

2025 ANNUAL REPORT

Mendocino County Russian River Main Stem Diverters Water Demand Management Program

Introduction

The Water Demand Management Program (WDMP) for the Mendocino County Russian River Main Stem Diverters was submitted to the State Water Resources Control Board (RWQCB) on January 11, 2017. The SWRCB approved this WDMP on March 6, 2017. The Governing Body, the California Land Stewardship Institute (CLSI) completed a 2024 inventory of vineyards and orchards that use water for frost control that was submitted to the SWRCB on March 14, 2025. This is the eighth annual report for this WDMP. In 2015 and 2016 main stem Russian River diverters each had individual WDMPs and reported separately. However, in 2016 the main stem diverters decided to form a group WDMP with CLSI as the Governing Body.

Frost Water Reporting

Reporting from sites using water for frost control in the Mendocino County portion of the main stem Russian River in 2025 is outlined in Appendix 1. This inventory includes reported diversion data for the frost season of March 15 to May 15, 2025. As required by the regulation, the rate of diversion, hours of operation and the volume of water diverted per frost event are listed. In 2025 there were 70 diverters that did not use any water for frost control out of a total of 76 diverters. Two diverters did not report their water use.

Table 1 lists the growers who use water for frost control but chose not to continue to participate in this WDMP by not paying their fees or not reporting their water use. These diverters are not in compliance with the frost regulation. The State Water Resources Control Board Enforcement Division sent letters to all the sites listed in the 2020, 2021, 2022, 2023, and 2024 annual reports.

Table 1. Diverters who have stopped participating in the WDMP

Diverter name	APN of diversion	Year dropped out of WDMP	Comments
Talarico Vineyards/ Hop Kiln Vineyard	170-120-015	2025	
Valley Oaks	04821001	2024	Has not reported since 2021, and did not pay fees for 2025

Stream Stage Monitoring

In accordance with the approved WDMP, we are using three U.S. Geological Survey (USGS) stream flow gages to evaluate the effects of frost water diversions on river stage (Figure 1). These gages are: Russian River near Talmage (11462080) or “Talmage gage”, Russian River near Hopland (11462500) or “Hopland gage”, and Russian River near Cloverdale (11463000) or “Cloverdale gage”. The date/time/stage data for each gage is contained in Appendix 2, or can be accessed through the USGS website ([usgs.gov](https://www.usgs.gov)). We evaluated frost diversions according to their locations upstream of each USGS gage.

Upstream of the Talmage gage, frost diversions were reported on 3 nights. Table 2 outlines the dates and times of reported frost water diversions, stage changes at the Talmage gage and flow changes at the

Talmag gage. There were two change in stage in excess of 0.1 ft. During a frost event on 3/29, stage dropped 0.1 feet with flows changing from 710 – 679 cfs. On 4/3, stage dropped .18 ft with flows changing from 2300 – 2150 cfs. These flows are high enough to avoid negative impacts on salmonids.

Between the Hopland gage and the Talmage gage frost diversions were reported on 3 nights. Table 3 outlines the dates and times of reported frost water diversions, stage changes at the Hopland gage and flow changes at the Hopland gage. There was one change in stage in excess of 0.1 ft. During a frost event on 4/3, stage dropped 0.32 feet with flows changing from 1610 – 1500 cfs. These flows are high enough to avoid negative impacts on salmonids.

Between the Hopland gage and the Cloverdale gage frost diversions were reported on 4 nights. Table 4 outlines the dates and times of reported frost water diversions, stage changes at the Cloverdale gage and flow changes at the Cloverdale gage. There were two change in stage in excess of 0.1 ft. During a frost event on 3/18, stage dropped 0.41 feet with flows changing from 3910 – 3470 cfs. During a frost even on 4/3, stage dropped 0.18 feet with flows changing from 2300 – 2150 cfs. These flows are high enough to avoid negative impacts on salmonids.

Appendix 3 includes graphs from the three gages for nights when water was used for frost control.

