March 2, 2022

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

**Re: LCS Proposal for Finley Farms** 

To Deputy Director: Attached you will find our LCS Proposal for 2022.

Here at Finley Farms, we have 2,179 Acres of designated farmland per Siskiyou County Department of Agriculture spray maps (see attached). Finley Farms Incorporated owns or leases all 2,179 acres. We have adjudicated and non-adjudicated rights. We get all our water through ground water pumping. We also have one water right in Kidder Creek and one water right in the Scott River that we will not be exercising in 2022. We grow alfalfa, grass and grain hay. Our irrigation methods include center pivots, wheel lines, and big guns. We care deeply about the environment and pride ourselves in being stewards of the land. We understand how important the Scott River Watershed is to our farming operation and to our local communities. We have taken many steps over the years to become more efficient in our farming practices and strive to conserve water. In 2021 we did participate in a forbearance agreement which shows we are willing to work to find a solution. Below we will show how we plan to get our estimated 30% overall reduction and meet our monthly reduction in the months of July, August, and September.

With the extremely dry conditions of 2020 we put on estimated 35.5 inches of water in 2020. (Orloff study attached with info from our fields labeled FI) which is an estimated 6,444 Acre Feet of water. To reach our goal of 30% we will have to reduce that number to at least 4,510 Acre Feet. (1,934 acre-feet conserved). We will not be irrigating a fourth cutting on any fields in the 2022 growing year so that will play a huge role in meeting our goal. Below I will explain the steps in which we will take to reach the rest of the reduction as well as attach a spread sheet and the Siskiyou County Department of Agriculture spray maps that identify each individual location.

1) Starting with center pivots we searched for a more efficient use, that led us to install low energy precision application (LEPA) systems as well as low elevation spray application (LESA) to some of our pivots this past year. Studies have shown that by retro fitting your center pivots with both systems you can reduce water usage by at least 18%. (See Attached) LEPA was installed in late 2020 and 2021 on 654 acres of pivots resulting in an estimated water savings of 384 acre-feet.

- 2) Although we don't reach our goal with just these systems, we have found that we can control our end gun usage and shut end guns completely off by June 15<sup>th</sup> at fields 3-01,3-02,3-03,3-04,3-05,3-06,3-07,3-11,4-03, and 4-04. We used the formula <u>GPM X Min X Hours X Days/325851</u> Using that formula, we could calculate the estimated acre feet our end guns used. We found shutting the end guns off gives us another approximant <u>1.9%</u> reduction. (122 acre-feet conserved). All these end guns are in reach nine down Scott River Road.
- Another measure we will take to reach our goal is to reduce the number of revolutions our some of our pivots make in the irrigation year. We felt that the best option to control our water usage in 2022 was through our pivots because they irrigate most of our ground. We can deficit irrigate through those pivots and reduce the number of revolutions our pivots make in 2022. In 2020 our pivots made an estimated 28 revolutions applying approximately 1.3" each revolution for an estimate of 36.9" applied. In 2022 we plan to run those pivots for an estimated 18 revolutions applying an estimated 23.4". (801 acre-feet conserved). We will have charts at each pivot panel to keep track of the starting time and date and number of revolutions. Each pivot has a chart that gives the amount of water used and applied at every control panel. In a pivot you can set a certain speed to control the amount of water applied to a field. Although we have put LEPA systems on a lot of our pivots, we have not yet put them on every pivot. Part of our revolution reductions is on pivots that are not retrofitted with the LEPA, we used both pivots with LEPA and without LEPA to reach our goal. Using this plus the reductions mentioned above will give us an estimated 21.3% reduction through pivots.
- 4) When it comes to wheel lines, we have an estimated 564 irrigated acres through this method. We will shut off all wheel lines for fourth cutting as stated above but we will also be shutting off another 21 acres in reach nine by June 15 only getting 1 cutting instead of 4 off that area. This will add an estimated .75% reduction (48 acre-feet conserved). We also have 3 specific sites 4-01, 5-03, and 5-05 that we will have to reduce our number of passes of water applied to reach our goal for those specific fields. We estimate that our wheel lines on the sites mentioned above will apply 2.6 inches of water in a 10-hour set at 40 PSI. We will make passes accordingly to reach our month-to-month goals as well as our overall goal. Attached will be the Rain Bird sprinkler chart to show how we get our 2.6-inch estimate.
- 5) Although our goal of 30% is not reached by just the steps above we have an estimated 124 acres more grain production in 2022 as opposed to 2020. By rotating fields to a grain crop, it allows us to cut water to 224 acres by June 10<sup>th</sup> as opposed to irrigating said acres into September. This will add a <u>6%</u> savings in water (387 acre-feet conserved) for our 2022 irrigation year as well as help us meet our monthly goals in the critical months of July, August, and September.

