



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	Emory and Heide GRAY
Name of Farm, Ranch, or Business	
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: Date:

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 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 checked="" 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
GH Well # 1	[REDACTED]
	see letter
	request letter waiver

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."

- 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.

<i>See letter</i>
<i>Request meter waiver</i>

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 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. 40 or less
- 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 info letter

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
Fescue	owned	[REDACTED]		Percent Reduction Groundwater LCS
Fescue pasture	owned			
GH Pasture #1	owned			
GH Pasture #2	owned			

Upload Attachment

Emory and Heide Gray

April 10, 2024

State Water Resources Control Board
1001 I Street
Sacramento, CA 95814

Re: 2024 Local Cooperative Solution
Percent Reduction Groundwater LCS

To: State Water Board

We are submitting this LCS Proposal for 2024 similarly based on our LCS of 2022. We reduced our irrigation 30% plus in 2022 and continued to conserve in the 2023 irrigation season as well. We have reduced our irrigation water and did not irrigate some pastures to achieve the 30%.

This season we will probably be irrigating 40 acres or less. We are also proposing to reduce irrigation of both GH Pastures #1 and #2 to approximately to half the acreage.

Brandon Fawaz leases our main field of Alfalfa. We already have two pivots with low pressure drops and drizzle emitters on this field. We've let the corners go dry. This field growing alfalfa will probably have a meter installed according to the Brandon Fawaz LCS.

The fields we still operate grow Fescue for a hay crop and pasture for cattle. The water allotted is marginal for either crop and we have had to lessened our growing acreage to conserve water to make the reduced water percentages and still produce some crop.

We are requesting an **Exemption** as to **installing a Meter**.

The way our fields are set up, a meter at the pivot will not meter the irrigation water used when the wheel lines run. The pivot does not always run at the same time the wheel lines irrigate. Often the pivot is off when some of the wheel lines are irrigating.

We were also told that our pipe coming up out of the ground from the pump does not have enough length to install a meter. Of this I can not be sure.

We feel we are diligent and keep accurate accounts of the irrigation.

We also think this is a hardship, a lot of money and lost income for such a small field.

We have already lost acreage to grow crops with the 30% irrigation reduction as well as income. Fields we once could lease at a certain farmable acreage are not farmable at that acreage anymore. This is substantial to us.

This letter is to affirm the commitment of Emory & Heide Gray to voluntarily reduce the volume of groundwater through an LCS.

Introduction/History Irrigation Practices

Historically, our farm was cultivated as seasonal pasture, fescue, and cereal grains in the Scott Valley. Approximately 49 acres grow grains and fescue in rotation and is used as seasonal pasture.

We have adjudicated surface water rights from the Scott Valley Irrigation District and overlying adjudicated groundwater rights within the basin. We will not use our surface water right to supplement or offset the reduction in use of groundwater.

Our property is not rectangular, square, or circular - the attached map shows the actual shape. Diverse types of irrigation have been implemented to supply coverage of the irregular shaped 49 acres. The field map gives the best coordinates for the ranch location. Historically, pivots, wheel lines, hand lines, and big guns have all been used on the operation.

Our operation harvested cereal grains and fescue, and was seasonal pasture. The property is irrigated with one 5 tower -873 ft center pivot, handlines and wheel lines consisting of 58 sprinkler heads, and big guns. Wheel lines and handlines that are moved twice daily resulting in two approximate 11hour (22 hours run time) sets in a 24hour period.

The irrigation season for our operation, including in 2020 (base year), typically begins about April 10th each year and continues into mid to late October. These time frames are subject to variances that depend on annual temperature and precipitation conditions.

The attached spreadsheet gives the reduction calculated to reduce usage by 32.1% over the 2020 usage and are described below.

2024 Conservation Efforts

- **Wheel lines** - Reduced set times. We still intend to follow the 2022 LCS that reduced our daily Wheel line set times from approximately 11 hours each (22 hours run time in 24 hours) to 10 hours each (20 hour run time in 24 hours). We will maintain a written wheel line and pivot log on run times and will present that log to the Cooperating Entity upon request.
- **Irrigation efficiencies** - 58 sprinkler heads on our wheel lines were reduced from 3/16" to 11/64".
- **Reduced Planting** - 2020 was a double crop year as both cereal grain and a grass crop was cultivated. As in 2022, 2024 will not have a second crop. This can be visually confirmed by a visual inspection from the road. Still in Fescue Grass.
- **Reduced Irrigated Acres** - We have reduced our total irrigated acreage by eliminating pasture in 2022 and will reduce some more pasture acreage for the 2024 season.

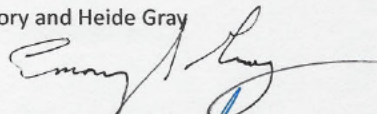
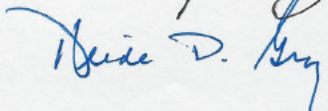
Please note this plan is offered in good faith in connection with the 2024 irrigation season only. All rights, claims and defenses with regard to the matters described herein are hereby expressly reserved. Moreover, and as this plan is offered voluntarily, should any governmental or NGO funds later become available for any forbearance or improvement efforts to which we would otherwise be entitled, nothing herein shall be construed to limit the availability of such funds to us provided that we materially perform the 2024 LCS 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 inspections conducted by the coordinating entity, hopefully scheduled to be able to provide the material to be verified as well as visual inspection, and also, to adhere to protocol for products used on the fields. Some have restricted entry protocols.

