featherriver.org

UPPER FEATHER RIVER IRWM

PROJECT INFORMATION FORM

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

Please provide information in the tables below:

I. PROJECT PROPONENT INFORMATION

Agency / Organization	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 / Organizations / Stakeholders	Westwood Sanitation/Plumas County Environmental Sciences Department/Pacific Gas and Electric.
Is your agency/organization committed to the project through completion? If not, please explain	Yes

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.

Upper Feather River IRWM Objectives:	**Will the project address the objective?**	**Brief explanation of project linkage to selected Objective**	**Quantification** (e.g. acres of streams/wetlands restored or enhanced)
Restore natural hydrologic functions.	☐ Yes **X** N/A		
Reduce potential for catastrophic wildland fires in the Region.	☐ Yes **X** N/A		
Build communication and collaboration among water resources stakeholders in the Region.	**X** Yes ☐ N/A	Developing an integrated basin-wide solid waste and wastewater management system for communities around Lake Almanor will require the existing communities to collaborate.	Lake Almanor and its surrounding communities.
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.	**X** Yes ☐ N/A	As an integrated basin-wide solid waste and wastewater management system is identified all stakeholders, including DWR will be involved in the identification of potential solutions, planning for implementation and participation in implementation of projects.	Lake Almanor and its surrounding communities.
Encourage municipal service providers to participate in regional water management actions that improve water supply and water quality.	**X** Yes ☐ N/A	As an integrated basin-wide solid waste and wastewater management system is identified all stakeholders, including DWR, will be involved in the identification of potential solutions, planning for implementation and participation in implementation of projects.	Lake Almanor and its surrounding communities.
Continue to actively engage in FERC relicensing of hydroelectric facilities in the Region.	**X** Yes ☐ N/A	Members of LAWG have been actively engaged in the FERC relicensing of Lake Almanor since it started. Despite detailed documentation	Lake Almanor and its surrounding communities.

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)
		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 of municipal service providers to serve customers.	**X** Yes ☐ N/A	At present all municipal service providers act as separate entities which produce economic challenges. Having an integrated system will reduce those challenges.	Lake Almanor and its surrounding communities.
Protect, restore, and enhance the quality of surface and groundwater resources for all beneficial uses, consistent with the RWQC Basin Plan.	**X** Yes ☐ N/A	This project (completion of phase 1 and 2) will be designed to help protect, restore and enhance the quality of water in the Almanor Basin watershed.	Lake Almanor and its surrounding communities.
Address water resources and wastewater needs of DACs and Native Americans.	**X** Yes ☐ N/A	This project (completion of phase 1 and 2) will be designed to address water resources and wastewater needs of DACs and Native Americans in the region.	Lake Almanor and its surrounding communities.
Coordinate management of recharge areas and protect groundwater resources.	**X** Yes ☐ N/A	At present all municipal service providers act as separate entities which produce challenges. Having an integrated system will reduce those challenges.	Lake Almanor and its surrounding communities.
Improve coordination of land use and water resources planning.	**X** Yes ☐ N/A	At present all municipal service providers act as separate entities which produce challenges. Having an integrated system will reduce those challenges.	Lake Almanor and its surrounding communities.
Maximize agricultural, environmental and municipal water use efficiency.	☐ Yes **X** N/A		

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)
Effectively address climate change adaptation and/or mitigation in water resources management.	**X** Yes ☐ N/A	As an integrated basin-wide solid waste and wastewater management system is 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.	Lake Almanor and its surrounding communities.
Improve efficiency and reliability of water supply and other water-related infrastructure.	☐ Yes **X** N/A		
Enhance public awareness and understanding of water management issues and needs.	**X** Yes ☐ N/A	During the implementation of this project public meetings will be held to address public needs and awareness.	Lake Almanor and its surrounding communities.
Address economic challenges of agricultural producers.	☐ Yes **X** 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	The cooperating entities are committed to ensuring the successful implementation of this project.	Lake Almanor and its surrounding communities.

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	Improve water quality in Lake Almanor, its surrounding communities and the Upper Fork of the Feather River.
b. Disadvantaged Communities[1]	☐ N/A	Improve water quality in Lake Almanor, its surrounding communities and the Upper Fork of the Feather River.
c. Environmental Justice[2]	☐ N/A	Improved water quality in Lake Almanor, 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 climate change[3]	**X** N/A	
f. Generation or reduction of greenhouse gas emissions (e.g. green technology)	**X** N/A	
g. Other expected impacts or benefits that are 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 conservation, water use efficiency	**X** Yes ☐ N/A	g. Drinking water treatment and distribution	**X** Yes ☐ N/A
b. Stormwater capture, storage, clean-up, treatment, management	**X** Yes ☐ N/A	h. Watershed protection and management	☐ Yes **X** N/A
c. Removal of invasive non-native species, creation/enhancement of wetlands,	☐ Yes **X** N/A	i. Contaminant and salt removal through reclamation/desalting, other treatment technologies	☐ Yes **X** N/A

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 ☐ N/A	j. Planning and implementation of multipurpose flood management programs	**X** Yes ☐ N/A
e. Groundwater recharge and management projects	☐ Yes **X** N/A	k. Ecosystem and fisheries protection	**x** Yes ☐ N/A
f. Water banking, exchange, reclamation, and improvement of water quality	**X** 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/).

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 **X** No	
Urban water use efficiency	☐ Yes **X** No	
Improve Flood Management		
Flood management	**X** Yes ☐ No	Wastewater management.
Improve Operational Efficiency and Transfers		
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		
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

Project serves a need of a DAC?: **X** Yes ☐ 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
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**, provide cost breakdown by phases			
		Project Cost	**O&M Cost**	**Description of Phase**
	Phase 1	$135,000		Study and Planning
	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.
l.	**Has a Cost/Benefit analysis been completed?**	☐ Yes **X** No
m.	**Describe what impact there may be if the project is not funded (300 words or less)**	Lake Almanor will continue to degrade to the point where it will no longer be useable.

*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 if more than one project stage is checked as current status					

IX. PROJECT TECHNICAL FEASIBILITY

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

a. List the adopted planning documents the proposed project is consistent with or supported by (e.g. General Plans, UWMPs, GWMPs, Water Master Plan, Habitat Conservation Plans, TMDLs, Basin Plans, etc.).	The intent of phase 1 is to produce such a document to support the conclusions of the Lake Almanor Watershed Assessment Report done in 2007 by EARTHWORKS Restoration Inc. and CH2MHill.
b. List technical reports and studies supporting the feasibility of this project.	Lake Almanor Watershed Assessment 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 research has been conducted) **of the proposed project in 300 words or less.**	Lake Almanor Watershed Assessment Report done in 2007 by EARTHWORKS Restoration Inc. and CH2MHill. Also evaluations conducted by the Plumas County Environmental Health Department.
d. Does the project implement green technology (e.g. alternate forms of energy, recycled materials, LID techniques, etc.).	**X** Yes ☐ No ☐ N/A During the study and design phase green technology will be used where possible such as solar panels to energize flow instruments in the pipe lines.
e. Are you an Urban Water Supplier[1]?	☐ 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] 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-37: Almanor Basin Solid and Wastewater Treatment Plant

Project applicant: Carl Felts

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