



PUBLIC NOTICE

Regular Meeting of the

WATERMASTER ADVISORY COMMITTEE (WAC)
Attachments available 11/07/2022 at www.honeylakevalleyrcd.us

Date: Thursday, November 10th, 2022

Location: NRCS/HLVRCD Office

170 Russel St, Suite C

Susanville CA, 96130

Time: **5:30 PM**

AGENDA

NOTE: THE HONEY LAKE VALLEY RESOURCE CONSERVATION DISTRICT WAC MAY ADVISE ACTION ON ANY OF THE AGENDA ITEMS SHOWN BELOW.

NOTE: IF YOU NEED A DISABILITY-RELATED MODIFICATION OR ACCOMMODATION, INCLUDING AUXILIARY AIDS OR SERVICES, TO PARTICIPATE IN THIS MEETING, PLEASE CONTACT THE DISTRICT OFFICE AT THE TELEPHONE NUMBER AND ADDRESS LISTED BELOW PRIOR TO THE MEETING.

I. CALL TO ORDER, PLEDGE OF ALLEGIANCE, ROLL CALL

II. APPROVAL OF AGENDA

III. PUBLIC COMMENT

Per RCD Board Policy No. 5030.4.1, during this portion of the meeting any member of the public is permitted to make a brief statement, express his/her viewpoint, or ask a question regarding matters related to the District. **Five (5) minutes** may be allotted to each speaker and a maximum of twenty (20) minutes to each subject matter.

IV. ITEMS FOR BOARD ACTION

V. ITEMS FOR BOARD DISCUSSION AND/OR ACTION

A. Annual Use Report

VI. COMMITTEE MEMBERS' COMMENTS

In accordance with Government Code Section 54954.2(a), committee members may make brief announcements or brief reports on their own activities. They may ask questions for clarification, make referral to staff or take action to have staff place a matter of business on a future agenda.

VII. ADJOURNMENT

The next regularly scheduled Honey Lake Valley RCD WAC meeting will be **January 12th, 2022, 5:30pm** at the **NRCS/HLVRCD Office.**

*I certify that on **November 7th, 2022** I personally posted agendas as required by Government Code Section 54956 and any other applicable law.*

