

Butte Water District Dual Source Irrigation System Pilot Program Application Solicitation Package

December 2025

1 Introduction

Butte Water District (BWD) has received grant funding from the California Department of Water Resources (DWR), via Sutter County, to implement a Dual Source Irrigation System Pilot Program in Sutter County. The pilot program supports compliance with the Sustainable Groundwater Management Act (SGMA). The program will provide funding to landowners to convert existing groundwater irrigation systems, located in BWD and Sutter County, to dual source irrigation systems, capable of utilizing both groundwater and surface water. This document is the application solicitation package for the Butte Water District Dual Source Irrigation System Pilot Program.

1.1 Background

BWD, as an agricultural water supplier, supplies surface water to growers within its service area in Butte and Sutter Counties. For a variety of agronomic and economic reasons, many growers in the existing BWD service area use pressurized irrigation systems supplied solely by groundwater, despite BWD's highly reliable surface water supply. The benefits of dual source irrigation systems (i.e., a system capable of utilizing both groundwater and surface water) have been documented in nearby areas, including benefits to all groundwater users in the area and benefits to individual growers utilizing the dual systems.¹ By giving growers the flexibility to switch between surface water and groundwater, dual source systems reduce reliance on groundwater pumping, promote water supply reliability, and strengthen drought resilience, contributing to long-term groundwater sustainability in the Sutter Subbasin.

1.2 Program Overview

The Pilot Program will install new dual source turnouts at a minimum of twelve locations. The actual number of turnouts installed and area served will be determined by actual costs and available budget.

BWD will manage an application and selection process to select turnouts for installation. Turnouts for program inclusion will be selected by BWD from eligible applicants, according to pre-determined selection guidelines. BWD will then work directly with selected

¹ Butte County. Evaluation of Restoration and Recharge withing Butte County Groundwater Basins. 2018.

participants to modify and retrofit existing groundwater irrigation systems with equipment needed to convert to dual source irrigation systems, including but not limited to additional district turnouts, on-farm conveyance pipelines, filtration, and pressurization pumps. BWD will use funds from the pilot program to facilitate the application process, evaluate and select improvement sites, review and revise proposed designs, and ultimately reimburse participants for selected designs and improvements.

2 Program Goals

The Dual Source Irrigation Systems Pilot Program aims to:

- **Reduce groundwater pumping by better utilizing surface water supplies.** Installing dual source turnouts lets landowners use available surface water instead of relying solely on groundwater, reducing overall extraction.
 - **Provide flexibility and improved operability to growers.** Dual source systems give growers operational choices, help them adapt to varying water supply conditions, and improve drought resilience.
 - **Support future local adoption of dual source systems.** The program evaluates costs and benefits for both growers and the district, guiding incentives and assessing long-term feasibility.
- Support SGMA implementation for all local groundwater users.** This pilot supports SGMA goals by encouraging sustainable aquifer use, conjunctive water management, and greater drought resilience for the entire subbasin.

3 Dual Source Irrigation System Pilot Program Details

3.1 Eligibility Requirements

Turnouts selected for installation and reimbursement by BWD as part of the Pilot Program will meet the following eligibility criteria:

- The turnout and field(s) served by it are in Sutter County AND Butte Water District.
- The turnout and peripheral components funded by the program will enable participating landowners to utilize Butte Water District surface water supplies at an existing irrigation system.
- Applications must be submitted by or co-signed by the landowner(s) of the field(s) served by the new turnout.

3.2 Site Selection

3.2.1 Application Requirements

Interested applicants begin the process by submitting a completed application to Butte Water District, Attachment A. The application form will include the following information:

- applicant contact information,
- field size,
- turnout location(s),
- number and location of existing irrigation source(s) (e.g., wells and surface water turnouts),
- approximate flow rate of existing irrigation source(s),
- existing irrigation system design,
- approximate reduction in groundwater pumping with proposed improvements.

