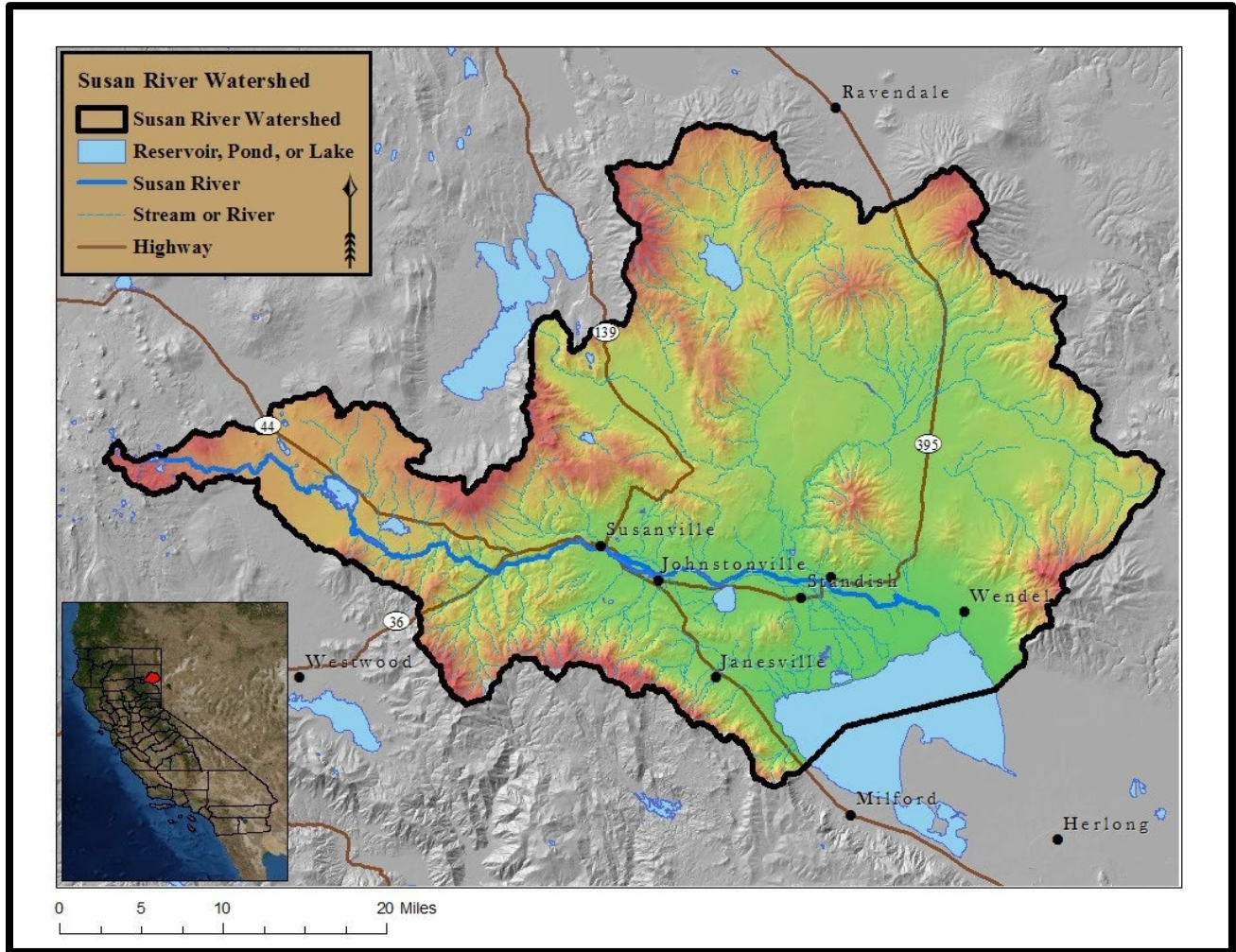




HONEY LAKE VALLEY
RESOURCE
CONSERVATION
DISTRICT

2024-2025 SUSAN RIVER WATERMASTER SERVICE AREA



Susan River

Watermaster Service Area

Annual Use Report- 2024/2025

Fiscal Year: July 1, 2024 - June 30, 2025
Irrigation Season: March 1, 2025 - October 31, 2025
Storage Season: November 1, 2025 - February 28, 2026

Lassen County, California
Decree No.'s 4573, 8174 and 8175
Submitted by December 31, 2025 to
The Presiding Judge, Lassen County Superior Court



Prepared By:

Honey Lake Valley Resource Conservation District
1516 Main Street
Susanville, CA 96130

Susan River Watermaster Service Area - Annual Use Report
2024/2025

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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.

