



featherriver.org

UPPER FEATHER RIVER IRWM PROJECT INFORMATION FORM

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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-Sierra County Department of Agriculture
Name of Primary Contact	Tim Gibson, Ag Commissioner
Name of Secondary Contact	Carol Dobbas, Project Manager Sierra Valley RCD 530-832-4415
Mailing Address	208 Fairgrounds Rd Quincy, CA 95971
E-mail	timgibson@countyofplumas.com
Phone	530-283-6365
Other Cooperating Agencies / Organizations / Stakeholders	Sierra Valley Resource Conservation District PO Box 3562 Quincy, CA 95971 sierravalleyrcd@gmail.com
Is your agency/organization committed to the project through completion? If not, please explain	Yes

II. GENERAL PROJECT INFORMATION

Project Title	ALS-4: Invasive Weed Management
Project Category	<input checked="" type="checkbox"/> Agricultural Land Stewardship <input type="checkbox"/> Floodplains/Meadows/Waterbodies <input type="checkbox"/> Municipal Services <input type="checkbox"/> Tribal Advisory Committee <input type="checkbox"/> Uplands/Forest
Project Description (Briefly describe the project, in 300 words or less)	<p>This multi-year project would support the cohesive strategy of the Plumas-Sierra Ag Department and the Sierra Valley RCD to protect waterways, croplands, timber lands, riparian and wetlands, and recreation areas from the spread of destructive and invasive noxious weeds.</p> <p>Invasive noxious weeds undermine biological diversity, disrupt natural vegetative systems and degrade agricultural lands and regional waterways which can contribute to soil erosion and degradation of water quality.</p> <p>Collaboration between local, regional and national organizations has taken place over the past 14 years. The Sierra Nevada Conservancy as well as both Plumas and Sierra</p>

	RACs are past and current partners in this effort to enhance watershed health by controlling and eradicating invasive weed species. This project will ensure continuation of the successful weed management program in the UFR.
Project Location Description (e.g., along the south bank of stream/river between river miles or miles from Towns/intersection and/or address):	The project area includes participating private agriculture lands, public right of ways and public recreation areas in Sierra Valley, Long Valley, American Valley, and Indian Valley. Important waterways in these areas include: Middle Fork Feather and tributaries in Sierra Valley and Mohawk Valley; North Fork Feather River, Indian Creek and tributaries in Indian Valley and Greenhorn Creek and tributaries in American Valley; as well as others.
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.

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.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A	The project will improve native vegetation functions by reducing destructive impacts of invasive monocultures in meadowlands as well as riparian and wetland areas.	640 acres total at a rate of approximately 213 acres per year.
Reduce potential for catastrophic wildland fires in the Region.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A	Control of weed infestations will result in a reduction of dry vegetation and fire fuel loads in the UFRW.	640 acres total at a rate of approximately 213 acres per year.
Build communication and collaboration among water resources stakeholders in the Region.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A	An education and outreach component will enhance collaboration between the P-S Ag Dept, regional RCDs and private agricultural landowners as well as public land managers.	Outreach and education will take place at the County Fair and the DPR Continuing Education day for each of the three grant years. Three brochures will be developed outlining control of specific species of

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)
			noxious weeds.
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.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A		
Encourage municipal service providers to participate in regional water management actions that improve water supply and water quality.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A		
Continue to actively engage in FERC relicensing of hydroelectric facilities in the Region.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A		
Address economic challenges of municipal service providers to serve customers.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A		
Protect, restore, and enhance the quality of surface and groundwater resources for all beneficial uses, consistent with the RWQC Basin Plan.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A	Elimination of invasive weed infestations will improve surface water resources for numerous beneficial uses including agriculture, aquatic, recreational, and municipal.	640 acres total at a rate of approximately 213 acres per year.
Address water resources and wastewater needs of DACs and Native Americans.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A		
Coordinate management of recharge areas and protect groundwater resources.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A		
Improve coordination of land use and water resources planning.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A	The Plumas-Sierra Agriculture Department and Sierra Valley RCD work with NRCS and local agricultural landowners to implement overall management strategies to enhance and protect rangelands, meadowlands and waterways within the UFRW.	640 acres total at a rate of approximately 213 acres per year.