- 6) With most of our reduction reached through the steps above the final steps to reach the final goal are as follows. We will completely dry up another 29.7 acres leaving previously irrigated hay and pasture ground without water in 2022 which gives us an estimated 1.3% reduction (84 acre-feet).
- 7) At location Pom-01 we previously ran two pumps for that center pivot at a higher nozzle package. In 2021 we changed that nozzle package which has allowed us to quit using one 25 Hp pump producing 450 GPM that used an estimated 141.19-acre ft in that location and gives us a 2.1% estimated savings. We used formula Gallon Per Minute X 60 Minutes X Hours Ran X Days Ran/325851

By implementing the practices described above on our fields we can reduce our pumping by 30.6%. These reductions are described for each field in the attached spread sheet. Several fields use multiple practices to save water. These are reflected in the calculations in the attached spreadsheet.

We plan to use DFW as our Coordinating entity. We feel we can work together with DFW to make sure our goals are met. We will have easily accessible charts in every pivot to keep track of pivot revolutions and water applied.

The pump that will no longer run at location Pom-01 will be accessible for inspection at any time. Reduction of wheel line passes will be noticed at the start of each pass (which takes roughly 1 week) and will be reported to coordinating entity. All other conservation measures including grain, end gun, and dried up acres will be visible at any time. At Finley Farms we care deeply about the Scott River Watershed and its natural resources. We know that our livelihoods depend on it and the Scott Valley economy depends on it. Obviously, we are willing to work with the water board as this LCS is evidence, but we hope that you understand the impact that this curtailment and any future decisions would have on the future of agriculture in Scott Valley and Siskiyou County as a whole.

This plan is offered in good faith regarding the local control solution for the 2022 irrigation season. All rights, claims, and defenses with regards to the matter described herein are hereby expressly reserved. Moreover, this plan is offered voluntarily by Finley Farming Inc. Previously in 2021. We were one of three irrigators that curtailed our water use early, July 31, 2021, in exchange for compensation. No part of this plan or its water budget shall be construed to limit the availability of our participation of any future potential programs.

Below you will see our estimation for water applied in inches. We have our month-to-month plan as well as our total inches applied the entire irrigation season. This is a sample chart of what will be in each pivot. Not all pivots will have these exact numbers, but each pivot will have a chart unique to the amount of water allowed under our plan.

									Total
Year		April	May	June	July	August	September	October	Inches
	2020	3.5"	5.5"	7"	9"	6.5"	4"	0"	35.5"
	2022	3.5"	4"	6.3"	6.3"	4.5"	0"	0"	24.6"

In order to report our month-to-month usage we will take the following steps to create our report.

Pivots- We will have a chart in each pivot panel showing date, revolutions, amount of water applied, and submitted each month.

Wheel lines- Wheel lines mentioned in the plan will be monitored. When a new pass across the field begins it will be noted, and upon finish it will be noted with the amount of water applied, and the pressure that it operated at. Each month we will submit the information above.

End Guns- End Guns will be monitored to make sure we have the correct guns shut off at the dates mentioned in our plan. We will make note of those dates and submit.

wheel line dry up- Wheel lines that are dried up after a certain date will be noted and will be logged and submitted.

Dry acreage- We will submit photos of dried-up acres monthly.

Pump no longer in use- The panel which starts the pump will have fuses removed which will not allow the pump to run. We will include pictures at the start of the irrigation season.



March 17, 2022

Jason Finley, Landowner and Manager Finley Farms Incorporated

SUBJECT:

Groundwater Use Reduction and Binding Agreement for Local

Cooperative Solution

Dear Jason Finley,

On August 17, 2021, the State Water Board adopted an emergency regulation establishing drought emergency minimum flows in the Scott River and Shasta River watersheds. (Cal. Code Regs., tit. 23, §§ 875–875.9.). Under the regulation, 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 in lieu of curtailment.