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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 2025-2026

The National Ocean and Atmospheric Administration (NOAA) has predicted, as of August 2025, average precipitation in the Susan River basin this fall. No large increase or decrease in amounts of rain or snow are forecast. As no long-term forecast can be 100 percent accurate, this outlook could be only used as a guide. However, weather predictions from different sources agree that this winter will be average for rain and snow.

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 Fiscal Year 2024/2025 Watermaster Service Budget was adopted on May 23rd, 2024 in the amount of \$290,350.51. The Fiscal Year 2025/2026 Watermaster Service budget was adopted on May 22nd, 2025 in the amount of \$174,210.60. Fiscal Year 25/26 budget saw a 40% decrease from FY 24/25. This is in part due to the Watermaster Service successfully building and maintaining a contingency fund, to allow the operational budget to operate at lower than net zero for the upcoming fiscal year. 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, 2025. 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, 2025.

2024/2025 Water Allocation and Distribution:

The Susan River Watermaster Service Area experienced average precipitation compared to the previous year's rainfall. With average snowfall, the water available to users was only above average for part of the season. After which, the water available to users dropped off significantly by mid-. The general availability of water for the various stream systems is described below.

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Lassen Creek: Lassen Creek provided water through mid-June of 2025 at less than 50 percent water availability, dropping off to almost no flow by September.

Hills Creek: Hills Creek has prorated water availability. Diversions that were in good maintenance were able to access above average water right, when taken in turn. Some diversions are in the process of being repaired after last year's washouts. A small amount of flow was still able to return to Gold Run Creek.

Gold Run Creek: Water was available in prorated amounts for irrigation until late June. Flows then receded to an average of 2 cubic feet per second still flowing into the month of September 2025, providing a percentage of water rights to users on Gold Run Creek.

Upper Susan River: Flows for the Upper Susan met the full requirements of the Schedule 5, 2nd priority water right allotments up until early August. Stock water was available to most users through September. Flows decreased in September, providing percentages of water right at the time of this report.

Lower Susan River Below the Confluence of Willow Creek: The Lower Susan had irrigation water available for Schedule 3, 3rd priority users until mid-June 2025 and was nearly sufficient for Schedule 3, 2nd priority users until mid-late June. Stock water was available to most users until mid-August. Past this point, users were able to exercise stock watering rights at a percentage of water rights depending on the flow at Colony Dam.

Willow Creek: Willow creek flows remain consistent throughout the season. The Flows were sufficient for regular stock watering of the second priority until September. Conveyance of stock water to downstream users continues at the time of this report.

Bankhead/Sloss Creek At the time of this report, these creeks are dry. Prorated water was available till the end of May 2025. No water flow is expected to return till after the season ends.

Lassen Irrigation Company Storage Reservoirs: LIC began diverting water from McCoy Flat on June 15, 2025. Water release from McCoy flat reservoir decreased on July 22nd and ended on August 29, 2025.

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Baxter Creek: Upper Baxter Creek has had consistent flow during the summer months, with water available at a percentage of right. The lower end of Baxter Creek flows fell off during the month of June and will not supply water again till after the season ends.

Miscellaneous Notable Events:

1. The Watermaster Service installed several remote sensors to monitor water levels and streamflow in real time at key locations throughout the service area.
2. The Watermaster Service also began using new technology to document measurements throughout the season, ultimately ensuring more accurate data collection and contributing to the ease of reporting at the end of the season.

Appendices

Numerical values are in cubic feet per second (cfs)

A blank space or "0" indicates no reading.

