



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 Unified School District
Name of Primary Contact	Rob Wade
Name of Secondary Contact	Jennifer Ayres
Mailing Address	1484 East Main Street, Quincy CA 95971
E-mail	rwade@pcoe.k12.ca.us
Phone	(530) 283-6500 x 5257
Other Cooperating Agencies / Organizations / Stakeholders	Plumas Corporation, Feather River College, Plumas National Forest, Quincy Community Services District, Chester Community Services District, Indian Valley Community Services District, City of Portola, California Department of Water Resources, Plumas County Fish & Game Commission, California Department of Fish & Wildlife, Army Corps of Engineers – Bay Model,
Is your agency/organization committed to the project through completion? If not, please explain	Yes

II. GENERAL PROJECT INFORMATION

Project Title	FMW-9: Watershed Education
Project Category	<input type="checkbox"/> Agricultural Land Stewardship <input checked="" type="checkbox"/> Floodplains/Meadows/Waterbodies <input type="checkbox"/> Municipal Services <input type="checkbox"/> Tribal Advisory Committee <input type="checkbox"/> Uplands/Forest
Project Description	The Watercourse: Plumas to Pacific is an integrated, year-long course of study that uses the Feather River and its tributaries

<p>(Briefly describe the project, in 300 words or less)</p>	<p>to teach concepts in life science, earth science, social studies, and mathematics. Building upon established elements of the sixth grade curriculum, students examine the influences of mining, logging, ranching/farming in the region, as well as water uses for transportation, recreation, wildlife/fisheries, hydroelectric power, commerce, and municipal/domestic purposes.</p> <p>The Watercourse: Plumas to Pacific consists of two main sections. The first part of the journey begins at home and is focused on the immediate watersheds of each school and community situated at various points adjacent to and within the Plumas National Forest. The second phase follows the river as it leaves each community and explores the people and places it affects as it flows to the Pacific Ocean.</p> <p>Each year nearly 200 students from four schools (Chester, Greenville, Quincy and Portola) participate in the series of adventures, with over 160 sixth graders and another 30 plus high school students serving as mentors and counselors. Many teachers, parents, community groups, and resource professionals also participate in portions of The Watercourse. Plumas Corporation had successfully secured funding for the coordination of The Watercourse for the last ten years. A Program Coordinator conducts the necessary planning, curricular research, scheduling field trips and guest speakers, and class instruction in conjunction with each sixth grade teacher. The studies are directly correlated to the California Content Standards for Science, Social Science, Mathematics, and Reading, Grade 6.</p>
<p>Project Location Description (e.g., along the south bank of stream/river between river miles or miles from Towns/intersection and/or address):</p>	<p>Literally follow the following watercourse/ tributaries from the headwaters of each to the Pacific Ocean –</p> <ul style="list-style-type: none"> ▪ Middle Fork Feather River ▪ Spanish Creek Watershed ▪ Wolf Creek Watershed ▪ North Fork Feather River
<p>Latitude:</p>	<p>Various</p>
<p>Longitude:</p>	<p>Various</p>

