

Application Form for 2025 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 2025 irrigation season under the Scott River and Shasta River watersheds <u>emergency regulation</u>. Applications must be submitted for at least a full irrigation season. A separate application should be submitted for each type of groundwater LCS proposal. **The form and attachments are due by April 15, 2025**.

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 1001 I Street - 14th Floor Sacramento, CA 95814

Section 1: Applicant Information

Name	DANE SOUSA
Name of Farm, Ranch, or Business	SOUSA FARM
Phone Number	
Email Address	

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:	04-14-2025
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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 all of the required components.
 - Map(s) with each well(s), meter location(s), and field(s) 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, well location(s) and meter location(s), and field(s) labeled.
 - Percent Reduction Groundwater LCS (see Section 9 of application)
 - Description of verifiable water reduction actions that will be implemented.
 - Spreadsheet with monthly volumes for baseline year and current year.
 Use one row per irrigation method per field.
 - Map(s) with each well(s), meter location(s), and field(s) labeled.
- A description of existing and planned groundwater metering (Section 6 of application), a time schedule for additional installation or information to support a waiver request, and a plan to record metered extractions or applications weekly and to report them monthly to your Coordinating Entity and/or State Water Board.
- Groundwater Well or Metered Application Information (see Section 5 of application) (paper or email submittal accepted).

Section 3: Requirements for All Groundwater LCS Proposals

- **Deadline:** Proposals are due to the State Water Board by April 15, 2025.
- **Implementation:** Proposals must be implemented during the entirety of one or more irrigation seasons (including the time 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 or applications covered under the LCS and information on how extractions and/or applications will be recorded weekly and reported monthly to the Deputy Director (or Coordinating Entity, if so agreed). Please note the Coordinating Entity is required to provide this data to the State Water Board.
 - <u>Funding for Meters</u>: The State Water Board has limited 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.
 - <u>*Time Schedule for Metering:*</u> All applicants should have the required metering equipment installed and operating before the start of irrigation season so that all groundwater extractions or applications covered by the LCS are metered.
 - <u>Waivers</u>: 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 the 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. This includes feasibility evaluation of installing a meter at the well(s) and at the place(s) of use (e.g., pivot).

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 <u>emergency regulation</u>.

✓	California Department of Fish & Wildlife Contact: Crystal Robinson (530) 340-0767 crystal.robinson@wildlife.ca.gov	Shasta Valley Resource Conservation District Contact: Rod Dowse (530) 598-1253 rdowse@svrcd.org
	Siskiyou Resource Conservation District Contact: Evan Senf (530) 643-1585 evan@siskiyourcd.com	Scott River Water Trust Contact: Chris Voigt (916) 396-0131 chrisb.voigt@gmail.com
	Other, I am proposing an Entity not in the provided options. Please provide the name of the Entity, contact information, and description of qualifications in the box below.	I select not to work with a coordinating entity.

Section 5: Groundwater Well Information

Complete the table below or upload an attachment for information on the groundwater wells, fields irrigated by the well and the APN, and associated meters that are covered under the proposed groundwater LCS.

- Well ID: Name of the well covered by the proposal LCS
- Well Coordinates: Latitude and Longitude of the well location
- Field APNs: List the APNs for the fields irrigated by the well. Please include APN of fields fallowed as part of the LCS plan.
- Meter ID: List the meters recording extraction or application from this well.

Well ID	Well Coordinates	Field APNs	Meter ID
Well 1			78534632
Well 2			78534887
JIM			78534885

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

Upload Well Information

Section 6: Metering Information

Please describe the metering plan for all the fields that will be irrigated under the LCS. Remember that meters can be installed at the well head or at the place of use (e.g., pivots). All meters should be installed to manufacturers' specifications and recommendations and measurements should be in the expected accuracy range. Fill in the box below, upload an attachment, or email a document or spreadsheet with the information requested in this section.

a. Describe how you will <u>record</u> weekly extractions or applications and <u>report</u> monthly volumes. Include a description of all water uses associated with each groundwater well that is part of this groundwater LCS. For each meter include the Well ID the meter is recording, the amount of irrigated acres covered and the crop type. Each meter should have an identifier (e.g., Meter #1) included in the description and in the monthly reports.