Appendix A: Department of Water Resources, Digital Guage Data

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	21	43	14	57	9	4	4	
2	39	34	15	48	6	4	3	
3	45	30	76	45	5	4	5	
4	33	36	48	42	4	3	5	
5	46	23	29	46	4	3	4	
6	54	25	40	30	7	4	1	
7	35	0	71	24	7	4	0	
8	31	18	95	22	7	5	0	
9	36	27	94	20	7	5	0	
10	44	20	80	17	8	4	0	
11	32	0	60	17	9	3	0	
12	24	19	80	14	10	3	3	
13	41	26	28	13	13	3	3	
14	43	24	54	12	14	2	1	
15	35	20	91	12	19	0	0	
16	44	0	92	11	15	0		
17	52	4	90	10	12	0		
18	35	33	86	12	10	0		
19	32	25	82	13	8	1		
20	33	22	83	11	11	4		
21	44	12	80	12	11	4		
22	26	20	81	11	8	4		
23	29	24	77	11	6	4		
24	27	27	76	10	6	4		
25	25	8	76	13	6	3		
26	25	30	75	13	6	6		
27	0	45	74	12	6	7		
28	32	25	72	9	5	9		
29	34	17	68	9	5	7		
30	34	0	65	11	5	5		
31	54		62		4	5		

Note: These daily values were averaged from the gauge's 'Real Time' Daily interval data. The '0' represents known extremely high or low flows, overtopping the gauge sensor and reading as zeros or an error in the system. Values measured in CFS for the irrigation season from March 1st, 2025 to October 31st, 2025.

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

SUSAN R NR STANDISH (SSD)

Date from 03/01/2025 00:00 through 10/17/2025 00:00 Duration: 230 days
Max of period: (05/08/2025 00:00,95) Min of period: (03/27/2025 00:00, 0)

SENSOR ID: 30281

— M FLOW CFS



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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	0	0	76	15	66	4	4	
2	0	0	77	13	6	5	5	
3	0	0	57	13	6	5	5	
4	0	35	60	13	7	4	5	
5	0	92	63	13	4	4	5	
6	0	89	59	11	5	3	5	
7	36	23	54	10	5	4	4	
8	87	0	50	10	5	5	4	
9	82	0	52	9	5	5	4	
10	78	0	55	9	5	4	4	
11	75	0	57	10	6	4	5	
12	77	0	57	9	6	4	5	
13	20	0	72	9	6	4	5	
14	2	0	62	8	6	4	5	
15	83	0	50	7	7	4	4	
16	81	0	41	7	6	4		
17	8	0	35	8	6	4		
18	0	0	33	8	6	4		
19	0	0	27	8	5	4		
20	0	0	25	8	5	4		
21	0	0	24	7	5	4		
22	0	4	22	6	5	4		
23	0	0	21	7	5	4		
24	0	0	20	7	5	4		
25	0	0	19	8	6	4		
26	0	0	19	8	6	5		
27	0	0	19	6	5	6		
28	0	0	18	5	5	6		
29	0	0	16	6	5	5		
30	0	35	16	6	4	5		
31	0		15		5	5		

Note: These daily values were averaged from the gauge's 'Real Time' 15-minute interval data. The '0' represents known extremely high or low flows, overtopping the gauge sensor and reading as zeros. Values measured in CFS for the irrigation season from March 1st, 2025 to October 31st, 2025.

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

WILLOW CREEK NEAR STANDISH (WCD)

Date from 03/01/2025 00:00 through 09/17/2025 00:00 Duration: 200 days
Max of period: (04/05/2025 00:00,92) Min of period: (03/01/2025 00:00, 0)

SENSOR ID: 30280
— M FLOW CFS



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

SUSAN RIVER AT SUSANVILLE (SSU)

Date from 03/01/2025 00:00 through 10/17/2025 00:00 Duration: 230 days
Max of period: (04/29/2025 00:00,277) Min of period: (09/19/2025 02:00, 9)

