

State Water Resources Control Board

July 25, 2024

Mr. Brian Heffernan


CONDITIONAL APPROVAL OF GROUNDWATER LOCAL COOPERATIVE SOLUTION FOR H&H LAND AND LIVESTOCK COMPANY

Dear Mr. Heffernan:

The State Water Resources Control Board (State Water Board) adopted an emergency regulation that went into effect on February 1, 2024, that establishes emergency minimum flows in the Scott River and Shasta River watersheds (Cal. Code Regs., tit. 23, §§ 875-875.9) (Regulation). Under the Regulation, local cooperative solutions by individuals or groups may be proposed by petition to the Deputy Director of the Division of Water Rights (Deputy Director) as an alternative means of reducing water use to meet or preserve the emergency minimum flows, or to provide other fishery benefits, in lieu of curtailment. Section 875, subdivision (f)(4)(D) describes three types of local cooperative solutions that are specifically available for overlying or adjudicated groundwater diversions for irrigated agriculture: Best Management Practices, Graduated Cessation Schedule, and Percent Reduction. The Deputy Director may approve a proposal submitted by an individual or group, provided that it meets the specific requirements of the applicable groundwater local cooperative solution type and satisfies the metering and inspection requirements.

Summary of Proposal

The State Water Board received a groundwater local cooperative solution proposal from Brian Heffernan (petitioner) that involves reducing water use from two groundwater wells that irrigate a total of 320 acres using the Best Management Practices and Percent Reduction groundwater local cooperative solution options.

- **Best Management Practices Proposal:** Under the Best Management Practices portion of the proposal, the petitioner proposes to use a low-energy precision application (LEPA) system on 230 acres of irrigated land, use soil moisture sensors to inform irrigation timing, stop irrigating corners after June 15, and forgo the use of end guns.
- **Percent Reduction Proposals:** The petitioner proposes two separate Percent Reduction proposals for: (1) 25 acres irrigated by wheel lines; and (2) 65 acres of

“corners”¹ irrigated by K-Line, big guns, and handlines. For the 25 acres irrigated by wheel lines, the petitioner proposes to reduce water use by 33 percent compared to water use in the 2020 irrigation season. The reduction will be achieved by reducing the daily irrigation time from 24 hours to 16 hours (two 8-hour sets per day). For the 65 acres of “corners” irrigated by K-Line, big guns, and handlines, the petitioner proposes to reduce water use by 33 percent compared to water use in the 2020 irrigation season. This reduction will be accomplished by reducing the duration of the irrigation from 24 hours to 16 hours per day.

Applied Water Baseline

Per the Regulation, if evidence from the 2020, 2021, 2022, or 2023 irrigation seasons indicates that the base rate of applied water is higher than 33 inches per year for alfalfa, 14 inches per year for grain, or 30 inches per year for pasture, then the base rate of applied water shall be adjusted to these specified values, or the petitioner may request a higher base rate for approval by the State Water Board. The petitioner must provide supporting information as part of any such request, such as multi-year practices, soil type, and irrigation methods. The petitioner has requested to use a higher baseline rate of applied water for pasture and proposes to use 49.5 inches per year as the baseline amount for the 90 acres of pasture included in the Percent Reduction proposals.

The petitioner provided a justification for the request, stating that 30 inches applied per water year is not tenable because it is 25 percent below the evapotranspiration rate for healthy pasture in Scott Valley and does not consider reasonable losses attributable to irrigation efficiency. The petitioner also included a document by Scott Valley Agriculture Water Alliance that provides guidance for calculating applied water needs for pasture and supports using a higher baseline amount than 30 inches. The State Water Board finds the baseline amounts proposed by the petitioner to be high when considering the water demands of the pasture crops, soil moisture levels, and seasonal precipitation contributions. However, the State Water Board approves this request because there is considerable uncertainty regarding water application needs in the Scott Valley and meters have been installed on the two irrigation wells, which will provide the data necessary to inform applied water amounts relative to different watering practices that may be used in the future. Additionally, the proposal provides sufficient evidence that the proposed changes to irrigation methods will result in reduced application of water (i.e., substantial reduction in set times will result in less water use such that to the extent the estimated 2020 irrigation amount is high, the corresponding reduction in water use is also high).

The proposal was posted to the State Water Board's webpage for local cooperative solutions associated with the Regulation on July 12, 2024. A further description of the site and water reduction measures is provided in the application submitted for this proposal. The application identifies Scott River Water Trust as the Coordinating Entity and includes a Binding Agreement that grants property access to verify compliance with

¹ Due to the irregular shape of the property, certain areas cannot be irrigated by wheel lines or pivots and have been defined by the petitioner as “corners.” These areas do not include the corners of the 230 acres irrigated under the Best Management Practices portion of the proposal, for which irrigation ceased on June 15, 2024.

the proposal.

Groundwater Metering

A groundwater local cooperative solution must include a description of metering in place for groundwater well extractions and a proposal to meter, record, and report such extractions to the Deputy Director or the Coordinating Entity, as applicable. If a meter has not been installed prior to the start of the irrigation season, the petitioner may submit a time schedule as part of the proposal that describes and substantiates the efforts, actions, and timelines for meter installation. The Deputy Director may waive the metering requirement for groundwater wells irrigating less than 30 acres or upon a determination that metering in a particular instance is not feasible.

The petitioner installed meters on the two irrigation wells and has been collecting and maintaining a log of water usage data since June 1, 2024. The proposal includes a plan to collect this data and submit the log monthly to the Coordinating Entity.

Approval

The Division of Water Rights has reviewed the groundwater local cooperative solution proposal and finds that it meets the requirements of Regulation section 875, subdivision (f)(4)(D), and is approved with the following condition:

- The petitioner shall collect and maintain a log of water usage data from the two groundwater meters through the end of the 2025 irrigation season. Data for the 2025 irrigation season shall be submitted to the State Water Board by the 10th of each month for the preceding month. The groundwater local cooperative solution proposal is hereby approved, as conditioned.

Any failure to implement the proposal or violation of the conditions of this approval are subject to enforcement as a violation of the Regulation. Additionally, violations of other provisions of the Regulation (e.g., surface water curtailment) may result in termination of this approval.

The State Water Board has been advised that some groundwater users in the vicinity of the Shelly Fire are assisting the community by providing water for firefighting. Such use is not subject to the limitations of the groundwater local cooperative solution, which apply to water for irrigation use; water use for firefighting should be tracked to avoid confusion in any compliance assessment of your groundwater local cooperative solution.

If you have questions regarding this approval, please contact Division of Water Rights staff via email to: ScottShastaDrought@waterboards.ca.gov or by leaving a message on our dedicated phone line at: (916) 327-3113.

Sincerely,



Erik Ekdahl
Deputy Director
Division of Water Rights

Mr. Brian Heffernan
H&H Land and Livestock Company

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