Dane Sousa
[redacted]

April 6, 2022

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

Re: 2022 Cooperative Solution - Sousa Farm

To Deputy Director,

As authorized by Local Cooperative Agreement 875(f)(4)(d) for the Scott River watershed, Dane Sousa at Sousa Farm is providing this letter to further describe its proposed Local Cooperative Solution (LCS) for the 2022 irrigation season.

Introduction/History Irrigation Practices

We own approximately 75 acres at the above address, of which we irrigate 65 acres that has been cultivated as seasonal Alfalfa, grass, and we've rotated crops such as Winter Wheat and Teff grass since 2014. In addition to the 75 acres on Oak Hill Ln, we lease approximately 16 acres on 1401 McAdams Creek Rd. for a total of 80 irrigated acres. Our farm is irrigated by groundwater, and we do not have any access to surface water. Irrigation for seasonal fields include two agricultural wells that supply the following areas and equipment:

1. Wheellines (approximately 64 acres) - Wheelline (i.e. long mobile pipe sets historically moved manually during irrigation season) service approximately 64 acres. We have one wheel line that irrigates McAdams Creek Rd for approximately 16 acres. Generally, each wheelline is moved manually each day at approximately 8am and at 8pm resulting in two approximately 12 hour operation periods during a 24 hour period.

Irrigation season for seasonal pasture across our property, including in 2020 (base year) typically begins for us about the first week in April each year and continues into

late August, subject to variance depending on annual temperature and precipitation conditions.

The attached spreadsheet gives the reduction calculated to reduce usage by 48.3% over the 2020 usage. The 38-acre rotation of alfalfa to Winter Wheat, the reduction of nozzles on the sprinkler heads for the wheellines, and to only irrigate until the end of June will meet the reduction requirements.

Specific 2022 Conservation Practices and Infrastructure Improvements

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

- **Wheelline** - We have replaced the nozzle sizes from 3-16 to 5-32 which saves on the amount of water used. We have also reduced the irrigation set times from 12 hours to 10 hours sets per day for (McAdams Creek). We intend to maintain a written irrigation log detailing wheelline run times and will present that log to the cooperating entity upon request.
- **Crop Rotation** - Reduced ground we are irrigating due to Winter Wheat is in production of 38 acres and will not be needing as much irrigation for (124 Oak Hill Ln)
- **Summer Forbearance** - Unlike most years we would be using approximately 64 acres in full production for irrigation as this year after June we will only have 28 acres in irrigation production and will cease irrigating all other acres.

Please note 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 Sousa Farm would otherwise be entitled, nothing herein shall be construed to limit the availability of such funds to the Sousa Farm 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.

Because Sousa Farm operates less than 400 acres we seek to coordinate with Krauss & Sons. These conservation efforts can be verified on inspection conducted by the coordinating entity, hopefully scheduled because we do use pesticides from time to time

and those products have restricted entry protocols. As a partner in our family operation, I, Dane Sousa will be the contact person for this LCS. I can be reached by mail, the phone number listed above, and/or by email at [redacted].

Thank you for your consideration in this matter.

Regards,
Sousa Farm

Dane Sousa, Owner/Operator

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 April 6, 2022, the Dane Sousa DBA Sousa Farm (Landowner) proposed an 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 field maps incorporated by reference. The proposal uses the year 2020 as the baseline; it includes detailed spreadsheets and a narrative that describes reduced irrigation wheel line set timing, crop rotation, and a summer 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 48.3% 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 in conjunction with Krauss & Sons, Local Cooperative Solution with the understanding that their added acres are under a separate binding agreement. As such, the total enrolled acreage exceeds 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.

- 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 Carmen Tull klamathwatershed@wildlife.ca.gov 916.203.1947	Sousa Farm Dane Sousa [redacted]

This Binding Agreement 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 have the conservation plan readily available at its residence in the event any questions arise from either party during implementation or monitoring.