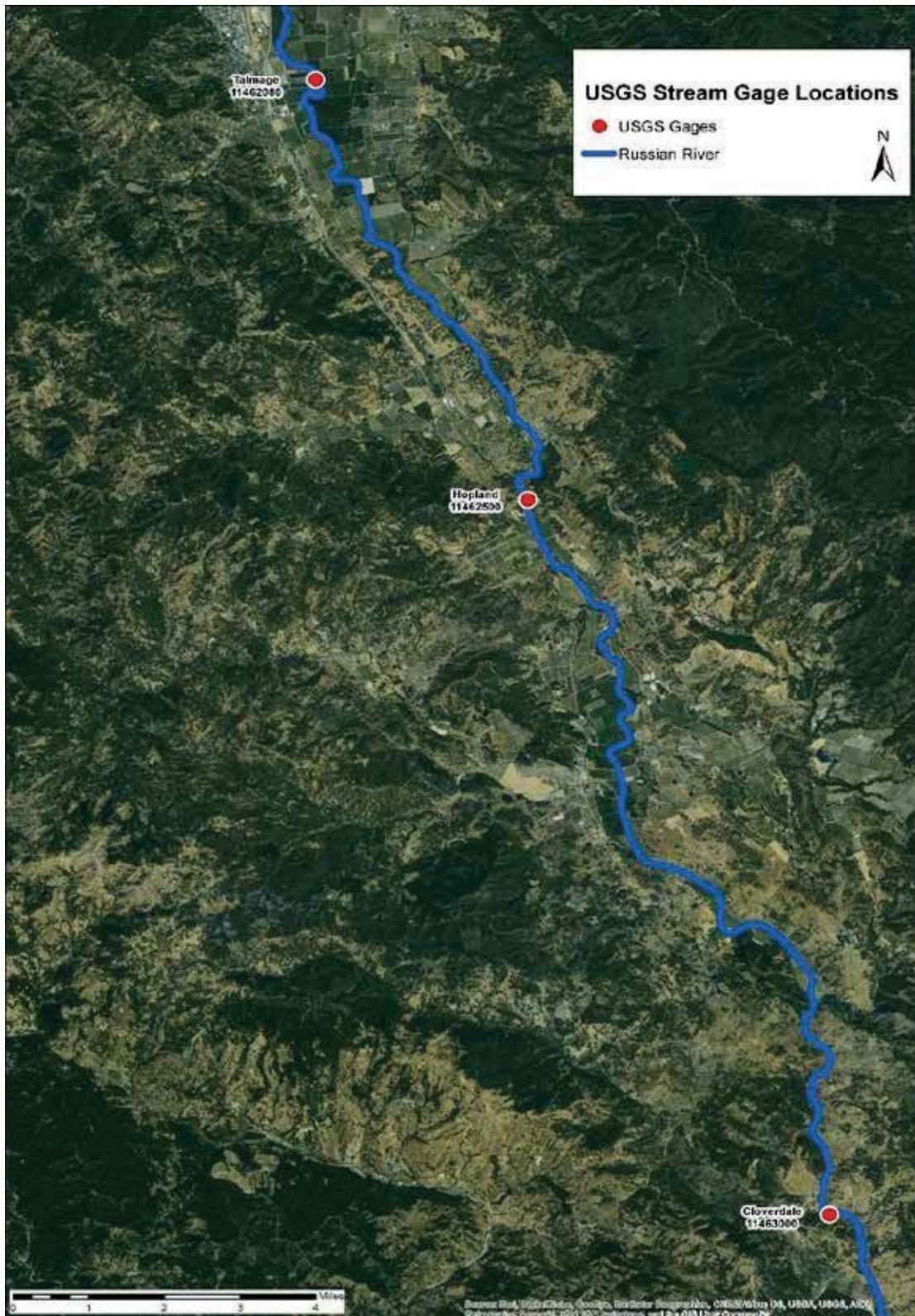


Figure 1. Three U.S. Geological Survey stream flow gages operate in the main stem Russian River in Mendocino County.

Table 2. Frost water diversions upstream of the Talmage gage.

Date	Time on	Time off	Stage during frost event in feet	Stage change in feet	Flows during frost event in cfs	Flow change in cfs*
3/28/2025	3AM	8AM	7.97 – 8.09	+0.12	617 – 654	+37
3/29/2025	3AM	8AM	8.27 – 8.17	0.10	710 – 679	41
4/3/2025	3AM	8AM	7.22 – 7.04	0.18	2300 – 2150	150

*The + sign indicates the stage/flow increased during frost diversions

Table 3. Frost water diversions upstream of the Hopland gage.

Date	Time on	Time off	Stage during frost event in feet	Stage change in feet	Flows during frost event in cfs	Flow change in cfs*
3/29/2025	3AM	8AM	3.88 – 3.76	0.09	888 – 852	46
4/3/2025	3AM	8AM	6.04 – 5.72	0.32	1610 – 1500	110
4/4/2025	6AM	8AM	4.62 – 4.55	0.07	1120 - 1100	20

*The + sign indicates the stage/flow increased during frost diversions

Table 4. Frost water diversions upstream of the Cloverdale gage.

