL PROJECT INFORMATION

Project Title	MS-41: Tank Replacement Project
Project Category	☐ Agricultural Land Stewardship
	☐ Floodplains/Meadows/Waterbodies
	☐ Tribal Advisory Committee
	☐ Uplands/Forest
Project Description	SPUD has a storage tank that has been taken out of service
(Briefly describe the project,	due to its dilapidated condition leaving the district with a
in 300 words or less)	single 215,000-gallon tank to serve the entire system. The
	remaining tank is visibly leaking although it has a remaining
	life of 15 years. SPUD needs additional storage to meet the
	combination of maximum daily demand and fire protection
	requirements. Having 2 storage tanks allows operational
	flexibility by providing redundancy for maintenance or repairs.
Project Location Description (e.g.,	Approximately ¼ mile SSW of the intersection of state Hwy 89
along the south bank of stream/river	and Old Truckee Road
between river miles or miles from	
Towns/intersection and/or address):	
Latitude:	39°34′14.84″ N
Longitude:	120°22′ 09.06″ W

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: Restore natural hydrologic functions.	Will the project address the objective?	Brief explanation of project linkage to selected Objective	Quantification (e.g. acres of streams/wetlands restored or enhanced)
Reduce potential for catastrophic wildland fires in the Region.	⊠ Yes □ N/A	Will provide more dependable source of fire suppression water to support initial attack activities	Potentially 300,000 gallons
Build communication and collaboration among water resources stakeholders in the Region.	⊠ Yes □ N/A	SPUD is a collaboration of water resource stakeholders and improvements will serve all stakeholders in the district	134 hook-ups
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.	⊠ Yes ⊠ N/A	Increases water supply for service area	300,000 gallons
Encourage municipal service providers to participate in regional water management actions that improve water supply and water quality.	⊠ Yes □ N/A	Sierraville Public Utility District is a municipal service provider. This project would allow us to service one tank without interruption of water delivery, providing better water quality, reliability and supply to the district.	Increase of 300,000 gallons
Continue to actively engage in FERC relicensing of hydroelectric facilities in the Region.	□ Yes ⊠ N/A		

		T	ik kepiacement Projec
	Will the		Quantification
	project		(e.g. acres of
	address		streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Address economic challenges	⊠ Yes	Sierraville is a Severely	
of municipal service providers		Disadvantaged Community and	
to serve customers.	□ N/A	Grant funding is necessary to	
		provide safe, reliable water	
		supplies to the local	
		community. SPUD ratepayers	
		have said that an increase in	
		rates to pay for infrastructure	
		improvements would be a	
		serious economic challenge.	
Protect, restore, and enhance	⊠ Yes	A new storage tank would allow	
the quality of surface and		us to better manage the effects	
groundwater resources for all	□ N/A	of our water system on the	
beneficial uses, consistent with	,	groundwater taken from RR	
the RWQC Basin Plan.		Springs	
Address water resources and	⊠ Yes	Sierraville is a DAC. This project	134 hook-ups and
wastewater needs of DACs and		would address the water	tourists who
Native Americans.	□ N/A	resource needs of Sierraville.	support the local
		Sierraville is a hub for tourist	economy
		and commercial traffic between	coonom,
		Interstate 80 and the other	
		communities in the Sierra	
		Valley (the headwaters region	
		for the Middle Fork of the	
		Feather River). Most of the	
		commercial and recreational	
		traffic entering the headwaters	
		area flows through Sierraville.	
		Many visitors stop for food and	
		travel related services in town.	
		A failure of the domestic water	
		supply for this community will	
		hurt the economic viability of	
		the communities in Sierra and Plumas Counties.	
		riumas counties.	
Coordinate management of	□ Va-		
Coordinate management of	☐ Yes		
recharge areas and protect			
groundwater resources.	⊠ N/A		
Improve coordination of land	⊠ Yes	Greater storage capacity allows	
use and water resources		us to improve management of	
planning.	□ N/A	water source	

	Will the		Quantification
	project		(e.g. acres of
	address		streams/wetlands
Upper Feather River IRWM	the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Maximize agricultural <u>,</u>	⊠ Yes	Greater storage capacity allows	
environmental and municipal		us to improve management of	
water use efficiency.	□ N/A	water source	
Effectively address climate	⊠ Yes	Greater storage capacity allows	
change adaptation and/or		us to improve management of	
mitigation in water resources	□ N/A	water source and provides	
management.		protection against potential	
		diminishing source	
Improve efficiency and	⊠ Yes	Greater storage capacity allows	
reliability of water supply and		us to improve management of	
other water-related	□ N/A	water source. This is our	
infrastructure.		primary objective.	
Enhance public awareness and	⊠ Yes	SPUD would engage community	
understanding of water		outreach and strive for	
management issues and needs.	□ N/A	effective communication with	
		all stakeholders	
Address economic challenges	☐ Yes		
of agricultural producers.			
	⊠ N/A		
Work with counties/	⊠ Yes	SPUD Board of Directors is a	
communities/groups to make		volunteer group committed to	
sure staff capacity exists for	□ N/A	assuring responsible	
actual administration and		management of the district.	
implementation of grant		We have no paid staff, only a	
funding.		contract water system operator	
		and secretary. We are	
		prepared to work with the	
		IRWM and the County to	
		administer any resultant grant	
		and see this project through to	
		completion. We are prepared	
	I	to resource accordingly.	

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 pro	ject wi	th respect to:			
a. Native American Tribal Communities		N/A				
b. Disadvantaged Communities ¹		N/A	Sierraville is designated as a Se Disadvantaged Community and serves the community.	•		
c. Environmental Justice ²		N/A	SPUD ensures fair and equal services regardless of race, culture, income, or any other cultural factors.			
d. Drought Preparedness	Preparedness ☐ N/A Greater storage capacity provides reliable service during drought and allows for water collection at most beneficial times.			and		
e. Assist the region in adapting to effects of climate change ³		N/A	Greater storage capacity provides			
f. Generation or reduction of greenhouse gas emissions (e.g. green technology)	\boxtimes	N/A				
g. Other expected impacts or benefits that are not already mentioned elsewhere		N/A				
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	Yes	g. D	rinking water treatment and	⊠ Yes		
conservation, water use efficiency $\ \Box$	N/A	d	istribution	□ N/A		
	Yes		Vatershed protection and	⊠ Yes		
	N/A		nanagement	□ N/A		
c. Removal of invasive non-native			ontaminant and salt removal	☐ Yes		
species, creation/enhancement of $oximes$	N/A	tl	hrough reclamation/desalting,	⊠ N/A		

	wetlands,			other treatment technologies	
	acquisition/protection/restoration			and conveyance of recycled	
	of open space and watershed lands			water for distribution to users	
d.	Non-point source pollution	☐ Yes	j.	Planning and implementation of	☐ Yes
	reduction, management and	⊠ N/A		multipurpose flood	⊠ N/A
	monitoring			management programs	
e.	Groundwater recharge and	⊠ Yes	k.	Ecosystem and fisheries	☐ Yes
	management projects	□ N/A		restoration and protection	⊠ N/A
f.	Water banking, exchange,	☐ Yes			
	reclamation, and improvement of	⊠ N/A			
	water quality				

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/).

