



Application Form for 2024 Local Cooperative Solution for Overlying or Adjudicated Groundwater Rights in Scott River and Shasta River Watersheds

Please complete this form if you plan to implement a groundwater local cooperative solution (LCS) for the 2024 irrigation season under the Scott River and Shasta River watersheds [emergency regulation](#). A separate application should be submitted for each type of groundwater LCS proposal. **The form and attachments are due by April 15, 2024.**

How to Submit: To submit your application and associated required materials see Section 2 you can:

- Use the online form
- Email: DWR-ScottShastaDrought@waterboards.ca.gov
- Mail:
 - State Water Resources Control Board
 - Division of Water Rights - Instream Flows Unit 1
 - 1001 I Street - 14th Floor
 - Sacramento, CA 95814

Section 1: Applicant Information

Name	Dane Sousa
Name of Farm, Ranch, or Business	Sousa Farm

By typing or signing your name below and submitting this form to the State Water Resources Control Board (State Water Board) you hereby certify that the submitted information is true and correct to the best of your knowledge.

Name: *Dane Sousa*

Date: 04-15-2024

Section 2: Application Checklist

Below is a list of items to include with your application form:

- Application Form (paper or email submittal accepted).
- If working with a Coordinating Entity (Section 4 of application), submit a signed Binding Agreement (paper or email submittal accepted).
- Supporting Information (electronic submittal only). Submit the applicable information based on selected groundwater LCS.
 - Best Management Practices Groundwater LCS (see Section 7 of application)
 - Description of how you will implement of all required components.
 - Map(s) with each well and field labeled.
 - Graduated Groundwater Cessation Schedule LCS (see Section 8 of application)
 - Description of how you will reduce irrigation compared to standard practices on the property (e.g., practice in a similar unregulated year).
 - Map(s) designating the area where diversions will cease by the required dates and well location(s).
 - Percent Reduction Groundwater LCS (see Section 9 of application)
 - Description of verifiable water reduction actions that will be implemented.
 - Spreadsheet with monthly pumping volumes for baseline year and current year. Use one row per irrigation method per field.
 - Map(s) with each well and field labeled.
- A description of metering (Section 6 of application) in place for groundwater well extractions and an agreement to record such extractions daily and report monthly to your Coordinating Entity and/or State Water Board.
- Groundwater Well Information (see Section 5 of application) (paper or email submittal accepted).
- List of Fields, Assessor's Parcel Numbers (APNs), and Water Rights (see Section 10 of application) (paper or email submittal).

Section 3: Requirements for All Groundwater LCS Proposals

- **Deadline:** Proposals must be submitted to the State Water Board by April 15, 2024.
- **Implementation:** Proposals must be implemented during the entirety of the irrigation season (including prior to approval), unless the applicant withdraws the application.
- **Metering:** Proposals must include a description of metering that will be used to measure groundwater well extractions and information on how extractions will be recorded daily and reported monthly to the Deputy Director or Coordinating Entity, as applicable. Please note the Coordinating Entity is required to provide this data to the State Water Board.
 - Funding for Meters: The State Water Board has funding and technical support available for some amount of metering and those interested in such assistance should promptly contact State Water Board staff using the "Contact Information" at the end of this application.
 - Time Schedule for Metering: If a meter is not currently installed and may not be installed prior to the start of the irrigation season, the applicant must provide information that substantiates the applicant's efforts and actions taken to get a meter installed, and a timeline for meter installation.
 - Waivers: Proposals may include information requesting waiver of the metering provisions in the following instances:
 - Groundwater wells that irrigate less than 30 acres. Information supporting the request to waive metering provisions must be provided, including distance of the groundwater well to surface water. The State Water Board may require other information in lieu of monitoring.
 - Metering is not feasible. Substantiation for the infeasibility of installing a meter must be provided.

Section 4: Coordinating Entity

Select only one 1) box below. Please note that a Coordinating Entity is not required. If a Coordinating Entity is not selected, parties will work directly with the State Water Board to provide metering data and ensure performance of the groundwater local cooperative solution. For more information on Coordinating Entity provisions, refer to Section 875(f)(1)(G) in the [emergency regulation](#).

