

What is a Water Right?

 Legal permission to <u>use</u> water for a beneficial purpose (Household, Irrigation, Fish & Wildlife, Mining, Municipal, Industrial, Power, Recreation)

- Different types of water rights have different rules.
- All water right holders or claimants
 <u>must</u> report their water use to the
 State Water Board annually.



Riparian Rights

Landowners can use some water from a water body bordering their property:

- Can only divert natural flow not stored water.
- Amount depends on natural flow (more in wet years).
- All riparians share mutually (same priority).
- Must use water on riparian land within the watershed.
- Cannot store water for later use.
- Generally senior to appropriative.

Riparian

River

Riparian

Not Riparian

Appropriative Rights

Based on "First in Time First in Right"

- Prioritized by date of right.
- Land does <u>not</u> need to border a water body.
- Water can be exported and stored.
- Divided into pre-1914 and post-1914.
- Post-1914 requires a permit or registration.



Parts of a Water Right



Diverter Responsibilities

All right holders must....



Comply with water right terms and conditions.



Pay fees if required.



Request approval to change information.



Submit annual reports each year.



Measure diversions more frequently if diverting > 10 acre-feet (SB 88).



Comply with State Water Board orders.

What Happens During Drought?

- State Water Board may restrict diversions based on priority.
- Process is called curtailment.
- Junior right holders curtailed before senior (typically).
- Accurate reporting is critical for drought management.





-and-

Monitoring and Measurement Requirements (SB88)

Basics of Annual Reporting

Who is required to submit?

EVERYONE! All water right holders and claimants (riparian, pre-14, post-14, etc.) Even if you did not divert any water the previous year

How do I know if I have a water right?

Look it up online



Monthly volumes of water diverted for each water right or claim

Note: diverters that use more than 10 acre-feet per year must also measure their diversions, and report on that *in addition* to the annual report (more in subsequent slides)

Regulatory Reference: California Code of Regulations, Title 23, §§ 920, 925, and 929



Annual Diversion and Use Report

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE FOR REPORTING PERIOD

October 1, 2022 to September 30, 2023

Primary Owner:		
	Statement Nur Date Submitte u. vz/+1//zvz4	

Water is used under		D	iparian Claim
Year diversion comm	ance0	19	930
		<u>'</u>	
		Purpose of Use	
rrigation			
		Irrigated Crops	
	Multiple Crops	Area Irrigated (Acres)	Primary Irrigation Method
Corn	Yes	399	Surface (example: flood)
Grains (wheat, oat)	Yes	399	Surface (example: flood)
	Sr	pecial Use Categories	

Are you using any water diverted under this right for the cultivation of cannabis?

	Amount of Water Diverted and Used						
Month	Amount directly diverted (Acre-Feet)	Amount diverted or collected to storage (Acre-Feet)	Amount beneficially used (Acre-Paet)				
2022							
October	60	0	60				
November	82	0	82				
December	6	0	6				
2023							
January	0	0	0				
February	0	0	0				
March	0	0	0				
April	25	0	25				
May	0	0	0				
June	60	0	60				
July	114	0	114				
August	158	0	158				
September	165	0	165				
lotal	670	0	670				
Type of Diversion	Direct Diversion Only						

	Maximum Rate of Diversion	
Month	Rate of Diversion (Cubic Feet Per Second)	
2022		
Ctober	8	
November	8	
December	4	
2023		
January	0	
February	0	
March	0	
April	8	
May	0	
une	8	
July	8	
August	8	
September	8	

Water Transfe	rs
Water transfered	No
Quantity transfered (Acre-Feet)	
ates which transfer occurred	/ to /
Transfer approved by	

Water Supply Contracts	
Water supply contract	No
Contract with	
Contract number	
Source from which contract water was diverted	
Point of diversion same as identified water right	
mount (Acre-Feet) authorized to divert under this contract	
Amount (Acre-Feet) authorized to be diverted in 2023	
Amount (Acre-Feet) projected for 2024	
Exchange or settlement of prior rights	
All monthly reported diversion claimed under the prior rights	
Amount (Acre-Feet) of reported diversion solely under contract	

Reports are Due February 1 Late Reporting Fees

(post-1914 appropriative water rights)

Summary of Late Reporting Fees								
Size of Water Right (acre-feet)	1-30 days late	31-60 days late	61-90 days late	>90 days late				
Up to 100	No late fee	25% of annual fee	40% of annual fee	50% of annual fee				
>100-1,000	No late fee	30% of annual fee	45% of annual fee	55% of annual fee				
>1,000-5,000	No late fee	40% of annual fee	50% of annual fee	60% of annual fee				
>5,000-25,000	No late fee	50% of annual fee	60% of annual fee	75% of annual fee				
>25,000	No late fee	60% of annual fee	75% of annual fee	85% of annual fee				

Annual Diversion and Use Reporting

Why is it Important?

This data helps us better understand water availability It helps us plan for future years and each diverters needs, especially in dry years

Resources:

Email: RMS@waterboards.ca.gov

Call: (916) 341-5431

Visit the Water Use Reporting website

File online



Water use reporting website



File online here



Background

California Code of Regulations, Title 23, §§ 931-938 Approved in 2016

Requires applicable water right holders and claimants to measure and report their diversions

Specifies frequency and accuracy requirements depending on the authorized diversion size

Data supplements and supports Annual Water Diversion and Use Reports

Who is subject?