SENSOR ID: 8561

— FLOW CFS

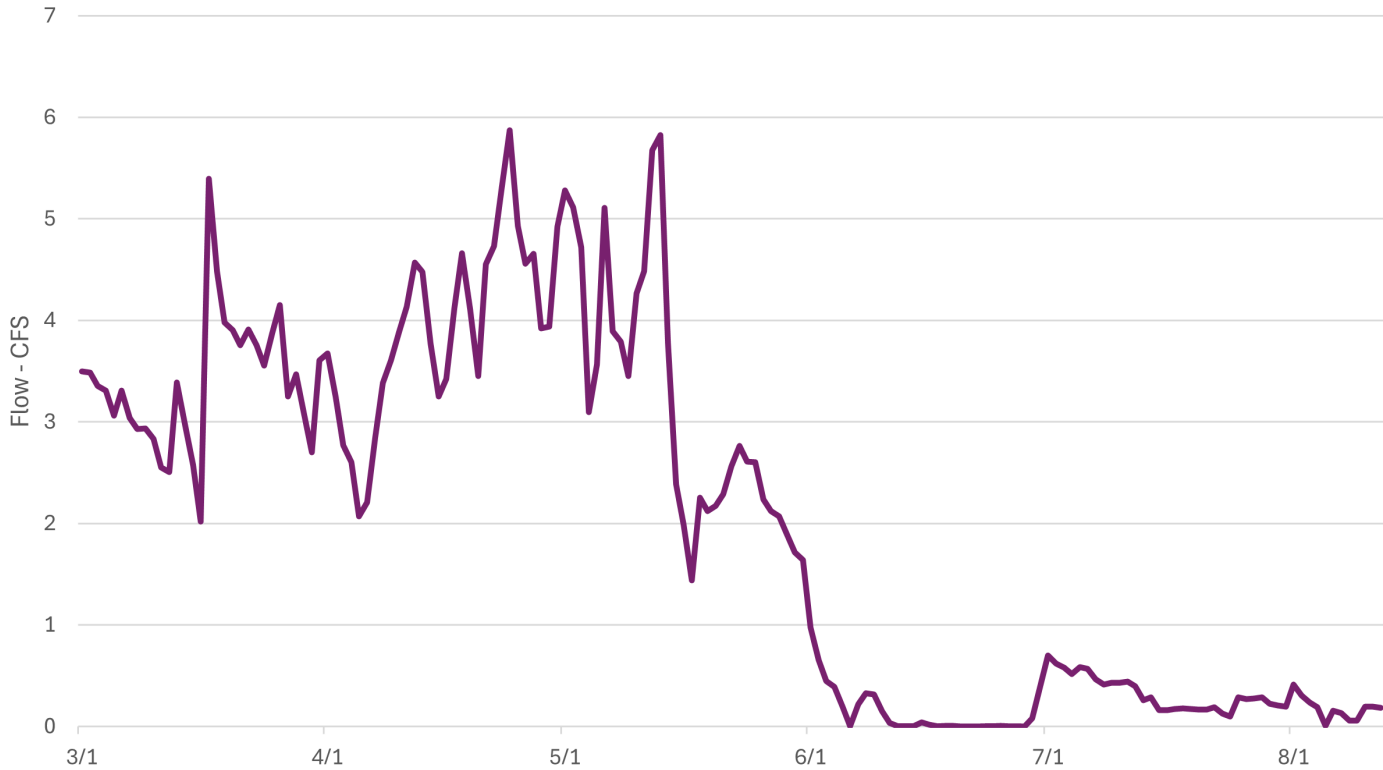


Appendix B: Various Points of Diversion Measurements and Graphs

Baxter Creek

Day	March	April	May	June	July	August
1	3.50	3.68	5.28	0.98	0.70	0.41
2	3.48	3.25	5.12	0.65	0.62	0.31
3	3.35	2.77	4.72	0.45	0.58	0.24
4	3.31	2.60	3.10	0.39	0.51	0.19
5	3.06	2.07	3.57	0.19	0.59	0.01
6	3.31	2.21	5.11	0.00	0.57	0.16
7	3.04	2.85	3.90	0.22	0.46	0.13
8	2.93	3.38	3.79	0.33	0.41	0.06
9	2.93	3.60	3.45	0.31	0.43	0.05
10	2.83	3.89	4.27	0.15	0.43	0.19
11	2.55	4.13	4.49	0.03	0.44	0.20
12	2.51	4.57	5.68	0.00	0.39	0.18
13	3.39	4.48	5.82	0.00	0.26	
14	2.98	3.77	3.78	0.00	0.29	
15	2.58	3.25	2.39	0.04	0.16	
16	2.02	3.42	1.98	0.02	0.16	
17	5.40	4.12	1.44	0.00	0.17	
18	4.48	4.66	2.25	0.01	0.18	
19	3.98	4.11	2.12	0.01	0.17	
20	3.91	3.45	2.17	0.00	0.17	
21	3.75	4.55	2.29	0.00	0.17	
