

PROJECT INFORMATION FORM

Please complete a unique Project Information Form for each project in the application. There are no character limits on specific questions but the Project Information Form as a whole may not exceed 10 pages.

1. Project Name: Etna Creek Real Time StreamFlow Monitoring Project
2. Local Project Sponsor (if different than grantee): Scott River Watershed Council
3. Please provide the latitude and longitude of the project site. For linear projects or those covering a large area, report the coordinates for a central point. If this information is confidential, it must be clearly labeled "confidential." You can find the latitude and longitude easily using google maps. You can find instructions at the following link:
<https://support.google.com/maps/answer/18539?hl=en&co=GENIE.Platform%3DDesktop>.

Latitude: 41°25'40.04N

Longitude: 122°55'15.13W

4. Please briefly describe the proposed project.
Etna Creek stream flow is a critical stream system to the Scott River watershed and the sole water supply for the City of Etna. In order for the City of Etna to evaluate its water supply and growing water scarcity concerns, there is a critical need to establish a real time flow station on Etna Creek. This project would allow data on current stream conditions to be available to the City of Etna which would aid in its ability to implement water conservation efforts. Without the ability to have streamflow data, the City's ability to encourage and enforce a water conservation plan is extremely limited. Not only would a flow station benefit the City of Etna, but the data would also add to the body of work around the State's Sustainable Groundwater Management Act (SGMA). This project would serve a multi purpose for both the City of Etna and the Scott River watershed as a whole.
5. Does this project respond to an existing emergency to humans and/or wildlife? If so, please describe the emergency and how this project is addressing it.
Along with the rest of California and much of the Western United States, the City of Etna is experiencing a prolonged drought and above-average heat temperatures. Precipitation in Scott Valley during the 2020-2021 winter was far below average and, combined with the historical drying trend, has resulted in current, low instream flows in the region, including in Etna Creek. The Scott River and particularly Etna Creek, is a snowpack driven system. Snow surveys in the Etna Creek watershed since 1951 show a strong declining trend in both snow depth and water content. With the impact of climate change affecting the region, it is predicted that this will continue to accelerate, continuing to put strain on the City's water supply.

The City of Etna, its residents, and businesses are entirely dependent on diverted water from Etna Creek for all uses. While the City has a water right to divert water for its municipality purposes, California law requires Etna, as well as any other diverters, to leave water instream for other beneficial purposes, including fish and wildlife. Thus, as instream flow continues to decrease over the summer, so will the amount of

water that Etna may lawfully divert. Less water diverted will, in turn, place additional pressure on the City of Etna, its residents and businesses to conserve water and potentially even eliminate discretionary uses (gardens and existing landscaping) altogether as those uses increasingly conflict with higher priority uses such as public health (e.g., drinking water, sanitation, etc.) and public safety (e.g. fire protection). Having the ability to monitor the streamflow real time will help implement and enforce essential water conservation measures, which in turn will help keep more water instream for the benefit of wildlife.

6. Each project must meet one of the following purposes as it relates to drought. Please select the appropriate purpose for your project.
- Address immediate impacts on human health and safety, including providing or improving availability of food, water, or shelter.
 - Address immediate impacts on fish and wildlife resources.
 - Provide water to persons or communities that lose or are threatened with the loss or contamination of water supplies.
7. Each project must enhance regional drought resilience and align with the goals and objectives of the relevant approved Integrated Regional Water Management Plan. You can find the relevant IRWM Region by using the map at the following link:
<https://gis.water.ca.gov/app/dacs/>

The IRWM Plans can be found at the following link: <https://water.ca.gov/Work-With-Us/Grants-And-Loans/IRWM-Grant-Programs/Plan-Review-Process>. If you have any questions about the IRWM region the contact list can be found at the following link: <https://water.ca.gov/Work-With-Us/Grants-And-Loans/IRWM-Grant-Programs>. Applicants are encouraged to contact and coordinate with the applicable RWMG for the IRWM region in which the project is located

Please identify the IRWM objective your project addresses.

GOAL 2: ECONOMIC VITALITY

Objective 5 - Conserve and improve the economic benefits of North Coast Region working landscapes and natural areas

GOAL 3: ECOSYSTEM CONSERVATION AND ENHANCEMENT

Objective 6 - Conserve, enhance, and restore watersheds and aquatic ecosystems, including functions, habitats, and elements that support biological diversity

GOAL 4: BENEFICIAL USES OF WATER

Objective 8 - Ensure water supply reliability and quality for municipal, domestic, agricultural, Tribal, and recreational uses while minimizing impacts to sensitive resources
Objective 9 - Improve drinking water quality and water related infrastructure to protect public health, with a focus of economically disadvantage communities.