	Will the Project incorporate	Description of how RMS to be employed,
Resource Management Strategy	RMS?	if applicable
Reduce Water Demand		
Agricultural Water Use Efficiency	☐ Yes ⊠ No	
Urban water use efficiency	⊠ Yes □ No	Creates a more efficient storage and delivery system
Improve Flood Management		
Flood management	☐ Yes ⊠ No	
Improve Operational Efficiency and T	ransfers	
Conveyance – regional/local	⊠ Yes □ No	Having 2 storage tanks allows operational flexibility by providing redundancy for maintenance or repairs.
System reoperation	⊠ Yes □ No	The improvement of existing operations and management procedures of water facilities to meet needs more efficiently and reliably.
Water transfers	☐ Yes ⊠ No	
Increase Water Supply		
Conjunctive management	☐ Yes ⊠ No	
Precipitation Enhancement	☐ Yes ⊠ No	
Municipal recycled water	☐ Yes ⊠ No	
Surface storage – regional/local	⊠ Yes □ No	The use of human-made, above-ground reservoirs to collect water for later release when needed.
Improve Water Quality		
Drinking water treatment and distribution	⊠ Yes □ No	Better management of SPUD resources. Pumping can occur during off-peak hours resulting in operational savings.

	Will the Project incorporate	Description of how RMS to be employed,
Resource Management Strategy	RMS?	if applicable
Groundwater remediation/aquifer remediation	☐ Yes ⊠ No	
Matching water quality to water use	☐ Yes ⊠ No	
Pollution prevention	☐ Yes ⊠ No	
Salt and salinity management	☐ Yes ⊠ No	
Urban storm water runoff management	☐ Yes ⊠ No	
Practice Resource Stewardship		
Agricultural land stewardship	☐ Yes ⊠ No	
Ecosystem restoration	☐ Yes ⊠ No	
Forest management	☐ Yes ⊠ No	
Land use planning and management	⊠ Yes □ No	SPUD will install new storage tank where existing abandoned tank is located. There will be no expansion of land use for this project.
Recharge area protection	☐ Yes ⊠ No	
Sediment management	☐ Yes ⊠ No	
Watershed management	⊠ Yes □ No	SPUD will plant new trees and shrubbery to stabilize erosion and mitigate runoff.
People and Water		
Economic incentives	⊠ Yes □ No	Increased storage will allow off-peak electrical use.
Outreach and engagement	⊠ Yes □ No	SPUD encourages and educates on conservation methods.
Water and culture	⊠ Yes □ No	SPUD educates residents including long time ranchers on water conservation practices.
Water-dependent recreation	☐ Yes ⊠ No	
Wastewater/NPDES	☐ Yes ⊠ No	
Other RMS addressed and explanation	on:	

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?: ⊠ Yes □ No							
Funding Match Waiver request?: Yes No							
. •	Cost Share:						
				n-State Fund	c	Cost Share:	
		Requested		Source*		ther State	
		Grant		(Funding		Fund	Total
	Category	Amount		Match)		Source*	Cost
a.	Direct Project Administration	5,000					5,000
b.	Land Purchase/Easement						
c.	Planning/Design/Engineer	25,000					25,000
	ing/ Environmental						
d.	Construction/Implementation	535,000					535,000
e.	Environmental Compliance/	8,500					8,500
f.	Mitigation/Enhancement Construction Administration	10,000	+				10,000
g.	Other Costs	<u> </u>					,
h.	Construction/Implementation	46,500					46,500
	Contingency	. 0,000					
i.	Grand Total (Sum rows (a)	630,000					630,000
	through (h) for each column)						
j.	Can the Project be phased? \Box Ye	s ⊠ No If	yes , p	rovide cost bre	akd	own by phase	es
		Project (Cost	O&M Cost		Descriptio	n of Phase
	Phase 1						
	Phase 2						
	Phase 3						
	Phase 4			.			
k.	Explain how operation and mainter financed for the 20-year planning p			From rate-pa	-		
	implementation (not grant funded)		ect	reserve – maintenance costs should be reduced as compared to current			
implementation (not grant funded).			operation because of increased				
				efficiencies			-
I. Has a Cost/Benefit analysis been completed?			⊠ Yes □ No				
m.	Describe what impact there may be	if the project	is	Life of existing storage tank is 10 years.			
	not funded (300 words or less)			SPUD will have less storage capacity,			•
				decreased rel		•	
storage capacity in 15 years to serve residents, businesses, or tourists of							
				· ·	sine	sses, or touri	sts of
				Sierraville.			

*List all sources of funding.

Note: See Project Development Manual, Exhibit B, for assistance in completing this table (http://featherriver.org/documents/).

VIII. PROJECT STATUS AND SCHEDULE

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	Con	npleted?	Description of Activities in Each Project Stage	Planned/ Actual Start Date (mm/yr)	Planned/ Actual Completion Date (mm/yr)
a. Assessment and Evaluation			Yes No N/A	SPUD hired Walters Engineering to create Preliminary Engineering Report	November 2011	3 months after funding secured.
b. Final Design			Yes No N/A	We have recommendations from the engineers	Upon securing grant funding.	12 months after funding received.
c. Environmental Documentation (CEQA / NEPA)			Yes No N/A		6 months after funding received	7 months after funding received
d. Permitting			Yes No N/A		9 months after funding received	12 months after funding received
e. Construction Contracting			Yes No N/A		14 months after funding received	15 months after funding received
f. Construction Implementation			Yes No N/A		24 months after funding received	26 months after funding received
Provide explanation stage is checked as c		-	project			

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	Water System Upgrades					
	feasibility of this project.	Preliminary Engineering Report					
		Walters Engineering					
c.	Concisely describe the scientific basis (e.g. how much						
	research has been conducted) of the proposed project in	Adding the 300,000-gallon storage tank					
	300 words or less.	will ensure OSHA compliance and that					
		NFPA and AWWA codes are met. The					
		project's improved efficiency will					
		improve groundwater management,					
		and provide safe drinking water to 134					
		households, businesses, and facilities,					
		as well as a larger, more reliable water					
-1	Describe and included and an arrange to the classification of the control of the	supply for emergency fire protection.					
d.	Does the project implement green technology (e.g.	☐ Yes ☐ No ☒ N/A					
	alternate forms of energy, recycled materials, LID	If yes, please describe.					
	techniques, etc.).						
e.	Are you an Urban Water Supplier ¹ ?	☐ Yes ☒ No ☐ N/A					
f.	Are you are an Agricultural Water Supplier ² ?	☐ Yes ⊠ No ☐ N/A					
g.	Is the project related to groundwater?	⊠ Yes □ No □ N/A					
		If yes, please indicate which					
		groundwater basin.					
		RR Springs is located in the Sierra Valley					
		(5-12) groundwater basin					
	ban Water Supplier is defined as a supplier, either publicly o	•					
	municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than						
	100 acre-feet of water annually.	an mulatial and multiple second second second second					
	gricultural Water Supplier is defined as a water supplier, eith						
wa	vater to 10,000 or more irrigated acres, excluding the acreage that receives recycled water.						

Climate Change – Project Assessment Checklist

This climate change project assessment tool allows project applicants and the planning team to assess project consistency with Proposition 84 plan standards and RWMG plan assessment standards. The tool is a written checklist that asks GHG emissions and adaptation/resiliency questions.