Each applicant is also required to provide a system design and cost estimate prepared by their selected irrigation system installer². BWD may provide assistance in refining system designs to conform with the program requirements and goals.

Once applications are received, Butte Water District will review each one for eligibility and evaluate them using the criteria in section 3.2.2. BWD may work with the applicant and their installer to refine the proposal so that it aligns with program objectives and technical standards.

3.2.2 Application Evaluation Criteria

Applications that pass eligibility review are then evaluated using a standardized set of criteria to prioritize projects that provide the greatest benefit and align with the program goals. Application will be evaluated on the following criteria:

- acres and crops to be served by turnout(s),
- ratio of estimated overall project cost to anticipated reduction in groundwater pumping,
- feasibility of construction,
- consistency with Program goals.

Applications will be evaluated and BWD will determine for each application whether to approve implementation, reject implementation, or hold the application for future

² Most new dual source turnouts will be retrofit to operate an existing pressurized irrigation system already in place, and applicants may have an existing relationship with a local irrigation installer that designed and installed their existing system.

evaluation. Determinations will be made based on the relative evaluation of costs and benefits of all applications received to date and the remaining budget and time for program implementation.

3.2.3 Notification and Contracting

Successful applications approved for implementation will be notified and move into the design and contracting stage. At this point, BWD will work with applicants and their installers to finalize designs, specifications, and cost estimates. When the applicant and BWD agree on final designs and costs, a formal contract is then executed outlining the approved budget, reimbursement terms, construction schedule, and scope of work.

3.3 Implementation and Construction

3.3.1 Funding for Construction

Pilot Program funding will cover 100% of costs to install a new dual source irrigation turnout that brings surface water to a field that currently utilizes groundwater. Eligible costs will be agreed to in advance of implementation and will be reimbursed upon completion of final inspection and after BWD has been reimbursed by Sutter County for submitted invoices. Eligible costs may include the following:

- Canal gates and pipelines for new gravity turnout from BWD conveyance canal.
- On-farm conveyance pipelines as required to connect surface water turnout to existing on-farm irrigation system.
- Additional filtration as required to utilize surface water supply in existing on-farm irrigation system.
- Additional pressurization pumps, including electric power distribution costs, as required to utilize surface water supply in existing on-farm irrigation system.
- Additional valves, manifolds, and other peripherals as required to utilize surface water supply in existing on-farm irrigation system.

Eligible costs will NOT include the following:

- On-farm irrigation system components not specifically required to incorporate a new surface water supply to a dual source irrigation system, including but not limited to emitters, pipelines, wells and well pumps, and primary filtration for groundwater.

3.3.2 Construction oversight

During construction, applicants manage installation through their own installers while BWD provides oversight and technical support. The applicant or installer submits invoices

to the district for reimbursement, according to the contract terms. Before releasing funds for final payment, BWD will perform a final inspection to verify that the installation matches the approved design and that all contractual obligations have been met.

3.3.3 Responsibility and Ownership

The pilot program is structured to maintain applicant ownership of the dual source systems upon installation. Applicants are responsible for contracting with their preferred installers, managing construction, and maintaining the systems upon installation. Butte Water District provides oversight, technical guidance, and reimbursement, while the responsibility for ownership and operation will stay with the applicant.

3.3.4 Post-Project monitoring and access

To measure long-term benefits, all turnouts installed through the program will include post-project monitoring. At each new dual source turnout, a new flow meter is installed. These meters will be required, and will provide records of surface water deliveries.

3.4 Schedule

Applications will be accepted until July 31, 2026, and all work must be completed by January 31, 2027 to qualify for reimbursement. Table 1 shows overall beginning and ending dates for intermediate milestones. To effectively utilize district resources for oversight and reimbursement, individual turnout installation contracts may include schedule milestones that are more specific than the general dates shown below.

Table 1. Dual source irrigation system pilot program schedule.

