

# 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 <u>emergency regulation</u>. 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	Kelsey Lofdahl
Name of Farm, Ranch, or Business	Not a farm/ranch/buisness

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: Kelsey Lofdahl	Date:	4/14/24
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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.
  - o 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.
  - o 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).
  - o 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.
  - <u>Funding for Meters</u>: 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.
  - <u>Time Schedule for Metering</u>: 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.
  - <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 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.

California Department of Fish & Wildlife	Shasta Valley Resource Conservation District
Contact: Crystal Robinson	Contact: Rod Dowse
(530) 340-0767	(530) 598-1253
crystal.robinson@wildlife.ca.gov	rdowse@svrcd.org
Siskiyou Resource Conservation District	Scott River Water Trust
Contact: Evan Senf	Contact: Chris Voigt
(530) 643-1585	(916) 396-0131
evan@siskiyourcd.com	chrisb.voigt@gmail.com

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 <sup>1</sup>
Well 1	

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 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."

Field 1 & 2 are irrigated by well 1. Both are pasture fields and well usage will be recorded and filled daily by land owner.

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.

This LCS is a total of 11 acres falls under the minimum 30 acres that require 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:
- 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),
typ	e of best management practice, and field crop type.
Up	load 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.
    - 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.
    - 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 <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 which well(s) and 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 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.

The 30% reduction of use will be achieved by deduction of total acreage irrigated from 11 to 7 acres. Total acreage is found on map uploaded. I do not have a spreadsheet of past irrigation practices rather that total acres irrigated and measure taken to reduce the overall acres irrigated.

Previous to curtailment

Field 1 was irrigated for 12 hour sets for one cutting of grass hay then as needed for pasture but no more that 12 hour sets.

#### **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 labelled.

Upload Map(s)

## 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
1/2	Owned		Adjudicated	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
  Submit
- Email DWR- ScottShastaDrought@Waterboards.ca.gov
- Mail: State Water Resources Control Board Division of Water Rights - Instream Flows Unit 1001 I Street - 14<sup>th</sup> 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.

Field	2022 Irrigation type	2022 crop type	Equation	April 2022 Acre feet	May 2022 Acre Feet	June 2022 Acre Feet	July 2022 Acre Feet	August 2022 Acre Feet	September 2022 Acre Feet	Ocotber 2022 Acre Feet	2022 Acre Feet
1	Wheel Line	Grass	14 Sprinklers 3/16" @ 45 psi, 4 sets per pass, 12 hour sets, 10 passes per year.	8.41	8.41	8.41	8.41	8.41	0	0	<u>42.05</u>
2	Wheel Line	Alfalfa	16 Sprinklers 3/16" @ 45 psi, 5 sets per pass, 12 hour sets, 10 passes per year	12.02	12.02	12.02	12.02	12.02	0	0	<u>60.1</u>
3	Hand Line	Grass	30 Sprinklers 3/16" @ 45 psi, 1 sets per pass, 12 hour sets, 10 passes per year	4.5	4.5	4.5	4.5	4.5	0	0	<u>22.5</u>
4	Wheel Line	Grass	4 Sprinklers 3/16" @ 45 psi, 4 sets per pass, 12 hour sets, 10 passes per year	2.4	2.4	2.4	2.4	2.4	0	0	<u>12</u>
			<u>Total acre feet</u>	<u>27.33</u>	<u>27.33</u>	<u>27.33</u>	<u>27.33</u>	27.33	<u>0</u>	<u>0</u>	<u>136.65</u>

Fi	eld	2022 Irrigation type	2022 crop type	Equation	April 2024 Acre feet	May 2024 Acre Feet	June 2024 Acre Feet	July 2024 Acre Feet	August 2024 Acre Feet	September 2024 Acre Feet	Ocotber 2024 Acre Feet	2024 Acre Feet
	1	Wheel Line	Grass	14 Sprinklers 3/16" @ 45 psi, 4 sets per pass, 11 hour sets, 10 passes per year.		3.8	7.71	7.71	7.71	7.71	3.8	<u>38.44</u>
:	2	Wheel Line	Grass	16 Sprinklers 3/16" @ 45 psi, 5 sets per pass, 11 hour sets, 10 passes per year		5.5	11.01	11.01	11.01	11.01	5.5	<u>55.04</u>
:	3	FALLOW				0	0	0	0	0	0	<u>0</u>
	4	FALLOW				0	0	0	0	0	0	<u>0</u>
				Total acre feet	<u>0</u>	<u>9.3</u>	<u>18.72</u>	<u>18.72</u>	<u>18.72</u>	<u>18.72</u>	<u>9.3</u>	<u>93.48</u>

Summery- in 2022 The averag total usage of water was 136.65 acre feet. By reducing set times from 12 hours to 11 hours and fallowing 4 acres the estimates reduction of use has been cut down by 31.5%