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, environmental and municipal water use efficiency.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A	A reduction in invasive species will result in improved water use efficiency and greater availability to productive and native vegetation.	640 acres total at a rate of approximately 213 acres per year.
Effectively address climate change adaptation and/or mitigation in water resources management.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A	The project outreach component will incorporate climate change adaptation and water efficiency strategies for local agricultural lands.	Outreach and education will take place at the County Fair and the DPR Continuing Education day for each of the three grant years. Three brochures will be developed outlining control of specific species of noxious weeds.
Improve efficiency and reliability of water supply and other water-related infrastructure.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A		
Enhance public awareness and understanding of water management issues and needs.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A	The project outreach events will increase awareness of the critical role of proper noxious invasive species control in good water resource management.	Outreach and education will take place at the County Fair and the DPR Continuing Education day for each of the three grant years. Three brochures will be developed outlining control of specific species of noxious weeds.
Address economic challenges of agricultural producers.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A	A successful noxious weed and invasive species management program involves a long-range strategy and long-range financial commitment which is an economic challenge to most agricultural producers. The project will decrease this burden to key stakeholders.	Hours and chemical usage will be tracked as this is time and money that the agricultural producers will not be spending.

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)
Work with counties/communities/groups to make sure staff capacity exists for actual administration and implementation of grant funding.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A	PS Ag Dept and SVRCD will work with other UFRW groups to ensure adequate staff is available to implement and administer grant projects.	This will be achieved through an annual Weeds Management Area group meeting.

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 not 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	<input checked="" type="checkbox"/> N/A	
b. Disadvantaged Communities¹	<input checked="" type="checkbox"/> N/A	
c. Environmental Justice²	<input checked="" type="checkbox"/> N/A	
d. Drought Preparedness	<input type="checkbox"/> N/A	The project will increase drought preparedness by facilitating increased water flow efficiency and reducing water used by noxious plant species.
e. Assist the region in adapting to effects of climate change³	<input type="checkbox"/> N/A	Reductions in noxious weeds will improve meadowlands and riparian areas which serve as habitats for sensitive species most likely to be affected by climate change.
f. Generation or reduction of greenhouse gas emissions (e.g. green technology)	<input type="checkbox"/> N/A	Carbon sequestration will be enhanced through the removal of invasive weed monocultures and replacing them with a polyculture of native species.
g. Other expected impacts or benefits that are not already mentioned elsewhere	<input type="checkbox"/> N/A	The project will be monitored to assist in quantifying the increased health of natural vegetative systems unique to the UFRW region. This collaborative effort will encourage future partnerships among the local resource organizations.

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, and 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	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A	g. Drinking water treatment and distribution	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A
b. Stormwater capture, storage, clean-up, treatment, management	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A	h. Watershed protection and management	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
c. Removal of invasive non-native species, creation/enhancement of wetlands, acquisition/protection/restoration of open space and watershed lands	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A	i. Contaminant and salt removal through reclamation/desalting, other treatment technologies and conveyance of recycled water for distribution to users	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A
d. Non-point source pollution reduction, management and monitoring	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A	j. Planning and implementation of multipurpose flood management programs	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A
e. Groundwater recharge and management projects	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A	k. Ecosystem and fisheries restoration and protection	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
f. Water banking, exchange, reclamation, and improvement of water quality	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Reduction of water used by non-productive invasive noxious weeds and shift use to productive vegetation systems.
Urban water use efficiency	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Improve Flood Management		
Flood management	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Improve Operational Efficiency and Transfers		

Resource Management Strategy	Will the Project incorporate RMS?	Description of how RMS to be employed, if applicable
Conveyance – regional/local	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Elimination of noxious weeds from conveyance structures will provide for improved bank stability and a restoration of natural stream flow resulting in an improvement of available water and conveyance downstream.
System reoperation	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Water transfers	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Increase Water Supply		
Conjunctive management	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Precipitation Enhancement	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Municipal recycled water	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Surface storage – regional/local	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Minor improvements in water holding capacity may be realized in small ponds, riparian areas and meadows through reduction of thirsty noxious weed vegetation along streambanks.
Improve Water Quality		
Drinking water treatment and distribution	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Groundwater remediation/aquifer remediation	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Matching water quality to water use	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Pollution prevention	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Improving native vegetative cover reduces soil erosion and other natural pollutants.
Salt and salinity management	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Buffers of native vegetation have been proven to be key in the reduction of salinity in streams due to agriculture.
Urban storm water runoff management	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Practice Resource Stewardship		
Agricultural land stewardship	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Implementation of native vegetation and meadow lands management will improve agriculture land stewardship and enhance the habitat benefits provided by agricultural lands.
Ecosystem restoration	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Healthy biological diversity within the native meadowlands of the UFRW is critical to ecosystem restoration. Weed management is an important tool to achieve this goal.
Forest management	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Weed encroachment across property boundaries between ranch lands and adjacent forest lands is prevented by a successful weed management program.

