

A: 6732 EASTSIDE ROAD, FORT JONES, CA, 96032

February 24, 2022

Via Email

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

Re: 2022 Cooperative Solution - H&H Land and Livestock Company LLC

To Deputy Director:

As authorized by 23 CCR §§ 875(f)(4)(D), the H&H Land and Livestock Company LLC is providing this letter to further describe its proposed local cooperative solution (LCS) for the 2022 irrigation season.

Introduction/Historical Irrigation Practices

All of the approximately 320 acres¹ we own and irrigate at the above address has been cultivated as seasonal pasture (predominantly grasses and clover) since 2018 for seasonal rotational grazing of cattle, sheep and hogs. Irrigation infrastructure for seasonal pasture includes two overlying agricultural wells that supply the following areas and equipment:

(i) **Center Pivots** (approximately 230 acres) - Three automated circular center pivots (installed in 2003, 2014 and 2015) service most of our acreage. All three were originally installed with high pressure mid elevation spray application (MESA) sprinkler packages.

(ii) **Wheelline** (approximately 25 acres) - Wheelline (i.e. long mobile pipe sets historically moved manually during irrigation season) service approximately 25 acres.

¹ For purposes of this letter, all acreage estimates have been estimated in good faith using satellite imagery.

Generally, each wheeline is moved manually each day at approximately 6 am and at 6pm resulting in two approximately 11 hour operation periods during a 24 hour period.²

(iii) **Corners** (approximately 65 acres) - Since our property is irregularly shaped, certain areas of the property cannot be irrigated with circular pivots or rectangular wheelines, remainder areas (i.e. "corners") are irrigated using a combination of methods including movable big guns (i.e. movable high pressure sprinklers), Irripods (daisy chained ground level sprinklers) and handline (movable aluminum pipe).

Irrigation season for seasonal pasture across our property, including in 2020 (base year) typically begins for us about April 1 each year and continues into late October, subject to variance depending on annual temperature and precipitation conditions.

Specific 2022 Conservation Practices and Infrastructure Improvements

Conservation efforts undertaken since 2020 and proposed conservation efforts for 2022 include:

Pivots - LEPA System Installation. In addition to the 11 pivot spans converted from the above reference high pressure MESA system to a Low Energy Precision Application (LEPA) system in 2021, the H&H Land and Livestock Company LLC is undertaking a similar LEPA conversion on all of its remaining pivot spans prior to the 2022 irrigation season. All conversions have been self funded and all remaining conversion hardware has been ordered. The LEPA system utilizes very low pressure "bubbling" nozzles (as opposed to higher pressure MESA rotating nozzles that disperse water over a larger area). The LEPA system results in far less wind drift and more precise and effective water application. The LEPA manufacturer estimates that total water savings of up to 30% is achievable based on reduced windrift and less frequent irrigation. Additional documentation on water savings will be provided. Verification of the above described conversions can be directly verified by the Cooperating Entity in an on site inspection.

Wheeline - Reduced set times. We intend to reduce our two daily wheeline set times from approximately 11 hours to 9 hours. Simply by operating wheelines four hours less each day, we expect to save 19% over historical practices on all wheeline acreage. We intend to maintain a written irrigation log detailing wheeline run times and will present that log to the Cooperating Entity upon request.

Corners - Irrigation Forebearance. We intend to cease irrigation of all corners on July 1, 2022. This date is months sooner that we would ordinarily end irrigation, as well as earlier than good husbandry practices would require for optimal pasture management - this will result in a material reduction in forage production in these areas during 2022. Verification of the above described forbearance can be directly verified by the Cooperating Entity in an on site inspection.

² Time is required for wheeline to drain fully and be moved, which can take an hour or so each move. No irrigation occurs during periods required to drain/move wheeline. Hence, the estimation of 11 hour sets.

Fall 2022 Forbearance. We intend to cease all pasture irrigation by October 1, 2022. This date is weeks sooner than we would ordinarily end irrigation, as well as earlier than good husbandry practices would require for optimal pasture management. Verification of the above described forbearance can be directly verified by the Cooperating Entity in an on site inspection.

In the event that material precipitation does not arrive prior to March 7, 2022 we intend to begin irrigation prior to April 1, 2022 - in consideration for beginning irrigation early, we are willing to agree to a 2 for 1 acceleration of the Fall 2022 forbearance date (i.e. for every 2 days of irrigation prior to April 1, 2022, we will cease all irrigation one day sooner than October 1, 2022). To illustrate, if we irrigate 10 days in March 2022, all pasture irrigation would cease on September 26, 2022 (i.e. 5 days sooner than October 1, 2022).

Each of these undertakings and installation is at significant cost to us as a small family livestock producer, both in actual costs (e.g. pivot sprinkler conversion - approximately \$27,000 total conversion cost) and in reduced pasture production opportunity due to irrigation forbearance. When grazing pastures do not reasonably adequate irrigation throughout the normal irrigation season which is a consequence of this plan, especially in corner acreage, (i) grazing opportunity is significantly reduced, (ii) our grazing season becomes shorter, (iii) additional supplemental fall/winter feed forage must be purchased at forage prices that are at historically highs this year and (iv) permanent plant damage may likely occur and future productivity of pastures may be impaired..