Name of project: MS-41: Tank Replacement Project

Project applicant: Sierraville Public Utility District

GHG Emissions Assessment

3113 Emissions 7.53635ment
Project Construction Emissions (If you check any of the boxes, please see the attached worksheet)
 The project requires nonroad or off-road engines, equipment, or vehicles to complete. The project requires materials to be transported from outside of the UFR watershed. The project requires workers from outside of the UFR watershed. The project is expected to generate GHG emissions for other reasons. The project does not have a construction phase and/or is not expected to generate GHG emissions during the construction phase.
Operating Emissions (If you check any of the boxes, please see the attached worksheet)
The project requires energy to operate.
The project will generate electricity.
The project will proactively manage forests to reduce wildfire risk.
The project will affect wetland acreage.
The project will include new trees.

Adaptation & Resiliency Assessment

Water Supply
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water supply vulnerability issues:
Not applicable ■ Not applicable Not applicable
Reduced snowmelt
Unmet local water needs (drought)
☐ Increased invasive species
Water Demand
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water demand vulnerability issues:
Not applicable ■ Not applicable Not applicable
Increasing seasonal water use variability
☐ Unmet in-stream flow requirements
Unmet in-stream flow requirements Climate-sensitive crops
Unmet in-stream flow requirements
☐ Unmet in-stream flow requirements ☐ Climate-sensitive crops ☐ Groundwater drought resiliency
☐ Unmet in-stream flow requirements ☐ Climate-sensitive crops ☐ Groundwater drought resiliency
☐ Unmet in-stream flow requirements ☐ Climate-sensitive crops ☐ Groundwater drought resiliency
☐ Unmet in-stream flow requirements ☐ Climate-sensitive crops ☐ Groundwater drought resiliency
☐ Unmet in-stream flow requirements ☐ Climate-sensitive crops ☐ Groundwater drought resiliency
☐ Unmet in-stream flow requirements ☐ Climate-sensitive crops ☐ Groundwater drought resiliency
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☐ Unmet in-stream flow requirements ☐ Climate-sensitive crops ☐ Groundwater drought resiliency
☐ Unmet in-stream flow requirements ☐ Climate-sensitive crops ☐ Groundwater drought resiliency

high priority water quality vulnerability issues:
Not applicable ■ Not applicable Not applicable
Increasing catastrophic wildfires
 Eutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and other related water quality issues)
Seasonal low flows and limited abilities for waterbodies to assimilate pollution
Water treatment facility operations
Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold freshwater habitat, spawning habitat, wildlife habitat, etc.)
Flooding
Describe how the project makes the watershed (more/less) resilient to one or more of the following
Describe how the project makes the watershed (more/less) resilient to one or more of the following
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues:
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain
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Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain

Water Quality

Upper Feather River Integrated Regional Water Management Plan Climate Change- Project Assessment Tool

Ecosystem and Habitat
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority ecosystem and habitat vulnerability issues:
Not applicable ■ Not applicable Not applicable
Climate-sensitive fauna or flora
Recreation and economic activity
Quantified environmental flow requirements
Erosion and sedimentation
☐ Endangered or threatened species
Fragmented habitat
Undergroup
Hydropower Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority hydropower vulnerability issues:
Not applicable ■ The state of t
Reduced hydropower output

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-41: Tank Replacement Project

GHG Emissions Analysis

Project Construction Emissions

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

t requires non-road or on-road engines, equipment, or venicles to complete. If						
	Maximum					
	Number Per	Total 8-Hour Days in				
Type of Equipment	Day	Operation	Total MTCO₂e			
Cranes	1	5	4			
Rough Terrain						
Forklifts	1	10	3			
Other Construction						
Equipment	1	12	1			
Crawler Tractors	1	2	1			
Tractors/Loaders/Bac						
khoes	1	5	1			
			0			
			0			
			0			
			0			
			0			
		Total Emissions	10			

Χ	The project re	equires materials to	be transported	d from outside o	of the UFR waters	hed. If yes:

	Average Trip	
Total Number of	Distance	
Round Trips	(Miles)	Total MTCO ₂ e
8	60	1

X The project requires workers from outside of the UFR watershed. If yes:

of Workers	of Workdays 40	(Miles)	Total MTCO ₂ e	
· ·		Distance Traveled	T	
		Average Round Trip		

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.

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-41: Tank Replacement Project **Project Operating Emissions** The project requires energy to operate. If yes: **Annual Energy Needed** Unit Total MTCO₂e kWh (Electricity) Therm (Natural Gas) 0 The project will generate electricity. If yes: Annual kWh Generated Total MTCO₂e 0 *A negative value indicates GHG reductions The project will proactively manage forests to reduce wildfire risk. If yes: Acres Protected from Wildfire Total MTCO2e 0 *A negative value indicates GHG reductions The project will affect wetland acreage. If yes: Acres of Protected Wetlands Total MTCO₂e 0 *A negative value indicates GHG reductions The project will include new trees. If yes: Acres of Trees Planted Total MTCO₂e *A negative value indicates GHG reductions **GHG Emissions Summary** Construction and development will generate approximately: 15 MTCO₂e 0 MTCO₂e In a given year, operation of the project will result in:



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	East Quincy Services District		
Name of Primary Contact	Mike Green - General Manager		
Name of Secondary Contact	Vicki Poh – Administrative Assistant		
Mailing Address	179 Rogers Avenue		
E-mail	mike@eastquincycsd.com vicki@eastquincycsd.com		
Phone	530-283-2390		
Other Cooperating Agencies /	Bastian Engineering – Daniel Bastian		
Organizations / Stakeholders	bastianengineeringinc@gmail.com 530-832-2644		
Is your agency/organization	Yes		
committed to the project through			
completion? If not, please explain			

II. GENERAL PROJECT INFORMATION

Project Title	MS-42: Automatic Meter Reading (ARM) Project			
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)	Replace the existing 850 water meters with Sensus I-Perl (or equivalent) meters with automatic reading capabilities. The measured groundwater pumped from EQSD wells is approximately 10% more than the water read at the current meters. Accurate and timely meter reading will provide the EQSD stakeholders with the information to better govern water use in accordance with the Governor's drought proclamation and satisfy the IRWM goal to: "establish and maintain effective communication among water resource stakeholders in the region, enhancing the publics' understanding of water management issues". ARM water meters will allow for improved efficiency and reliability of the EQSD water-related infrastructure resulting in reduced groundwater pumping. And ARM water meters			

	would also enhance the District's ability to audit the system for leakage thereby improving water supply reliability and efficiency.
Project Location Description (e.g., along the south bank of stream/river between river miles or miles from Towns/intersection and/or address):	This project is located in the East Quincy service district boundary, in the American Valley Groundwater Basin (5-10),
Latitude:	39.930747°
Longitude:	-120.898315°

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.

