

Surface Water Measurement Program YCWA-16

I. Project Sponsor Contact Information

Lead Agency/Organization	Yuba County Water Agency
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II. General Project Information

Project Title	Surface Water Measurement Program
Project Total Budget	TBD
Project Funding Match	TBD
Project Funding Request (This amount should equal the total budget minus secured funding match)	\$500,000
Can a detailed cost estimate be provided upon request?	No
Project Location:	Various- regionwide
Could you provide a map of the project location including boundaries upon request?	Yes
County	Yuba
City/Community	Various- regional
Watershed/subwatershed	Yuba
Groundwater Basin	Yuba Groundwater Basin
Project Type	Monitoring Best Management Practices

III. Project Description

The California Bay-Delta Program has identified the need for improved water delivery measurement. The August 2000 CALFED Record of Decision called for legislation requiring the appropriate measurement of all water uses in California. One of the first steps towards that goal was the formation of a panel of independent experts to help define appropriate agricultural water use measurement. The findings of the panel's report were presented in the Independent Panel on Appropriate Measurement of

Agricultural Water Use—Final Report issued in September 2003.

Yuba County Water Agency (YCWA) is looking to implement a surface water measurement program that includes the installation of weirs, gages, and SCADA system to measure surface water flows diverted from the north and south diversions on the Yuba River. This project would include:

- The development of a measurement plan to guide the development of the measurement program;
- Identification of the hardware, software, and staffing requirements to implement the program;
- Installation and calibration of the weirs or flumes and installation of the SCADA systems.

IV. Project Rationale/Issues Statement

Improved surface water measurement and analysis will support transfers related to the Lower Yuba River Accord, and also water deliveries to member units via contracted water allocations and/or water rights held by the member units. In addition, the automation through SCADA will reduce operating costs for YCWA and Member Units. This project is the first step in preparing a surface water measurement program that will enable the accumulation and dissemination of information concerning the patterns of water use in the region and will enable managers to improve their water usage.

The project specifically addresses the following identified regional issues:

Water Use Efficiency/Water Conservation

Promote and implement policies and practices to increase water use efficiency *and* water conservation in municipal and agricultural sectors;

Regulatory Compliance

Mitigate for the impacts of regulatory compliance on water management decision-making and processes, including increased costs and decreased opportunities for collaboration;

Climate Change

Respond to projected climate change impacts on water supply reliability, water quality, public safety and watershed health and develop regional and inter-regional adaptive management strategies.

V. Goals/Objectives/Performance Metrics

Goals Addressed by the Project	Goal 1: Ensure adequate and reliable water supply that meets the diverse needs of the region; Goal 6: Address climate vulnerabilities and reduce greenhouse gas emissions.
Objectives Addressed by Project	1.2 Promote water conservation and water use efficiency by instituting various techniques including, but not limited to, groundwater recharge, conjunctive management, irrigation efficiencies, municipal

	<p>water conservation, water recycling and reuse;</p> <p>1.6 Preserve water supplies that support recreational opportunities and agricultural uses;</p> <p>1.7 Support regulatory compliance with current and future state and federal water supply standards;</p> <p>1.8 Promote regional education and outreach regarding water supply issues and needs;</p> <p>6.2 Improve data, modeling and technical analyses to better understand the impacts of climate change on regional and inter-regional water supply and watershed health;</p> <p>6.3 Increase system flexibility and resiliency to adapt to climate variability;</p> <p>6.5 Promote education about climate change/variability and its impacts on water management and watershed health throughout the region;</p> <p>6.6 Promote regional and inter-regional collaboration to implement climate change adaptive management strategies.</p>
<p>What performance metrics will be used to demonstrate that objectives are being met? Wherever possible, provide a quantitative measurement reflecting successful project outcomes.</p>	

VI. Resource Management Strategies

Reduce Water Demand	
Agricultural Water Use Efficiency	<p>Improved estimates of the degree of water reuse in member units;</p> <p>Improved water measurement and reporting capabilities;</p> <p>Improved ability to manage water measurement data;</p> <p>Identifying opportunities to improve water use efficiency</p>
Urban Water Use Efficiency	See above

Improve Operational Efficiency and Transfers	
Conveyance-- Delta	The development of a measurement plan to guide the development of the measurement program;
Conveyance—Regional/Local	Improved computation of regional surface water usage
Water Transfers	Development of program supporting water transfers

VII. Statewide Priorities

Drought Preparedness

- Promote water conservation, conjunctive use, reuse and recycling
- Improve landscape and agricultural irrigation efficiencies
- Achieve long term reduction of water use

Use and Reuse Water More Efficiently

- Increase urban and agricultural water use efficiency measures such as conservation and recycling

Climate Change Response Actions

- Adaptation to Climate Change: Use and reuse water more efficiently
- Reduce Energy Consumption: Water use efficiency

Protect Surface and Groundwater Quality

- Protecting and restoring surface water and groundwater quality to safeguard public and environmental health and secure water supplies for beneficial uses

Climate Change Adaptation

This project takes a regional approach to addressing a full range of identified water supply vulnerabilities. The project would establish a program to increase best management practices, monitoring and data collection to use water more efficiently across the region. The project would, therefore, improve water management system efficiency and ensure greater resiliency amidst climate variability and uncertainties associated with climate change.

GHG Emissions Reduction

This project is currently conceptual and has yet to consider GHG mitigation and emissions reduction strategies. However, this regional water conservation program would reduce energy consumption through increased water use efficiency over time.

VIII. Project Status and Schedule

For Conceptual Projects Only: The Project is currently in the Conceptual Stage: **YES**

IX. Project Technical Feasibility

a. List the water planning documents that specifically identify this project.	
b. List the adopted planning documents the proposed project is consistent with (e.g., General Plans, UWMPs, GWMPs, Water Master Plans, Habitat Conservation Plans, etc.)	Yuba County Agricultural Water Management Plan, December 2012
c. List technical reports and studies supporting the feasibility of this project.	Independent Panel on Agricultural Water Use—Final Report issued in September 2003
If you are an Urban Water Supplier:	
1. Have you completed an Urban Water Management Plan and submitted to DWR?	Yuba County Water Agency (YCWA) does not supply water for direct urban use and is not subject to the Urban Water Management Plan Act (UWMPA).
2. Are you in compliance with AB1420?	See above.
3. Do you comply with the water meter requirements (CWC Section 525)?	See above.
If you are an Agricultural Water Supplier:	
1. Have you completed and submitted an AWMP?	Yes
If the project is related to groundwater:	
1. Has GWMP been completed and submitted for the subject basin?	Yes