Resource Management Strategy	Will the Project incorporate RMS?	Description of how RMS to be employed, if applicable
Land use planning and management	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Recharge area protection	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Sediment management	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Noxious weeds contribute to bank erosion. Native vegetation provides for stable banks and better filters agricultural runoff resulting in sediment reduction.
Watershed management	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Vegetation biodiversity is an important component of overall watershed management.
People and Water		
Economic incentives	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Funding assistance for costly weed management programs provides incentives to local agricultural land managers to participate more actively in the effort.
Outreach and engagement	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Outreach events and workshops will be an important part of this project.
Water and culture	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	The culture of farming and ranching in the watershed has historically been based on the meadows and streams that are sustained by subterranean spring water and artesian wells. The preservation and protection of these historic/prehistoric features will become extremely important in sustaining the historical ranch lands and cultural heritage of the UFRW. The cultural significance of water to our headwaters region will need to be a united focus point of outreach by all UFRW organizations and agencies.
Water-dependent recreation	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Weed free recreational areas will encourage return visits to our water resource based region. The increase in natural, noxious weed free habitat will result in in stronger fisheries and improved habitat for migratory birds travelling the Pacific Flyway.
Wastewater/NPDES	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
Funding Match Waiver request?: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
Category		Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding)	Cost Share: Other State Fund Source*	Total Cost
a.	Direct Project Administration	\$200,000	TBD	TBD	\$200,000+
b.	Land Purchase/Easement	N/A	N/A		N/A
c.	Planning/Design/Engineering / Environmental	20,000	TBD		20,000+
d.	Construction/Implementation	200,000	TBD		200,000
e.	Environmental Compliance/ Mitigation/Enhancement	N/A	N/A		N/A
f.	Construction Administration	N/A	N/A		N/A
g.	Other Costs	30,000	TBD		30,000+
h.	Construction/Implementation Contingency	N/A	N/A		N/A
i.	Grand Total (Sum rows (a) through (h) for each column)	\$450,000	TBD	TBD	\$450,000+
j.	Can the Project be phased? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, provide cost breakdown by phases				
	Not exactly a phased project; but \$ could be allocated over multi-years for treatment across UFRW	Project Cost	O&M Cost	Description of Phase	
	First year	150,000+		1st year of multi-year treatment	
	Second year	150,000+		2 nd year of multi-year treatment	
	Third year	150,000+		3 rd year of multi-year treatment	
k.	Explain how operation and maintenance costs will be financed for the 20-year planning period for project implementation (not grant funded).		n/a		
l.	Has a Cost/Benefit analysis been completed?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
m.	Describe what impact there may be if the project is not funded (300 words or less)		Tall Whitetop, sulfur cinquefoil, and Star Thistle infestations have significantly degraded many areas of Northern California resulting in significant economic losses to both private agriculture and public recreation based entities. The commitment of Plumas and Sierra County organizations including the Ag Dept., Sierra		

		Valley RCD, Feather River RCD, NRCS and private landowners has been key to preventing this same scenario of destructive uncontrolled weed infestations in our beautiful watershed. Future funding to sustain a regional weed management project is critical to protecting our water and natural resources.
<p>*List all sources of funding. Note: See Project Development Manual, Exhibit B, for assistance in completing this table (http://featherriver.org/documents/).</p>		

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	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Weed identification has been completed by RCD, Ag Dept and Weed Contractor.	TBD by IRWM funding	Current funding expires: Ag Dept - 2015 SVRCD - 2016
b. Final Design	<input checked="" type="checkbox"/>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Identification of and securing long-range project funding is ongoing.		
c. Environmental Documentation (CEQA / NEPA)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Ag Dept is exempt		
d. Permitting	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Weed Control Contractor has obtained required permits for current program.		
e. Construction Contracting	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Existing program is underway with limited funding.		
f. Construction Implementation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Existing program is underway with limited funding.		
Provide explanation if more than one project stage is checked as current status			Current noxious weed management programs are in progress through other grant-funded projects. These successful program strategies will be continued and expanded under potential future IRWM grants and guidelines.		