22	3.91	4.73	2.56	0.00	0.19	
23	3.75	5.29	2.76	0.00	0.13	
24	3.55	5.87	2.61	0.00	0.10	
25	3.87	4.93	2.60	0.01	0.29	
26	4.15	4.56	2.24	0.00	0.27	
27	3.25	4.66	2.12	0.00	0.27	
28	3.47	3.92	2.07	0.00	0.29	
29	3.10	3.94	1.90	0.08	0.23	
30	2.70	4.92	1.71	0.40	0.20	
31	3.60		1.64		0.19	

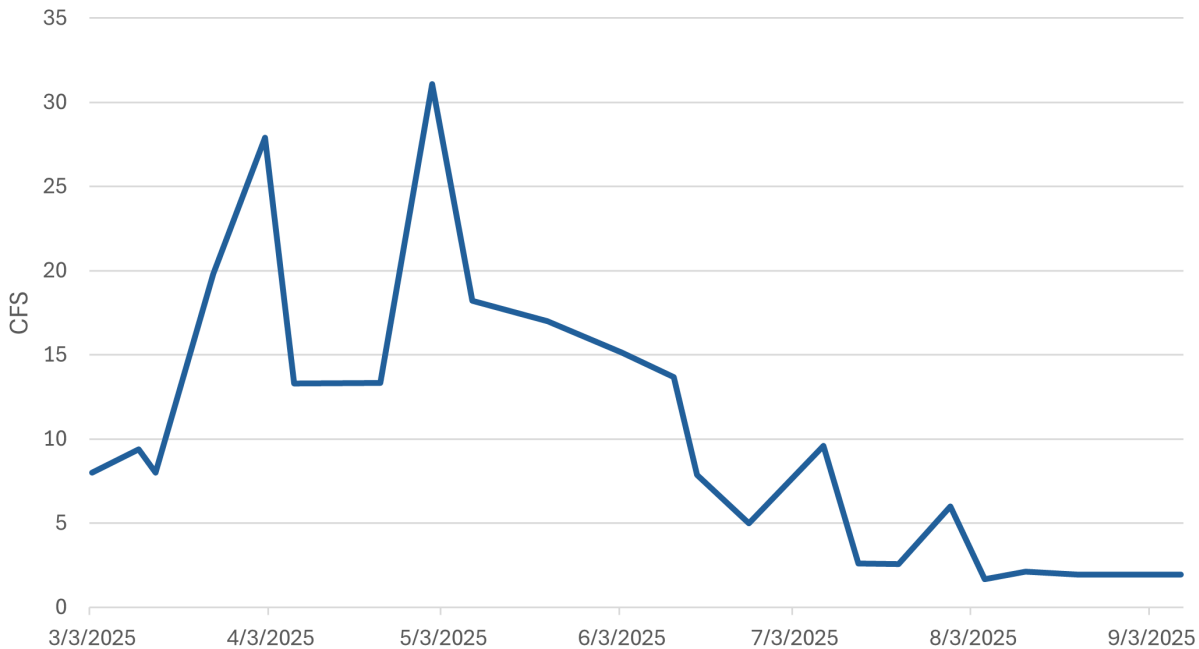
Baxter Creek: Diversion #6



Gold Run Creek - Diversion # 187

Day	March	April	May	June	July	August	September
1			31.1				
2		27.9					
3	8			15.12			
4							
5						1.68	
6							
7		13.3					
8			18.2		9.6		1.95
9							
10							
11	9.4						
12				13.67		2.1	
13							
14	8				2.6		
15							
16				7.85			
17							
18							
19							
20							
21			17		2.58	1.95	
22		13.32					
23							
24	19.8						
25				4.98			
26							
27							
28							
29							
30					6		
31							