GOAL 5: CLIMATE ADAPTATION & ENERGY INDEPENDENCE

Objective 11 - Address climate change effects, impacts, vulnerabilities, including droughts, fires, floods, and sea level rise. Develop adaptation strategies for local and regional sectors to improve air and water quality and promote public health

8. Describe the Primary Benefit of the project.

Quantified benefit: 2

Units (Drop down):Cubic feet per second If other please enter:

Benefit Type: Water Conservation If other please enter:

9. Describe the Secondary Benefit of the project:

Quantified benefit: 2.4

Units (Drop down):Cubic feet per second If other please enter:

Benefit Type: Improve operational efficiency If other please enter:

10. Please briefly describe how the project will achieve the claimed benefits.

This project will allow the City of Etna to implement water conservation measures, allowing for more water to remain instream for the benefit of fish and wildlife. It also improves the City's water delivery system by allowing actual real time data to be used for the various reporting obligations such as the curtailment orders and 1600 permitting.

11. Briefly describe how the community/area benefiting from this project is being impacted by the current drought.

The City of Etna's water solely relies on the streamflow of Etna Creek, a tributary to the Scott River stream system. The City does not have a second source of water. Besides the threat of fire, water scarcity is the single biggest threat to public health and safety to the residents and all other water users reliant on water from Etna Creek. These impacts don't only affect the residents and businesses, it also affects three schools, Etna Elementary, Scott River High School and Etna High School, and the youth of the entire Scott Valley.

The City has a municipal right of 2.4 cubic feet per second and is required by the terms of the Scott River Decree to "reasonable use", fundamentally not allowing the act of diverting water to "unreasonably impair the quality of the natural flow." Other state laws also require water to be left instream for other beneficial purposes such as fish and wildlife. Prior to 2020 and 2021, virtually no data has been collected for the Etna Creek stream flow, at which time SRWC established a manual flow monitoring system that is solely dependent on hand flow measurements and a maintenance of the data logger to obtain the information. In both drought years, SRWC did document the stream flow to decrease below the City's water right of 2.4 cubic feet per second however the fact that the information is not real time, makes it impossible to understand the current stream conditions.

As an example of the magnitude of the situation, the State Water Resources Control Board issued an ORDER IMPOSING WATER RIGHT CURTAILMENT AND REPORTING REQUIREMENTS IN THE SCOTT RIVER WATERSHED FOR WATER RIGHT(S) ASSOCIATED WITH THE PARCEL(S) LISTED IN ATTACHMENT A AND NOT OTHERWISE CURTAILED (ORDER WR 2021-0084-DWR) on September 10, 2021. This first ever order fundamentally required all surface water and groundwater divisions to cease except for the needs for human health and safety. Given the lack of data for the streamflow within Etna Creek, compliance with the order was made more difficult to report to the State on the City's water conservation efforts.

12. How will this project alleviate the impacts described in your answer to Question 11?
 Having the ability to track, monitor and communicate real time streamflow for Etna Creek will allow the City of Etna and other water management organizations, the State Water Board, the North Coast Water Quality Control Board and the California Department of Fish and Wildlife, to provide actionable information to the City water users. Ultimately, the City will be able to promote, encourage and enforce effective water use, improving Etna’s overall stewardship of water and therefore by the act of water conservation will leave more water instream for the benefit of fish and wildlife. The City of Etna adopted a Water Conservation Plan in the summer of 2021 and relies heavily on volunteer measures before punitive damages are pursued, however not being able to communicate current conditions jeopardizes conservation efforts and may result in a failure to comply with both the Conservation Plan and/or any curtailment orders.

13. Please complete the following budget table for the project. (Identify funding sources in Question 15)

	BUDGET CATEGORY	Grant Amount	All Other Cost	Total Cost
(a)	Project Administration	26,972	26,972	53,945
(b)	Land Purchase / Easement	16,000	16,000	16,000
(c)	Planning / Design / Engineering / Environmental Documentation	33,000	33,000	66,000
(d)	Construction / Implementation	58,735	58,735	117,471
	TOTAL COSTS	134,708	134,708	269,416

14. Please describe why state funding is needed for this project. If state funding is not secured, what will happen to the project?

