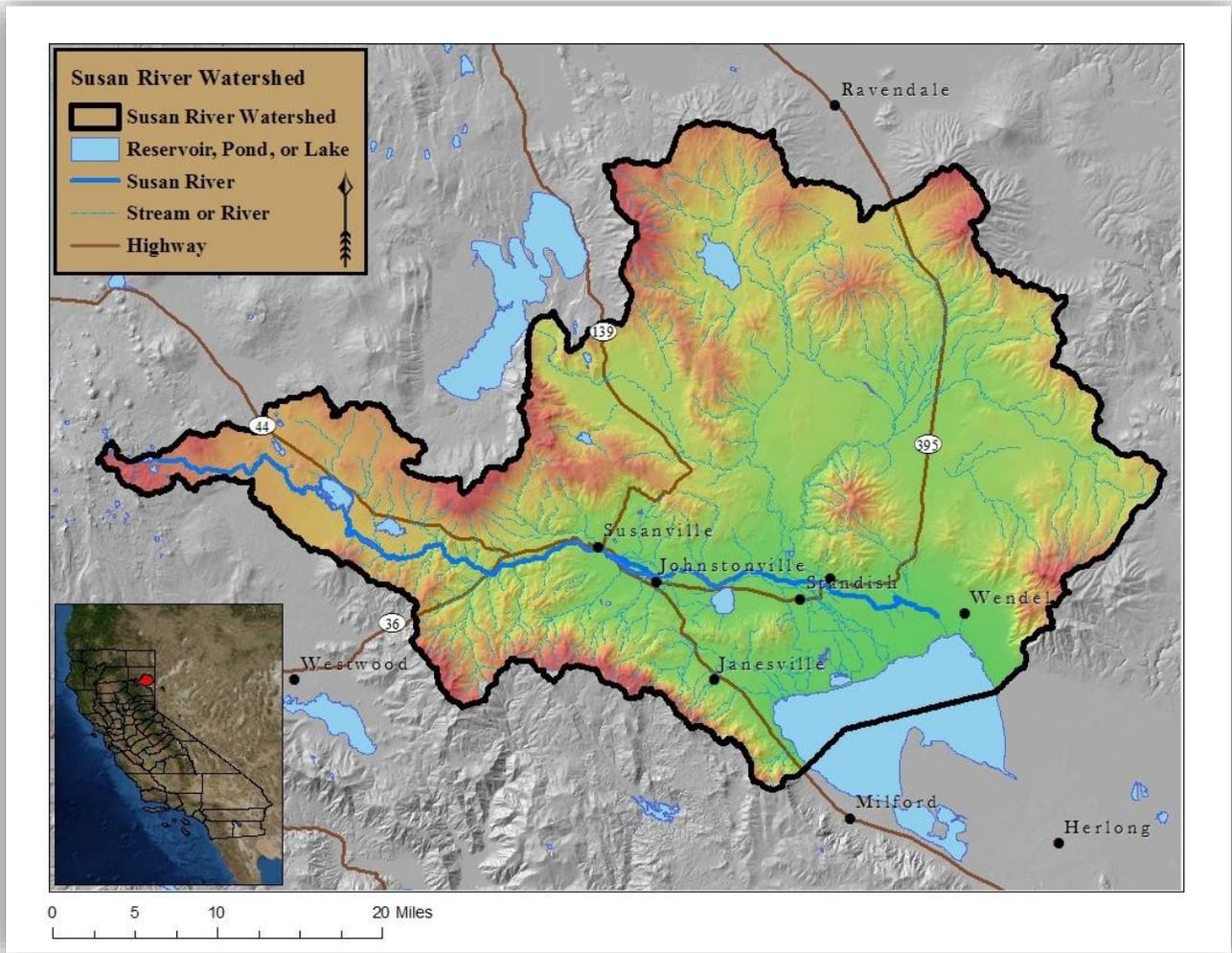




HONEY LAKE VALLEY  
RESOURCE  
CONSERVATION  
DISTRICT

# SUSAN RIVER WATERMASTER SERVICE AREA



ANNUAL USE REPORT - 2018/19

# Susan River

## Watermaster Service Area

Annual Use Report - 2018/19  
Lassen County, California

Decree No.'s 4573, 8174 and 8175  
Submitted by December 31, 2019 to  
The Presiding Judge, Lassen County Superior Court