For overlying or adjudicated groundwater diversions for irrigated agriculture described in section 875.5(f)(4)(D)(i) – (ii) [Scott River], the State Water Resources Control Board (SWB) 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. For the Scott River the proposal needs to provide at least: 1) a net reduction of water use of 30 percent throughout the irrigation 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.

On March 2, 2022, you proposed an LCS authorized by 23 CCR §§ 875(f)(4)(D) of the regulation for the 2022 irrigation season. It includes a conservation plan,

Jason Finley March 17, 2022 Page 2 of 3

narrative, and spray/field maps incorporated by reference. The proposal uses the year 2020 as the baseline; it includes detailed spreadsheets and a narrative that describes fourth cutting irrigation halted on all fields, enhanced irrigation pivot efficiencies, big gun sprinkler usage reductions, reduced irrigation pivot revolutions, reduced wheel line irrigation, rotated fields and crops, dried fields, and an upgraded nozzle package that has resulted in the discontinuation of one of the two groundwater pumps at location Pom-01 (see attached maps). The specific conservation practices within the narrative offer concise and appropriate monitoring elements enabling CDFW to assume the role of a coordinating entity to implement a binding agreement.

Attached to this cover letter is a groundwater use reduction and binding agreement for a local cooperative solution. You have worked closely with CDFW and SWB staff to develop this binding agreement that will enable us to be your coordinating entity. I have already signed it. If you agree with its content and terms, please sign and retain one copy, include one copy with your petition to the SWB, and return one copy to the email included in the contact information above.

CDFW is grateful for your commitment to enter a groundwater use reduction and binding agreement for a local cooperative solution. We think this will be one of several tools we can use to tackle the challenges of this ongoing drought to protect native salmon, protect tribal cultural resources, and support local and commercial economies. If you have any questions regarding this letter, please contact Environmental Program Manager Joe Croteau at <a href="mailto:klamathwatershed@wildlife.ca.gov">klamathwatershed@wildlife.ca.gov</a>.

Sincerely,

—DocuSigned by: Ina Bathitt

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Tina Bartlett, Regional Manager Northern Region

Ec's on Page 3

# 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, 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**

- 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 season (April 1 October 31), as compared to the prior irrigation

<sup>&</sup>lt;sup>1</sup> California Code of Regulations, title 23, sections 875–875.9.

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 March 2, 2022, Finley Farming Inc. (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 field maps incorporated by reference. The proposal uses the year 2020 as the baseline; it includes detailed spreadsheets and a narrative that describes fourth cutting irrigation halted on all fields, enhanced irrigation pivot efficiencies, big gun sprinkler usage reductions, reduced irrigation pivot revolutions, reduced wheel line irrigation, rotated fields and crops, dried fields, and an upgraded nozzle package that has resulted in the temporary discontinuation of one of the two groundwater pumps at location Pom-01 (see attached maps). The specific conservation practices within the narrative offer concise and appropriate monitoring elements enabling CDFW 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 30.6 % to meet the requirement described in item "ii" above.

The included lands in the proposal equal 2,179 acres and exceeds the minimum 400 acres required under the emergency regulation. This agreement is being entered into with the understanding that additional acres may be added under separate binding agreements with additional landowners for State Water Resources Control Board (State Water Board) approval. Any additional landowners joining the Finley Farms LCS will only be done with the Landowner's consent, and with the understanding it will not harm or hinder operations. The Landowner will not be held liable for any violations of additional landowner's respective LCS.

### 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 prenotification 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 <u>klamathwatershed@wildlife.ca.gov</u>. 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 Joe Croteau <a href="mailto:klamathwatershed@wildlife.ca.gov">klamathwatershed@wildlife.ca.gov</a> 530.340.0767	Finley Farming Inc. Jason Finley						

This LCS 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** 

Sign Here: James Finled Framing Inc.

Date signed: 3/17/22.