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 type="checkbox"/> Yes <input type="checkbox"/> N/A		
Reduce potential for catastrophic wildland fires in the Region.	<input type="checkbox"/> Yes <input type="checkbox"/> N/A		
Build communication and collaboration among water resources stakeholders in the Region.	<input type="checkbox"/> Yes <input type="checkbox"/> 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.	<input type="checkbox"/> Yes <input 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 type="checkbox"/> 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)
Continue to actively engage in FERC relicensing of hydroelectric facilities in the Region.	<input type="checkbox"/> Yes <input type="checkbox"/> N/A		
Address economic challenges of municipal service providers to serve customers.	<input type="checkbox"/> Yes <input 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 type="checkbox"/> Yes <input type="checkbox"/> N/A		
Address water resources and wastewater needs of DACs and Native Americans.	<input type="checkbox"/> Yes <input type="checkbox"/> N/A		
Coordinate management of recharge areas and protect groundwater resources.	<input type="checkbox"/> Yes <input type="checkbox"/> N/A		
Improve coordination of land use and water resources planning.	<input type="checkbox"/> Yes <input type="checkbox"/> N/A		
Maximize agricultural, environmental and municipal water use efficiency.	<input type="checkbox"/> Yes <input type="checkbox"/> N/A		
Effectively address climate change adaptation and/or mitigation in water resources	<input type="checkbox"/> 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)
management.	<input type="checkbox"/> N/A		
Improve efficiency and reliability of water supply and other water-related infrastructure.	<input type="checkbox"/> Yes <input 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	<p>All sixth grade students in the Plumas Unified School District spend the entire year studying the Upper Feather River Watershed and the many ways that their FR water is used locally and as it relates to the entire state of California.</p> <p>Understanding water quality and quantity challenges are core program outcomes as the students engage in cost/benefit analysis for all activities occurring from the Plumas to Pacific.</p> <p>This results in an informed citizenry for the rising generation of stewards.</p>	<p>160 sixth grade students and 30 high school students participate annually. Over 2000 students have participated to date with many choosing related careers.</p>
Address economic challenges of agricultural producers.	<input type="checkbox"/> Yes <input type="checkbox"/> N/A		
Work with counties/ communities/groups to make sure staff capacity exists for actual administration and implementation of grant funding.	<input type="checkbox"/> Yes <input type="checkbox"/> N/A		

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

Please note that the curriculum addresses the majority of the Upper Feather River IRWM objectives:

- Watershed stewardship
- Hydrologic Function
- Wildfire impacts to watershed
- Hydroelectricity generation in UFR
- Municipal and domestic use and efficiency
- DWR and SWP relationship to Upper Feather River and state
- Groundwater and surface water stewardship
- Agricultural use of Feather River locally and in the state

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 type="checkbox"/> N/A	Serving all students in Plumas County it directly serves all 6 th graders enrolled on the PUSD. Indian Valley Elementary School specifically represents the largest Maidu population served. This program serves these native youth and also integrates TEK into the curriculum.
b. Disadvantaged Communities¹	<input type="checkbox"/> N/A	The children from locally disadvantaged communities (socio economic, etc.) are enrolled in the PUSD and so are served by this program. It inadvertently reaches the families of participating students each year.
c. Environmental Justice²	<input type="checkbox"/> N/A	Disproportionate access to water resources is addressed both locally in the curriculum but also during the Plumas to Pacific trip where students encounter EJ concerns as they relate to water quality access, recreational access, health impacts of mercury concentration in bodies of water and food chains from historic mining activities, storm water and waste water impacts.
d. Drought Preparedness	<input type="checkbox"/> N/A	Water conservation is directly addressed from the headwaters homeland to the Pacific Ocean. Students investigate the impacts of the drought on

		municipal/domestic, agricultural and wildlife/environmental uses. Monitoring water use at home and school throughout the year, students are uniquely prepared to understand and adjust their activities and those of the community.
e. Assist the region in adapting to effects of climate change³	<input checked="" type="checkbox"/> N/A	
f. Generation or reduction of greenhouse gas emissions (e.g. green technology)	<input checked="" type="checkbox"/> N/A	
g. Other expected impacts or benefits that are not already mentioned elsewhere	<input type="checkbox"/> N/A	The Feather River Watercourse: Plumas to Pacific program uses education, stewardship and recreation to inspire this next generation of citizens. Understanding and loving the Upper Feather River equally develops a caring capacity that is critical for taking care of the region. The recreational aspects of this relationship are important for the economy and creating lifelong connections for all.
<p>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/) .</p> <p>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.</p> <p>³ Climate change effects are likely to include increased flooding, extended drought, and associated secondary effects such as increased wildfire risk, erosion, and sedimentation.</p>		

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	<input type="checkbox"/> Yes	i. Contaminant and salt removal through reclamation/desalting,	<input type="checkbox"/> Yes

wetlands, acquisition/protection/restoration of open space and watershed lands	<input checked="" type="checkbox"/> N/A	other treatment technologies and conveyance of recycled water for distribution to users	<input checked="" type="checkbox"/> N/A
d. Non-point source pollution reduction, management and monitoring	<input type="checkbox"/> Yes <input checked="" 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 type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A
f. Water banking, exchange, reclamation, and improvement of water quality	<input type="checkbox"/> Yes <input checked="" 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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
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		
Conveyance – regional/local	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Improve Water Quality		