For example, "the ranch manager will log meter readings at Well #1 using Meter #1; and for Well #2, the ranch manager will log meter readings at pivots 1 & 2 using Meters #2 and #3." Also note what the water is being used for – "Well #1 irrigates 50 acres of grain on fields A and B, 100 acres of pasture on fields E, G, and Z. Meter #2 will irrigate 75 acres of alfalfa on field Y and Meter #3 will irrigate 25 acres Alfalfa on Field W. The manager will send the logs and photos to the Water Board by no later than the 5th of the month for the preceding month."

b. For groundwater wells and applications that are NOT currently metered, in the box below please describe the time schedule and plan to install meters, including a description of efforts to obtain a meter before the initiation of groundwater diversions covered by this groundwater LCS, and when such efforts were undertaken. 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) or applications should be waived. Be sure to include total irrigated acres, distance of the well(s) from surface water, a description of why metering is infeasible, if applicable, and any additional information that supports your waiver request.

Upload isnt working. Metering isn't feasible for us as we are under the 30 acres and we are a very small farm.

Upload Attachment

Select the type of groundwater LCS you are applying for and complete the corresponding sections of the application. A separate application should be submitted for each type of groundwater LCS request.



Best Management Practices Groundwater LCS - Complete sections 7

Graduated Groundwater Cessation Schedule LCS - Complete sections 8

Percent Reduction Groundwater LCS - Complete sections 9

Please indicate the proposed time period for the LCS you are applying for (e.g., one irrigation season or multiple seasons). If multiple seasons, please provide the time period.

IRRIGATIONS SEASON 2025

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:
- 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 <u>emergency regulation</u>.)

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

Upload Map(s)

- 4. Certify <u>all</u> of 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, 2025.
 - 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).
 - 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 agrees to a below schedule AND provides evidence that irrigated acreage is reduced compared to standard practice on the property (e.g., practice in a similar unregulated year). 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 <u>emergency regulation</u>.

- 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.

Upload Attachment

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

Upload Map(s)

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 <u>emergency regulation</u>, and summarized below.

- Scott River Watershed: A net groundwater pumping reduction of at least 30% throughout the irrigation season (April 1 October 31) and a monthly reduction of at least 30% between July 1 through October 31.
- **Shasta River Watershed:** A net groundwater pumping reduction of at least 15% throughout the irrigation season (March 1 November 1) and a monthly reduction of at least 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.

SENT EMAIL SINCE WEBSITE WON'T ALLOW UPLOADS

Upload Attachment

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

Upload Baseline Pumping

c. Map(s) with each field labeled, well locations, and meter locations.

Upload Map(s)

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 **Submit**
- 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

- Rachel Wright Phone: (916) 322-8420 Email: Rachel.Wright@waterboards.ca.gov
- Robert Solecki
 Phone: (916) 341-5400
 Email: Robert.Solecki@Waterboards.ca.gov
- Division of Water Rights Scott-Shasta Phone Line and Email Phone: (916) 327-3113 Email: DWR-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 14, 2025

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

Re: 2025 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 2025 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 **Sector**, we lease approximately 16 acres on **Sector**. 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:

 Wheelline (Wheelline (i.e. long mobile pipe sets historically moved manually during irrigation season). We have one wheel line that irrigates 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 32.30% over the 2020 usage. We have installed 3 PIVOTS with the Lepa system and the reduction of nozzles on the sprinkler heads for the wheellines.

Specific 2025 Conservation Practices and Infrastructure Improvements

Conservation efforts undertaken since 2020 and proposed conservation efforts for 2025 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 (
 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** We've added a (pivot) Pivot 3 we are irrigating due to Teff Grass which is in production of 13 acres (
- **Summer Forbearance** Unlike most years we would be using approximately 64 acres in full production for irrigation as this year.
- **Pivot 1**, **Pivot 2 and Pivot 3** 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 the product of the contact person.