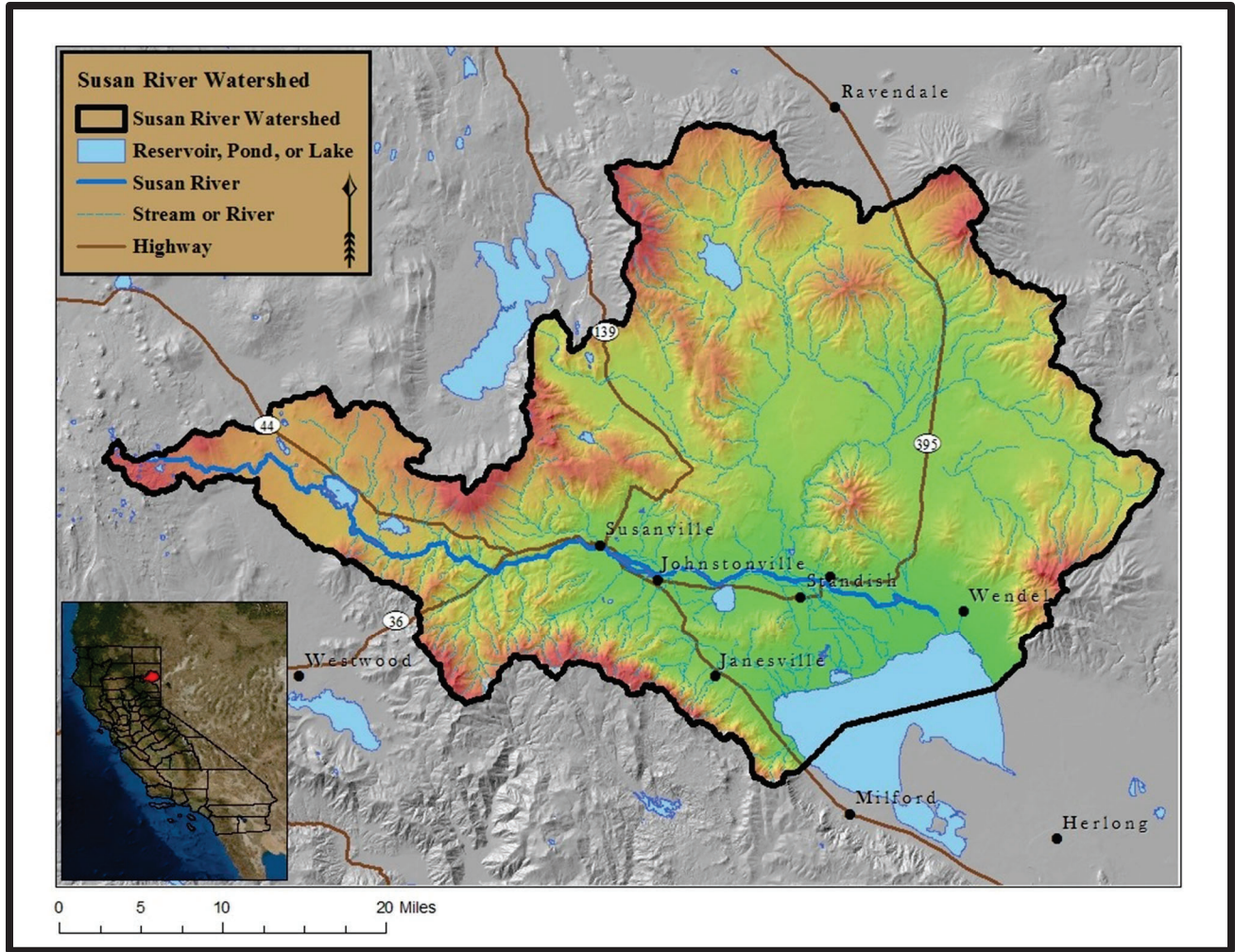
Respectfully submitted,

Henry Anderson
Deputy Watermaster, SRWMSA
Honey Lake Valley RCD



HONEY LAKE VALLEY
RESOURCE
CONSERVATION
DISTRICT

SUSAN RIVER WATERMASTER SERVICE AREA



ANNUAL USE REPORT - 2021/22

Susan River

Watermaster Service Area

Annual Use Report- 2021/2022

Fiscal Year: July 1, 2021- June 30, 2022

Irrigation Season: March 1, 2022- October 31, 2022

Storage Season: November 1, 2021- February 29, 2022

Lassen County, California

Decree No.'s 4573, 8174 and 8175

Submitted by December 31, 2022 to

The Presiding Judge, Lassen County Superior Court



Prepared By:

Honey Lake Valley Resource Conservation District
170 Russell Ave.
Susanville, CA 96130

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General Description:

The Susan River service area is located in the southern part of Lassen County in the vicinity of the town of Susanville. There are approximately 246 water right owners in the service area with total continuous allotments of 351.922 cubic feet per second in addition to storage rights held by several users. The source of supply consists of three stream systems as follows: Susan River, Baxter Creek, Parker Creek and their associated tributaries.

Susan River has its sources on the east slope of the Sierra Nevada Mountains in the southwesterly portion of Lassen County immediately east of Lassen National Park at an elevation of about 7,900 feet. Its channel runs easterly from Silver Lake through McCoy Flat Reservoir, through Susanville, and easterly on to Honey Lake.

Susan River has four major tributaries: Paiute Creek (entering from the north at Susanville), Gold Run and Lassen Creeks (entering from the south between Susanville and Johnstonville), and Willow Creek (entering from the north above Standish). Gold Run Creek and Lassen Creek rise on the north slope of Diamond Mountain at an elevation of about 7,600 feet. The watersheds of Paiute Creek and Willow Creek are lower and they rise on the south slopes of Round Valley Mountains.

A short distance below the confluence of Willow Creek and Susan River the river channel divides into three branches known as Tanner Slough Channel on the north, Old Channel in the middle, and Dill Slough Channel on the south. Two channels which take off Dill Slough on the south are known as Hartson Slough and Whitehead Slough.

