PROJECT INFORMATION FORM

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

1. Project Name: MWCD-Main Canal Lining for Instream Benefit

2. Local Project Sponsor (if different than grantee): Montague Water Conservaiton District

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°37'51.07" Longitude: 122°22'22.62"

4. Please briefly describe the proposed project.

   Montague Water Conservation District is an irrigation district that owns and operates Dwinnell Reservoir on the Shasta River, a critical tributary to the Klamath River. The District delivers water via a main canal to properties in the northern part of the Shasta Valley. This project will line 6,000' of MWCD's main canal where significant transmission or delivery loss occurs to improve water supply reliability for agriculture, municipal users and enhance instream conditions to benefit salmonids. In exchange for lining reaches of MWCD's main canal, MWCD will permanently allocate the volume of water conserved, estimated at 660 AFY, for instream benefit. The public benefit results in increased and more flows for fish and wildlife, a public trust resource.

   The City of Montague and Shasta Valley, Siskiyou County, California, are recognized as Disadvantaged Communities and are the population directly served by this project. Indirectly, the project benefits other disadvantaged fishing dependent and Tribal communities through enhancement of instream habitat for steelhead, lamprey, Chinook and coho salmon. The project also benefits fishing dependent communities that depend on Klamath stocks of salmon on the northern California Coast.

   This project is located in Shasta Valley grounwater basin (1-004), which is a medium priority basin as identified by the CASGEM program. Siskiyou County Flood Control and Water Conservation District, which serves as the Groundwater Sustainability Agency (GSA) for the Shasta Valley groundwater basin, is in strong support of this project. As indicated in the attached letter of support, the project would benefit the Shasta Valley groundwater basin and the Shasta River watershed, and assist the GSA in reaching its groundwater sustainability goals. (See attached GSA letter of support).

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.

   This funding request is for the last section of approved and permitted unlined canal in the southern reach of the main canal. While increasing delivery dependability to agriculture and municipal water for the City of Montague, this proposal presents numerous opportunities to enhance instream conditions in the most important spawning and rearing reach of the Shasta River, specifically for the listed SONCC Coho salmon. The limited storage this year was used for human consumption, instream enhancement and fire protection. The newly lined 1.3

miles of canal was able to speed up delivery time and conserve water through reduced conveyance. Conserved water was used supply water to the City of Montague where no alterantives exisited, meet instrem flow objectives in the Shasta River and provide weeks of water for wildfire and strucuture protection on the nearby Lava and Antelope Fires.

The Shasta River just experienced the driest water year on record preceeded by a critical dry year in 2020. MWCD's Dwinnell Reservoir dropped to 4% capacity on October 1, 2021 (full capacity is 49,000 af). MWCD stores water during the winter and spring to provide irrigation water, municipal and water for released for instream benefit. MWCD is working with CDFW and NOAA to provide identifed instream flows volumes to benefit Threatened Coho Salmon and other cold water depenedent species in the Shasta River. MWCD has an Operation's Plan that dictates priority use based on available water in storage. MWCD also has developed water years types to inflorm it's operations plan. Over the past two years, MWCD has had extreme difficulty meeting instream and municipal responsibilities, providing less than than 20 days of irrigation to MWCD users. Increased delivery efficiency and resulting dependable instream dedication is a preferred method to conseve water lost to deep perculation and provide it to the Shasta River below Dwinnell Reservoir for instream benenfit. MWCD has worked with CDFW and NOAA to develop a year round release schedule to benefit Coho Salmon and other cold water dependent species in the Shasta River. Through water conservation, MWCD is working with agencies and neighboring ranching entities to enhance the Shasta River to provide for year round habitat even in the most extreme drought conditions. MWCD's efforts are already providing flow and water quality enhancements while imporving resiliency for multiple benefical uses through storage of winter flows while committing to meet annual flow and municipal responsibilities. This funding request is for the last section of approved and permitted unlined canal in the southern reach of the main canal.

6. Each project must meet one of the following purposes as it relates to drought. Please select the appropriate purpose for your project.
    a. ☒ Address immediate impacts on human health and safety, including providing or improving availability of food, water, or shelter.
    b. ☒ Address immediate impacts on fish and wildlife resources.
    c. ☐ 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 1: INTRAREGIONAL COOPERATION & ADAPTIVE MANAGEMENT
    -Objective 1 - Respect local autonomy and local knowledge in Plan and project development and implementation
    -Objective 2 - Provide an ongoing framework for inclusive, efficient intraregional cooperation and effective, accountable NCRP project implementation
    -Objective 3 - Integrate Traditional Ecological Knowledge in collaboration with Tribes to incorporate these practices into North Coast Projects and Plans

    GOAL 2: ECONOMIC VITALITY

-Objective 4 - Ensure that economically disadvantaged communities are supported and that project implementation enhances the economic vitality of disadvantaged communities by improving built and natural infrastructure systems and promoting adequate housing
-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
-Objective 7 - Enhance salmonid populations by conserving, enhancing, and restoring required habitats and watershed processes

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 on economically disadvantaged 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
-Objective 12 - Promote local energy independence, water/ energy use efficiency, GHG emission reduction, and jobs creation

GOAL 6: PUBLIC SAFETY
-Objective 13 - Improve flood protection, forest and community resiliency to reduce the public safety impacts associated with floods and wildfires

PROJECT BENEFITS TO DISADVANTAGED COMMUNITIES AND TRIBES:
MWCD is the sole provider of municipal water to the 1,400+ residents in the City of Montague as well as irrigation water for 15,500 acres surrounding Montague in the Shasta Valley. Two hundred twenty families depend on MWCD to deliver water to contribute to thier income base. MWCD also provides releases for instream benefit that supports natural resources and coastal communities that depend on commercial and recretional fishing.

The City of Montague and Shasta Valley, Siskiyou County, California, are recognized as Disadvantaged Communities and they are the population directly served by this project. Indirectly, the project benefits other disadvantaged fishing dependent and Tribal communities through enhancement of instream habitat for steelhead, lamprey, Chinook and coho salmon. The project also benefits fishing dependent communities that depend on Klamath stocks of salmon on the northern California Coast.

8. Describe the Primary Benefit of the project.
   Quantified benefit: The primary benefit of this project will provide 660 AFY of conserved water that will be permanatly dedicated to an instream flow schedule approved by State and Federal agencies while maintaining water deliveries for agriculture and municipal purposes. Increased flow will improve stream habitat for up to six miles of the Shasta River throughout the year. This project implements recommendations by NOAA and CDFW to enhance habitat for coho, steelhead, and Chinook along with other aquatic species in the Shasta River. This project will provide for long term delivery efficiency, and increased dependability of all beneficial uses of water in the Shasta River, while also meeting instream flow objectives especially during drought years.
   Units (Drop down):Acre feet per year If other please enter:
   Benefit Type: Water Conservation If other please enter:

9. Describe the Secondary Benefit of the project:
   Quantified benefit:
   This project will provide up to 6.0 cfs of cold water for instream over summering habitat in the Shasta River for coho, steelhead, and Chinook along with other aquatic species. The project will also increase delivery dependability to MWCD's irrigation and municipal water for the City of Montague, helping MWCD meet its multiple delivery objectives. Secondary benefits also include flood protection for infrastrucutre and communities downstream of Dwinnell Reservoir.
   Units (Drop down):Cubic feet per second If other please enter:
   Benefit Type: Ecosystem/Habitat Restoration If other please enter:Municipal and flood protection

10. Please briefly describe how the project will achieve the claimed benefits.
    One of the critical limitations of MWCD in meeting demand is the inefficiency of the main canal where 28% of the flow in the canal is lost over the most ineffiicent 8.4 miles of the main canal. Further, the canal inefficiencies are often exacerbated in drought years as earthen ditches crack and leak even more. By lining 6,000' feet of main canal, MWCD proposes to permanently dedicate another 660 AFY of conserved water to instream benefit as a direct result of this project.

11. Briefly describe how the community/area benefiting from this project is being impacted by the current drought.
    The Shasta River just experienced the driest water year on record preceeded by a critically dry year in 2020. The System was identified in the State Water Resources Control Board SAFER assessmetn as a system at risk of be3ing able to continue to provide safe drinking water. Montague Water Conservation District was able to aquire an emergency petition to supply water to the City of Montague via the Shasta River as a conduit which also provided instream flow for 23 miles of the Shasta River before being diverted for the City of Montague. The conserved water was also used in fire protection during the Lava and Antelope Fires. The Shasta River Dam No. 60.000-Dwinnell Reservoir-Lake Shastina was also used during this current drought to supplement flows to reach curtailment flow targets for migrating salmon.

12. How will this project alleviate the impacts described in your answer to Question 11?
    The project will increase delivery efficiency and use the conserved watr to meet instream flow objectives and municipal needs for the City of Montague. All of the water conserved will be provided for instream use to reduce the conflict between agricultural, municipal and instream uses in the the Shasta River. Infrastructure improvements attain efficient delivery and operations within MWCD facilities, help MWCD meet multiple use objectives with limited water resources, especially during drought conditions.

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	30,000		
(b)	Land Purchase / Easement			
(c)	Planning / Design / Engineering / Environmental Documentation	40,000		
(d)	Construction / Implementation	900,000		

	TOTAL COSTS	**970,000**		

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

    Local funding is not available for implementation of canal lining. If State funding is not secured, the project will be delayed until MWCD is able to secure other State or Federal grant funds to support implementation. If a reduced amount is awarded, MWCD could reduce the extent of canal lining that is installed; however, any reduction in canal lining would have a corresponding reduction in conserved water that will be permanatly dedicated for instream benefit.

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.

    MWCD is seeking implementation funds to cost share to line 6,000' of MWCD's main canal where significant transmission or delivery loss occurs. In exchange for lining reaches of MWCD's main canal, MWCD will permanently allocate the volume of water conserved, estimated at 660 AFY, for instream benefit. MWCD is working with the SWRCB to protect the conserved water for instream use through California Water Code 1707 and change petitions. MWCD has been conducting investigations, has engineered designs and has been meeting with agencies over the last decade to refine the scope and accomplish attainable objectives identified in MWCD's long term conservation and operations plans. MWCD is working with CDFW and NOAA to provide idendtifed instream flows volumes to benefit Threatened Coho Salmon and other cold water depenedent species in the Shasta River. Water provided to the City of Montague via the Shasta River from Dwinnell Reservoir enhances instream flow objectives while effieiecntly deliverng water to the City of Montague.

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.

    MWCD has an easement along the canal and has reached out to all landowners and notified them of the project. All landowners have responded that they are aware and allowing of the project.

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

    Yes- MWCD will retain the designing Engineering Firm, Rh2 Engineering, to oversee implementation of the project and provide as-built plans.

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.

    MWCD has an approved CEQA exemtpion for canal lining.

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

    The exsiting canal reaches proposed for lining are currently earthen canals. Signifncant seepage loss occurs as a result of the pourous ditches. MWCD proposes to line the earthen ditches by first creating improved access on exisitng maintenance roads to provide access for concrete trucks. Using heavy equipment, the canal is then reprofiled and graded to form and trapezodal shaped canal with a constant slope. When the canal is shaped and refined, a geomembrane liner is placed in the canal and the sides of the liner are staked. The final step includes a concrete truck feeding a concrete pump that prssure blasts the concrete against the geomembrane liner. The shotcrete is sprayed on with a crew of laborers. The shotcrete is expected to provide 40-70 years of effective life. MWCD has some reaches of canal lining that have been effective for nearly 60 years.

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	7/1/2022	2/1/2024
(b)	Land Purchase / Easement		
(c)	Planning/ Design / Engineering / Environmental Documentation	9/1/2022	4/1/2023
(d)	Construction/ Implementation	10/1/2022	11/1/2023

COUNTY OF SISKIYOU

Flood Control & Water Conservation District

P.O. Box 750 ● 1312 Fairlane Road, Yreka, CA 96097
Phone: (530) 842-8012, Fax Number: (530) 842-8013

January 4, 2022

Financial Assistance Branch
Department of Water Resources
PO Box 942836
Sacramento, CA 94236
Attention: Round 2 IRWM Implementation Grant Program

Re: Support of MWCD's North Coast Regional Partnership Proposal

To Whom It May Concern:

The Siskiyou County Flood Control and Water Conservation District, which acts as the Groundwater Sustainability Agency (GSA) for the Shasta Valley groundwater basin, is in strong support of the Montague Water Conservation District's (MWCD) proposal, **Montague Water Conservation District, Main Canal Lining for Instream Benefit,** benefitting the Shasta Valley groundwater basin and the Shasta River watershed, a key Klamath River tributary.

In-stream flow and water quality needs often conflict with irrigation demands in the Shasta River. MWCD is the largest irrigation district in the watershed and the only entity with significant storage on the Shasta River. MWCD owns and operates Dwinnell Reservoir, with a storage capacity of 49,000 acre-feet. In addition to providing irrigation water, MWCD supplies municipal water to the City of Montague and is working to secure State Water Resources Control Board's approval to also provide conserved water to fish and wildlife through improving delivery efficiency of MWCD's main canal.

MWCD has long worked with the California Department of Fish and Wildlife, NOAA Fisheries and other partners to develop a comprehensive water-conservation strategy to enhance in-stream flows to protect and enhance Shasta River fisheries. The proposed project enhances flows in the Shasta River throughout the calendar year based upon an agency approved flow schedule that improves conditions for Threatened Coho Salmon and other cold water dependent species.

Through this grant application, the District is seeking funding to line a 6,000' reach of MWCD's Main Canal where significant seepage loss occurs. In exchange for lining a reach of MWCD's Main Canal, MWCD will permanently dedicate 660 acre-feet annually for in-stream benefit. The proposed project also increases the reliability of deliveries for irrigation and municipal purposes.

Updating the District's infrastructure will conserve water, assist the GSA in reaching its groundwater sustainability goals, enhance imperiled salmon runs and move the community toward resolve of long-running local conflicts. This project is a wise, long-term investment that has gained broad support. The Siskiyou County Flood Control and Water Conservation District approved this letter on January 4, 2022, by the following vote:

AYES: Directors Criss, Valenzuela, Ogren and Kobseff
NOES:
ABSENT: Director Haupt
ABSTAIN:

Sincerely,

DocuSigned by:
Brandon A. Criss
A1160BC61036457...

Brandon A. Criss, Chair
Siskiyou County Flood Control and Water Conservation District