Date	Time on	Time off	Stage during frost event in feet	Stage change in feet	Flows during frost event in cfs	Flow change in cfs*
3/18/2025	3AM	9AM	8.92 – 8.51	0.41	3910 – 3470	440
3/19/2025	4AM	9AM	7.3 – 7.07	+0.04	2360 – 2180	180
4/3/2025	4AM	8AM	7.22 – 7.04	0.18	2300 – 2150	150
4/4/2025	6AM	8AM	6.34 – 6.29	0.05	1650 – 1620	30

*The + sign indicates the stage/flow increased during frost diversions

Risk Assessment

In a 1/13/2016 letter National Marine Fisheries Service (NMFS) outlined the concept of green, yellow and red zones of stream flow based upon drought period stream flow data from the Hopland gage for the 3/15-5/15 period in 2012, 2013 and 2015. NMFS defines a green zone as occurring above a 300 cfs flow, a yellow zone of 100 to 300 cfs flow, and a red zone of 0-100 cfs flow, all as measured at the Hopland gage. NMFS states that when stream flows are in the red zone no frost diversions should occur, when stream flows are in the yellow zone frost diversions should not result in more than a 0.1 ft. change in stage and when stream flows are in the green zone frost diversions are unlikely to cause any salmonid strandings.

The instances of river stage dropping more than 0.1 ft. at the Cloverdale gage occurred when flows were well over 300 cfs and therefore does not violate the NMFS guidance.

Corrective Action Plan

No corrective action plan is needed for 2025

Instances of Non-Compliance

We have identified two growers who are not in compliance (Table 1).

Consultations

Our consultations are outlined below:

3/12/2025- CLSI held a virtual meetings with mainstem diverters to review the 2024 frost program annual report. We discussed the coordination system we have used in past years in which the growers report to CLSI frost website any expected use of water for frost control by 6pm each day. CLSI then transmits this information to the reservoir operator. We discussed any changes needed for 2025.

3/12/2025 – CLSI held a Virtual meeting with Rick Rogers and Bob Coey of the National Marine Fisheries Service (NMFS) and Monty Larsen of Ca. Dept of Fish and Wildlife (CDFW). CLSI updated both agencies on the 2024 annual report and discussed any concerns or issues.

Revisions or Changes to WDMP

No changes or revisions to the WDMP are recommended.

APPENDIX 1
2025 FROST SEASON DIVERSION RECORDS

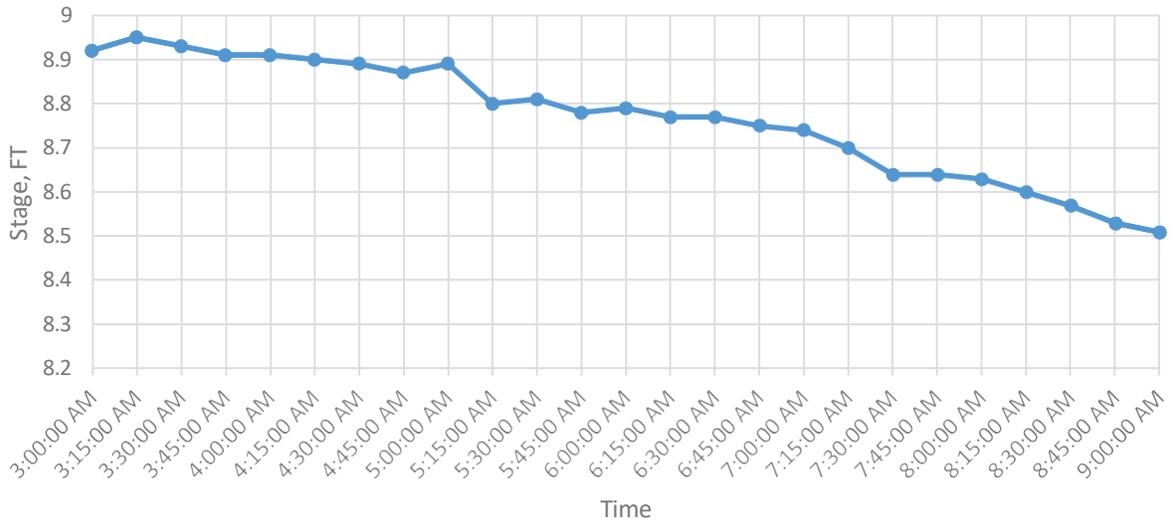
Appendix 1 Frost Water Reporting 2025 Mendocino County Russian River Main Stem Diverters Water Demand Management Program