Authorized Landowner Signature:

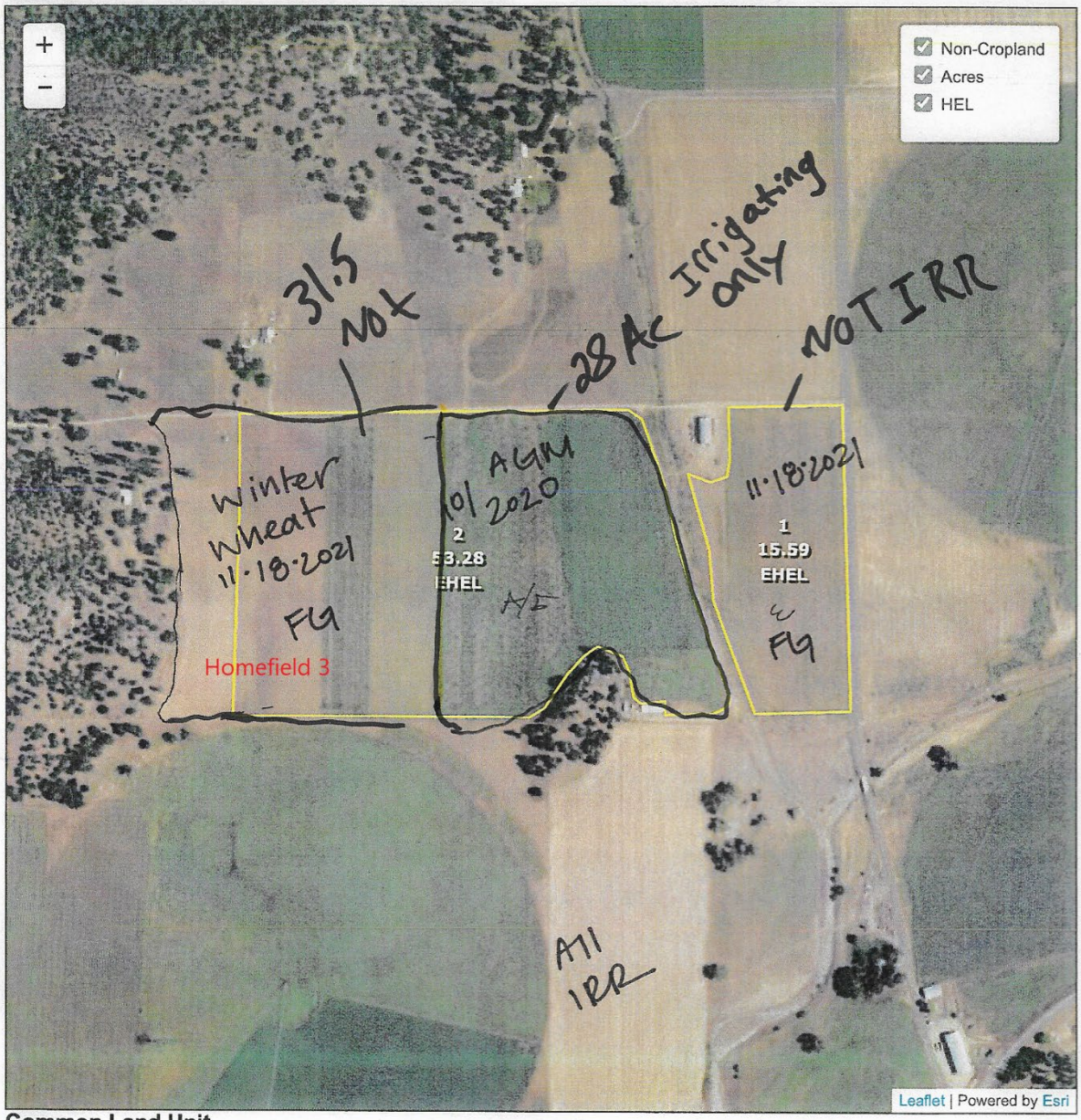
Sign Here: DocuSigned by: A224FBA212F248A... Date Signed: 8/3/2022

Authorized Coordinating Entity Signature:

Sign Here: DocuSigned by: 1D82ADE7303A474... Date Signed: 7/29/2022

SUPPORTING INFORMATION

USDA **Siskiyou County, California**



Common Land Unit

Cropland | Non-cropland | CRP

own

2022 Crop Year

Farm **2189**
Tract **8482**

Wetland Determination Identifiers
- **Restricted Use**
- **Limited Restrictions**
- **Exempt from Conservation Compliance Provisions**

N
W E
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Tract 1 of 1

[redacted]

release this
circled area
approx 15 acres

field name = "Jims"

