Yuba IRWMP- LCWD-06

Project Solicitation Form¹

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	Linda County Water District
Name of Primary Contact(s)	Brian Davis, General Manager
Mailing Address	1280 Scales Ave, Marysville, CA 95901
Email Address	bdavis@lindawater.com
Phone (###) ###-####	(530) 743-2043
Project	California Department of Water Resources (funding match)
Partners/Collaborators	

General Project Information

Project Title	Well 17 Treatment Plant and Storage Tank Project
Project Total Budget, based	\$11,848,000
on current knowledge	
Project Funding Match, if any	-\$999,950 (Secured DWR Prop 1 Planning Grant)
	-Linda County Water District
	-Other funding sources currently being pursued, including DWSRF in the
	amount of \$5,000,000
Total Project Funding	\$5,848,050 or Maximum funding available. Linda County Water District to
Request	provide remaining funds
Can a detailed cost estimate	Yes
be provided upon request?	
Project Location (map if	Marysville, CA along Linda Ave (See attached)
available)	
City/Community	Marysville
Watershed/subwatershed	Feather River Watershed
Groundwater Basin	South Yuba Sub-Basin
Project Type	Conceptual
(highlight in gray all that	Feasibility Study
apply)	Study/Assessment
	Planning
	Engineering/Design
	Permitting
	CEQA/NEPA
	Facility Construction
	Restoration
	Monitoring
	Best Management Practices
	Acquisition
	Demonstration/Pilot Project

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

Project Description

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

LCWD is currently in the process of constructing a new groundwater well, Well 17, with activities currently focusing on equipping and testing. The well has been drilled and equipping is scheduled to be completed by 2020. Once complete, the well will be available for production but must be treated before being used for potable purposes. The proposed project consists of the construction of a new water treatment plant that will treat groundwater from LCWD's new Well 17. The treated water would be conveyed to a nearby 1 million-gallon (MG) water storage tank through a conveyance pipeline, both of which are to be constructed as part of the proposed project. Construction level bidding documents will be completed and ready for review by 5/31/19.

The project consists of the following improvements:

- Forced draft aeration for removal of naturally occurring entrained gases (methane, carbon dioxide and hydrogen sulfide)
- On-site chlorine generation system for chemical oxidation and disinfection
- Pressure filtration treatment facilities to remove iron and manganese
- A control building at the well site to house electrical and chemical feed equipment
- An electrical building to house electrical and control equipment at the storage tank site
- Welded steel backwash water tank
- Two (2) booster pump stations, one of which will be at a clear well located beneath the aeration tower and the other outside of the 1.0 MG storage tank that will feed into the distribution system
- A new sewer connection.
- Two (2) standby diesel engine generators accompanied with their own fuel tank for emergency power, one per site
- One (1) 1.0 MG prestressed concrete storage tank, necessary appurtenances and connections
- Pipeline connection between the well and storage tank site, and a connection from the tank site to the distribution system
- Miscellaneous site improvements, including, site piping, grading, paving and fencing, for two (2) sites

I. Project Rationale/Issues Statement

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

LCWD serves the disadvantaged community of Linda in Yuba County. A supply evaluation was conducted as part of LCWD's 2018 Water System Master Plan to determine the District's available capacity to meet current and future demands. The District's available supply sources were compared with the projected maximum day and peak hour demands to confirm the expected available system capacity. The analysis revealed that the District's Firm Capacity falls short of meeting existing, 2030, and buildout (2050) peak hour demands (PHD). In addition, the District is not capable of meeting current PHD plus fire flow (FF) demands with their current total capacity.

Groundwater contamination remains a threat to the District's water supplies. Currently, Well 12 is offline due to elevated benzene levels. Wells 12 and 14 are near one another, and a likely scenario is that higher concentrations of benzene will be drawn toward Well 14, and Well 14 may also have to be taken offline.

In addition to groundwater contamination, District supplies are threatened by declining well productivity due to mineral fouling caused by iron and manganese oxides. Well 15, the District's second largest supply well has undergone multiple rehabilitation efforts, but the well currently operates at 60 percent of its original production capacity.