Diverter ID	Location of diversion - APN #	Date	Time frost water turned on	Time frost water turned off	Source of water	Rate of diversion (in gallons per minute)	If using off stream pond: when was pond refilled? At what diversion rate? And from what water source?	Total volume of water used for frost event on this date (in gallons)	Total volume of water used for frost event on this date (acre feet)
1	048-320-06	No water use				0	---		0.00
2	170-120-015	Did not report					---		0.00
4	040810001	3/18/2025	3AM	9AM	Off Stream Reservoir	1775	Pumped from blue heron pond that is filled from russian river during low use	639000	1.96
4	040810001	3/19/2025	4AM	9AM	Off Stream Reservoir	1549	Pumped from blue heron pond that is filled from russian river during low use	464727	1.43
4	040810001	4/3/2025	4AM	8AM	Off Stream Reservoir	1694	pumped from blue heron pond that is filled from russian river during low use	406636	1.25
4	040810001	4/4/2025	6AM	8AM	Off Stream Reservoir	1936	pumped from blue heron pond that is filled from russian river during low use	232363	0.71
5	18201001	No water use				0	---		0.00
7	186-250-02	No water use				0	---		0.00
8	169-020-03	No water use				0	---		0.00
9	48020020, 4806001	3/18/2025	4AM	9AM	Off Stream Reservoir	2213	Filled from Russian River during low use	1328000	4.08
9	48020020, 4806001	3/19/2025	3AM	8AM	Off Stream Reservoir	2288	Filled from Russian River during low use	1373000	4.21
9	48020020, 4806001	3/29/2025	6AM	8AM	Off Stream Reservoir	2103	Filled from Russian River during low use	631000	1.94
9	48020020, 4806001	4/3/2025	4AM	8AM	Off Stream Reservoir	1806	Filled from Russian River during low use	867000	2.66
9	48020020, 4806001	4/4/2025	5AM	8AM	Off Stream Reservoir	1938	Filled from Russian River during low use	695000	2.13
15	48600200	No water use				0	---		0.00
16	184-240-02, 184-230-010	No water use				0	---		0.00
21	18608005	No water use				0	---		0.00
23	04815001, 04815007, 04828017	No water use				0	---		0.00
24	187-070-03	No water use				0	---		0.00
27	04838014	4/3/2025	5AM	8AM	River intake from Russian River	2400	Direct Diverion from the Russian River into the vineyard	432000	1.33
27	04838014	4/4/2025	6AM	8AM	Direct Diversion from Russian River pumped into the vineyard	500	Direct Diverion from the Russian River into the vineyard	288000	0.88
28	186-110-02, 186-130-02	No water use				0	---		0.00
29	18727004	No water use				0	---		0.00
30	050-130-11	No water use				0	---		0.00
31	1860300100	No water use				0	---		0.00
32	04816003	No water use				0	---		0.00
34	17819012	No water use				0	---		0.00
38	18315002	4/3/2025	3AM	8AM	Well	1066	---	640000	1.96
38	18315002	4/4/2025	6AM	8AM	Well	1066	---	256000	0.79
40	04821011	No water use					---		0.00
41	180-050-0200	No water use				0	---		0.00
42	04818004	No water use				0	---		0.00
43	04737009, 04743009	No water use				0	---		0.00
45	18411022 18407015	No water use				0	---		0.00
46	472000400	No water use				0	---		0.00
47	04821001	Did not report					---		0.00
48	048-100-0100	No water use				0	---		0.00
49	04838011	No water use					---		0.00
51	184-200-01	No water use					---		0.00
52	179-040-07	No water use				0	---		0.00
54	179-151-03, 179-141-07	3/28/2025	3AM	8AM	Main stem Russian River	850	---	255000	0.78
54	179-151-03, 179-141-07	3/29/2025	3AM	8AM	Main stem Russian River	850	---	255000	0.78
54	179-151-03, 179-141-07	4/3/2025	3AM	8AM	Main stem Russian River	850	---	255000	0.78