The Baxter Creek stream system is situated in Honey Lake Valley on the east slope of the Sierra Nevada about 10 miles southeast of Susanville in the southern portion of Lassen County. The principal streams in the Baxter Creek stream system are Baxter Creek (which rises in the extreme western portion of the basin and flows in an easterly direction), Elysian Creek, Sloss Creek, and Bankhead Creek (a tributary to Baxter Creek from the south). Elysian Creek has three tributaries: North Fork Elysian Creek, South Fork Elysian Creek, and Kanavel Creek.

Parker Creek is situated in Honey Lake Valley on the east slope of the Sierra Nevada about 15 miles southeast of Susanville in the southern portion of Lassen County. Its source is on the east

slope of Diamond Mountain and flows in an easterly direction for about 5 miles into Honey Lake. The primary area of water use in the Susan River service area is in Honey Lake Valley between Susanville and the northwest shore of Honey Lake, 25 miles in length. The valley floor is at an elevation of about 4,000 feet.

Water Supply:

The water supply in the Susan River service area comes from two major sources: snowmelt runoff and springs. The snowpack on the Willow Creek Valley and Paiute Creek watersheds, which embrace more than half of the Susan River stream system, melts early in the spring and usually is entirely depleted by the first of May. The irrigation requirements from this portion of the stream system after the first of May are almost entirely dependent upon the flow of perennial springs which remain constant throughout the year. Under normal conditions, the flows of Lassen Creek, Gold Run Creek, Baxter Creek, Parker Creek, and the Susan River above Susanville are well sustained by melting snows until early June. The flow from perennial springs in this portion of the water system is comparatively small. The Lassen Irrigation Company stores supplemental water in Hog Flat Reservoir and McCoy Flat Reservoir, located on the headwaters of the Susan River. This stored water is released into the Susan River, which is used as a conveyance and commingled with the natural flow usually during June and July. It is then diverted into the A and B Canal leading to Lake Leavitt for further distribution by the irrigation district.

Precipitation Outlook for 2022-2023

The National Ocean and Atmospheric Administration (NOAA) has predicted as of October 20th, 2022, that a “near normal” amount of precipitation will occur for Northern California including the Susan River watershed for November 2022 to February 2023. NOAA also predicted “above normal” temperatures from November 2022 to January 2023, with temperatures predicted to return to “near normal” from December 2022 to February 2023.

As of October 13th, 2022, NOAA has predicted a 75% chance of a continued La Niña during the Northern Hemisphere winter of December 2022 to February 2023. The service also predicts a 54% chance for an ENSO-neutral from February-April of 2023.

Methods of Distribution:

Irrigation in the Susan River service area is accomplished by placing diversion dams in the main channel of the stream system, to raise the water to the level required to divert into the canals, sloughs and ditches. These dams for diversion are relatively large on the Susan River compared to those on the smaller tributaries. Various methods of irrigation are practiced; the most common approach is by flooding. With this technique, water is transported by a main conveyance channel along the high point of the lands to be irrigated. It is then dispersed by laterals along the higher ridges of the tract from which it can be distributed over the area to be irrigated by the smaller laterals of the ditch system. Sub-irrigation occurs in some areas incidental to surface irrigation or because of seepage from ditches or creek channels. During the past several years, numerous users have increased the usage of sprinkler irrigation by wheel lines to improve the efficiency of their irrigation systems.

Watermaster Service Fiscal Information:

The FY 2021/2022 Watermaster Service Budget was adopted on May 27th, 2021 in the amount of \$220,000; remaining steady with the FY 2020/2021 assessment of \$225,000. The Budget was increased due to high legal fees experienced by the District over three active water right litigation cases. The required notification regarding the budget, apportionment and individual assessments were mailed to the users and filed with the Lassen County Superior Court before June 15, 2021. There were no filed objections to the budget or apportionment within 15 days or thereafter; and thus, deemed approved by the Court without further hearing. The approved budget, apportionment, and individual assessments were certified to the Lassen County Auditor and the Lassen County Board of Supervisors prior to August 10, 2021.