Prepared By:

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

---

## Contents

General Description: ..... 4

Water Supply: ..... 5

Methods of Distribution: ..... 5

Watermaster Activities and Fiscal Information: ..... 6

**2018/19 Water Allocation and Distribution:** ..... 6

**Miscellaneous notable events** ..... 7

**Appendices A-E** ..... 8

    Appendix A: Susan River at Susanville ..... 9

    Appendix B: Susan River at the Confluence of Willow Creek ..... 10

    Appendix C: Willow Creek at the Confluence of the Susan River..... 11

    Appendix D: McCoy Flat Reservoir Outflows ..... 12

    Appendix E: Susan River Watermaster Spot Checks ..... 13

## 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 is comprised 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 of 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. It has its source 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.

## 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 Activities and Fiscal Information:

The FY 18/19 Watermaster budget in the amount of \$180,000 was adopted on 5/23/2018. Notification regarding the budget, apportionment and assessment were mailed to the users on 6/6/2018. There were no objections to the apportionment. The budget, apportionment, and assessments were approved and certified to the Lassen County Auditor and the Lassen County Supervisors prior to August 10, 2018.

An audit for FY 2018 has been completed [and is available on the Honey Lake Valley RCD website.](#)

## 2018/19 Water Allocation and Distribution:

The Susan River Watermaster Service Area experienced a fair amount of precipitation in March and April, but very little snow-melt runoff through early spring of 2018. The general availability of water for the various stream systems is described below.

**Parker Creek:** First priority water rights were served through the Spring.

**Baxter/Elysian Creek:** First priority users of both Baxter Creek and Elysian Creek could divert their full allotment until late June at which time the available water dropped through mid-July.

**Paiute Creek:** The water supply in Paiute Creek continued through early summer.

**Lassen Creek:** There was sufficient water in Lassen Creek to meet the allocated water use until June, at which time it began to taper off.

**Hills Creek:** The water supply in Hills Creek continued into August.

**Gold Run Creek:** The water supply in Gold Run Creek exceeded the allocated water use through May at which time it began to diminish, stock water was available throughout the course of the Season.

**Susan River:** Full allocations were available through early May and diminished throughout the course of the season.

**Lower Susan River Below the Confluence of Willow Creek:** Full allocations were available through early June and slowed through the rest of the season. Stock water was available to the upper-end water users through Sept.

**Willow Creek:** Full allocations were available through mid-July and slowly diminished during the season.

**Bankhead/Sloss Creek:** Irrigation water was available until May.

**LIC Storage Reservoirs:** McCoy Flat and Hog Flat Reservoirs reached full capacity by the start of irrigation season with McCoy Flat holding **XXXX** acre-feet of water and Hog Flat reserving **XXXX** acre-feet. LIC board members chose to utilize no water from Hog Flat and **XXXX%** from McCoy Flat this irrigation season, closing it on September 11<sup>th</sup>, 2019.

## Miscellaneous notable events:

1. A new Watermaster was hired, starting on May 28<sup>th</sup>, 2019.
2. **Court proceedings with Jay**
3. There were two Watermaster complaints, filed by one water user, during the 2019 water season.
4. **Install electronic measuring device.**