While voluntary conservation and forbearance efforts may tend to improve river conditions (and we are certainly supportive of these efforts), unless snow pack improves soon, it seems clear that in a year like 2022 no amount of sacrifice by farmers and ranchers will improve river conditions this year. Nonetheless, we are undertaking voluntary conservation measures in good faith to provide an opportunity to improve watershed conditions and to create a more constructive and effective framework for water conservation than involuntary curtailment triggered by river flow standards that are not likely achievable and/or other involuntary regulation. Conservation efforts can create real financial burdens on farmers and ranchers, their families and this community as a whole, especially in a year where forage costs are historically high and costs are escalating on all other inputs from labor to fuel to equipment. We therefore hope you will thoughtfully and diligently consider these voluntary actions as you balance the interests of various stakeholders in our watershed.

Please note that this plan is offered in good faith in connection with the 2022 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 H&H Land and Livestock Co LLC would otherwise be entitled, nothing herein shall be construed to limit the availability of such funds to the H&H Land and Livestock Co LLC provided that we materially perform the 2022 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.

Please timely advise as to your decision on the acceptability of this plan in lieu of regulatory curtailment as contemplated by 23 CCR §§ 875 and thank you for your consideration in this matter.

Please feel free to contact me with any questions.

Regards,

The H&H Land and Livestock Company LLC



Brian Heffernan, Manager

BINDING AGREEMENT



State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Northern Region
601 Locust Street
Redding, CA 96001
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



GROUNDWATER USE REDUCTION AND BINDING AGREEMENT FOR LOCAL COOPERATIVE SOLUTION

BACKGROUND

Under the 2021 drought emergency regulation establishing drought emergency minimum flows in the Scott River and Shasta River watersheds,¹ local cooperative solutions (LCS) by individuals or groups may be proposed by petition to the Deputy Director as an alternative means of reducing water use to meet or preserve drought emergency minimum flows, or to provide other fishery benefits (such as cold-water refugia, localized fish passage, or redd protection), in lieu of curtailment.

RECITALS

1. Section 875(f)(4)(D) of the drought emergency regulation provides a specific type of LCS that was determined to be sufficient for approval by the Deputy Director;
2. For overlying or adjudicated groundwater diversions for irrigated agriculture described in section 875.5(f)(4)(D)(i) – (ii) [Scott River], the Deputy Director may approve a groundwater-basin-wide, groundwater sub-basin-wide, or any number of individual local cooperative solutions totaling at least 400 irrigated acres where:
 - (i) The proposal is based on a binding agreement. "Such binding agreement may be made with a coordinating entity with the expertise and the ability to evaluate and require performance of the agreement, for example with the California Department of Fish and Wildlife (CDFW), the National Marine Fisheries Service, the Scott Valley and Shasta Valley Watermaster District, a non-profit organization with expertise and experience in water-saving transactions, or similar qualified entity. "
 - (ii) For the Scott River: "The proposal provides at least: 1) a net reduction of water use of 30 percent throughout the irrigation

¹ California Code of Regulations, title 23, sections 875–875.9.

season (April 1 – October 31), as compared to the prior irrigation season; and 2) a monthly reduction of at least 30 percent in the July 1 through October 31 period, as compared to the prior year or to 2020. Such reduction may be demonstrated by evidence that provides a reasonable assurance that the change in farming practice or other action results in at least the relevant proportionate reduction. Such evidence may include but is not limited to: pumping reports; actions that will be taken to reduce water use; estimation of water saved from conservation measures or changes in irrigation or planting decisions; and electric bills."

PROPOSED LOCAL COOPERATIVE SOLUTION

On February 24, 2022, the H&H Land and Livestock Company LLC (Landowner) proposed a LCS authorized by 23 CCR §§ 875(f)(4)(D) of the regulation for the 2022 irrigation season. It includes a final conservation plan, narrative, and parcel/field maps incorporated by reference. The proposal uses the year 2020 as the baseline; it includes detailed spreadsheets and a narrative that describes enhanced irrigation pivot efficiencies, reduced irrigation wheel line set timing, reduced irrigated "corner" acreage, and a fall irrigation forbearance plan. The specific conservation practices within the narrative offer concise and appropriate monitoring elements enabling the California Department of Fish and Wildlife to assume the role of a coordinating entity to implement a binding agreement described in "i" above. The mathematically calculated conservation plan accounts for a net reduction of approximately 32.7 % to meet the requirement described in item "ii" above.


This proposal does not include the minimum 400 acres required under the emergency regulation, but this agreement is being entered into with the understanding that additional acres will be added under a separate binding agreement with additional parties, such that the total will meet or exceed the 400-acre minimum for State Water Resources Control Board (State Water Board) approval.

