Guidance on 2025 Overlying and Adjudicated Groundwater Local Cooperative Solutions for the Scott River and Shasta River Watersheds

(under section 875(f)(4)(D) of Scott-Shasta Emergency Regulation)

The State Water Resources Control Board (State Water Board or Board) has re-adopted an emergency regulation establishing emergency minimum flows in the Scott River and Shasta River watersheds. (Cal. Code Regs., tit. 23, §§ 875– 875.9.) Under the regulation, individuals or groups may propose local cooperative solutions (LCSs) as an alternative to curtailment. A LCS provides a different way of reducing water use to meet or preserve emergency minimum flows, or to provide other fishery benefits (such as cold-water refugia, localized fish passage, or redd protection). Various options for a LCS are described in more detail under Regulation section 875, subdivisions (f)(1) through (f)(4). **This document describes a subset of LCS options available for overlying and adjudicated groundwater diverters.**

Overview of Groundwater Local Cooperative Solutions

Groundwater LCSs let ranchers and farmers with overlying or adjudicated groundwater rights[1] mitigate the risk of curtailment through annual planning and actions that result in overall reductions in water use. Section 875, subdivision (f)(4)(D) provides for three types of groundwater LCSs for the 2025 irrigation season:

- Best Management Practices
- Graduated Cessation Schedule
- Percent Reduction

A diverter may propose different types of groundwater LCSs for different portions of their agricultural lands. A diverter may not propose more than one type of groundwater reduction LCS for the same portion of agricultural land. These groundwater LCS options are not available for surface water or appropriative groundwater diversions and cannot serve as a substitute for curtailment for such water rights. However, groundwater LCSs may include enhanced use of valid surface water rights by applicants who wish to temporarily switch to surface water diversions to improve groundwater storage when applicable surface water curtailments are not in effect. Description of any such proposal can occur in the narrative submittals described below and should include anticipated groundwater level or instream benefits. Approval of such enhanced surface water use may require monitoring of anticipated benefits.

Since the end of the summer is the most likely time for very senior water rights to be curtailed, allowing senior users to proactively reduce water use (in essence self-curtailing a portion of water use), allows for increased certainty without injuring other water users who do not choose to enter a groundwater LCS. Because these groundwater LCSs require a reduction in groundwater pumping, export, or use of conserved groundwater in other places (i.e., outside of the lands identified in the groundwater LCS) is not permitted.

Application Process

The State Water Board has prepared a simplified, online groundwater LCS application form that groundwater diverters may complete and submit for their groundwater LCS proposal for the 2025 irrigation season. Applications must be submitted for at least a full

[1] The Scott River Decree adjudicated some groundwater rights.

irrigation season. The application asks groundwater LCS applicants to provide the following information and agree to the following requirements.

Requirements for All Groundwater LCSs

Applications for 2025 groundwater LCSs are due by April 15, 2025, and must be implemented for the entirety of the agreed upon time period – at least the entire irrigation season (including when the LCS is pending approval), unless the applicant withdraws the groundwater LCS. A groundwater LCS may be withdrawn at any time, including after it is approved by the State Water Board. For all three types of groundwater LCSs, the application form asks the applicant to provide the following information and consent to the following:

General Information:

- Provide the applicant's name, name of the ranch or operation, contact information, and, if applicable, the coordinating entity the applicant will work with during the 2025 irrigation season. If no coordinating entity is selected, State Water Board staff will oversee implementation of the groundwater LCS, including conducting relevant inspections.

Metering:

- All applicants should have the required groundwater metering equipment installed and operating before the start of the irrigation season. The Deputy Director may approve a delayed start with proof of reasonable efforts. Such determination will take into account that the metering requirements for groundwater LCSs are no longer new. The language in the Regulation has been expanded to allow groundwater meters to be installed at the well or at the place of use (e.g., pivots).
- Provide a description of how the applicant will:
    - Record such extractions or applications weekly;
    - Report monthly to the State Water Board (or coordinating entity, if so agreed); and
    - Take appropriate steps to ensure meter readings are accurate.
- The application requires a description for all metering equipment, including what crop type(s) are being irrigated, how much acreage is covered, and a map identifying the fields and locations of the well(s) and meter(s).
- The applicant is required to record metered water use (i.e., pumping or application information) on a weekly basis from the date the meter is installed and operating through at least one full irrigation season.
    - If weekly records are not feasible, the applicant shall provide a proposed frequency and information on why a weekly frequency is not feasible.

