

## **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	

	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	
	i		İ
implementation of grant		successful implementation of	
Improve efficiency and reliability of water supply and other water-related infrastructure.  Enhance public awareness and understanding of water management issues and needs.  Address economic challenges of agricultural producers.  Work with counties/ communities/groups to make sure staff capacity exists for	□ N/A  □ Yes □ N/A □ Yes □ N/A □ Yes	infrastructure has not been closely examined or repaired in a long time. Repair of leaks maximizes water use efficiency.  SPUD will engage community outreach and strive for effective communication with all stakeholders.  The volunteer Board of SPUD is acting in the best interests of the district. SPUD and the Board are dedicated to the	

If no objectives are addressed, describe he Region:	ow the project rel	ates to a challenge or opportunity for the				
IV. PROJECT IMPACTS AND BENEF						
		and impacts in the table below or check N/A				
if not applicable; <b>do no leave a blank cell.</b>						
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 <sup>1</sup>	□ N/A	Sierraville is a Disadvantaged Community				
c. Environmental Justice <sup>2</sup>						
	⊠ 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 <sup>3</sup>	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 the UFR website (http://featherriver.org/i		MHI. DWR's DAC mapping is available on				
<sup>2</sup> Environmental Justice is defined as the fa		eople 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.						
<sup>3</sup> 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 (<a href="http://featherriver.org/2013-california-water-plan-update/">http://featherriver.org/2013-california-water-plan-update/</a>).

	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 BUDGI	ET		
Due					
	Project serves a need of a DAC?: $oxtimes$ Yes $oxtimes$ No Funding Match Waiver request?: $oxtimes$ Yes $oxtimes$ No				
Fui	iding iviateri waiver requesti.	NO		T	T
	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.	Can the Project be phased?   Yes	□ No If <b>yes</b> , p	rovide cost breakd	lown by phases	
		Project Cost	O&M Cost	Descriptio	n of Phase
	Phase 1	2500		Leak detection	service
	Phase 2	150,000		Repair of identi	fied leaks
	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 fees collected from rate payers and from reserve				
I.	Has a Cost/Benefit analysis been com	pleted?	☐ Yes ⊠ No		
m.	Describe what impact there may be if not funded (300 words or less)	the project is	Continued undis	covered, undergr	ound leaking
*Lis	t all sources of funding.			<del>-</del> -	
No	Note: See Project Development Manual, Exhibit B, for assistance in completing 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 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 <a href="www.featherriver.org/catalog/index.php">www.featherriver.org/catalog/index.php</a> 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 <sup>1</sup> ?	☐ Yes ☒ No ☐ N/A
f.	Are you are an Agricultural Water Supplier <sup>2</sup> ?	☐ 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
	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)
<ul> <li>The project requires nonroad or off-road engines, equipment, or vehicles to complete.</li> <li>The project requires materials to be transported from outside of the UFR watershed.</li> <li>The project requires workers from outside of the UFR watershed.</li> <li>The project is expected to generate GHG emissions for other reasons.</li> <li>The project does not have a construction phase and/or is not expected to generate GHG emissions during the construction phase.</li> </ul>
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:
flight 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	
<ul><li>Increasing catastrophic wildfires</li><li>Eutrophication (excessive nutrient pollution in a waterbody, often followed by algae blooms and</li></ul>	
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	<b>Fmis</b>	sions
		COLISCI	action	LIIII	310113

	Χ	The project requires non-road	d or off-road engines.	equipment.	or vehicles to	complete. If	ve
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	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	et 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 MTCO<sub>2</sub>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 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 MTCO<sub>2</sub>e Acres of Trees Planted 0 \*A negative value indicates GHG reductions **GHG Emissions Summary** Construction and development will generate approximately: 5 MTCO<sub>2</sub>e 0 MTCO<sub>2</sub>e In a given year, operation of the project will result in: