

Yuba IRWMP- NYWD-03
Project Solicitation Form 2019¹

Please fill out the following information to the best of your ability/knowledge. Once the project has been received and a preliminary review completed, the project team will work with you to develop additional information.

Project Sponsor Contact Information

Lead Agency/Organization	North Yuba Water District (NYWD)
Name of Primary Contact(s)	Jeff Maupin, General Manager
Mailing Address	PO Box 299, Brownsville, CA 95919
Email Address	jmaupin@nywd.org
Phone (###) ###-####	(530) 675-2567
Project Partners/Collaborators	

General Project Information

Project Title	Forbestown Ditch to Pipeline Replacement Project
Project Total Budget, based on current knowledge	\$8,244,251
Project Funding Match, if any	Not required - DAC
Total Project Funding Request	\$8,244,251
Can a detailed cost estimate be provided upon request?	Yes
Project Location (map if available)	The project area includes conveyance facilities beginning in the northeast quarter of Section 33, Township 20N, Range 7E, Mount Diablo Meridian at the South Fork gauging station 14 (SF 14) 39°33'07.8"N, 121°11'36.9W, located on a parcel of land identified as APN 073-200-004. The conveyance ditch proceeds generally in a southerly direction with an alignment meandering for the most part parallel to the natural topographic contours. One (1) mile below SF 14, the Forbestown Ditch intersects with Oroleve Creek Ditch, and then proceeds generally in a southwesterly direction parallel to the natural topographic contours until it terminates at 39° 31' 50.48"N, 121° 12' 51
City/Community	Brownsville, Forbestown, Rackerby, Challenge
Watershed/subwatershed	The Project is located in the Yuba River Watershed. Project water is diverted from the South Fork of the Feather River via a penstock operated by the South Feather Water and Power Agency.
Groundwater Basin	N/A
Project Type (highlight in gray all that apply)	Conceptual Feasibility Study Study/Assessment

¹ Completed Project Solicitation Forms should be sent via email to Katie Burdick at admin@burdico.net

	Planning Engineering/Design Permitting CEQA/NEPA Facility Construction Restoration Monitoring Best Management Practices Acquisition Demonstration/Pilot Project
--	--

Project Description

Write a narrative briefly describing the project components and/or characteristics (maximum of 300 words).

The NYWD has engaged in many technical evaluations. The most recent is the engineer's report that was funded by the SWRCB. Please refer to the February 2019 report prepared by NorthStar. The project will involve the conversion of roughly 9 miles of ditch to a piped system (known colloquially as a 'ditch to pipe' system improvement). All ancillary alignment improvements are also included in the project.

I. Project Rationale/Issues Statement

Briefly describe the need for the project and the desired outcomes/deliverables (maximum of 200 words).

The North Yuba Water District (NYWD) receives surface water diverted from the South Fork of the Feather River that is conveyed via the Forbestown Ditch to a water treatment facility, from which water is conveyed to the surrounding communities of Challenge, Brownsville, Rackerby and Forbestown. This water conveyance facility was originally constructed in the 1860s and has been in service since that time, providing irrigation and domestic water to the residents in the localized area of Yuba and Butte Counties.

The storage pond at the NYWD Water Treatment Plant only has a ten day holding capacity. Any time the Forbestown Ditch has experienced storm related damage, or routine maintenance, it can only be done in short windows of time to ensure adequate supplies for treatment and delivery. This community cannot afford to obtain water supplies in any other manner (i.e. hauled water), and the increased costs to the District for ongoing maintenance of the Ditch are not sustainable.

The NYWD has not received time extensions for existing water rights permits due to the extent of the water losses in the aging system conveyance. Completing this project will address a primary regional issue and ensure adequate and reliable water supply through the repair, replacement and retrofitting of aging infrastructure. The Forbestown Ditch has deteriorated over the years and is in need of repair due to its susceptibility to failure during storm events, conveyance losses, unpermitted diversions and inability to meet operational requirements.

This project will place a pipeline at grade within the existing ditch, providing the following benefits:

- **Reduce water losses in the ditch.** Current losses in the Ditch are upwards of 50% of the water diverted at the intake. This loss factor is expected to drop to roughly 5% after the pipe installation, and based on historical data, this could produce a water saving of 4,120 AF to 7,620 AF annually.
- **Improve reliability of supply to the Water Treatment Plant.** Historically, extreme weather events and fires have caused a number of failures and areas of distress along the Ditch that have caused water conveyance to be disrupted or stopped completely. Installation of a pipeline in the existing ditch will help to ensure uninterrupted delivery of water to the treatment plant while reducing staff costs associated with repairs and daily inspections.

- **Improve water quality of the supply delivered to the Water Treatment Plant.** The proposed project will increase the quality of water conveyed to the water treatment plant in Forbestown by avoiding water quality degradation associated with the open ditch conveyance. Historically these have included turbidity, aluminum accumulation; and the potential for man-made pollution of any kind is ever present.
- **Improve facility safety.** The current ditch is accessible to the public, and in some areas, to a children's summer camps. By placing an enclosed pipeline in the existing ditch, the possibility of injury to system contamination, accidental or otherwise, will all but be eliminated.