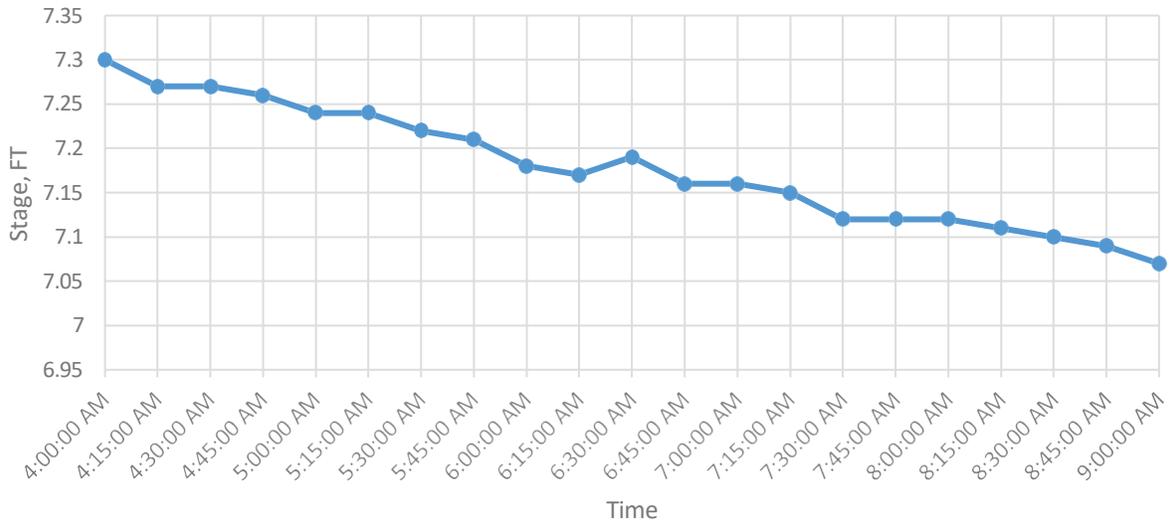
55	18715001, 18716002, 18720001, 18721001, 18726001	No water use					0	---	0	0.00
56	482800701	No water use					0	---	0	0.00
57	184-190-01	No water use					0	---	0	0.00
59	471703600	No water use					0	---	0	0.00
62	18316002	3/29/2025	3AM	8AM	Well		1825	---	547578	1.68
62	18316002	4/3/2025	3AM	8AM	Well		2133	---	639998	1.96
62	18316002	4/4/2025	6AM	8AM	Well		2133	---	256000	0.79
63	04810006	No water use					0	---	0	0.00
65	04810006	4/3/2025	6AM	8AM	Off Stream Reservoir		1191	---	143000	0.44
66	04816003,04821001,048 21005	4/8/2025	6AM	8AM	Mainstem		2400	pumped from blue heron pond that is filled from russian river during low use	288000	0.88
68	04836002, 04836001	3/18/2025	4AM	8AM	River intake from Russian River		500	Direct Diverion from the Russian River into the vineyard	120000	0.37
69	5003014	No water use					0	---	0	0.00
70	04724013, 04717025, 04724010, 04730014	No water use					0	---	0	0.00
74	04836010	No water use					0	---	0	0.00
75	047-360-0600	No water use						---		0.00
76	18303003, 18302003	No water use						---		0.00
78	04828006	3/18/2025	3AM	8AM	n/a		540000	Mainstem	540000	1.66
78	04828006	3/19/2025	3AM	8AM	well		1800	---	540000	1.66
78	04828006	4/3/2025	5AM	8AM	well		1800	---	324000	0.99
78	04828006	4/4/2025	6AM	8AM	well		1800	---	216000	0.66
80	04809002	No water use					0	---	0	0.00
82	180-050-0200	No water use					0	---	0	0.00
83	183-020-0200	No water use					0	---	0	0.00
85	047-300-0600	No water use					0	---	0	0.00
86	183-010-0400	No water use					0	---	0	0.00
87	050-230-05-00	No water use						---		0.00
88	04838020	No water use					0	---	0	0.00
89	18701001	No water use					0	---	0	0.00
90	18604001, 18611003	No water use					0	---	0	0.00
93	180-020-02	No water use						---		
94	17817180	No water use					0	---	0	0.00
96	047-420-03	No water use					0	---	0	0.00
97	183-140-01	No water use						---		0.00
98	178-180-170	No water use					0	---	0	0.00

APPENDIX 2
2025 STREAM STAGE MONITORING RECORDS FOR MAINSTEM RUSSIAN RIVER IN
MENDOCINO COUNTY

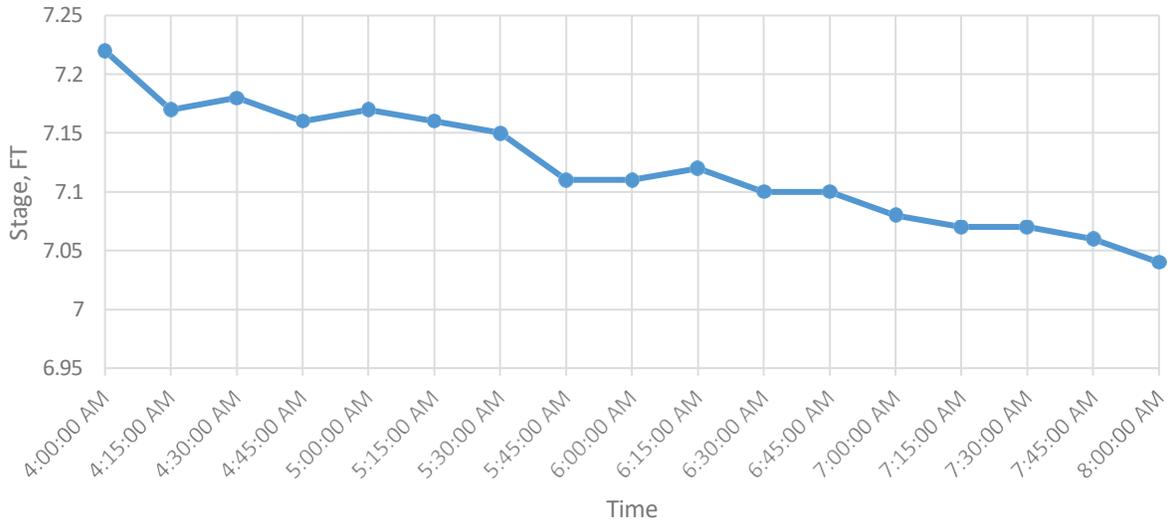
USGS Russian River near Cloverdale, March 18th 2025
3:00 AM to 9:00 AM