## Appendices A-E

## Appendix A: Susan River at Susanville

### SUSAN RIVER at SUSANVILLE

## Appendix B: Susan River at the Confluence of Willow Creek

### SUSAN RIVER at the CONFLUENCE of WILLOW CREEK

DAY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER
1	0	0	0	0	4	0	0	
2	0	0	0	6	4	0	0	
3	0	0	0	0	4	0	0	
4	0	0	0	36	4	0	0	
5	0	0	0	93	3	0	0	
6	0	0	14	90	3	0	0	
7	0	0	0	88	3	0	0	
8	0	0	0	82	3	0	0	
9	0	0	0	79	3	0	0	
10	0	0	0	71	3	0		
11	0	0	20	55	3	0		
12	0	0	12	45	3	0		
13	20	0	27	31	3	0		
14	59	0	28	26	3	0		
15	90	0	74	22	3	0		
16	88	0	19	35	4	-		
17	89	0	15	34	4	0		
18	93	0	16	21	3	0		
19	28	0	44	17	3	0		
20	0	0	84	31	3	0		
21	0	0	93	23	2	0		
22	0	0	88	26	4	0		
23	0	0	87	7	0	0		
24	0	0	84	19	0	0		
25	0	0	84	9	0	0		
26	0	0	87	8	0	0		
27	0	0	80	7	0	3		
28	0	0	60	6	0	4		
29	0	0	32	6	0	0		
30	0	0	0	5	2	0		
31	0		0		3	0		

## Appendix C: Willow Creek at the Confluence of the Susan River

### WILLOW CREEK at the CONFLUENCE of the SUSAN RIVER

DAY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER
1	0	0	0	71	11	6	6	
2	0	0	0	64	10	6	5	
3	0	0	0	64	11	6	5	
4	0	0	0	61	11	6	5	
5	0	0	0	44	10	6	6	
6	0	0	18	35	10	6	6	
7	0	0	16	30	10	6	5	
8	0	0	61	23	10	6	6	
9	0	0	80	21	11	6	5	
10	0	0	66	19	10	6		
11	0	0	58	17	11	6		
12	0	0	58	16	11	6		
13	0	0	56	15	11	6		
14	0	0	54	15	11	6		
15	51	0	42	14	11	6		
16	90	0	63	15	10	-		
17	89	0	59	14	10	6		
18	90	0	56	13	10	5		
19	4	0	54	12	9	5		
20	0	0	49	13	9	5		
21	0	0	40	12	9	5		
22	0	0	39	12	8	6		
23	0	0	28	10	8	6		
24	0	0	26	11	8	6		
25	0	0	25	11	7	6		
26	0	0	31	11	7	6		
27	0	0	43	11	7	7		
28	0	0	54	11	7	7		
29	0	0	60	11	7	5		
30	0	0	68	10	7	5		
31	0		81		7	6		

## Appendix D: McCoy Flat Reservoir Outflows

### MCCOY FLAT RESERVOIR OUTFLOWS

DAY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER
1	-	-	-	-	5.09	36.7	21.8	-
2	-	-	-	-	14.4	36.7	21.8	-
3	-	-	-	-	15.4	36.7	21.8	-
4	-	-	-	-	15.4	36.7	21.8	-
5	-	-	-	-	15.4	36.7	21.8	-
6	-	-	-	-	18.5	35.4		-
7	-	-	-	18.5	18.5	35.4		-
8	-	-	-	18.5	18.5	35.4		-
9	-	-	-	18.5	38.1	35.4		-
10	-	-	-	18.5	38.8	34.7		-
11	-	-	-	12.6	38.8	34.7	-	-
12	-	-	-	12.6	38.8	34.7	-	-
13	-	-	-	12.6	38.8	34.7	-	-
14	-	-	-	1.2	40.2	34.7	-	-
15	-	-	-	1.2	40.2	34.7	-	-
16	-	-	-	1.2	38.8	34	-	-
17	-	-	-	0	38.8	34	-	-
18	-	-	-	0	38.8	34	-	-
19	-	-	-	20.6	38.8	34	-	-
20	-	-	-	20.6	38.8	34	-	-
21	-	-	-	20.6	38.8	34	-	-
22	-	-	-	20.6	38.8	34	-	-
23	-	-	-	20.6	38.8	24	-	-
24	-	-	-	12.1	38.1	24	-	-
25	-	-	-	12.1	38.1	24	-	-
26	-	-	-	9.16	38.1	24	-	-
27	-	-	-	9.16	38.1	22.9	-	-
28	-	-	-	5.09	37.4	22.9	-	-
29	-	-	-	5.09	37.4	22.9	-	-
30	-	-	-	5.09	37.4	22.9	-	-
31	-	-	-	5.09	37.4	-	-	-