Resource Management Strategy	Will the Project incorporate RMS?	Description of how RMS to be employed, if applicable
Drinking water treatment and distribution	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Groundwater remediation/aquifer remediation	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Matching water quality to water use	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Pollution prevention	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Salt and salinity management	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Urban storm water runoff management	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Practice Resource Stewardship		
Agricultural land stewardship	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Ecosystem restoration	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Forest management	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Land use planning and management	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Recharge area protection	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Sediment management	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Watershed management	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Provide regionally appropriate, regular, and dependable educational materials and programs to encourage water conservation, water reuse, and water pollution prevention. Materials have been developed and are integrated with the curriculum each year.
People and Water		
Economic incentives	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Outreach and engagement	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Within regions, water managements should collaborate on outreach campaigns for clarity of message and to better utilize stakeholders' time. Program collaborates with multiple partners to communicate watershed education at the K-12 public education level.
Water and culture	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Educate children about how watersheds function. Watersheds are catchments for water and culture. Students learn 7 primary cultural/societal uses of Feather River water; how and why diversions are made and the related cost/benefit analysis. Add the hydrologic cycle to the California education standard. Every student should learn the hydrologic

Resource Management Strategy	Will the Project incorporate RMS?	Description of how RMS to be employed, if applicable
		cycle from headwater to ocean, as well as the impacts and dependency people have on water.
Water-dependent recreation	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	In developing water-dependent recreation opportunities, agencies should consider the needs of the public and low-income communities, and increased population and diversity as identified in planning documents such as the <i>California Outdoor Recreation Plan</i> updates. Program provides water sports activity for all students in partnership with Feather River College.
Wastewater/NPDES	<input type="checkbox"/> Yes <input 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 Match)	Cost Share: Other State Fund Source*	Total Cost
a.	Direct Project Administration	\$5,000			\$5,000
b.	Land Purchase/Easement				
c.	Planning/Design/Engineering / Environmental				
d.	Construction/Implementation				
e.	Environmental Compliance/Mitigation/Enhancement				
f.	Construction Administration				
g.	Other Costs	\$43,000	\$69,196	\$19,500	\$131,696
h.	Construction/Implementation Contingency				
i.	Grand Total (Sum rows (a) through (h) for each column)	\$48,000	\$69,196	\$19,500	\$136,696
j.	Can the Project be phased? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, provide cost breakdown by phases				

	Project Cost	O&M Cost	Description of Phase
Phase 1	24,000		Year One
Phase 2	24,000		Year Two
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).		
l.	Has a Cost/Benefit analysis been completed?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	*Formal Program Evaluation
m.	Describe what impact there may be if the project is not funded (300 words or less)		
	<p>The Plumas to Pacific has been operating regionally for 12 years. The funding is highly diversified however the core costs of coordinating the program remain as a funding obligation each year. These are the costs being requested here.</p> <p>We seek to find funding sources that are ideally aligned. We believe the IRWM has mission alignment with our outcomes of watershed education and stewardship. The Feather River Watercourse: Plumas to Pacific is a critical opportunity to guarantee that all of our youth are being exceptionally educated in issues related to watershed management in the Upper Feather River Watershed.</p> <p>If the project is not funded we will find a way forward as we always do. The commitment to this program runs high at every school and in every community. The 6th grade year is anticipated for years and then reflected upon for a lifetime. Parental commitment for fundraising helps to support many of our costs and that will continue. Other funding sources are also being considered to provide the highest likelihood of success.</p>		

*List all sources of funding.