	Will the		Quantification (e.g. acres of
	project		streams/wetlands
Upper Feather River IRWM	address the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Restore natural hydrologic	☐ Yes		
functions.			
	■ N/A		
Reduce potential for		Reduced demand on local	
catastrophic wildland fires in	Yes	groundwater increases resources	
the Region.		available for wildland fire	
	□ N/A	suppression.	
Build communication and		Communicated accurate	
collaboration among water	Yes	information on District	
resources stakeholders in the		groundwater usage and water	
Region.	□ N/A	conservation methods to	
		stakeholders in the Region.	
Work with DWR to develop			
strategies and actions for the	Yes		
management, operation, and			
control of SWP facilities in the	□ N/A		
Upper Feather River Watershed			
in order to increase water			
supply, recreational, and			
environmental benefits to the			
Region.			
Encourage municipal service		The project will facilitate reliable	
providers to participate in	Yes	potable water for use by	
regional water management		customers in the EQSD area. This	
actions that improve water	□ N/A	project will reduce reliance on	

		IVIS 42. Automatic Wieter IV	
Upper Feather River IRWM Objectives: supply and water quality.	Will the project address the objective?	Brief explanation of project linkage to selected Objective groundwater through conservation, thereby helping the Region meet drinking water demands that are threatened by drought restrictions. As a local, sustainable water supply, the groundwater saved by this project becomes available for future needs and is not vulnerable loss.	Quantification (e.g. acres of streams/wetlands restored or enhanced)
Continue to actively engage in FERC relicensing of hydroelectric facilities in the	☐ Yes	Increased water supply due to early identification of customer leaks.	
Region.	■ N/A		
Address economic challenges of municipal service providers to serve customers.	■ Yes	This project is dependent on grant funding. Early leak detection reduces District pumping demands and improves efficiency of service to customers.	
Protect, restore, and enhance the quality of surface and groundwater resources for all beneficial uses, consistent with the RWQC Basin Plan.	Yes	Reduce groundwater consumption through early leak detection.	
Address water resources and wastewater needs of DACs and Native Americans.	■ Yes □ N/A	Reduced groundwater demand due to early leak identification addresses the water resource needs of East Quincy Services District customers.	
Coordinate management of recharge areas and protect	■ Yes	Early identification of leaks, less ground water usage would be	
groundwater resources. Improve coordination of land use and water resources planning.	□ N/A □ Yes ■ N/A	necessary.	
Maximize agricultural, environmental and municipal	Yes	EQSD relies entirely on groundwater sources for its	

	Will the		Quantification (e.g. acres of
Linnay Foothey Divey IDMAA	project	Duick combonation of musicat	streams/wetlands
Upper Feather River IRWM	address the	Brief explanation of project	restored or
Objectives: water use efficiency.	objective? ☐ N/A	linkage to selected Objective water source. The American	enhanced)
water use efficiency.	I IN/A	Valley also includes agricultural	
		users that access the same	
		aguifer. Any reduction in	
		groundwater supplies could	
		result in local water restrictions	
		to agricultural users. Accurate	
		monitoring of groundwater	
		usage as well as early leak	
		detection reduces the Districts	
		groundwater usage.	
Effectively address climate	☐ Yes		
change adaptation and/or			
mitigation in water resources	■ N/A		
management.			
Improve efficiency and	Yes	Reduce groundwater pumping by	
reliability of water supply and other water-related	□ N/A	providing stakeholders with	
infrastructure.	I LI IN/A	more accurate and timely usage data.	
Enhance public awareness and	Yes	By providing the customers with	
understanding of water	163	timely and accurate water usage	
management issues and needs.	□ N/A	information helps lead to an	
	,	understanding of how water is	
		used.	
Address economic challenges of	☐ Yes		
agricultural producers.	_		
	■ N/A		
Work with counties/	☐ Yes		
communities/groups to make	— N/A		
sure staff capacity exists for actual administration and	■ N/A		
implementation of grant			
funding.			
Turiumg.		<u> </u>	
If no objectives are addressed, de	escribe how the	e project relates to a challenge or op	portunity 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 a	pplicable, describe benefits or impacts of the	project wit	h respect to:	
a.	Native American Tribal Communities	■ N/A		
b.	Disadvantaged Communities ¹	□ N/A	Increased monitoring and early leak detection reducing customer costs associated with undetected leaks.	
c.	Environmental Justice ²	■ N/A		
d.	Drought Preparedness	□ N/A	Less groundwater demand due to more efficient monitoring and leak detection.	
e.	Assist the region in adapting to effects of climate change ³	□ N/A	Reduced water demand. Reduced fossil fuel consumption necessary for current manual meter reading program. Has the potential to save 20+million gallons of water a year through early leak detection and repair: equal to one summer month worth of usage.	
f.	Generation or reduction of greenhouse gas emissions (e.g. green technology)	□ N/A	Reduces fuel use in district vehicles for manual reading of meters in the current program.	
g.	Other expected impacts or benefits that are not already mentioned elsewhere	■ N/A		
inco	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	Yes	g.	Drinking water treatment and	Yes
	conservation, water use efficiency	□ N/A		distribution	□ N/A
b.	Stormwater capture, storage, clean-	☐ Yes	h.	Watershed protection and	Yes
	up, treatment, management	■ N/A		management	□ N/A
c.	Removal of invasive non-native	☐ Yes	i.	Contaminant and salt removal	☐ Yes
	species, creation/enhancement of	■ N/A		through reclamation/desalting,	N/A
	wetlands,			other treatment technologies and	
	acquisition/protection/restoration			conveyance of recycled water for	
	of open space and watershed lands			distribution to users	
d.	Non-point source pollution	☐ Yes	j.	Planning and implementation of	☐ Yes
	reduction, management and	■ N/A		multipurpose flood management	■ N/A
	monitoring			programs	
e.	Groundwater recharge and	Yes	k.	Ecosystem and fisheries	☐ Yes
	management projects	□ N/A		restoration and protection	N/A
f.	Water banking, exchange,	Yes			
	reclamation, and improvement of	□ N/A			
	water quality				

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/).

	Will the Project	
	incorporate	Description of how RMS to be employed,
Resource Management Strategy	RMS?	if applicable
Reduce Water Demand		
Agricultural Water Use Efficiency	☐ Yes ■ No	
Urban water use efficiency	■ Yes □ No	Reduced use due to early leak detection and repair in this rural community
Improve Flood Management		
Flood management	☐ Yes ■ No	
Improve Operational Efficiency and Tr	ansfers	
Conveyance – regional/local	■ Yes □ No	Improved system efficiency due to early leak detection and repair allowing more water to be available for delivery to neighboring district.
System reoperation	■ Yes □ No	Locates and reduces water loss from customer services reduce pumping and ground water depletion.
Water transfers	☐ Yes ■ No	
Increase Water Supply		
Conjunctive management	Yes No	

	Will the Project	
	incorporate	Description of how RMS to be employed,
Resource Management Strategy	RMS?	if applicable
Precipitation Enhancement	☐ Yes ■ No	
Municipal recycled water	☐ Yes ■ No	
Surface storage – regional/local	☐ Yes ■ No	
Improve Water Quality		
Drinking water treatment and		Accurate monitoring of gallons pumped vs.
distribution	Yes No	gallons metered. Early leak detection and
	Tes Lino	resulting increased efficiency of distribution
		system.
Groundwater remediation/aquifer	☐ Yes ■ No	
remediation		
Matching water quality to water use	☐ Yes ■ No	
Pollution prevention	☐ Yes ■ No	
Salt and salinity management	☐ Yes ■ No	
Urban storm water runoff	☐ Yes ■ No	
management	103 110	
Practice Resource Stewardship		
Agricultural land stewardship	☐ Yes ■ No	
Ecosystem restoration	☐ Yes ■ No	
Forest management	Yes No	
Land use planning and management	☐ Yes ■ No	
Recharge area protection	Yes No	
Sediment management	☐ Yes ■ No	
Watershed management	Yes No	
People and Water		
Economic incentives	☐ Yes ■ No	
Outreach and engagement		More information on water use available to
	■ Yes □ No	customers. EQSD also distributes water
	- 1c3 - 100	conservation information/tips to our
		customers.
Water and culture	☐ Yes ■ No	
Water-dependent recreation	Yes No	
Wastewater/NPDES	☐ Yes ■ No	

Other RMS addressed and explanation:

The September 16, 2014 groundwater management legislation that was passed in three bills "embraces the concept that groundwater is best managed locally". This AMR Project responds to that groundwater management legislation.