Gold Run: Diversion #187

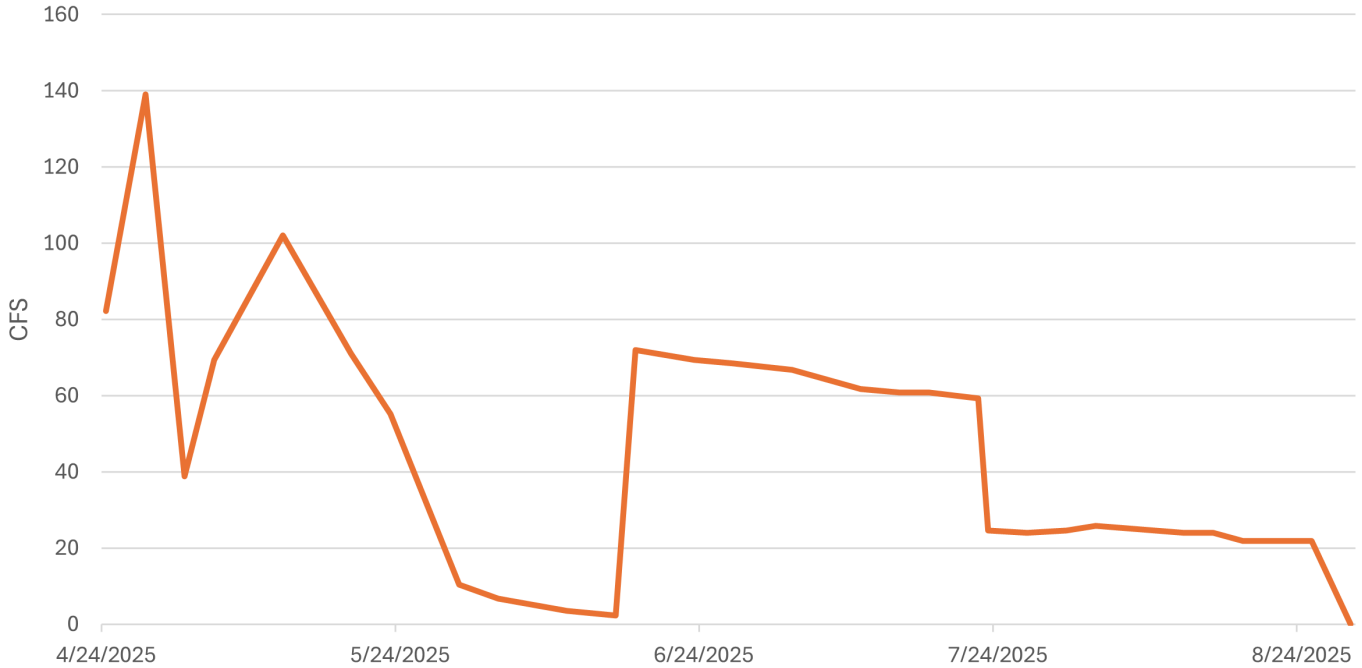


McCoy Flat Reservoir Outflow - Diversion # 6

Day	March	April	May	June	July	August
1						
2			38.8			
3				6.81	66.8	25.8
4						
5			69.4			
6						
7						
8						
9						
10				3.56	61.8	
11						
12			102			24
13						
14					60.9	
15				2.25		24
16						
17				72	60.9	
18						21.8
19			71			
20						
21						
22					59.3	
23			55.2	69.4	24.6	
24		82.2				
25						21.8
26						
27				68.5	24	
28		139				
29						0.01
30			10.4			
31					24.6	

Note: LIC began diverting water from McCoy Flat on June 15, 2025 after the above measurement was taken. Water release from McCoy flat reservoir flow was reduced on July 22nd, and ended on August 29, 2025.