- Plumas County Fish & Game Commission
- Feather River College TRiO
- Local Rotary Clubs
- Local fundraising (bake/candy/mandarin/cookie dough sales, concession booths, yard sales, various business donations, restaurant FR Water donation jars)
- Parental Donations

Note: See Project Development Manual, Exhibit B, for assistance in completing this table
[\(http://featherriver.org/documents/\)](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	<input type="checkbox"/>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Annual evaluation is conducted		
b. Final Design	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Program Design is complete		
c. Environmental Documentation (CEQA / NEPA)	<input type="checkbox"/>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	N/A		
d. Permitting	<input type="checkbox"/>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	N/A		
e. Construction Contracting	<input type="checkbox"/>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	N/A		
f. Construction Implementation	<input type="checkbox"/>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	N/A		
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.

<p>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.).</p>	<p>N/A</p>
<p>b. List technical reports and studies supporting the feasibility of this project.</p>	<p>http://www.seer.org/pages/research/Emekauwa2004.pdf http://www.seer.org/pages/research/Bartosh2003.pdf http://www.seer.org/pages/research/BaySchools2004.pdf http://www.seer.org/pages/research/AIROutdoorSchool2005.pdf http://www.seer.org/pages/research/CSAPII2005.pdf http://www.seer.org/pages/research/CSAP2000.pdf http://www.seer.org/pages/research/NEETFEBE2000.pdf http://www.seer.org/pages/research/Southcarolinafalco2004.pdf http://www.seer.org/pages/research/PEEC%202005.pdf http://www.seer.org/pages/research/PEEC%202004.pdf http://www.seer.org/pages/research/AthmanandMonroeJIR2004.pdf</p>
<p>c. Concisely describe the scientific basis (e.g. how much research has been conducted) of the proposed project in 300 words or less.</p>	<p>In educational pedagogy (study of children) student learning that is based upon real world inquiry and hands on experiences is shown to increase their understanding of concepts and principles. When the environment specifically is used as an integrating context for learning, additional benefits have been shown to occur.</p> <ul style="list-style-type: none"> • Higher scores on standardized measures of academic achievement in reading, writing, math, science, and social studies; • Reduced discipline and classroom management problems; • Increased student engagement and enthusiasm for learning; and, • Greater pride and ownership in students' accomplishments. <p>In addition to educational benefits there are stewardship benefits. Stewardship is a relationship that is developed over time through long-term interactions and direct experience. The resulting connection (attachment theory) and understanding create the potential for lifetime commitments to environmental stewardship. Please refer to studies listed above for more specific data.</p>

<p>d. Does the project implement green technology (e.g. alternate forms of energy, recycled materials, LID techniques, etc.).</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p> <p>If yes, please describe.</p> <p>Related sustainable activities tied to wise use of water resources are integrated into the curriculum. Recycling education is part of this.</p>
<p>e. Are you an Urban Water Supplier¹?</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A</p> <p>*My students would say yes because the Upper Feather River does</p>
<p>f. Are you are an Agricultural Water Supplier²?</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A</p> <p>*My students would say yes because the Upper Feather River does</p>
<p>g. Is the project related to groundwater?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p> <p>If yes, please indicate which groundwater basin.</p> <p>Educationally related</p>
<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: FMW-9: Watershed Education

Project applicant: Plumas Unified School 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
- Reduced snowmelt
- Unmet local water needs (drought)
- Increased invasive species

Water supply issues are part of the curriculum. The physical resource is not impacted but the related culture is enhanced by increasing understanding of watershed and related stewardship.

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 demand issues are part of the curriculum. The physical resource is not impacted but the related culture is enhanced by increasing understanding of watershed and related stewardship.

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.)

Water quality issues are part of the curriculum. The physical resource is not impacted but the related culture is enhanced by increasing understanding of watershed and related stewardship.

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

Flooding is part of the curriculum. The physical resource is not impacted but the related culture is enhanced by increasing understanding of watershed and related stewardship.

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

These issues are part of the curriculum. The physical resource is not impacted but the related culture is enhanced by increasing understanding of watershed and related stewardship.

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

Hydropower is part of the curriculum. The physical resource is not impacted but the related culture is enhanced by increasing understanding of watershed and related stewardship.

FMW-9: Watershed Education

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
			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.

FMW-9: Watershed Education

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
	0

*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:

Project may generate minor GHG emissions when students are transported to various locations.

GHG Emissions Summary

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