Newton Family Ranch Karin Piersall Newton Trust

March 6, 2022

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

Re: 2022 Local Cooperative Solution

The Newton Family Ranch is providing this letter to further describe its proposed Local Cooperative Solution (LCS) actions for the 2022 irrigation season as authorized by 23 CCR §§ 875(f)(4)(D).

## **Introduction/Historical Irrigation Practices**

We irrigate 108 acres of which approximately 77 acres is seasonal pasture for grazing cattle and 31 acres in alfalfa hay which we harvest to feed our cattle in the winter months. Irrigation infrastructure for seasonal pasture and alfalfa includes two agriculture wells that supply the following areas and equipment: (see attachment for land locations and APN)

#### PIVOT (approximately 63 acres)

Pivot was installed in 2016, replacing three (3) one quarter mile wheelines. The pivot services approximately 63 acres. The end gun (large-nozzle single sprinkler on the end of the pivot) is a Nelson SRNV 100 with a 5 horse power booster pump which is estimated at 130 gpm. (see attached vendor chart)

#### WHEELINES (approximately 36 acres)

Wheelines (i.e. long mobile pipe sets historically moved manually during irrigation season) service approximately 36 acre. Historically, each wheeline is moved manually at approximately 6am and 6pm resulting in two approximate 11 hour operation periods (22 hours run time) in a 24 hour period

#### CORNERS AND STRIPS (approximately 9 acres)

Since our irrigated property is irregularly shaped and certain areas cannot be irrigated with pivot or rectangular wheelines systems, the remainder areas are irrigated using a combination of methods including movable big guns (i.e. movable high pressure sprinklers) and handlines (i.e. movable aluminum pipe). Historically, these big guns and handlines are moved at approximately 6am and 6pm resulting in two approximate 11 hour (22 hours run time) operation periods in a 24 hour period.

Irrigation season for seasonal pasture and alfalfa on our operation, including in 2020 (base year), typically begins about April 1 each year and continues into mid to late October for pasture and mid September for alfalfa. These time frames are subject to variances that depend on annual temperature

and precipitation conditions.

## Specific Local Conservation Solutions (LCS) for the 2022 Irrigation Season

## PIVOT (End Gun shutoff)

We intend to shut the End Gun off on the pivot by July 1, 2022 and leave it off for the remainder of the irrigation season. This practice can be verified by drive-by inspection from the road.

## WHEELINES (Reduced set times)

We intend to reduce our two daily wheeline set times from approximately 11 hours each (22 hours run time in 24 hours ) to 6 hours each (12 hours run time in 24 hours). We also intend to maintain a written wheeline log on run times and will present that log to the Cooperating Entity upon request.

## CORNER AND STRIPS (Reduced set times)

We intend to reduce our two daily set times on our big guns and handlines from approximately 11 hours each (22 hours run time in 24 hours) to one 6 hour set per day on these systems. We also intend to maintain a written log on run times and will present that log to the Cooperating Entity upon request.

#### FALL 2022 (Ceasing of all irrigation)

We intend to cease all irrigation on pasture and alfalfa by October 1, 2022. This date is generally weeks sooner than good practices would require for optimal pasture management for cattle grazing. Verification of the cessation of irrigation can be verified by an on site inspection by the Cooperating Entity.

## **General Comments**

Each of these undertakings are at a significant cost to us as a small, generational family livestock and hay producer, resulting in reduced pasture and hay production due to reduced irrigation water. When grazing pastures and hay fields do not receive adequate irrigation throughout the normal irrigation season, which is a consequence of this plan, especially in corners and strips of pasture and end gun coverage areas; 1) grazing opportunity is reduced; 2) grazing season becomes shorter; 3) hay production for our winter cattle feed is reduced; 4) additional supplemental fall/winter feed must be purchased at prices that are historically high this year and; 5) permanent plant damage may likely occur and future productivity of pastures and hay crops may be impaired.

It seems clear that unless the weather and the snowpack improve soon, given the dry year that 2022 has been to this point, no amount of sacrifice by farmers and ranchers will improve river conditions this year. However, we are undertaking voluntary conservation measures in good faith in lieu of involuntary curtailments triggered by river flow standards that are not likely achievable and/or other involuntary regulations. Conservation efforts can, and likely will, create real financial burdens on

farmers and ranchers, their families, and the entire community as a whole, especially in a year where feed and forage costs are historically high and costs are escalating on all other inputs from labor to fuel to equipment. We hope that you will consider these voluntary actions as you balance the interests of various stakeholders in our watershed. We also hope that you will consider the history of past water conservation efforts in Scott Valley, including changing from flood irrigation to wheelines to modern pivot systems, and also the on-going efforts with the Sustainable Groundwater Management Act which farmers and ranchers in the Valley, including ourselves, have put much time and effort into planning for future long term water conservation.