Current service meter reading process requires manual inspection of each meter that takes 2 men several days to accomplish. Because the six water well meter readings can be read in a fraction of the service meter reading time, there exists a time delay nexus that cannot be reconciled.

The volume of water saved by the project could be one-two million gallons per month. The current annual losses, (estimated to be around 20 million gallons) are equal to one summer month worth of usage.

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					
Dreject convers a need of a DAC2. Was Disc						
	Project serves a need of a DAC?: ■ Yes □ No Funding Match Waiver request?: ■ Yes □ No					
1 41	resident water request.:				1	
			Cost Share:			
			Non-State	Cost Share:		
		Requested	Fund Source*	Other State		
	Catagomi	Grant	(Funding	Fund	Total Cost	
	Category	Amount	Match) \$31,750	Source*	Total Cost	
a.	Direct Project Administration		\$31,750		\$31,750	
b.	Land Purchase/Easement					
c.	Planning/Design/Engineering		\$20,125		\$20,125	
	/ Environmental					
d.	Construction/Implementation	\$604,708	\$12,850		\$617,558	
e.	Environmental Compliance/					
	Mitigation/Enhancement					
f.	Construction Administration		\$31,000		\$31,000	
g.	Other Costs					
h.	Construction/Implementation	\$61,971			\$61,971	
	Contingency					
i.	Grand Total (Sum rows (a) through	\$666,679	\$95,725		\$762,404	
	(h) for each column)					
j.	Can the Project be phased? Yes	■ No If yes, p	rovide cost breakdo	own by phases		
	Project Cost		O&M Cost	Description of Phase		
	Phase 1					
	Phase 2					
	Phase 3					
	Phase 4					
k.	Explain how operation and maintenan		Annual operation		-	
	financed for the 20-year planning peri	od for project	funded by month	nly customer serv	ice rates.	
	implementation (not grant funded).	1 . 10				
I.	Has a Cost/Benefit analysis been comp		Yes No			
m.	Describe what impact there may be if	the project is	Continual loss of tens of millions of gallons of			
	not funded (300 words or less)		potable water each year due to undetected leaks and inefficient and inaccurate monitoring			
				ent and inaccura	te monitoring	
*1 :04	*List all sources of funding.					
Note: See Project Development Manual, Exhibit B, for assistance in completing this table						
	(http://featherriver.org/documents/).					
(III	tp.//teatherriver.org/documents/).					

VIII. PROJECT STATUS AND SCHEDULE

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		☐ Yes ☐ No ☐ N/A	Cost/benefit analysis; ???	6/15	1 month after grant agreement
b. Final Design		☐ Yes ■ No ☐ N/A	Selection of meters and retail source for purchase	6/15	1 month after grant agreement
c. Environmental Documentation (CEQA / NEPA)		☐ Yes ☐ No ■ N/A	N/A		
d. Permitting		☐ Yes ■ No ☐ N/A	The new meters are unlikely to require permitting	1 month after grant agreement	3 months after grant agreement
e. Construction Contracting		☐ Yes ☐ No ■ N/A	EQSD will install the new meters		
f. Construction Implementation		☐ Yes ■ No ☐ N/A	Removal of existing meters and installation of new meters	1-3 months after grant agreement	2-4 months after grant agreement
Provide explanation stage is checked as c					

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	EQSD Water Capital Improvement Program.			
	Conservation Plans, TMDLs, Basin Plans, etc.).				
b.	List technical reports and studies supporting the feasibility of this project.	District Engineer Report (attached)			
c.	Concisely describe the scientific basis (e.g. how much research has been conducted) of the proposed project in 300 words or less.	A decade worth of gallons pumped vs. gallons metered reports show approx. 10% difference each month amounting to over 20million gallons of lost water each year which is equivalent to one summer month's worth of usage. Current service meter reading process requires manual inspection of each meter that takes 2 men several days to accomplish. Because the six water well meter readings can be read in a fraction of the service meter reading time, there exists a time delay nexus that cannot be reconciled.			
d.	Does the project implement green technology (e.g. alternate forms of energy, recycled materials, LID	■ Yes □ No □ N/A			
	techniques, etc.).	Reduces the amount of gasoline required for current manual reading method.			
e.	Are you an Urban Water Supplier ¹ ?	☐ Yes ■ No ☐ N/A			
f.	Are you are an Agricultural Water Supplier ² ?	☐ Yes ■ No ☐ N/A			
g.	Is the project related to groundwater?	Yes No N/A If yes, please indicate which groundwater basin. 5-10 American Valley			
3,0 ² A	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.				

Climate Change – Project Assessment Checklist

This climate change project assessment tool allows project applicants and the planning team to assess project consistency with Proposition 84 plan standards and RWMG plan assessment standards. The tool is a written checklist that asks GHG emissions and adaptation/resiliency questions.

Name of project: MS-42: Automatic Meter Reading (ARM) Project

Project applicant: <u>East Quincy Services District</u>

GHG Emissions Assessment
Project Construction Emissions If you check any of the boxes, please see the attached worksheet)
 The project requires nonroad or off-road engines, equipment, or vehicles to complete. X The project requires materials to be transported to the project site. X The project requires workers to commute to the project site. The project is expected to generate GHG emissions for other reasons. X The project does not have a construction phase and/or is not expected to generate GHG emissions during the construction phase.
Operating Emissions If you check any of the boxes, please see the attached worksheet)
The project requires energy to operate.
The project will generate electricity.
The project will proactively manage forests to reduce wildfire risk.
The project will affect wetland acreage.
The project will include new trees.
Project operations are expected to generate or reduce GHG emissions for other reasons.

Adaptation & Resiliency Assessment

Water Supply Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water supply vulnerability issues:
 Not applicable X Reduced snowmelt □ Unmet local water needs (drought) □ Increased invasive species
Reduction of GHG's due to the reduction in driving to read water meters.
Water Demand Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water demand vulnerability issues:
 Not applicable ☐ Increasing seasonal water use variability ☐ Unmet in-stream flow requirements ☐ Climate-sensitive crops ☐ Groundwater drought resiliency X Water curtailment effectiveness
Expected to reduce water loss though more accurate metering and immediate leak detection and repair.

Water Quality
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water quality vulnerability issues:
 X Not applicable Increasing catastrophic wildfires Eutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and other related water quality issues) Seasonal low flows and limited abilities for waterbodies to assimilate pollution
Water treatment facility operations
Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold freshwater habitat, spawning habitat, wildlife habitat, etc.)