2021/2022 Water Allocation and Distribution:

The Susan River Watermaster Service Area experienced light precipitation compared to the area's average. Based on California Cooperative Snow Surveys for the Susanville area, October 2020 through September 2021, the Northern Sierra area received only 25% of the average snow water content by April 1st, the point of peak average snow water equivalent content. The general availability of water for the various stream systems are described below.

Parker Creek: First priority water rights were served at proration through mid-spring.

Baxter/Elysian Creek: Users of both Baxter Creek and Elysian Creek could divert at prorated rates through early May.

Paiute Creek: The water supply in Paiute Creek was present in quantities for low proration for most of year, with low flows in March and April.

Lassen Creek: No Data Available

Hills Creek: No Data Available

Gold Run Creek: No Data Available

Upper Susan River: Flows for the Upper Susan met the full requirements of the Schedule 5, 2nd priority water right allotments up until early May. Stock water was available to most users through the irrigation season.

Lower Susan River Below the Confluence of Willow Creek: The Lower Susan had irrigation water for Schedule 3, 3rd priority users until late April and was nearly sufficient for schedule 3, 2nd priority users until mid-late May. Stockwater was available to most users until mid-June. Past this point only users upstream were able to exercise stock watering rights.

Willow Creek: Prorated allocations were available through late May. Flows were sufficient for regular stock watering of the second priority until late June. Conveyance of stockwater to downstream users developed issues from June to September.

Bankhead/Sloss Creek: Irrigation water was not available this year for consumption.

Lassen Irrigation Company Storage Reservoirs: LIC began diverting water from McCoy Flat Reservoir on June 1st, utilizing the reservoir completely by June 23rd. Hog Flat Reservoir water

utilization started approximately on June 29th and was completely drained by approximately July 10th.

Miscellaneous notable events:

1. The Watermaster truck was unavailable from April 19th to June 2nd due to a severe mechanical failure. Two new Watermaster service trucks were acquired for a total of \$27,088. One vehicle is reserved for WM use only. The other truck currently be loaned to the HLVRCD for total recovery of cost of purchase, and potential use by the Watermaster in case of emergency.
2. Henry Anderson was hired on as the new Deputy Watermaster for the SRWSA on March 9th, 2022. Henry has a Bachelor of Science in Chemistry and formerly worked as a Liquid Media Formulation Technician.
3. On May 31, 2022 the California Court of Appeals, Third Appellate District decided on the case of Dow V. Lassen Irrigation Company; ruling that Judgement 3037 does not award specific quantities of water for use against that over others in the water shed in relation to Decree 4573. Furthermore, the court ruled in favor of the Lassen Irrigation Companies claim that paragraph 17 of the Susan River Decree 4573, under the justification that the change of place of use can cause injury to others by negatively affecting the return flows to the water course. Furthermore, the water rights in question were deemed by the Supreme Court to be riparian in nature and therefore it would be unreasonable to move said rights from their intended place of use.
4. The Watermaster Service recently worked with Whitestar mapping to digitize the irrigated lands and diversions as described in the Parker, Susan, and Baxter Decrees. The information is now readily available on the HLVRCD website and should assist users and the Watermaster in better navigating the system in supplement to the DWR irrigated lands maps. - <https://www.honeylakevalleyrcd.us/srwsa-interactive-map>
5. The Watermaster Service has begun using more frequently digital depth recording devices. These can be deployed in most stream systems and provide recording lengths upwards of several months if necessary. An example chart of the data is found in Appendix D.

Appendices A-E

Numerical values are in cubic feet per second (cfs)
A blank space indicates no reading.

Appendix A: Department of Water Resources, Digital Gauge Data

FLOW OF SUSAN RIVER at SUSANVILLE (SSU) ($\frac{ft^3s^{-1}}{CFS}$)