McCoy Outflow: Diversion #6

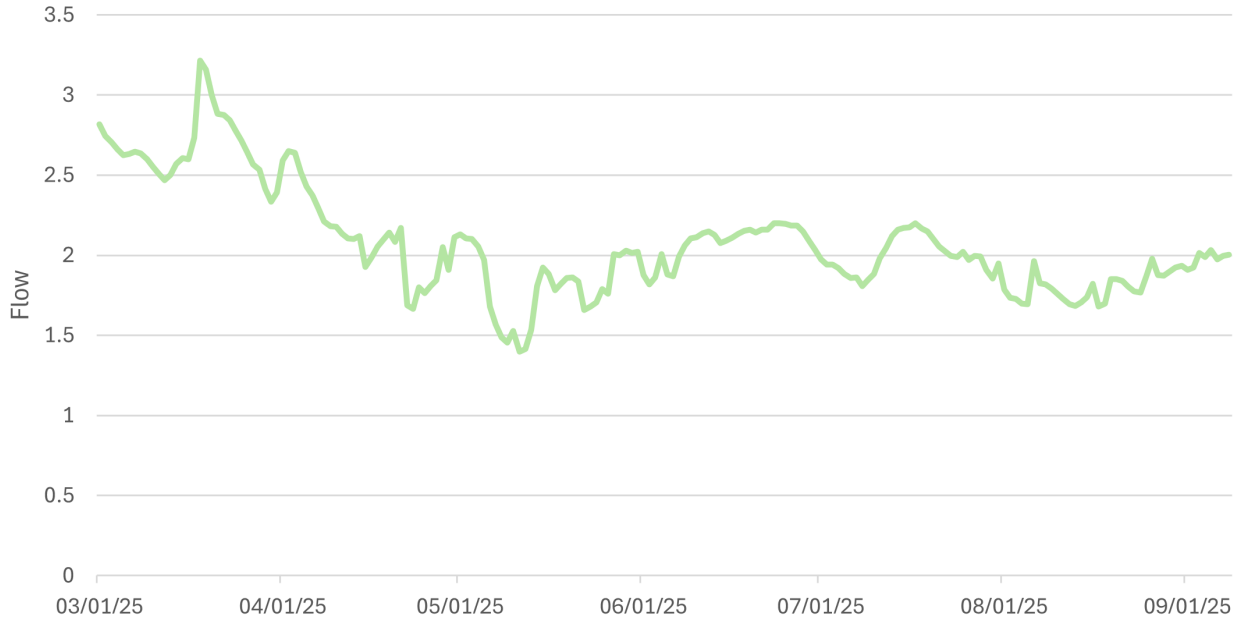


LIC started diverting water on June 15th, water release was adjusted on July 22nd, and ended on August 29th.