- The applicant is required to report metered water use data monthly during the LCS, to either their Coordinating Entity or the State Water Board.
    - Applicant should ensure that each meter has an identifying name and include it in the application and when reporting their monthly data.
- The metering requirement may be waived in limited circumstances with appropriate supporting information and approval from the State Water Board:
    - Groundwater wells that irrigate less than 30 acres; or
    - When metering is determined infeasible.

  *In waiving the metering requirement, the State Water Board may require other water use information in lieu of metering.

The State Water Board has some funding and a contractor to assist with meter purchase and data collection. If the applicant receives funding for a meter(s), the applicant is required to record and maintain weekly groundwater extractions or applications (e.g., data logger, logbook, photos, etc.) for five years from the date of installation and provide this information to the Board monthly. If weekly records are not feasible, the applicant shall provide a proposed frequency and information on why weekly frequency is not feasible.

Inspections:

- Provide consent to allow compliance inspections with 24-hour notice, including notice by e-mail or telephone.

Information on Irrigated Acres:

- For each type of groundwater LCS, provide the sum of irrigated acreage, assessor parcel numbers, whether each parcel is owned or leased, and the names and/or numbers of irrigated fields on each parcel.

Coordinating Entity *(only required if working with a Coordinating Entity)*:

- The application requires deciding whether to work with a Coordinating Entity, and identifying the entity, if so.
- Separate from the application form, if an applicant is working with a Coordinating Entity, the applicant must sign a binding agreement with that Coordinating Entity and submit the signed binding agreement to the State Water Board.[2]

[2] A Coordinating Entity is an entity with the expertise and the ability to evaluate and require performance of the agreement. Examples of Coordinating Entities include the California Department of Fish and Wildlife, National Marine Fisheries Service, Scott Valley and Shasta Valley Watermaster District, a nonprofit organization with expertise and experience in water-saving transactions, or similar qualified entity.

Best Management Practices Groundwater LCS

The Best Management Practices Groundwater LCS provides a streamlined process for irrigators who have adopted the most water efficient technology and agree to certain actions to reduce water use. The application form requires a narrative description of the proposed management practices that will be implemented and map(s) of each field. The Best Management Practices Groundwater LCS requires:

- Use of a low energy precision application (LEPA) system on all irrigated acreage;
- No irrigation of corners after June 15;
- No use of end guns; and
- Use of soil moisture sensors to inform irrigation timing with records available for inspection by the Coordinating Entity, if applicable, and/or the State Water Board.

Also, the applicant must commit to additional limits on irrigation in certain drier years.[3] Specifically, in these years, applicants must agree to stop watering 90% of irrigated acreage by August 31, with a maximum of two (2) inches of water per acre to be applied to the remaining 10% of irrigated acres for existing alfalfa fields and grain, or four (4) inches of water per acre for pasture or new alfalfa plantings, during the remainder of the irrigation season.

Graduated Cessation Schedule Groundwater LCS

Under this groundwater LCS type, the applicant manages their property to limit irrigation on an increasing percentage of land throughout the irrigation season under one of two available irrigation schedules:

- Option 1: Pumping to irrigate the following percentages of irrigated acres shall cease by the dates below:
    - 15% of acres by July 15,
    - 50% of acres by August 15, and
    - 90% of acres by August 31, with a maximum of 8 inches of water to be applied to the remaining 10 percent of irrigated acres during the remainder of the irrigation season.

[3] In the Scott River watershed, the dry year commitments are triggered with a snowpack of 80% or less of the Department of Water Resources' first May snow water equivalent station average measurements (or the average of the first April measurement if May snowpack measurements are not gathered in the irrigation year). For the Shasta River watershed, the dry year commitments are triggered with a water year determination of "dry" or "very dry" as determined under Table 2 of the March 2021 Montague Water Conservation District water operation plan.