DAY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER
1	64	114	101	29	33	11	9	8
2	84	110	94	40	32	12	9	9
3	97	102	87	55	32	11	10	9
4	109	95	84	55	34	10	9	9
5	109	94	81	60	32	11	9	9
6	91	88	79	56	31	13	8	9
7	83	84	76	53	26	11	8	9
8	79	85	74	52	24	12	9	9
9	77	84	75	51	21	13	9	9
10	72	76	75	50	18	12	10	9
11	66	80	73	49	15	12	10	9
12	66	73	67	53	14	11	10	9
13	69	65	64	60	13	12	8	9
14	70	72	61	49	12	11	8	9
15	119	89	58	47	12	11	8	9
16	136	174	56	45	13	11	8	10
17	120	143	53	46	11	12	8	10
18	115	121	51	45	11	15	8	10
19	120	161	50	46	10	12	10	10
20	109	132	48	43	11	11	17	10
21	103	212	46	41	12	10	13	10
22	125	195	43	40	12	10	13	10
23	151	166	41	36	12	9	12	11
24	163	149	39	34	12	10	11	12
25	167	139	38	22	10	9	10	13
26	168	133	36	18	10	10	10	13
27	165	128	34	15	11	9	10	13
28	150	121	35	17	10	9	10	13
29	131	111	35	34	11	9	9	13
30	126	105	33	33	11	10	8	13
31	119		30		11	9		13

Note: The green box border marks LIC’s utilization of Hog Flat Reservoir. The blue box border marks LIC’s utilization of McCoy Flat Reservoir. These daily values were averaged from the gauge’s ‘Real Time’ 15-minute interval data. Throughout the beginning of the season, the River commonly had dramatic increases and decreases in flow, in the span of 8-48 hours. Because of this, some of the above daily averages may be skewed. The water being released from Hog and McCoy Flat Reservoirs are included in

these figures. Values measured in CFS for the irrigation season from March 1st, 2022 to October 31st, 2022.

FLOW OF SUSAN RIVER at the CONFLUENCE of WILLOW CREEK (SSD) (ft^3s^{-1}/CFS)

DAY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER
1	24	69	49	11	0	0	0	0
2	42	66	50	9	0	0	0	0
3	51	66	49	7	0	0	0	0
4	59	66	47	6	0	0	0	0
5	67	62	40	6	0	0	0	0
6	63	59	41	5	0	0	0	1
7	57	57	42	5	0	0	0	3
8	43	55	40	6	0	0	0	3
9	53	50	38	6	0	0	0	0
10	53	47	39	6	0	0	0	0
11	48	48	40	1	0	0	0	0
12	41	44	38	0	0	0	0	0
13	43	40	33	0	0	0	0	0
14	57	41	25	1	0	0	0	5
15	58	47	24	5	0	0	0	10
16	81	54	21	6	0	0	0	11
17	74	65	20	5	0	0	0	12
18	77	52	21	5	0	0	0	9
19	75	65	20	5	0	0	0	6
20	73	63	20	5	0	0	0	6
21	66	78	20	4	0	0	0	5
22	63	91	25	4	0	0	0	2
23	71	77	19	5	0	0	0	0
24	78	70	20	3	0	0	0	1
25	82	65	22	1	0	0	0	5
26	83	64	16	0	0	0	0	9
27	84	60	9	3	0	0	0	12
28	84	56	8	4	0	0	0	14
29	80	55	8	1	0	0	2	14
30	76	52	12	0	0	0	0	14
31	74		12		0	0		15

Note: These daily values were averaged from the gauge's 'Real Time' 15-minute interval data. The 'x' represent known extremely high flows, overtopping the gauge sensor and reading as zeros. Values measured in CFS for the irrigation season from March 1st, 2022 to October 31st, 2022.

FLOW OF WILLOW CREEK at the CONFLUENCE of the SUSAN RIVER (WCD) (ft^3s^{-1}/CFS)

DAY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER
1	38	28	20	9	6	1	0	4
2	43	26	20	8	5	3	0	4
3	45	26	20	7	5	3	0	4
4	45	26	21	7	5	3	0	4
5	49	25	20	8	6	3	0	5
6	49	24	20	7	6	3	0	5
7	50	24	19	7	5	1	2	6
8	48	24	18	7	4	1	3	6
9	53	23	18	7	4	2	3	5
10	52	23	19	7	4	3	3	5
11	47	25	19	7	4	0	3	5
12	44	25	18	7	4	0	3	5
13	42	24	17	7	4	1	3	5
14	47	24	16	7	4	2	3	6
15	44	26	16	7	4	3	3	7
16	66	31	16	6	4	2	3	7
17	51	37	15	6	3	2	3	7
18	51	39	14	7	4	3	3	7
19	47	35	14	7	4	3	3	6
20	45	34	14	8	4	2	4	6
21	41	44	14	7	3	2	5	6
22	41	60	14	7	3	0	4	6
23	42	39	13	7	3	0	4	6
24	47	32	12	7	3	0	4	7
25	51	28	13	7	3	0	4	7
26	51	27	11	6	3	0	4	8
27	49	25	10	6	3	0	4	8
28	50	23	9	6	3	0	4	9
29	44	22	9	6	3	0	5	9
30	37	21	10	5	1	1	4	9
31	34		9		0	0		9