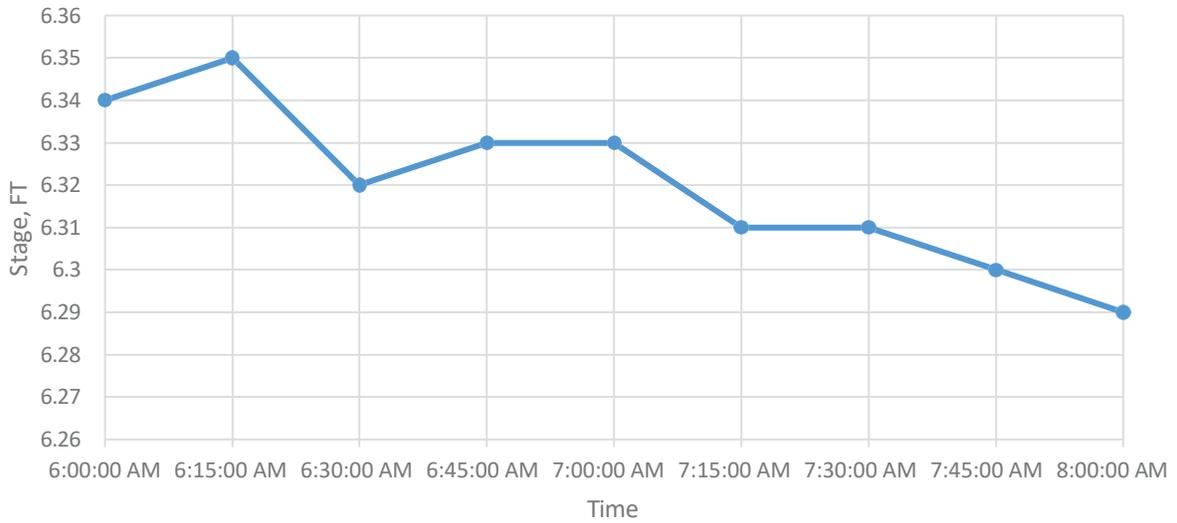
USGS Russian River near Talmage, March 19 2025
4:00 AM to 8:00 AM



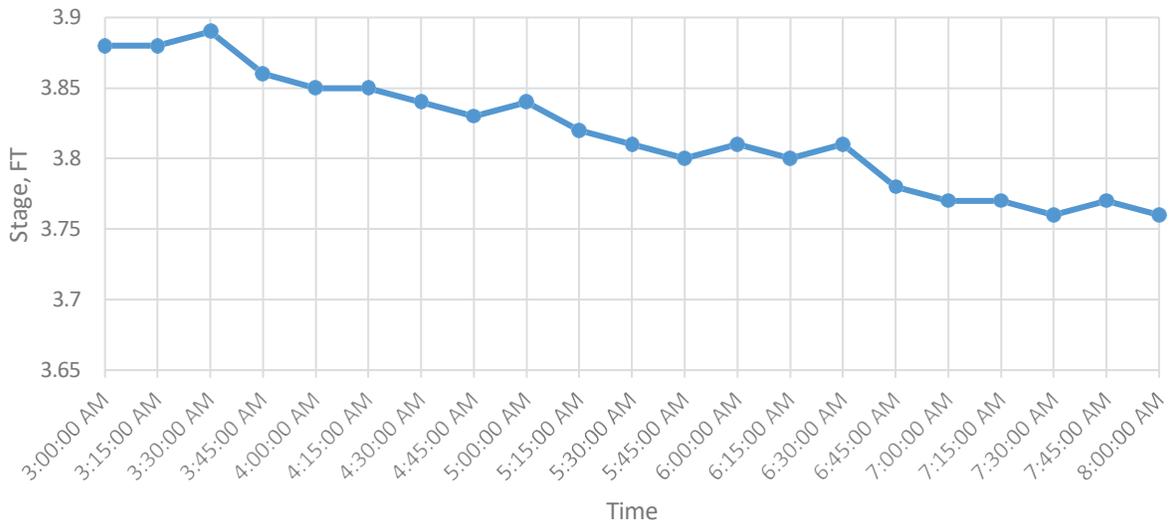
USGS Russian River near Cloverdale April 4 2025
4:00 AM to 8:00 AM