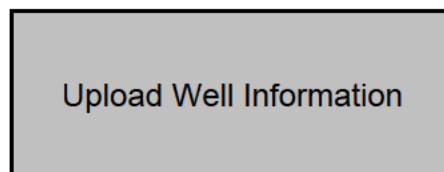
- | | |
|---|--|
| <input checked="" type="checkbox"/> California Department of Fish Wildlife
Contact: Crystal Robinson
(530) 340-0767
crystal.robinson@wildlife.ca.gov | <input type="checkbox"/> Shasta Valley Resource Conservation District
Contact: Rod Dowse
530 598-1253
rdowse@svrccd.org |
| <input type="checkbox"/> Siskiyou Resource Conservation District
Contact: Evan Senf
530 643-1585
evan@siskiyourcd.com | <input type="checkbox"/> Scott River Water Trust
Contact: Chris Voigt
(916) 396-0131
chrisb.voigt@gmail.com |
| | <input type="checkbox"/> I select not to work with a coordinating entity. |

Section 5: Groundwater Well Information

Complete the table below or upload an attachment for groundwater wells that are part of the proposed groundwater LCS.

Well Name	Well Coordinates ¹

For assistance in finding well coordinates, you can use Google Maps (www.google.com/maps).



Section 6: Metering Information

Please describe the metering for all groundwater wells covered by this groundwater LCS. Fill in the box below, upload an attachment, or email a document or spreadsheet with this information.

- a. Describe how you will record daily extractions and report monthly pumping volumes. Include a description of all water uses associated with each groundwater well that is part of this groundwater LCS. For example, "the ranch manager will log meter readings at Well 1 and Well 2 and take a picture of the meters each week. They will note what the water is being used for - Well 1 will irrigate 50 acres of grain on fields A and B, 100 acres of pasture on fields E, G, and Z, and Well 2 will irrigate 75 acres of alfalfa on field Y. The manager will send the logs and photos to the Water Board around the first of each month."

- b. For groundwater wells that are NOT currently metered, please describe the time schedule and plan to install meters and efforts to obtain a meter before the initiation of groundwater diversions covered by this groundwater LCS. If you want to file for a waiver to the metering requirement please use the box below and include information on why metering of your well(s) should be waived. Be sure to include total irrigated acres, distance of the well(s) from surface water, description of why metering is infeasible, if applicable, and any additional information that supports your waiver request.

Each Well has less than 30 acres that are irrigated. For this reason I am requesting a waiver for a meter.

Upload Attachment

Select the type of groundwater LCS you are applying for and complete the corresponding sections of the application.

- Best Management Practices Groundwater LCS - Complete sections 7 and 10
- Graduated Groundwater Cessation Schedule LCS - Complete sections 8 and 10
- Percent Reduction Groundwater LCS - Complete sections 9 and 10

Section 7: Best Management Practices Groundwater LCS

1. Provide the total amount of all irrigated acreage (with units) covered under your proposal for a Best Management Practices Groundwater LCS:
2. Upload an attachment, write in the box, and/or email a description of the irrigation system that will be used under this proposal, specifying details of your low-energy precision application system, soil moisture sensors, and any corners that will be irrigated. (Refer to Section 875(f)(4)(D)(vii) of the [emergency regulation](#).)

3. Provide a map(s) of each field with labels for well s , type of best management practice, and field crop type. Upload as an attachment or email.

Upload Map(s)

4. Certify the following by initialing or checking each box:

- a. I certify the use of a low-energy precision application (LEPA) system on all irrigated acreage covered under this groundwater LCS.
- b. I certify to not use end guns for irrigation for the duration of the season.
- c. I certify to cease irrigation of corners after June 15, 2024.
- d. I certify to use soil moisture sensors to inform irrigation timing, and maintenance of such records, which I will make available for inspection by the Coordinating Entity, if applicable, and/or the State Water Board.
- e. I certify that I will further limit irrigation based on water year, in the event of the hydrologic condition noted in i or ii below. If this requirement is triggered, the State Water Board will inform all Best Management Practices Groundwater LCS applicants for the applicable watershed(s). Please note, a yes certification is required for a Groundwater Best Management Practices LCS to be accepted.
 - i. Scott River Watershed: Snow pack of 80% or less of the Department of Water Resources California Data Exchange Center's first May snow water equivalent station average (or the average of the first April measurement if May snow pack measurements are not gathered) in Scott River watershed.
 - ii. Shasta River watershed: A water year determination of dry or very dry in the Shasta River watershed, as determined under Table 2 of the March 2021 Montague Water Conservation District water operation plan.

Section 8: Graduated Groundwater Cessation Schedule LCS

A Graduated Groundwater Cessation Schedule LCS may be approved if the applicant provides evidence that irrigated acreage is reduced compared to standard practice on the property (e.g., practice in a similar unregulated year). If applicable, please take crop rotation and number of alfalfa cuttings into account. Under this groundwater LCS type, the applicant must select one of two potential irrigation schedules, listed below. See section 875(f)(4)(D)(vi) of the [emergency regulation](#).

1. Provide the total amount of irrigated acreage (with units) under your proposal for a Graduated Groundwater Cessation Schedule LCS:
2. Select the irrigation schedule you certify to implement.