Note: These daily values were averaged from the gauge's 'Real Time' 15-minute interval data. The 'x' represent known extremely high flows, overtopping the gauge sensor and reading as zeros. Values measured in CFS for the irrigation season from March 1st, 2022 to October 31st, 2022.

Appendix B: McCoy Flat and Hog Flat Reservoir Outflows

Release Flow of McCoy and Hog Flat Reservoirs(ft^3s^{-1}/CFS)

DAY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER
1				26.42				
2								
3								
4								
5					8.38			
6								
7					8.88			
8					7.2			
9								
10								
11								
12								
13					0			
14								
15								
16								
17								
18								
19								
20								
21				19.56				
22								
23				15.92				
24								
25								
26								
27								
28								
29								
30								
31								

Note: Release from McCoy Flat Reservoir labeled in blue, release from Hog Flat Reservoir in green.

Values measured in CFS for the irrigation season from March 1st, 2022 to October 31st, 2022.

Appendix C: Susan River Watermaster Spot Checks

Note: Values are of a measure at one moment in time. This Irrigation Season, dam and diversion adjustments were especially frequent throughout the system, due to the flashy nature of the Susan River and its tributaries. Values are measured in CFS for the irrigation season from March 1st, 2022 to October 31st, 2022.

Flow of Old Channel Diversion (ft^3s^{-1}/CFS)

DAY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER
1				11.24		0.37		
2								
3				15.23				
4		8.19						
5								
6			11.35				2.16	
7								
8		10.75			2.9			
9								
10						4.91		
11								
12								
13				13.75	8.06			
14								
15								
16								
17								
18								
19								
20							2.32	
21		17		11.42				
22								
23								
24				0.56				3.93
25								2.32
26					1.49			
27								
28							1.92	
29				5.44		3.92		
30						2.99		
31								

Note: When the River flow was at 100% availability, the full allotment for all users on Old Channel could not be supplied, due to the lack of water elevation at the dam, minimal flows, and the highly vegetated

channel. Old Channel is not considered a legal diversion by the decrees, however, the channel serves as water conveyance for diversions 13 to 35 of the Susan River.

Flow of DIVERSION #13 (ft^3s^{-1}/CFS)