Thank you for your consideration in this matter.

Regards, Sousa Farm

Dane Sousa, Owner/Operator

Field ID	2020 Irrigated Acres	2020 Irrigation Method	2020 Crop Type	Calculation Factors	April 2020 Acre Feet Applied	May 2020 Acre Feet Applied	June 2020 Acre Feet Applied	July 2020 Acre Feet Applied	August 2020 Acre Feet Applied	September 2020 Acre Feet Applied		2020 Total Acre Feat	2025 Irrieated Acres	2025 Irrigation Method	2025 Crop Type	Calculation Factors	April 2025 Acre Feet Applied	May 2025 Acre Feet Applied	June 2025 Acre Feet Applied	July 2025 Acre Feet Applied	August 2025 Acre Fee Acolied	t September 2025 Acre Feet Applied		2025 Acre Feet	Soil Moisture Sensor Installed
ims	16	Wheel Line Section	Alfalfa	4 crops of Alfalfa were raised: 18 sprinklers 3/16 nozzles with 1/8" back sprayers. 60 psi. 11.60 GPM. 11 Hour sets 18 sets per pass. 7.51 ac feet per pass.	15.22	15.22	22.83	22.83	22.83	15.22	0	114.15	16	Wheel Line Section		3 crops will be raised. 18 sprinklars 5/32 nozzels with 3/32 back sprayers. 60 psi 7.47 GPM 30 hour sets 18 sets per pass. 4.45 ac feet per pass.	8.9	8.9	13.35	13.35	13.35	5	0	62.85	
Home field 1	13	Wheel Line Section	Grass	3 crops were raised. 34 sprinklers, 3/16 nozzles, 60 psi , 7.9 GPM, 11 hour sets, 10 sets per pass. 5.43 ac feet per pass.	10.86	10.86	16.29	16.29	16.29	10.86	0	81.45	13	Wheel Line Section	Grass	1 pass is a 1.5 inches	٥	7	7	7	2		0	23	
Home field 2 wheeline	14	Wheel Line Section	Alfalfa	3 crops were raised. 32 sprinklers, 3/16 nozzels, 60 psi, 7.9 GPM 11 hour sets, 10 sets per pass. 5.11 ac feet per pass.	10.22	10.22	15.33	15.33	15.33	10.86	5.11	82.4	28	pivot	Grassev/Alfalfa	1 pass is an 1.5 inches	5.5	21	28	28	28	7	0	117.5	
Home field 2 wheeline		Wheel Line Section	Alfalfa	3 crops were raised. 32 sprinklers, 3/16 nozzles, 60 psi, 7.9 GPM 11 hour sets, 10 sets per pass. 5.11 ac feet per pass.	10.22	10.22	15.33	15.33	15.33	10.86	5.11	82.4	0				0	0	٥			0	0	0	
				3 crops were raised.32 sprinklers, 3/16 nozzles, 60 psi, 7.9 GPM. 11 hour sets, 14 sets per pass.																					
Home field 3	23	Wheel Line Section	wheat/ Teff grass	7.61 ac per pass	7.61	15.22	7.61	15.22	15.22	7.61	0	68.49 0 0	23	pivot	Alfalfa	1 pass is an 1.5 inches	4.6	19.16	19.16	19.16	19.16	5.75	0	85.99	
												0												0	
	80			TOTALS	54.13	61.74	77.39	85	85	55.41	10.22	428.89	80				19	56.06	67.51	67.51	62.51	17.75	0	290.34	
																30 % Reduction Target Monthly = 70% of 2020 use	37.891	43.218	54.173	59.5	59.5	38.787	7.154	300.223	
																30% Target Needed for annual reduction Water reduced in								300.223	
																excess of need expressed in AC Feet									
																Total Percentage Reduced								32, 30432046	
I																									
																1		1	1		1	1			