Meadow Channel

Day	March	April	May	June	July	August	September
1	2.82	2.59	2.13	1.88	1.97	1.79	1.91
2	2.74	2.65	2.11	1.82	1.94	1.74	1.92
3	2.70	2.64	2.10	1.86	1.94	1.73	2.01
4	2.66	2.52	2.06	2.01	1.92	1.70	1.99
5	2.63	2.43	1.97	1.88	1.88	1.70	2.03
6	2.63	2.37	1.68	1.87	1.86	1.97	1.98
7	2.65	2.29	1.57	1.99	1.86	1.83	2.00
8	2.63	2.21	1.49	2.06	1.81	1.82	2.00
9	2.60	2.18	1.46	2.11	1.85	1.79	
10	2.55	2.18	1.53	2.11	1.88	1.76	
11	2.51	2.13	1.40	2.14	1.98	1.73	
12	2.47	2.10	1.42	2.15	2.05	1.70	
13	2.50	2.10	1.54	2.13	2.12	1.68	
14	2.57	2.12	1.81	2.08	2.16	1.71	
15	2.61	1.93	1.92	2.09	2.17	1.74	
16	2.60	1.99	1.88	2.11	2.17	1.82	
17	2.74	2.05	1.78	2.14	2.20	1.68	
18	3.22	2.10	1.82	2.15	2.17	1.70	
19	3.16	2.14	1.86	2.16	2.15	1.85	
20	3.00	2.08	1.86	2.14	2.10	1.85	
21	2.88	2.17	1.84	2.16	2.06	1.84	
22	2.87	1.69	1.66	2.16	2.02	1.81	
23	2.84	1.67	1.68	2.20	2.00	1.78	
24	2.78	1.80	1.71	2.20	1.99	1.77	
25	2.72	1.77	1.79	2.20	2.02	1.87	
26	2.64	1.81	1.76	2.19	1.97	1.98	
27	2.57	1.84	2.01	2.18	2.00	1.88	
28	2.53	2.05	2.00	2.15	1.99	1.87	
29	2.42	1.91	2.03	2.09	1.91	1.90	
30	2.34	2.11	2.02	2.03	1.85	1.92	
31	2.39		2.02		1.95	1.94	

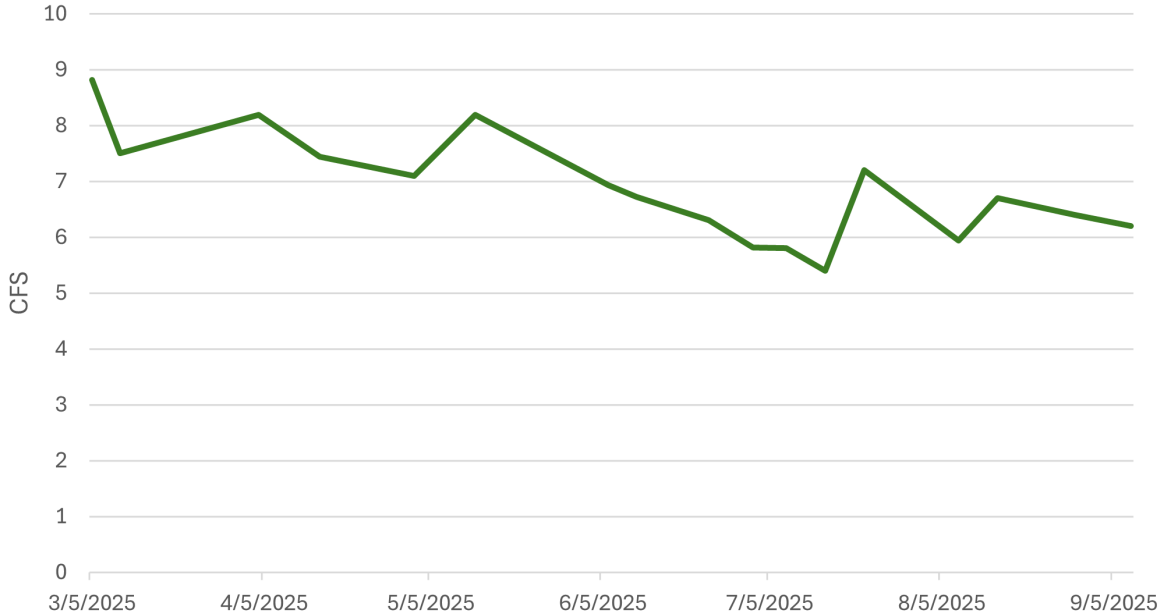
Meadow Channel: Diversion #136



Willow Creek - Diversion # 118

Day	March	April	May	June	July	August	September
1							
2			7.1		5.82		
3							
4		8.19					
5	8.82						
6				6.93			
7							
8					5.8	5.94	6.2
9							
10	7.5						
11				6.72			
12							
13			8.19				
14							
15		7.44			5.4	6.7	
16							
17							
18							
19							
20							
21							
22					7.2		
23							
24				6.3			
25							
26							
27							
28							
29						6.4	
30							
31							

Willow Creek: Diversion #118



Various Points of Diversion