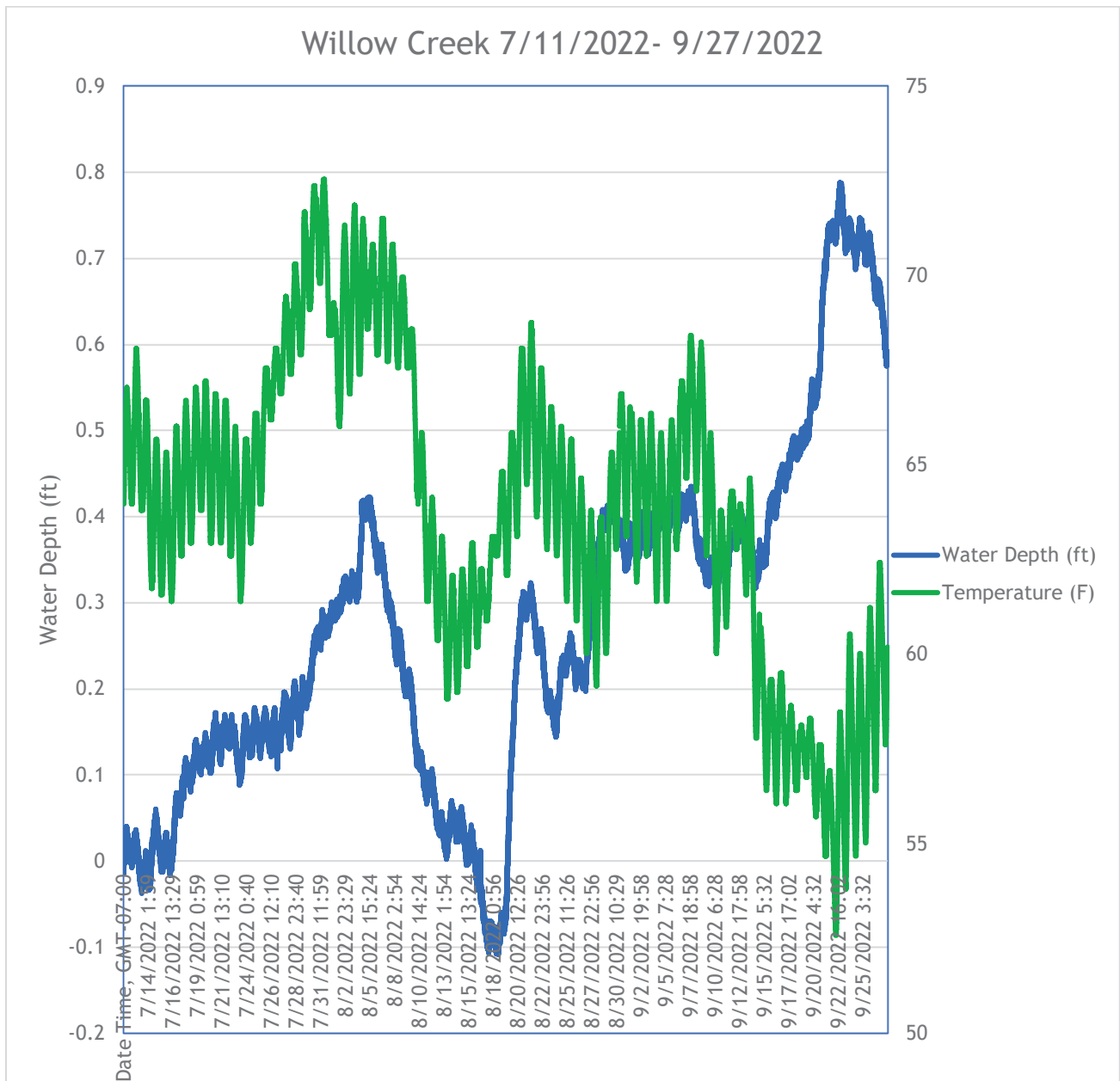
DAY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER
1				2.04		0		
2								
3				2.66				
4		1.47						
5								
6			2.11				0.26	
7								
8		2.04				0		
9								
10						0.84		
11								
12								
13				0	1.34			
14								
15								
16	0							
17								
18								
19								
20							0.26	
21		5.58						
22	0							
23								
24				0				0.63
25								0.26
26					0.19			
27								0.19
28							0.62	
29				0.96		0.63		
30						0.43		
31								

Flow of DIVERSION # 41, AB Canal (ft^3s^{-1}/CFS)

DAY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER
1	7.2	29.82						
2						0.93		
3				38.52	14.68			
4		32.64						
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15		29.82						
16								
17								
18								
19								
20								
21	18.86			43.95	0.846			
22				38.52				
23				25.76				
24	36							
25								
26								
27			15.81					
28								
29						0.55		
30								
31	26.422							