Please note that this conservation 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 government or NGO funds later become available for any forbearance or improvement efforts to which the Newton Family Ranch would otherwise be entitled, nothing herein shall be construed to limit the availability of such funds to the Newton Family Ranch provided that we materially perform the 2022 undertakings described herein. Water conserved under this proposal will not be transferred to parcels not included under the LCS and we will not knowingly or intentionally otherwise take action outside of the LCS that diminish, in any material way, the overall thirty percent reduction established by this proposal.

In an effort to minimize any liability claims, we would like to request that the Cooperating Entity or any other member of the State Water Resource Control Board be accompanied by a representative from the Newton Family Ranch if they need to access the ranch property to observe our LCS practices.

Thank you for your consideration in this matter and please feel free to contact me with any questions.

## Karin Newton, Manager

cc : Brian Heffernan

Answers to narrative letter questions as requested by Adam Weinberg:

- 1) We do not have access to surface water.
- 2) We will use Joe Croteau with the CDFW as our Coordinating Entity.
- 3) You are correct. The "Pivot % Total Acres" is supposed to be "Handline % Total Acres"

## **BINDING AGREEMENT**



<u>State of California – Natural Resources Agency</u> 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,<sup>1</sup> 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;
- 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

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<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 6, 2022, the Karin Newton of Newton Family Ranch (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 pivot irrigation reductions, reduced irrigation wheel line set timing, reduced irrigation of "corner" and "strip" 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 33.8% 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 Brian Heffernan's, of the H&H Land & Livestock Co., LLC, Local Cooperative Solution with the understanding that their additional 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 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 logs described under the wheel line, and corner and strip conservation practices, and any photos, logs, checklists, and other documentation for these conservation strategies 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 Inform	ation
California Department of Fish and Wildlife	Newton Family Ranch
Carmen Tull	Karin Newton
klamathwatershed@wildlife.ca.gov	
916.203.1947	

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 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: Karin Newton Date Signed: 4/24/2022

#### Authorized Coordinating Entity Signature:

Sign Here: Brutt kormos Date Signed: 4/22/2022 For Tina Bartlett, Regional Manager

# **SUPPORTING INFORMATION**

ressure variation at the sprinkler

pply

eld

s end guns and swing arm corners

for reducing higher pressures akler nozzles are the smallest, thus evaporation. They are required options that have been engineered acific range, for optimum water duct and ultimately increased yield.



#### ESSORIES

er variety of sprinkler mounting tem to your specific needs. Contact ation.

#### **END GUNS AND BOOSTER PUMPS**

End guns are an economical way to add profitable acres to your farm operation. The optimum operating pressure for an end gun can range between 40 and 70 psi and is based largely on the nozzle size of the end gun which is determined by the system length, total system flow (gpm), operating pressure and the distance of throw or effective coverage of the end gun.



NOZZLE	END GUN PSI	END GUN GPM	BOOSTER PUMP/PSI BOOST	EFF. COVERAGE
.40"	40 - 50	28 - 32	2 HP / +32	59' - 63'
.50"	43 - 53	47 - 53	2 HP / +33	75' - 81'
.60"	46 - 56	71 - 79	2 HP / +33	86' - 92'
.70"	50 - 60	100 - 110	2 HP / +31	97' - 103'
.80"	54 - 64	138 - 151	2 HP / +28	108' - 114'
.90"	57 - 67	172 - 187	5 HP / +33	115' - 121'
1.0"	60 - 70	211 - 228	5 HP / +28	125' - 133'

#### **RECOMMENDED END GUN OPERATING PRESSURE**

Reinke understands the importance of efficiency. That's why we locate the booster pump at the end gun with full sweep elbows to minimize the costly friction loss and additional weighty components associated with mounting the booster pump at the end tower.