- Option 2: Pumping to irrigate the following percentages of irrigated acres shall cease by the dates below:
    - 20% of acres by July 20,
    - 50% of acres by August 20, and
    - 95% of acres by September 5, with a maximum of 6 inches of water to be applied to the remaining 5 percent of irrigated acres during the remainder of the irrigation season.

Additionally, a Graduated Cessation Schedule Groundwater LCS may only be approved if the applicant provides evidence that the proposal will reduce irrigation from an unregulated baseline year. The application allows for a narrative description of how this proposal compares to standard practice on the property, including taking crop rotation and number of cuttings into account, as applicable. The application form requests map(s) outlining the diversion cessation schedule for the included fields and associated well location(s).

Percent Reduction Groundwater LCS

In the Scott River watershed, the groundwater LCS must reduce groundwater pumping by at least 30% over the irrigation season (April 1 – October 31) AND by at least 30% in the months of July, August, September, and October. In the Shasta River watershed, a 15% reduction is required over the irrigation season (March 1- November 1) AND by at least 15% in June, July, August, and September.

The reduction in water use can generally be compared to a baseline irrigation season from 2020, 2021, 2022, or 2023. But, if the amount of water applied in those years is higher than:

- 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, unless the applicant can provide additional information supporting the higher baseline values.

The application requests a narrative that describes the actions the applicant will take to reduce their groundwater use, a spreadsheet that breaks down irrigation savings by month, and map(s) with each associated groundwater well and field(s) labelled to describe how the verifiable actions that will be implemented to reduce groundwater pumping volumes. The actions must be verifiable by either the Coordinating Entity and/or the State Water Board. There are a variety of actions that one may implement to reduce groundwater diversion and use for irrigated agriculture. Such actions may include water efficiency improvements (e.g., pivots versus flood irrigation, soil moisture sensors), cropping decisions (e.g., planting grain rather than alfalfa), and other conservation measures (e.g., fallowing a portion of lands, forgoing a third or fourth cutting of alfalfa).

During the irrigation season, the Board and/or Coordinating Entity will conduct inspections to verify that the applicant is implementing the verifiable actions.

Applicants should electronically submit a spreadsheet with monthly pumping volumes for the baseline and current year. The spreadsheet should use one row per irrigation method per field. For each row, the spreadsheet should have columns that provide the following:

- Field name/number;
- Irrigation method;
- Calculation used to estimate monthly water use;
- Monthly water use; and
- Total water use.

In reviewing the spreadsheet, State Water Board staff will check the calculations to double check and understand the applicant's math.

Coordinating Entity (Optional)

An applicant may identify and consult with a Coordinating Entity that can ensure implementation of the groundwater LCS. The applicant and Coordinating Entity shall sign a binding agreement that implements the actions for water use reduction, including any necessary monitoring to demonstrate that the actions are being implemented. The binding agreement gives the groundwater LCS an additional layer of reliability. The applicant should electronically submit the binding agreement to the State Water Board, along with the groundwater LCS application.

The Scott River and Shasta River watersheds have a history of residents undertaking actions for fisheries benefits. There are many organizations and agencies in the area with knowledge of developing and evaluating water-related agreements that may serve as coordinating entities. Entities interested in serving as coordinating entities that are not listed on the application form should contact the State Water Board if they would like to participate in the groundwater LCS program.

The agreement should include assurances that the applicant will not transfer water saved under the groundwater LCS actions to parcels not included under the groundwater LCS or otherwise take actions outside of the groundwater LCS that diminishes the overall reductions in groundwater pumping. The agreement should ensure that the Coordinating Entity can reasonably access the lands associated with the proposal as relevant for monitoring compliance (e.g., an agreement to inspect crops, irrigations systems, groundwater level in wells, and other water reduction actions).

Contact Us

If you have questions regarding groundwater LCSs, please contact staff by email to: ScottShastaDrought@waterboards.ca.gov or leave a message at our dedicated Scott River and Shasta River Drought phone line at: (916) 327-3113.