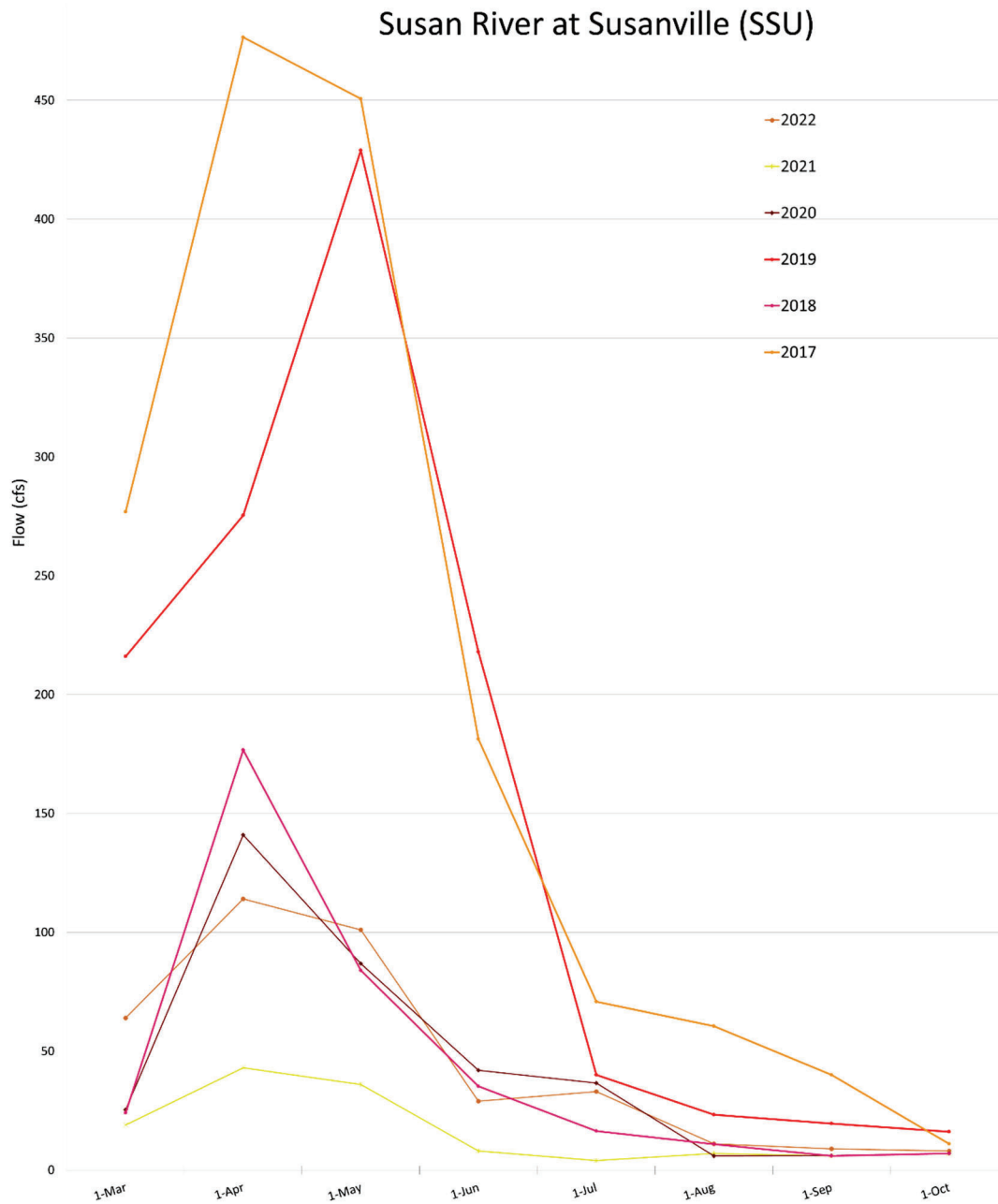
Note: The green box border marks LIC's utilization of Hog Flat Reservoir. The blue box border marks LIC's utilization of McCoy Flat Reservoir.

Appendix D: Depth of the Meadow Channel Ditch on Willow Creek



Note: Recorder was placed at the land intersection of the California Department of Fish and Wildlife and the Hanson ranch. A measure of depth is not a reflection of the flow of the system. All depth measurements are relative to a starting measurement on 7/11/2022, a negative value represents a depth below that reference measurement.

Appendix E: Susan River Flow Graph



Note: Data sourced from Department of Water Resources digital flow gauges, California Data Exchange Center (CDEC). Points represent average daily flows, connected by lines. Daily values were averaged from the gauge's 'Real Time' 15-minute interval data. This is so that the plotted points show, solely, the natural flow of the Susan River.