TERMS OF BINDING AGREEMENT

The Landowner is required to adhere to the proposed conservation plan, as submitted to CDFW and approved by the State Water Board. The Landowner has requested that CDFW serve as the coordinating entity. The Landowner and CDFW agree to the following:

- For the duration of this binding agreement where CDFW is the coordinating entity, the Landowner shall give CDFW and CDFW agents the right to reasonably access the included parcels for the limited purpose of verifying execution of the conservation plan. Any individual not directly employed or contracted by CDFW shall provide pre-notification to, and shall obtain approval by, the Landowner,
- CDFW will strive to notify the Landowner a day in advance of visiting the parcels and shall provide the Landowner or a designee the ability to participate in the monitoring inspection,
- It is anticipated that CDFW representatives will visit the property approximately twice per month. A monitoring inspection may include verification of any or all the actions described in the conservation plan and may include inspection checklist/notes/report and photo verification.
- The written irrigation log described under the wheel line conservation practice, and any photos, logs, checklists, and other documentation for this conservation strategy incorporated by reference will be transmitted by the Landowner via email to the Klamath Watershed Program at klamathwatershed@wildlife.ca.gov. This information for each month shall be transmitted within the first 7 calendar days of each calendar month,
- CDFW will submit the Information regarding the verification materials and actions described in this agreement, and conservation plan incorporated by reference, to the State Water Board upon request, for the purposes of verifying compliance with the LCS.
- This binding agreement is not intended to preclude, harm, or otherwise interfere with the Landowner's ability to secure any funding to mitigate the financial impacts imposed by the emergency regulation or proposed conservation practices. CDFW supports use of funding programs to ameliorate the costs of implementing the conservation practices described in the proposed conservation plan: planning and cooperation under a voluntary LCS should not undermine the ability to receive such funding,
- This binding agreement may be terminated by either party with 30 days' notice. The Coordinating Entity will only terminate the agreement if the Landowner is not cooperating with the terms of this binding agreement (e.g., is not providing access, is not reporting, etc.). Both parties agree to take reasonable measures to resolve any concerns related to performance of the conservation plan, negative human interaction, or any other unforeseen circumstance prior to invoking termination, and

- It is recognized that as the irrigation season unfolds, there may be reason to change the terms of the conservation plan or this agreement regarding its implementation and verification. Any such changes to the conservation plan or binding agreement will need to offer continued compliance with the drought emergency regulations and shall be agreed upon by both parties as well as the State Water Board.

Contact Information	
California Department of Fish and Wildlife Joe Croteau klamathwatershed@wildlife.ca.gov 530.340.0767	H&H Land and Livestock Company LLC Brian Heffernan 

This LCP is valid while the current drought emergency regulation is in place. By signature, both parties agree and memorialize CDFW as the coordinating entity for this binding agreement. The Landowner shall include one signed copy with its petition to the SWB, return one signed copy to CDFW; and retain a signed copy of this binding agreement and the conservation plan readily handy at its residence in the event any questions arise for either party during implementation or monitoring.

Authorized Landowner Signature

H&H Land and Livestock Co. LLC

Sign Here: _____

Brian Heffernan, Manager

Date signed:

3/10/22

Authorized Coordinating Entity Signature

DocuSigned by:

Jeffrey Stoddard

Sign Here: _____

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Date signed: 3/9/2022

Approved on Behalf of Tina Bartlett, Regional Manager
 Northern Region

SUPPORTING INFORMATION

PIVOTS	
Total Pivot Acres	230.00
Pivot % Total Acres	71.88%
LEPA Conversion Savings (%) (ESTIMATED)	18.00%

	2020 Pivot AF (baseline)	2022 Reduction AF
April	61.61	11.09
May	92.41	16.63
June	123.21	22.18
July	169.42	30.50
August	200.22	36.04
September	154.02	27.72
October	61.61	11.09
	862.50	155.25

CORNERS

Total Corners Acres	65.00
Corners % Total Acres	20.31%

6/30/22 Shutoff All Irrigation to corners

	2020 Corners AF (baseline)	2022 Corners Reduction AF
April	17.41	0.00
May	26.12	0.00
June	34.82	0.00
July	47.88	47.88
August	56.58	56.58
September	43.53	43.53
October	17.41	17.41
	243.75	165.40

WHEELLINE

Total Wheelline Acres	25.00
Wheelline % Total Acres	7.81%
Wheelline Savings (%) (reduce sets from 11 to 9 hrs each)	19.00%

	2020 Wheelline AF (baseline)	2022 Wheelline AF Reduction
April	6.70	1.27
May	10.04	1.91
June	13.39	2.54
July	18.42	3.50
August	21.76	4.14
September	16.74	3.18
October	6.70	1.27
	93.75	17.81

EARLYSHUTOFF

EARLY IRRIGATION SHUT OFF (10/1)

October

2020 AF (baseline)

2022 Estimated AF (without early shutoff)
85.71

2022 Estimated Reduction AF with Early Shutoff
85.71