Flooding

Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues:

X Not applicable	
Aging critical flood protection	
Wildfires	
Critical infrastructure in a floodplain	
Insufficient flood control facilities	

Ecosystem and Habitat

Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority ecosystem and habitat vulnerability issues:
X Not applicable Climate-sensitive fauna or flora
Recreation and economic activity Quantified environmental flow requirements
Erosion and sedimentation
Endangered or threatened species
Fragmented habitat
Hydropower
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority hydropower vulnerability issues:
riigh phonty hydropower vulnerability issues.
X Not applicable
Reduced hydropower output

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-42: Automatic Meter Project (ARM)

GHG Emissions Analysis

Project Construction Emissions

Г	,	The market and acceptance are a second			and the fact of the second	
ı	Х	The project requires non-road	a or off-road engines,	, equipment,	or venicies to	complete. If yes

	Maximum		
	Number Per	Total 8-Hour Days in	
Type of Equipment	Day	Operation	Total MTCO₂e
Other Construction			
Equipment	2	46	7
			0
			0
			0
			0
			0
			0
			0
			0
			0
_		Total Emissions	7

Χ	The project requires materials to be transported to the project site. If yes:

	Average Trip	
Total Number of	Distance	
Round Trips	(Miles)	Total MTCO₂e
2	160	0

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

		Average Round Trip		
Average Number	Total Number	Distance Traveled		
of Workers	of Workdays	(Miles)	Total MTCO₂e	
4	46	10		1

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.

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-42: Automatic Meter Project (ARM)					
Project Operating Emissions					
The project requires energy to operate. If yes:					
	Annual Energy Needed	Unit	Total MTCO₂e		
		kWh (Electricity)	0		
		Therm (Natural Gas)	0		
The project	t will generate electricity. If yes:		-		
	Annual kWh Generated	Total MTCO₂e			
		0			
	*A negative value indicates GHG red	ductions			
_					
The project	t will proactively manage forests to r	educe wildfire risk. If y	/es:		
	Acres Protected from Wildfire	Total MTCO₂e			
		0			
	*A negative value indicates GHG red	ductions			
_					
The project	t will affect wetland acreage. If yes:	1	1		
	Acres of Protected Wetlands	Total MTCO₂e			
		0			
	*A negative value indicates GHG red	ductions			
_					
The project	t will include new trees. If yes:	•	1		
	Acres of Trees Planted	Total MTCO₂e			
	0				
	*A negative value indicates GHG red	ductions			
	erations are expected to generate or	reduce GHG emission	s for other reasons. If yes,		
X explain:	Reduces the number of miles and	la a coma al uivera a a a la coma	nath to wood water		
		neters.	intil to read water		
	''	neters.			
GHG Emissions Summary					
Construction and development will generate approximately: 9 MTCO ₂ e					
	year, operation of the project will res		0 MTCO ₂ e		
in a given y	in a given year, operation of the project win result in.				



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	East Quincy Services District		
Name of Primary Contact	Mike Green - General Manager		
Name of Secondary Contact	Vicki Poh – Administrative Assistant		
Mailing Address	179 Rogers Avenue		
E-mail	mike@eastquincycsd.com vicki@eastquincycsd.com		
Phone	530-283-2390		
Other Cooperating Agencies /	Bastian Engineering – Daniel Bastian		
Organizations / Stakeholders	bastianengineeringinc@gmail.com 530-832-2644		
Is your agency/organization	Yes		
committed to the project through			
completion? If not, please explain			

II. GENERAL PROJECT INFORMATION

Project Title	MS-43: Replace Copper Service Line Project		
Project Category	☐ Agricultural Land Stewardship		
	☐ Floodplains/Meadows/Waterbodies		
	Municipal Services		
	Water Supply/Water Quality		
	Community Water/Wastewater		
	☐ Tribal Advisory Committee		
	☐ Uplands/Forest		
Project Description	Replace 450 copper water service lines from the corporation		
(Briefly describe the project,	stop at the water main to the service meter with polyethylene		
in 300 words or less)	pipe of the same size. These older soft copper lines were not		
	bedded in select material at the time of construction and have		
	begun to develop wear holes that enlarge with the erosive		
	force of high pressure flow. The native material is a coarse		
	aggregate which does not result in surfacing of the leaks. The		
	work would entail open trench construction, primarily in the		
	county roads. Trench repair would satisfy the requirements of		
	the to-be-obtained encroachment permit.		
	Replacement of the copper service lines will lead to water		
	conservation as the leaks that develop are difficult to locate		
	due to aforementioned granular nature of the native material.		
	Conservation would result in improved efficiency and		
	reliability of the EQSD water-related infrastructure resulting in		

	reduced groundwater pumping.		
Project Location Description (e.g., along the south bank of stream/river between river miles or miles from Towns/intersection and/or address):	This project is located in the EQSD service district boundary in the American Valley Groundwater Basin (5-10)		
Latitude:	39.930747°		
Longitude:	-120.898315°		

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.

	14 CH - 1		Quantification
	Will the		(e.g. acres of
	project		streams/wetlands
Upper Feather River IRWM	address the	Brief explanation of project	restored or
Objectives:	objective?	linkage to selected Objective	enhanced)
Restore natural hydrologic	☐ Yes		
functions.			
	■ N/A		
Reduce potential for		Improved supply reliability also	
catastrophic wildland fires in	Yes	allows water to be available to	
the Region.		fight wildfires with a reduced	
	□ N/A	impact on supplies needed to	
		meet existing demands. The	
		project also reduces wildfire risk	
		by reducing contribution to the	
		causes of climate change	
		(greenhouse gas [GHG]	
		emissions) and associated	
		wildfire risk.	
Build communication and			
collaboration among water	☐ Yes		
resources stakeholders in the			
Region.	■ N/A		
Work with DWR to develop			
strategies and actions for the	☐ Yes		
management, operation, and			
control of SWP facilities in the	■ N/A		
Upper Feather River Watershed			
in order to increase water			
supply, recreational, and			
environmental benefits to the			
Region.			

Will the project address the objective? Yes N/A	Brief explanation of project linkage to selected Objective Replacing water service lines will significantly reduce water losses from leakage, which will reduce groundwater demand and make the water supply more reliable. Replacing the pipes that have large leaks will also reduce sources of possible contamination to make the water supply safer for users.	Quantification (e.g. acres of streams/wetlands restored or enhanced)
☐ Yes ■ N/A		
■ Yes □ N/A	This project is dependent on grant funding. Increasing water supply reliability will help to ensure that demands associated with the regional economy – including manufacturing, tourism and agriculture – can be met. This project provides a conservation measure to help buffer against prolonged drought. In addition, the reduction in leakage will result in less groundwater pumping and an associate cost savings to the Disctrict.	
■ Yes □ N/A	Repair and replacement of aging infrastructure will ensure safe, reliable water supply to the District's water users.	
Yes N/A	Improve water quality to East Quincy Services District.	
■ Yes □ N/A □ Yes	Repair of leaking infrastructure will lead to less ground water usage.	
	project address the objective? Yes N/A	project address the objective? Secondaria Brief explanation of project linkage to selected Objective