There are several reasons why these state funds are needed. The most immediate one is the reality of the need to address water scarcity is becoming increasingly obvious with these multiyear and historic dry years. It is essential that the City of Etna have the data regarding streamflow in order to effectively manage its only water source. The reality of finding grant funding to support this type of project is limited. If these funds are not received, SRWC will continue to seek other funding sources however the time needed to do so will drastically limit the City’s ability to communicate, encourage and enforce water conservation efforts.

15. Will the applicant provide cost share (encouraged but not required) and/or will this project require any additional funding from sources other than this solicitation? If so, please describe the funding source and indicate if the funding has been secured. If the funding has not been secured, please describe the plan to secure the necessary funding.

The City of Etna recently applied for funding through the Urban and Multibenefit Drought Relief Grant Program for “City of Etna’s Water Meter Modernization and Water Security Project.” This is a 2M project that increases the water storage capacity, develops an emergency water source and will

install a smart watering metering system. These two projects are symbiotic to each other. The flow station was not included in the City's application to the State as it does not possess the equipment, staff or expertise needed to to install, maintain or analyze the system or its data, hence the reason for SRWC taking the lead on this project. The cost share will be 1:1 pending funds from the State's award.

16. Is land acquisition or landowner permission required for this project? If so, please briefly describe the status of the acquisition or agreement with the landowner. If the acquisition is not complete or permission not secured at the time of application, please describe the plan to complete it.

The City of Etna's water division infrastructure already possesses an easement on the private land therefore this project will fall under those easement rights however a former contract for SRWC to maintain the real time flow station will need to be executed. Discussions and verbal approval with the City of Etna leadership has already been obtained so the agreement merely needs to be formalized by Board Resolution by the City Council.

17. Has planning and design for this project been completed? If not, please describe the status of planning and design.

SRWC has been in consultation with the Quartz Valley Indian Reservation (QVIR) as they recently installed a simple system on Shackleford, another tributary to the Scott River. Conceptual planning and design work has been completed however a full design for the system will need to be completed, mainly to obtain actual survey data of the stream channel and adjacent land terrace to inform placement of infrastructure. There has also been work with the City of Etna and their application to the State for the "City of Etna's Water Meter Modernization and Water Security Project". This project for the real time flow station is complementary to the City's project.

18. Are the CEQA (and NEPA if applicable) and permitting processes for this project complete? If not, please briefly describe the permits and CEQA (or NEPA) documents to be completed and projected schedule for completion.

The environmental compliance for this grant has not been completed and will be made part of this project. A mitigate negative declaration (MND) will be used and either the City of Etna or the California Department of Fish and Wildlife will be the lead agency. The completion of the MND will done on or before 9-1-22 so that implementation of the station can be done during this critical time.

19. Please briefly describe the necessary construction/implementation for this project.

A topographic survey will be performed in order to determine the land form and stream channel configuration to finalize designs of the following: Installation of a water quality datasonde and flow gage will require a 10 inch galvanized pole, equipped with a metal box (approx. size 3ft X 3ft X 10 inch) for housing the logger, to be embedded into a 2ft diameter X 4ft depth hole filled with concrete for stability up on a land terrace, outside the stream channel of Etna Creek. Conduit will run from the gage box to the datasonde and to an orifice line. Orifice line conduit will be a 2 inch galvanized pipe that will be securely fastened to nearby bedrock within the stream channel within a pool formation. This will require several holes to be drilled sixteen inches into the bedrock, epoxy will set a steel pin in each hole, and then a C-shaped clamp will be placed over the orifice line and a sleeve is placed over the steel pin. The datasonde conduit will be 2 inch 'anaconda flex hose' and will be underground, at a depth of approximately 1-foot and 5 feet maximum length. A small 2" galvanized pole will be mounted on the side of the gaging box to provide conduit for the

satellite wires, a GPS globe, solar panel and satellite transmission antenna, providing the ability to get the information real time.

To calibrate the system, biweekly flow measurement will be taken and possibly more frequently during high flows or during the recessional flows in late or early summer. Data from hand measurements and the datasonde will be QA/QC on a monthly basis to ensure reliability of the data.

20. Please complete the schedule below for the project. Projects must be complete by March 31, 2026, to allow time for final invoice processing and retention payment before the State funds expire on June 30, 2026. Project administration should end at least three months after construction.

	Categories	Start Date	End Date
(a)	Project Administration	5/31/2022	5/31/2026
(b)	Land Purchase / Easement	5/31/2022	7/15/2022
(c)	Planning/ Design / Engineering / Environmental Documentation	5/31/2022	9/1/2022
(d)	Construction/ Implementation	9/1/2022	5/31/26