## Appendix E: Susan River Watermaster Spot Checks

### DIVERSION # 11

## DIVERSION # 41

DAY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER
1	-	-	-	-	12.73	28.75	16.43	-
2	-	-	-	-	12.73	28.75	16.43	-
3	-	-	-	-	12.73	28.75	16.43	-
4	-	-	-	-	12.73	28.75	16.43	-
5	-	-	-	-	18.15	28.75	16.43	-
6	-	-	-	-	18.15	29.52	16.43	-
7	-	-	-	-	18.15	29.52	16.43	-
8	-	-	-	-	18.15	29.52	16.43	-
9	-	-	-	-	18.15	30.25	16.43	-
10	-	-	-	-	38.11	30.25	-	-
11	-	-	-	-	38.11	30.25	-	-
12	-	-	-	41.55	37	30.25	-	-
13	-	-	-	49.72	37	30.14	-	-
14	-	-	-	56.43	34.65	30.14	-	-
15	-	-	-	56.43	34.65	30	-	-
16	-	-	-	56.43	35.43	30	-	-
17	-	-	-	31.61	36.77	30	-	-
18	-	-	-	31.61	36.77	30	-	-
19	-	-	-	31.61	36.77	30	-	-
20	-	-	-		36.77	25.11	-	-
21	-	-	-		33.64	25.11	-	-
22	-	-	-		33.64	25.11	-	-
23	-	-	-		33.64	25.11	-	-
24	-	-	-	12.02	33.64	25.11	-	-
25	-	-	-	17.38	30.59	21.64	-	-
26	-	-	-	19.29	29.82	21.64	-	-
27	-	-	-		29.82	21.64	-	-
28	-	-	-		31.77	15.21	-	-
29	-	-	-		31.77	15.21	-	-
30	-	-	-		31.77	16.43	-	-
31	-	-	-		31.77	16.43	-	-

DIVERSION # 51

DAY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER
1	-	-	-	-	3.53	-	-	-
2	-	-	-	-	-	-	-	-
3	-	-	-	-	-	0.38	-	-
4	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-
8	-	-	-	-	0.47	-	-	-
9	-	-	-	-	-	0	-	-
10	-	-	-	-	-	-	-	-
11	-	-	-	-	0.47	-	-	-
12	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-
14	-	-	-	1.24	-	-	-	-
15	-	-	-	-	0.46	-	-	-
16	-	-	-	-	0.42	-	-	-
17	-	-	-	2.48	-	-	-	-
18	-	-	-	-	-	-	-	-
19	-	-	-	10.3	-	-	-	-
20	-	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-	-
22	-	-	-	-	0.42	-	-	-
23	-	-	-	-	-	-	-	-
24	-	-	-	13.5	-	-	-	-
25	-	-	-	8	0.38	-	-	-
26	-	-	-	-	-	0	-	-
27	-	-	-	-	-	-	-	-
28	-	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-	-

## DIVERSION # 82

DAY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER
1	-	-	-	-	-	-	-	-
2	-	-	-	-	4.7	-	-	-
3	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-
5	-	-	-	-	-	1.7	-	-
6	-	-	-	-	4.7	-	-	-
7	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-
10	-	-	-	-	4.9	-	-	-
11	-	-	-	-	-	-	-	-
12	-	-	-	-	-	1.5	-	-
13	-	-	-	-	-	-	-	-
14	-	-	-	6.2	5	-	-	-
15	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-
17	-	-	-	7.1	5.3	-	-	-
18	-	-	-	-	-	-	-	-
19	-	-	-	-	4.25	-	-	-
20	-	-	-	-	-	-	-	-
21	-	-	-	7.8	-	-	-	-
22	-	-	-	-	4	-	-	-
23	-	-	-	-	-	-	-	-
24	-	-	-	8.4	-	-	-	-
25	-	-	-	8.4	-	-	-	-
26	-	-	-	8.4	-	-	-	-
27	-	-	-	-	3.7	-	-	-
28	-	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-	-