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)
Maximize agricultural,	Yes	EQSD relies entirely on	
environmental and municipal		groundwater sources for its	
water use efficiency.	□ N/A	water source. The American	
		Valley also includes agricultural	
		users that access the same	
		aquifer. Any reduction in	
		groundwater supplies could	
		result in local water restrictions	
		to agricultural users. Local,	
		drought-proof measures such as	
		this line replacement project	
		provides a local water supply	
		buffer that allows the Region to	
		minimize or avoid water use	
		restrictions to agricultural users	
		in times of drought.	
Effectively address climate	☐ Yes		
change adaptation and/or	■ NI/A		
mitigation in water resources	■ N/A		
management. Improve efficiency and	Yes	Repairing aging infrastructure to	
reliability of water supply and	— 163	minimize water loss from pipe	
other water-related	□ N/A	leakage improves overall system	
infrastructure.		efficiency.	
Enhance public awareness and understanding of water	☐ Yes		
management issues and needs.	■ N/A		
Address economic challenges of agricultural producers.	☐ Yes		
	■ N/A		
Work with counties/	Yes	EQSD is committed to the	
communities/groups to make		successful implementation of this	
sure staff capacity exists for	□ N/A	project. We will work with the	
actual administration and		County and other Stakeholders	
implementation of grant		as necessary to implement the	
funding.		grant project.	
If no objectives are addressed, de Region:	escribe how the	e project relates to a challenge or op	portunity for the

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 a	If applicable, describe benefits or impacts of the project with respect to:				
a.	Native American Tribal Communities	■ N/A			
b.	Disadvantaged Communities ¹	□ N/A	Improvement of system efficiency and increase system stability that serves East Quincy Services District.		
c.	Environmental Justice ²	□ N/A	Replacement of service water lines to eliminate leaks will ensure safe and reliable water supply for all people in the District regardless of race, culture or income.		
d.	Drought Preparedness	□ N/A	Reduction of water loss from aging infrastructure pipe leakage will reduce groundwater pumping and allow the groundwater basin to be better managed for drought preparedness.		
e.	Assist the region in adapting to effects of climate change ³	□ N/A	Reduction of water loss from aging infrastructure pipe leakage will reduce groundwater pumping and allow the groundwater basin to be better managed for drought preparedness. Additionally, more water will be available for emergency fire response.		
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 I	¹ A Disadvantaged Community is defined as a community with an annual median household (MHI)				

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

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/).

	Will the Project incorporate	Description of how RMS to be employed,		
Resource Management Strategy	RMS?	if applicable		
Reduce Water Demand				
Agricultural Water Use Efficiency	☐ Yes ■ No			
Urban water use efficiency	■ Yes □ No	Reduction of water loss from aging infrastructure pipe leakage in this rural community		
Improve Flood Management				
Flood management	☐ Yes ■ No			
Improve Operational Efficiency and Transfers				
Conveyance – regional/local	Yes No	System stability and efficiency improvement		
System reoperation	■ Yes □ No	The improvement of existing operations and management procedures of water facilities to meet needs more efficiently and reliably		
Water transfers	☐ Yes ■ No			
Increase Water Supply				
Conjunctive management	☐ Yes ☐ No			
Precipitation Enhancement	☐ Yes ■ No			
Municipal recycled water	☐ Yes ■ No			
Surface storage – regional/local	☐ Yes ■ No			

	Will the Project incorporate	Description of how RMS to be employed,			
Resource Management Strategy	RMS?	if applicable			
Improve Water Quality					
Drinking water treatment and distribution	■ Yes □ No	Aging system infrastructure repair results in a safer, more reliable drinking water supply.			
Groundwater remediation/aquifer remediation	☐ Yes ■ No				
Matching water quality to water use	☐ Yes ■ No				
Pollution prevention	☐ Yes ■ No				
Salt and salinity management	☐ Yes ■ No				
Urban storm water runoff management	☐ Yes ■ No				
Practice Resource Stewardship					
Agricultural land stewardship	☐ Yes ■ No				
Ecosystem restoration	☐ Yes ■ No				
Forest management	Yes No				
Land use planning and management	☐ Yes ■ No				
Recharge area protection	☐ Yes ■ No				
Sediment management	☐ Yes ■ No				
Watershed management	■ Yes □ No	Reduction in groundwater pumping will allow the groundwater basin to retain and store more water.			
People and Water					
Economic incentives	☐ Yes ■ No				
Outreach and engagement	☐ Yes ■ No				
Water and culture	Yes No				
Water-dependent recreation	☐ Yes ■ No				
Wastewater/NPDES	Yes 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							
Drainet company mond of a DACO.							
	Project serves a need of a DAC?: ■ Yes □ No Funding Match Waiver request?: ■ Yes □ No						
ı uı	Tulluling Water request:.						
			Cost Share:				
			Non-State	Cost Share:			
		Requested	Fund Source*	Other State			
		Grant	(Funding	Fund			
	Category	Amount	Match)	Source*	Total Cost		
a.	Direct Project Administration		\$31,750		\$31,750		
b.	Land Purchase/Easement						
c.	Planning/Design/Engineering		\$32,175		\$32,175		
	/ Environmental						
d.	Construction/Implementation	\$1,003,000	\$71,843		\$1,074,843		
e.	Environmental Compliance/		\$395		\$395		
	Mitigation/Enhancement						
f.	Construction Administration		\$14,300		\$14,300		
g.	Other Costs	Inc.			Inc.		
h.	Construction/Implementation	\$104,685			\$104,685		
	Contingency						
i.	Grand Total (Sum rows (a) through	\$1,107,685	\$150,463		\$1,258,148		
	(h) for each column)						
j.	Can the Project be phased? Yes	■ No If yes, pr	rovide cost breakdo	own by phases			
		Project Cost	O&M Cost	Description of Phase			
	Phase 1						
	Phase 2						
	Phase 3						
	Phase 4						
k.	Explain how operation and maintenan		Through our ope				
	financed for the 20-year planning peri	od for project	annual budget funded with monthly service		hly service		
	implementation (not grant funded).		charges.				
I.	Has a Cost/Benefit analysis been completed?		■ Yes □ No				
m.	Describe what impact there may be if	the project is	Continued loss of water due to leaks in the				
	not funded (300 words or less)		unmetered portion of the system. Higher				
			demand on groui				
			water supply. Sys				
			of contamination	•	through		
			infiltration via ho	les in pipes.			

*List all sources of funding.

Note: See Project Development Manual, Exhibit B, for assistance in completing this table (http://featherriver.org/documents/).

VIII. PROJECT STATUS AND SCHEDULE

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**.