Field ID	2020 Irrigated	2020 Irrigation	2020 Crop Type	Calculation Factors	April 2020 Acre	May 2020 Acre	June 2020 Acre	July 2020 Acre	August 2020 Acre	September 2020	October 2020 Acre	2020 Total Acre	2022 Irrigated	2022 Irrigation	2022 Crop Type	Calculation Factors	April 2022 Acre	May 2022 Acre	June 2022 Acre	July 2022 Acre	August 2022 Acre	September 2022	October 2022 Acre	2022 Acre Feet
jims	16	Wheel Line Section	Alfalfa	4 crops of Alfalfa were raised. 18 sprinklers 3/16 nozzles with 1/8" back sprayers. 60 psi. 11.60 GPM. 11 Hour sets 18 sets per pass. 7.81 ac feet per pass	15.22	15.22	22.83	22.83	22.83	15.22	0	**114.15**	16	Wheel Line Section	Grassey/Alfalfa	3 crops will be raised. 18 sprinklers 5/32 nozzels with 3/32 back sprayers. 60 psi 7.47 GPM 10 hour sets 18 sets per pass. 4.45 ac feet per pass	8.9	8.9	13.35	13.35	13.35	8.9	0	**66.75**
Home field 1	13	Wheel Line Section	Grass	3 crops were raised. 34 sprinklers, 3/16 nozzles, 60 psi , 7.9 GPM, 11 hour sets, 10 sets per pass. 5.43 ac feet per pass	10.86	10.86	16.29	16.29	16.29	10.86	0	**81.45**	13	Wheel Line Section	Grain	1 crop of grain. 34 sprinklers 11/64 nozzels, 60 psi, 6.57 GPM 11 hour sets 10 sets per pass. 4.52 ac feet per pass	4.52	9.04	4.52	0	0	0	0	**18.08**
Home field 2 wheeline 1	14	Wheel Line Section	Alfalfa	3 crops were raised. 32 sprinklers, 3/16 nozzles, 60 psi, 7.9 GPM, 11 hour sets, 10 sets per pass. 5.11 ac feet per pass	10.22	10.22	15.33	15.33	15.33	10.86	5.11	**82.4**	14	Wheel Line Section	Grassey/Alfalfa	3 crops. 32 sprinklers 5/32 nozzels 60 psi .5.45 GPM, 11 hour sets 10 sets per pass. 3.53 ac feet per pass	7.06	10.59	10.59	10.59	10.59	7.06	0	**56.48**
Home field 2 wheeline 2	14	Wheel Line Section	Alfalfa	3 crops were raised. 32 sprinklers, 3/16 nozzles, 60 psi, 7.9 GPM, 11 hour sets, 10 sets per pass. 5.11 ac feet per pass	10.22	10.22	15.33	15.33	15.33	10.86	5.11	**82.4**	14	Wheel Line Section	Grassey/Alfalfa	3 crops raised. 32 sprinklers 5/32 nozzles 60 psi, 5.45 GPM, 11 hour sets, 10 sets per pass. 3.53 ac feet per pass	7.06	10.59	10.59	10.59	10.59	7.06	0	**56.48**
Home field 3	23	Wheel Line Section	wheat/ Teff grass	3 crops were raised.32 sprinklers, 3/16 nozzles, 60 psi, 7.9 GPM, 11 hour sets, 14 sets per pass. 7.17 ac per pass	7.17	14.34	7.17	14.34	14.34	7.17	0	**64.53**	23	Wheel Line Section	Grain	1 crop raised 32 sprinklers 11/64 nozzels 60 psi, 6.57 GPM, 11 hour sets, 14 sets per pass. 5.96 ac feet per pass	5.96	11.92	5.96	0	0	0	0	**23.84**
	80			TOTALS	53.69	60.36	76.95	84.12	84.12	54.97	10.22	**424.93**	80				33.5	51.04	45.61	34.53	34.53	23.02	0	**241.63**
																70% of 2020 water use volume (AF)				58.9	58.9	58.5	7.2	297.5
																30% reduction volume (AF)				25.2	25.2	16.5	3.1	127.5
																Water reduced in excess of need expressed in (AF)				24.4	24.4	15.5	7.2	75.8
																Total Percentage Reduced	37.6%	16.1%	41.5%	59.0%	59.0%	58.1%	100.0%	47.8%