Option 1: By the dates below, pumping to irrigate the following percentages of irrigated acres shall cease:

- 15% by July 15,
- 50% by August 15, and
- 90% by August 31, with a maximum of 8 inches of water to be applied to the remaining 10% of irrigated acres during the remainder of the irrigation season. This 10% can be on land previously fallowed.

Option 2: By the dates below, pumping to irrigate the following percentages of irrigated acres shall cease:

- 20% by July 20,
- 50% by August 20, and
- 95% by September 5, with a maximum of 6 inches of water to be applied to the remaining 5% of irrigated acres during the remainder of the irrigation season. This 5% can be on land previously fallowed.

4. Please upload an attachment, write in the box, or email a description that demonstrates that the proposal reduces irrigation as compared to standard practices on the property (e.g., practice in a similar unregulated year). If applicable, please take crop rotation and number of alfalfa cuttings into account.

5. Please upload or email a map(s) that identifies which well(s) and field(s) are associated with each cessation date covered by this groundwater LCS.

Section 9: Percent Reduction Groundwater LCS

The applicable percent reduction in groundwater pumping noted below must be demonstrated for the Percent Reduction Groundwater LCS consistent with section 875 f (4)(D)(v) of the [emergency regulation](#), and summarized below.

- **Scott River Watershed:** A net groundwater pumping reduction of 30% throughout the irrigation season (April 1 – October 31) and a monthly reduction of 30% between July 1 through October 31.
- **Shasta River Watershed:** A net groundwater pumping reduction of 15% throughout the irrigation season (March 1 – November 1) and a monthly reduction of 15% between June 1 through September 30.
- The relevant water use reduction shall be based on a comparison to a baseline irrigation season (i.e., 2020, 2021, 2022, or 2023).
 - BUT, if the previous year baseline is higher than the following applied water rates:
 - 33 inches per year for alfalfa,
 - 14 inches per year for grain, or
 - 30 inches per year for pasture
 - ❖ Then the above values shall be used as the baseline UNLESS the applicant provides sufficient additional information supporting an alternative baseline.
- Please provide the total amount of irrigated acreage (with units) under your proposal for a Percent Reduction Groundwater LCS.
- If you are proposing a Percent Reduction Groundwater LCS, attach or email the following files to the State Water Board and your Coordinating Entity.
 - a. A description of practices that reduces groundwater pumping and how the State Water Board or Coordinating Entity, if applicable) can verify those actions.

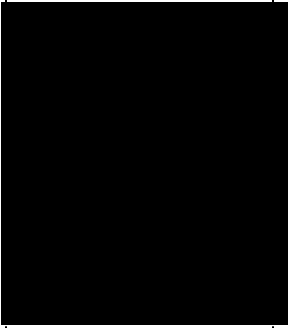
see attached file

- b. A spreadsheet with monthly pumping volumes for the selected baseline year and current year. Use one row per irrigation method per field.

- c. Map(s) with each field labelled.

Section 10: List of Fields, APNs, and Water Rights

List the fields associated with this groundwater LCS application, if each property is owned or leased, and the assessor's parcel number (APN) that contains each field. If a field is on multiple parcels, provide the APN that contains the majority of the field. Alternatively, you may also electronically submit a document or spreadsheet with this information. Each field can only have **one (1)** type of groundwater LCS associated with it.

Irrigated Field Name(s) or Number(s)	Is the parcel owned or leased?	Assessor Parcel Number(s)	Water Right(s)	Groundwater LCS Type
JIM				Percent Reduction
WELL 1				Percent Reduction
WELL 2				Percent Reduction

Upload Attachment

Submission of Groundwater LCS Proposal to State Water Board

A groundwater LCS may require the applicant to attach or email additional information, such as descriptions, spreadsheets, maps, or other relevant information. State Water Board staff request descriptions be submitted as Microsoft Word (.docx, .doc) or Adobe PDF (.pdf) files as these file formats are easiest for staff to work with applicants to review and revise, if needed. For the same reasons, staff request that applicants submit spreadsheets as Microsoft Excel files (.xlsx, .xls).

Submitting documents in other formats, such as photographs of narratives or narratives via traditional mail may lengthen the review process. If you need assistance, please contact your Coordinating Entity (see Section 4 or State Water Board staff identified in the Contact Information section below).