SUMMARY (DRAFT)			
Total Irrigated Seasonal Pasture Acreage	108		
Pivot Acreage (alfalfa)	25		
Pivot Acreage (pasture)	38		
Wheelline Acreage (alfalfa)	6		
Wheeline Acreage (pasture)	30		
Handline (pasture)	1		
Squirt Gun (pasture)	8		
Total AF 2020 All Acres (NON BINDING BASELINE ESTIMATE FOR DISCUSSION PURPOSES ONLY)	400.00		
Total Monthly AF (avg) 2020	57.14		
	Total 2020 Estimated Monthly (AF)	Total Estimated 2022 Monthly Reduction (AF)	Estimated Monthly Redustion %
April	28.57	6.06	
Мау	42.86	9.09	
June	57.14	12.12	
July	78.57	25.36	
August	92.86	30.21	
September	71.43	25.22	
October	28.57	26.98	
	Total Estimated 202	Total Estimated 2022	Estimated Season
	400.00	135.06	

	Estimated Monthly		
_	Redustion %		
6			
	-		
9	21.21%		
2	-		
6	32.28%		
1	32.54%		
2	35.31%		
8	94.44%		
5	Estimated Seasonal Redust	tion 0/	
	Estimated Seasonal Redusi	IIUT 70	
6	33.76%		
	· · · · · · · · · · · · · · · · · · ·		

PIVOTS (Alfalfa)	
Total Pivot Acres	25.00
Pivot Alfalfa % Total Acres	23.15%
GPM with End Gun	685
Gpm without End Gun	555

## 2020 Pivot Alfalfa AF (baseline) 2022 Reduction Alfalfa AF

April	6.61	0.00
Мау	9.92	0.00
June	13.23	0.00
July	18.19	3.45 End Gun OFF
August	21.49	4.08 End Gun OFF
September	16.53	3.14 End Gun OFF
October	6.61	6.61 All Irrigation OFF
	92.59	17.28

PIVOTS (Pasture)	
Total Pivot Pasture Acres	38.00
Pivot Pasture % Total Acres	35.19%
GPM with End Gun	685
Gpm without End Gun	555

	2020 Pivot Pasture AF (baseline)	2022 Pivot PastureReduction AF	
April	10.0	5	0.00
Мау	15.00	3	0.00
June	20.1	1	0.00
July	27.6	5	5.25 End Gun OFF
August	32.6	7	6.20 End Gun OFF
September	25.13	3	4.77 End Gun OFF
October	10.0	5	10.05 All Irrigation OFF
	140.74	4	26.27

Wheelline (alfalfa)	
Total Wheelline Alfalfa Acres	6.00
Wheeline Alfalfa Total Acres	5.56%
Savings (moving from 11 hour sets to 6)	45.45%

	2020 Wheeline Alfalfa (baseline)	2022 Wheeline Alfalfa Reduction AF	
April	1.59	0.72	
Мау	2.38	1.08	
June	3.17	1.44	
July	4.37	1.98	
August	5.16	2.58	
September	3.97	3.97	
October	1.59	0.00 `	
	22.22	11.78	

Wheelline (Pasture)	
Total Wheelline Pasture Acres	30.00
Pivot % Total Acres	27.78%
Savings (moving from 11 hour sets to 6)	45.45%

	2020 Wheelline Pasture AF (baseline)	2022 Wheelline Pasture Reduction AF
April	7.94	3.61
Мау	11.90	5.41
June	15.87	7.22
July	21.83	9.92
August	25.79	11.72
September	19.84	9.02
October	7.94	7.94
	111.11	54.83

Handline Pasture	
Total Handline Pasture Acres	1.00
Pivot % Total Acres	0.93%
Savings (moving from 2 11 hour per day to one 6 hr set per day)	72.73%

2020	Handline Pasture AF (baseline)	2022 Handline Pasture Reduction AF
April	0.26	0.19
Мау	0.40	0.29
June	0.53	0.38
July	0.73	0.53
August	0.86	0.63
September	0.66	0.48
October	0.26	0.26
	3.70	2.77

Gun (Pasture)	
Total Gun Pasture Acres	8.00
Gun Pasture % Total Acres	7.41%
Savings (moving from 2 11 hour per day to one 6 hr set per day)	72,73%
	12.1070

	2020 Gun Pasture AF (baseline) 2022 Gun Pasture Reduction	on AF
April	2.12	1.54
Мау	3.17	2.31
June	4.23	3.08
July	5.82	4.23
August	6.88	5.00
September	5.29	3.85
October	2.12	2.12
	29.63	22.13