	Current project contractors and staff are available for continued implementation of a watershed wide weed management program.
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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.).	General Plan, NRCS landowner contracts,
b. List technical reports and studies supporting the feasibility of this project.	<p>Cal-Invasive Plant Council website: http://www.cal-ipc.org/</p> <p>Prioritizing Regional Response to Invasive Plants in the Sierra Nevada (2011) Plumas-Sierra WMA http://www.cal-ipc.org/ip/mapping/sierra/pdf/3bPlumasSierra.pdf</p> <p>UC Davis Weed Research & Information Center http://wric.ucdavis.edu/publications/pubs.htm</p> <p>Weed Control in Natural Areas of the Western United States http://www.cal-ipc.org/resources/booksandcdfs/weedcontrol.php</p> <p>Ecology of Weeds and Invasive Plants: Relationship to Agriculture and Natural Resource Management</p> <p>Yellow Starthistle Management Guide by Joseph M. DiTomaso, Guy B. Kyser, and Michael J. Pitcairn</p>
c. Concisely describe the scientific basis (e.g. how much research has been conducted) of the proposed project in 300 words or less.	Scientific research and documents by various universities, organizations and agencies have been published on the benefits of noxious weed management and are numerous. A few are listed above.
d. Does the project implement green technology (e.g. alternate forms of energy, recycled materials, LID techniques, etc.).	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A If yes, please describe.
e. Are you an Urban Water Supplier¹?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
f. Are you are an Agricultural Water Supplier²?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A

g. Is the project related to groundwater?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A If yes, please indicate which groundwater basin.
<p>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.</p> <p>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.</p>	

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: ALS-4: Invasive Weed Management

Project applicant: Plumas-Sierra County Department of Agriculture

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

This project is dedicated to reducing the invasive species within the watershed through the attempted eradication of certain invasive species. Fewer invasive species will result in more water in the streams through a reduction in evapotranspiration.

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
- 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 eradication of invasive weed species will result in the reduction of ladder fuels in the forest, thus preventing wildfires, which contribute materials to waterways. It will prevent eutrophication by allowing water to flow naturally through the wetlands and increase water flow through the reduction in evapotranspiration. The restoration of native species to the wetlands will increase wildlife habitat, spawning habitat, cold freshwater habitat, and result in a higher quality of water contact recreation.

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
 Recreation and economic activity
 Quantified environmental flow requirements
 Erosion and sedimentation
 Endangered or threatened species
 Fragmented habitat

The eradication of invasive weed species will result in a reduction of habitat fragmentation. Climate-sensitive fauna or flora and endangered or threatened species will have a better chance of survival through the return of native habitat through the eradication of invasive weed species.

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

ALS-4: Invasive Weed Management

GHG Emissions Analysis

Project Construction Emissions

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

Type of Equipment	Maximum Number Per Day	Total 8-Hour Days in Operation	Total MTCO ₂ e
			0
			0
			0
			0
			0
			0
			0
			0
			0
			0
Total Emissions			0

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

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

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

Average Number of Workers	Total Number of Workdays	Average Round Trip Distance Traveled (Miles)	Total MTCO ₂ e
			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.

Upper Feather River IRWMP
Project Assessment - GHG Emissions Analysis

ALS-4: Invasive Weed Management

Project Operating Emissions

The project requires energy to operate. If yes:

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

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 MTCO ₂ e
42	-265

*A negative value indicates GHG reductions

The project will affect wetland acreage. If yes:

Acres of Protected Wetlands	Total MTCO ₂ e
	0

*A negative value indicates GHG reductions

The project will include new trees. If yes:

Acres of Trees Planted	Total MTCO ₂ e
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 result in the restoration of approximately 640 acres of wetlands due to the removal of noxious weeds which will reduce GHG emissions. This operation of this project requires driving a light truck or ATV for approximately 2,080 miles annually to treat weeds around the region which will generate emissions.

GHG Emissions Summary

Construction and development will generate approximately:	0 MTCO ₂ e
In a given year, operation of the project will result in:	-265 MTCO ₂ e