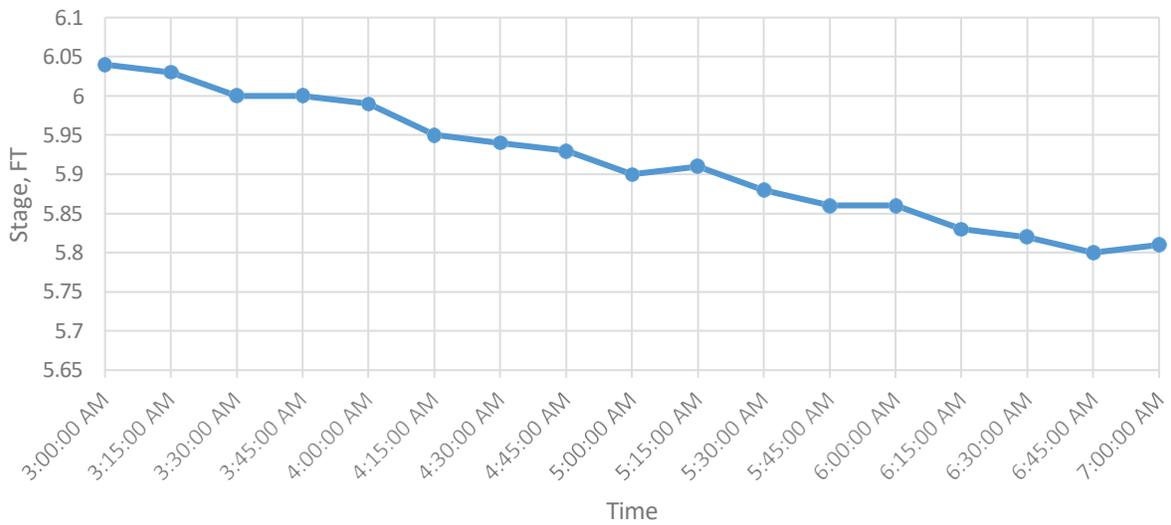
USGS Russian River near Cloverdale, April 4 2025
6:00 AM to 8:00 AM



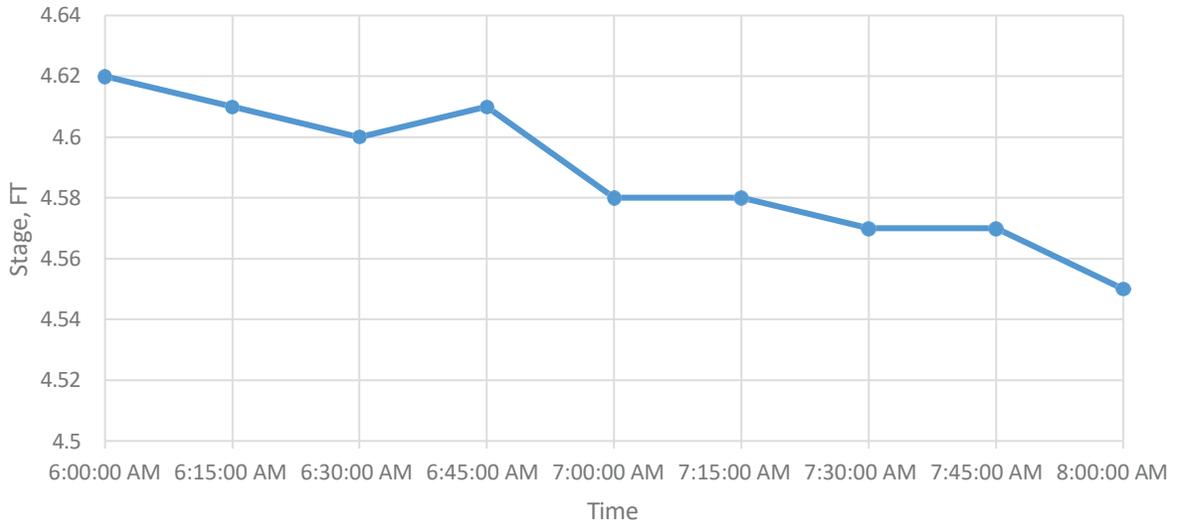
USGS Russian River near Hopland, March 29 2025
3:00 AM to 8:00 AM