	Check the Current Project		Description of Activities in Each	Planned/ Actual Start	Planned/ Actual Completion
Project Stage	Stage	Completed?	Project Stage	Date (mm/yr)	Date (mm/yr)
a. Assessment and		Yes	Cost/benefit	5/15	6/15
Evaluation		□ No	analysis, evaluation		
		□ N/A	of project needs		
b. Final Design		☐ Yes		Upon	1 month after
		■ No		procurement of	funding secured
		□ N/A		grant funding	
c. Environmental		☐ Yes		1 month after	2-3 months
Documentation		■ No		funding secured	after funding
(CEQA / NEPA)		□ N/A			secured
d. Permitting		☐ Yes	Encroachment	1 month after	3-4 months
		■ No	permit	funding secured	after funding
		□ N/A			secured
e. Construction		☐ Yes		3-4 months	4-5 months
Contracting		■ No		after funding	after funding
		□ N/A		secured	secured
f. Construction		☐ Yes		4-5 months	8-10 months
Implementation		■ No		after funding	after funding
	_	□ N/A		secured	secured
Provide explanation if more than one project			1	1	
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	EQSD Water Capital Improvement			
	project is consistent with or supported by (e.g. General	Program.			
	Plans, UWMPs, GWMPs, Water Master Plan, Habitat				
	Conservation Plans, TMDLs, Basin Plans, etc.).				
b.	List technical reports and studies supporting the	District Engineer Report (attached)			
	feasibility of this project.				
c.	Concisely describe the scientific basis (e.g. how much	Several years of pumped vs. metered			
	research has been conducted) of the proposed project in	reports showing unaccounted for water			
	300 words or less.	loss. Increased service lateral repairs in			
		affected area in last several years.			
		·			
d.	Does the project implement green technology (e.g.	☐ Yes ■ No ☐ N/A			
	alternate forms of energy, recycled materials, LID	If yes, please describe.			
	techniques, etc.).	, , ,			
	, , ,				
e.	Are you an Urban Water Supplier ¹ ?	☐ Yes ■ No ☐ N/A			
f.	Are you are an Agricultural Water Supplier ² ?	☐ Yes ■ No ☐ N/A			
g.	Is the project related to groundwater?	■ Yes □ No □ N/A			
		If yes, please indicate which			
		groundwater basin.			
		5-10			
		American Valley			
		,			
¹ U	rban 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				
	000 acre-feet of water annually.	117 0			
	gricultural Water Supplier is defined as a water supplier, eith	ner publicly or privately owned, providing			
	Agricultural water supplier is defined as a water supplier, cities publicly of privately owned, providing				

water to 10,000 or more irrigated acres, excluding the acreage that receives recycled water.

Climate Change – Project Assessment Checklist

This climate change project assessment tool allows project applicants and the planning team to assess project consistency with Proposition 84 plan standards and RWMG plan assessment standards. The tool is a written checklist that asks GHG emissions and adaptation/resiliency questions.

Name of project: MS-43: Replace Copper Service Lines Project

Project applicant: <u>East Quincy Services District</u>

GHG Emissions Assessment

Project Construction Emissions

(If you check any of the boxes, please see the attached worksheet)

, , , , , , , , , , , , , , , , , , , ,
X The project requires nonroad or off-road engines, equipment, or vehicles to complete.
X The project requires materials to be transported to the project site.
X The project requires workers to commute to the project site.
The project is expected to generate GHG emissions for other reasons.
The project does not have a construction phase and/or is not expected to generate GHG emissions during the construction phase.
Operating Emissions (If you check any of the boxes, please see the attached worksheet)
☐ The project requires energy to operate.
The project will generate electricity.
☐ The project will proactively manage forests to reduce wildfire risk.
The project will affect wetland acreage.
The project will include new trees.
X Project operations are expected to generate or reduce GHG emissions for other reasons.

Adaptation & Resiliency Assessment

Water Supply Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water supply vulnerability issues:
 Not applicable X Reduced snowmelt X Unmet local water needs (drought) ☐ Increased invasive species Reduces GHG by reducing needless pumping due to leakage, saving water resources and energy.
Water Demand Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority water demand vulnerability issues:
 Not applicable ☐ Increasing seasonal water use variability ☐ Unmet in-stream flow requirements ☐ Climate-sensitive crops X Groundwater drought resiliency ☐ Water curtailment effectiveness
Reduces unmetered water loss and helps sustain ground water table.

Water Quality
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority water quality vulnerability issues:

X Not applicable
Increasing catastrophic wildfires
 Eutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and other related water quality issues)
Seasonal low flows and limited abilities for waterbodies to assimilate pollution
Water treatment facility operations
Unmet beneficial uses (municipal and domestic water supply, water contact recreation, cold
freshwater habitat, spawning habitat, wildlife habitat, etc.)
FIGORING
Flooding Describe how the project makes the watershed (more/less) resilient to one or more of the following
Describe how the project makes the watershed (more/less) resilient to one or more of the following
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues:
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Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: X Not applicable
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: X Not applicable Aging critical flood protection
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: X Not applicable Aging critical flood protection Wildfires
Describe how the project makes the watershed (more/less) resilient to one or more of the following high priority flooding vulnerability issues: X Not applicable Aging critical flood protection Wildfires Critical infrastructure in a floodplain
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Ecosystem and Habitat

high priority ecosystem and habitat vulnerability issues:
X Not applicable
Climate-sensitive fauna or flora
Recreation and economic activity
Quantified environmental flow requirements
Erosion and sedimentation
☐ Endangered or threatened species
Fragmented habitat
Hydropower
Describe how the project makes the watershed (more/less) resilient to one or more of the following
high priority hydropower vulnerability issues:
X Not applicable
Reduced hydropower output

Upper Feather River IRWMP Project Assessment - GHG Emissions Analysis

MS-43: Replace Copper Service Lines

GHG Emissions Analysis

Project Construction Emissions

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

	Maximum		
	Number Per	Total 8-Hour Days in	
Type of Equipment	Day	Operation	Total MTCO₂e
Rollers	1	14	3
Tractors/Loaders/Bac			
khoes	2	30	16
Paving Equipment	1	10	3
Concrete/Industrial			
Saws	1	15	3
Plate Compactors	1	15	0
Other Construction			
Equipment	2	30	5
			0
			0
			0
			0
	_	Total Emissions	31

Χ	The project requires materials to be transported to the project	site. If yes

	Average Trip	
Total Number of	Distance	
Round Trips	(Miles)	Total MTCO₂e
2	160	0

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

		Average Round Trip	
Average Number	Total Number	Distance Traveled	
of Workers	of Workdays	(Miles)	Total MTCO₂e
4	90	10	1

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-43: Replace Copper Service Lines				
Project Operating Emissions					
The project requires energy to operate. If yes:					
	Annual Energy Needed	Unit	Total MTCO₂e		
		kWh (Electricity)	0		
		Therm (Natural Gas)	0		
The project	t will generate electricity. If yes:	,	1		
	Annual kWh Generated	Total MTCO₂e			
		0			
	*A negative value indicates GHG red	ductions			
—					
The project	t will proactively manage forests to r		yes: 1		
	Acres Protected from Wildfire	Total MTCO₂e	_		
		0			
	*A negative value indicates GHG red	ductions			
—					
The project	t will affect wetland acreage. If yes:	T .	1		
	Acres of Protected Wetlands	Total MTCO₂e			
		0]		
	*A negative value indicates GHG rec	ductions			
The project	t will include new trees. If yes:				
	Acres of Trees Planted	Total MTCO₂e]		
	0	0	1		
	*A negative value indicates GHG red	ductions	•		
Project operations are expected to generate or reduce GHG emissions for other reasons. If yes, explain:					
This project is expected to replace leaky copper pipe reducing well pumping saving water and electricity.					
GHG Emissions Summary					
Construction	on and development will generate ap	oproximately:	32 MTCO₂e		
In a given y	ear, operation of the project will res	sult in:	₀ MTCO ₂ e		