**Authorized Coordinating Entity Signature** 

Sign Here:

Jina Baitlitt =1D82ADE7303A474... Date signed: 3/17/2022

Field	Acres	Field Type in 2020	Field Type in 2022	Water Applied 2020	Water Applied 2022	% water reduction	Acre Feet 2020	Acre Feet 2022	Notes
1-01		15 Irrigated Pasture	Dry	40"	0"	100%	50	0	Completely dry in 2022
1-02		63 Grass Alafalfa	Grass Alfalfa	35.5"	35.5"	0.00%	186.375	186.375	
1-03		74 Alfalfa	Alfalfa	35.5"	35.5"	0.00%	218.91	218.91	
1-04		50 Grass	Grass	35.5"	35.5"	0.00%	147.91	147.91	
1-05		40 Alfalfa	Alfalfa	35.5"	35.5"	0.00%	118.332	118.332	
1-06		75 Grass Alafalfa	Grain	35.5"	12"	66%	221.872	75	Dry by June 10th/Grain
1-07		78 Alfalfa	Alfalfa	35.5"	35.5"	0.00%	230.747	230.747	
1-09		36 Alfalfa	Alfalfa	35.5"	35.5"	0.00%	106.498	106.498	
3-01		95 Grain/ Fall Plant	Alfalfa	24.6"	24.6"	0%	194.75	194.75	
3-02		146 Alfalfa	Alfalfa	37"	24.6"	33.60%	450.166	299.3	LEPA, End Gun shut off by June 15th, Revolution reduction
3-03		75 Alfalfa	Alfalfa	35.5"	24.6"	33.60%	221.87	153.75	LEPA, End Gun shut off by June 15th,Revolution reduction
3-04		170 Grass	Grass/Grain	40"	24.6"	38.50%	566.6	348.5	LEPA, End Gun shut off by June 15th, 50 acres dried up by June 10th,Revolution reduction
3-05		110 Alfalfa	Alfalfa	37"	24.6"	33.60%	339.166	225.5	LEPA, End Gun shut off by June 15th, 21 acres dried up by june 15th, Revolution reduction
3-06		94 Alfalfa	Grain	37"	12"	68%	289.83	94	Dry by June 10th
3-07		103 Alfalfa	Grass Alfalfa	37"	35"	5.40%	329.916	312.083	LEPA, End Gun, Revolution reduction
3-11		24 Alfalfa	Alfalfa	37"	24.6"	33.60%	74	49.2	End Gun
4-01		15 Alfalfa	Alfalfa	37"	24.6"	33.60%	46.25	30.75	Reduction of passes of water via wheel line
4-02		3 Grain	Grain	12"	9"	25%	3	2.25	Dry by June 10th
4-03		35 Alfalfa	Alfalfa	35.5"	24.6"	30.80%	103.54	71.75	End Gun, 5.5 Acres Dry by June 15th
4-04		65 Alfalfa	Grain	50"	12"	76%	270.83	65	End Gun, 65 Acres Dry by June 10th-No Longer use big gun on top corner
4-05		42 Alfalfa	Grain	37"	12"	68%	129.5	42	42 Acres Dry by June 10th
5-01		240 Alfalfa	Alfalfa	37"	24.6"	33.60%	740	492	Revolution reduction
5-02		100 Grain/ Fall Plant	Alfalfa	24.6"	24.6"	0%	205	205	
5-03		45 Alfalfa	Alfalfa	37"	24.6"	33.60%	138.75	92.25	Reduction of passes of water via wheel line
5-04		66 Alfalfa/Grass	Alfalfa/Grass	35.5"	24.6"	30.80%	195.247	135.3	Revolution reduction, Reduction of passes on wheel lines
5-05		58 Grass Alafalfa	Grass Alfalfa	37"	24.6"	33.60%	178.833	118.9	Reduction of passes of water via wheel line
5-06		35 Grain/ Fall Plant	Alfalfa	24.6"	24.6"	0%	71.75	71.75	
5-07		5 Dry	Dry	0"	0"	0%	0	0	
5-08		5 Irrigated Pasture	Dry	40"	0"	100%	16.66	0	Completely dry in 2022
MD-01		117 Alfalfa	Grass Alfalfa	37"	24.6"	33.60%	360.75	239.85	Lepa,Revolution reduction
POM-01		100 Alfalfa	Grass Alfalfa	46"	29"	37.00%	383.3	241.6	Two wells are tied together, one pump will not be in use thanks to new nozzle package creating 2.1% Savings, Revolution reduction
Total Ac	2	2179				Total Acre Feet	6590.352	4569.255	
								0.200075424	Maria Nata Nata Carlos and Maria Carlos and

0.306675121 Please Note No Irrigation on 4th Cutting on any of these sites.