Task	Dates
Prepare and distribute materials	12/1/2025
Completed Applications Received	12/1/2025 through 7/31/2026
Review and score applications	Monthly, starting December 2025 through August 2026
Notify recipients	1/1/2026 through 9/1/2026
Finalize designs	1/1/2026 through 10/1/2026
Contract with selected recipients	1/1/2026 through 10/31/2026
Construction and installation oversight	2/1/2026 through 1/31/2027
Notice of completion and final payment	2/1/2026 through 2/28/2027

Appendix A - Dual Source Irrigation System Pilot Program Application

Dual Source Irrigation System Pilot Program Application

Please complete this application in its entirety and submit electronically to donnie@buttewater.net OR by mail or in person at 735 Virginia St., Gridley, CA, 95948. Applicants submitting more than one project for consideration must complete a separate application for each proposed project.

Refer to the Butte Water District Irrigation System Pilot Program Application Solicitation for program background, goals, selection criteria, and other details. For questions or clarification, contact Butte Water District (donnie@buttewater.net or (530) 846-3100).

The district will execute an agreement with each selected applicant that dictates specific terms and conditions for approved projects.

Applicant Information

Organization name: _____

Contact person: _____

Mailing address: _____

City: _____ **County:** _____ **ZIP:** _____

Phone: _____ **Email:** _____

Field Information

Please provide information on the parcel or parcels that will be served by the new turnout.

APN(s) _____ **Total acres:** _____ **Crop(s):** _____

Landowner Information

Is the Applicant listed above the landowner for the specified Field? Yes / No

If No, please complete the following:

Landowner name: _____

Phone: _____ **Email:** _____

Eligibility Checklist

Please select any of the following criteria that apply to this application. All of the following must be true for an application to be considered.

- ☐ The turnout and field(s) served by it are in Sutter County.
- ☐ The turnout and field(s) served by it are in Butte Water District.
- ☐ The turnout and peripheral components funded by the program will enable participating landowners to utilize Butte Water District surface water supplies at an existing irrigation system.
- ☐ Applications must be submitted by or co-signed by the landowner(s) of the field(s) served by the new turnout.

Existing irrigation system information

Please provide information on the existing irrigation system for the parcels served by the new turnout.

Groundwater well location (lat/long, or attach map): _____

Is there power at existing well? Yes / No

If No, please estimate distance to nearest power source: _____

Is there filtration at existing well? Yes / No

If Yes, please describe: _____

Approx. static depth to groundwater (ft): _____ **Approx. pumping water level (ft)** _____

Pump design flow (GPM): _____ **Pump design power (HP):** _____

Emitter type(s): _____ **Emitter spacing(s):** _____

Proposed new turnout details

Please provide information about the proposed new turnout and irrigation system components

Turnout coordinates (lat/long or attach map) _____

Is there an existing or old BWD turnout at this location? Yes / No

Will the new turnout from the district canal need to cross a drainage ditch? Yes / No

Will the new turnout from the district canal need right of way access across a third party property? Yes / No

Please select which of the following components are included in your proposed design for the new turnout and to integrate it into your existing system:

☐ Conveyance pipeline, *if included*, **approximate length** ____ and **diameter** ____ of pipeline

☐ Additional filtration, *if included*, **please describe (number/type/size of filters)**

☐ Additional pumps for pressurization of surface water, *if included*, **please describe (type, size)**

☐ Extension of electrical power lines, *if included*, **approx. distance to nearest service**

Preferred irrigation installer

If you have a preferred local irrigation installer, please provide their information

Irrigation installer: _____

Installer contact person: _____

Phone: _____ **Email:** _____

Supporting Information

Please attach a complete irrigation design for proposed improvements (required). Irrigation designs must be prepared and presented using industry standard professional practices. Designs must clearly indicate component specifications, quantities, locations, and schematics.

Additional documentation

Please attach any additional documentation that supports your application, such as:

1. Site maps or diagrams
2. Photos of existing system
3. Irrigation designs and specifications for existing system

BWD reserves the right to request additional supporting documentation or design details in order to assess the proposed design and application.