Emory and Heide Gray will be the contact people for this LCS. We can be reached by mail, the phone number listed above, and by email at [REDACTED]

Sincerely,

Emory and Heide Gray


 4/10/2024

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	October 2020 Acre Feet Applied	2020 Total Acre Feet	2024 Irrigated Acres	2024 Irrigation Method	2024 crop type	Calculation Factors	April 2024 Acre Feet Applied	May 2024 Acre Feet Applied	June 2024 Acre Feet Applied	July 2024 Acre Feet Applied	August 2024 Acre Feet Applied	September 2024 Acre Feet Applied	October 2024 Acre Feet Applied	2024 Acre Feet
GH Pasture #1	2.5	Wheel Line + Hand line	Pasture	9 nozzles, 3/16", 60+ psi, 11 hour sets, 5 sets per pass. .73ac foot per pass	1.46	1.46	2.92	2.92	2.92	1.46	0.73	13.87	2.50	Wheel Line + Hand line	Pasture	9 nozzles, 11/64", 50 psi, 10 hour sets. .51 ac foot per pass	1.02	1.02	2.04	2.04	2.04	1.02	0.00	9.18
GH Pasture #2	4	Wheel Line	Pasture	14 nozzles, 3/16", 60+ psi, 11 hour sets, 6 sets per pass. 1.38 ac foot per pass	2.76	2.76	5.52	5.52	5.52	2.76	1.38	26.22	4.00	Wheel Line	Pasture	14 nozzles, 11/64", 50 psi, 10 hour sets, 6 sets per pass. 0.94 ac foot per pass	1.88	1.88	3.76	3.76	3.76	1.88	0.80	17.72
GH Fescue	33	Pivot Section	Fescue / Pasture / Grain	Pivot ran at 1" per pass. 2.75 acre feet per pass. 33 acres under pivot	16.50	16.50	24.75	24.75	24.75	19.25	2.75	129.25	42.00	Pivot Section	Fescue/ Hay Pasture	Pivot ran at 1" per pass. 2.75 acre feet per pass. 33 acres under pivot	11.00	11.00	16.50	16.50	16.50	13.75	2.75	88.00
GH Fescue	3.5	Wheel Line by River	Fescue / Pasture / Grain	11 nozzles, 3/16" nozzle, 60+ psi, 5 sets per pass. 11 hour sets. .89 ac foot per pass	1.78	1.78	3.56	3.56	3.56	1.78	0.89	16.91		Wheel Line by River	Fescue/ Hay Pasture	11 nozzles, 11/64", 50 psi, 10 hour sets, 5 sets per pass, .62 ac feet per pass	1.24	1.24	2.48	3.29	2.18	1.24	0.62	12.29
GH Fescue	4.5	Wheel + Hand Line by shop	Fescue / Pasture / Grain	19 nozzles, 3/16", 60+ psi, 4 sets per pass, 11 hour sets. 1.23 ac feet per pass	2.46	2.46	4.92	4.92	4.92	2.46	1.23	23.37		Wheel + Hand Line by shop	Fescue/ Hay Pasture	19 nozzles, 11/64", 50 psi, 10 hour sets, 5 sets per pass, 1.06 ac feet per pass	2.12	2.12	4.24	3.39	4.24	2.12	1.06	19.29
GH Fescue	1	Wheel Line by bottom	Fescue / Pasture / Grain	5 nozzles, 3/16", 60+ psi, 4 sets per pass, 11 hour sets. .32 ac foot per pass	0.64	0.64	1.28	1.28	1.28	0.64	0.32	6.08		Wheel Line by bottom	Fescue/ Pasture	5 nozzles, 11/64", 50 psi, 4 sets per pass, 10 hour sets, .22 ac foot per pass	0.44	0.44	0.88	0.66	0.88	0.40	0.22	3.92
GH Fescue		Guns	Fescue / Pasture / Grain	1 Nelson 100 gun with .75" nozzle, 11 hour sets. 3 sets per pass. .77 ac per pass	1.54	1.54	3.08	3.08	3.08	1.54	0.77	14.63		Gun	Fescue/ Pasture	1 Nelson 70"nozzle, 50 psi, 4 set per pass. 2.5 hour Sets, .18ac foot per pass				2.58	2.62	0.51		
	48.5			TOTALS:	27.14	27.14	46.03	46.03	46.03	29.89	8.07	230.33	48.50				17.70	17.70	29.90	32.22	32.22	20.92	5.45	150.40
																	19.00	19.00	32.22	32.22	32.22	20.92	5.65	161.23
																				0.00		0.00	0.20	10.83
																				30.00%	30.00%	30.01%	32.47%	34.70%