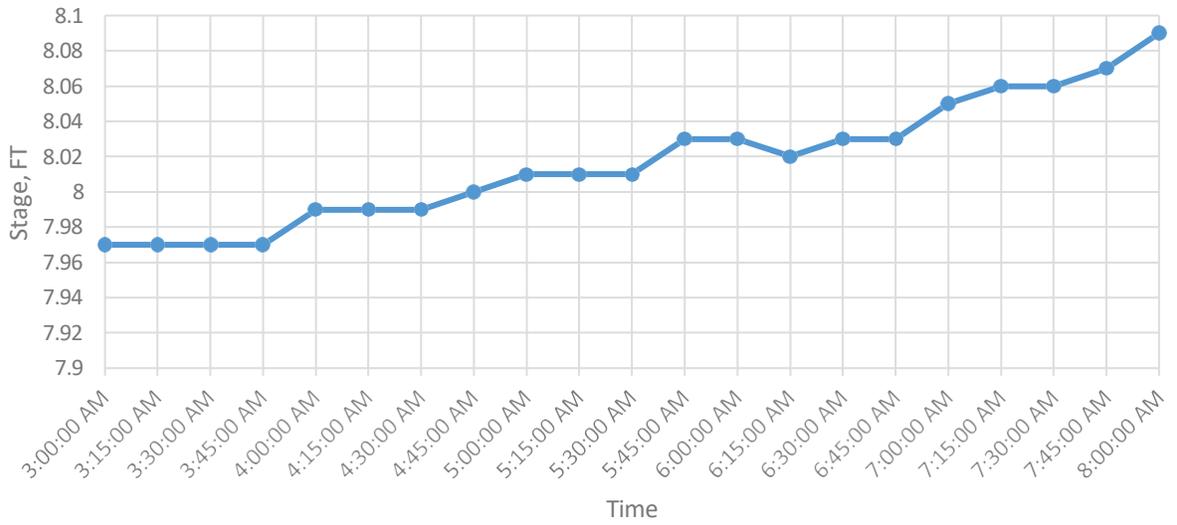
USGS Russian River near Hopland April 3 2025
3:00 AM to 8:00 AM



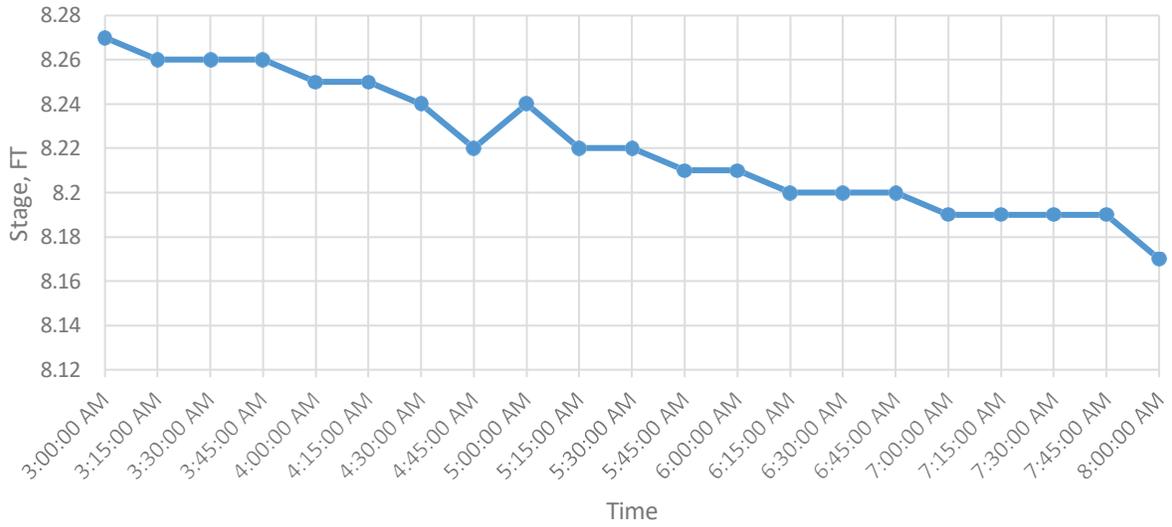
USGS Russian River near Hopland, April 4 2025
6:00 AM to 8:00 AM



USGS Russian River near Talmage, March 28th 2025
3:00 AM to 8:00 AM



USGS Russian River near Talmage, March 29th 2025
3:00 AM to 8:00 AM



USGS Russian River near Talmage April 3 2025
4:00 AM to 8:00 AM