To submit your application with all required materials (see Section 2 , you can:

- Use the online form 
- Email DWR- ScottShastaDrought@Waterboards.ca.gov
- Mail:
State Water Resources Control Board
Division of Water Rights - Instream Flows Unit
1001 I Street - 14th Floor
Sacramento, CA 95814

Contact Information for State Water Board Staff

- Kevin DeLano
Phone: (916) 319-0631
Email: Kevin.DeLano@waterboards.ca.gov
- Shahab Araghinejad
Phone: 916 319-0975
Email: shahab.araghinejad@waterboards.ca.gov
- Division of Water Rights – Scott-Shasta Phone Line and Email
Phone: 916 327-3113
Email: ScottShastaDrought@waterboards.ca.gov

What's Next?

State Water Board staff will review each groundwater LCS application. If staff identify errors, a need for additional information, or changes that need to be made, they will contact the applicant. Once staff determine the application is substantially complete, it will be posted as pending on the State Water Board's [Local Cooperative website](#) for the Scott River and Shasta River watersheds emergency regulation.

Dane Sousa

April 15, 2024

State Water Resources Control Board
1001 I St.
Sacramento, CA 95814

Re: 2024 Cooperative Solution - Sousa Farm

To Deputy Director,

As authorized by Local Cooperative Agreement 875(f)(4)(d) for the Scott River watershed, Dane Sousa at Sousa Farm is providing this letter to further describe its proposed Local Cooperative Solution (LCS) for the 2022 irrigation season.

Introduction/History Irrigation Practices

We own approximately 75 acres at the above address, of which we irrigate 65 acres that has been cultivated as seasonal Alfalfa, grass, and we've rotated crops such as Winter Wheat and Teff grass since 2014. In addition to the 75 acres on [REDACTED] we lease approximately 16 acres on [REDACTED] for a total of 80 irrigated acres. Our farm is irrigated by groundwater, and we do not have any access to surface water. Irrigation for seasonal fields include two agricultural wells that supply the following areas and equipment:

1. Wheellines (approximately 13 acres) - Wheelline (i.e. long mobile pipe sets historically moved manually during irrigation season) service approximately 13 acres. We have one wheel line that irrigates [REDACTED] [REDACTED] for approximately 16 acres. Generally, each wheelline is moved manually each day at approximately 8am and at 8pm resulting in two approximately 12 hour operation periods during a 24 hour period.

Irrigation season for seasonal pasture across our property, including in 2020 (base year) typically begins for us about the first week in April each year and continues into

late August, subject to variance depending on annual temperature and precipitation conditions.

The attached spreadsheet gives the reduction calculated to reduce usage by 30.44% over the 2020 usage. We have installed 2 PIVOTS with the Lepa system and the reduction of nozzles on the sprinkler heads for the wheellines, and to only irrigate until the end of June will meet the reduction requirements.

Specific 2024 Conservation Practices and Infrastructure Improvements

Conservation efforts undertaken since 2020 and proposed conservation efforts for 2024 include:

- **Wheelline** - We have replaced the nozzle sizes from 3-16 to 5-32 which saves on the amount of water used. We have also reduced the irrigation set times from 12 hours to 10 hours sets per day for (McAdams Creek). We intend to maintain a written irrigation log detailing wheelline run times and will present that log to the cooperating entity upon request.
- **Crop Rotation** - Reduced ground we are irrigating due to Spring Wheat is in production of 13 acres and will not be needing as much irrigation for (124 Oak Hill Ln)
- **Summer Forbearance** - Unlike most years we would be using approximately 64 acres in full production for irrigation as this year after June we will only have 51 acres in irrigation production and will cease irrigating all other acres.
- **Pivot 1 and Pivot 2** - 1.5 inches of water per pass. We intend to log 1 day a month our meter for our pivots for the duration of the irrigation season.

Please note this plan is offered in good faith in connection with the 2024 irrigation season only. All rights, claims and defenses with regard to the matters described herein are hereby expressly reserved. Moreover, and as this plan is offered voluntarily (without any current legal obligation to undertake the matters described herein), should any governmental or NGO funds later become available for any forbearance or improvement efforts to which the Sousa Farm would otherwise be entitled, nothing herein shall be construed to limit the availability of such funds to the Sousa Farm provided that we materially perform the 2024 undertakings described herein. Water saved under this proposal will not be transferred to parcels not included under the LCS and we will not knowingly or intentionally otherwise take actions outside of the LCS that diminish, in any material way, the overall thirty percent reduction established by this proposal.

These conservation efforts can be verified on inspection conducted by the coordinating entity, hopefully scheduled because we do use pesticides from time to time and those products have restricted entry protocols. As a partner in our family operation, I, Dane Sousa will be the contact person for this LCS. I can be reached by mail, the phone number listed above, and/or by email at [REDACTED]

Thank you for your consideration in this matter.

Regards,
Sousa Farm

Dane Sousa, Owner/Operator