Type of Right	Water Right ID First Letter	Applicability Threshold
Statement (Riparian or Pre-1914 Claim)	S (Ex: <u>S</u> 001234)	 Maximum historical diversion > 10 acre-feet per year OR Maximum future diversion > 10 acre-feet per year
Permit or License	A, T (Ex: <u>A</u> 012345)	Face value > 10 acre-feet per year
Registration (Domestic, Livestock, Small Irrigation, Cannabis)	D, L, H (Ex: <u>H</u> 004567)	 Face value > 10 acre-feet per year OR Capacity of storage facility > 10 acre-feet
Multiple water rights or claims with the same point of diversion OR same place of use	A, D, H, L, S, T	Sum of face values (or maximum historical or future diversion) > 10 acre-feet per year

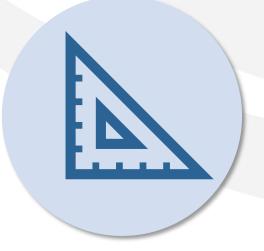
How to measure?



MEASUREMENT DEVICE

Any device that measures:

- Water volume
- Water flow rate
- Water velocity
- Water elevation



MEASUREMENT METHOD

Any other way of determining the volume of water diverted per water right (usually involves extra math)



ALTERNATIVE COMPLIANCE

Provides flexibility if strict compliance is not possible, but must still meet as many requirements as possible

Measurement Frequency

Diversion Type	Volume Threshold	Required Frequency
Direct Diversion	More than 10,000 acre-feet	Hourly, plus telemetry requirements
Direct Diversion	1,000 to 10,000 acre-feet	Hourly
Direct Diversion	100 to 999 acre-feet	Daily
Direct Diversion	10 to 99 acre-feet	Weekly
Diversion to Storage	10,000 acre-feet or more	Hourly, plus telemetry requirements
Diversion to Storage	1,000 to 9,999 acre-feet	Hourly
Diversion to Storage	rsion to Storage 200 to 999 acre-feet	
Diversion to Storage	50 to 199 acre-feet	Weekly
Diversion to Storage	10 to 49 acre-feet	Monthly

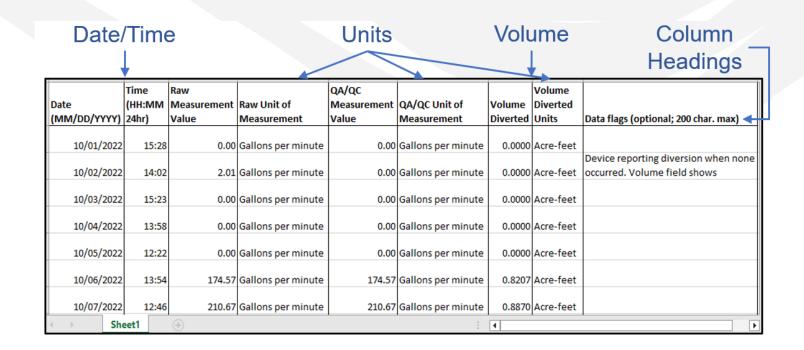
^{*}Direct Diversion: Based on the face value or maximum annual historical use (whichever is greater)

^{*}Diversion to Storage: Based on the capacity of the storage facility

What do I need to Submit?

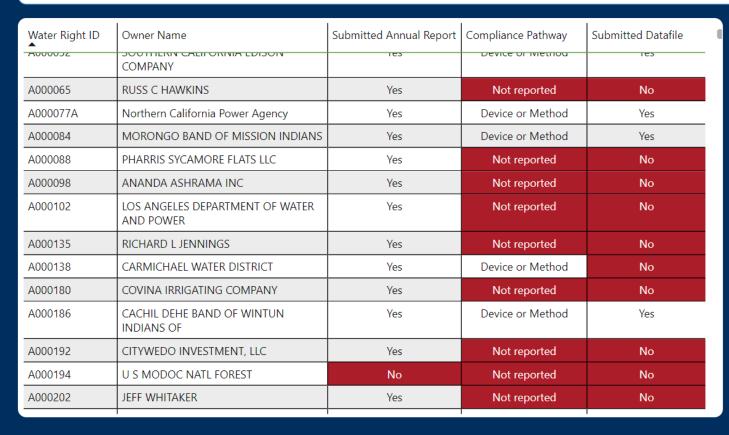
Register your measurement device online

Upload Datafiles from your device



Water Measurement and Reporting: Submissions and Deficiencies (WY 2023)

(Last Updated 4.23.2024)



Search by Water Right ID	
All	~
Search by Owner Name	
All	~
Filter by County	
All	~
Filter by Watershed	
All	~
Filter by Face Value (AF)	
0.00 11,463,752.50	
0	

Key

Submitted Annual Report = Whether the diverter filed their 2023 Annual Water Use Report

Compliance Pathway = How the diverter is complying with device requirements, based on 2023 Annual Report

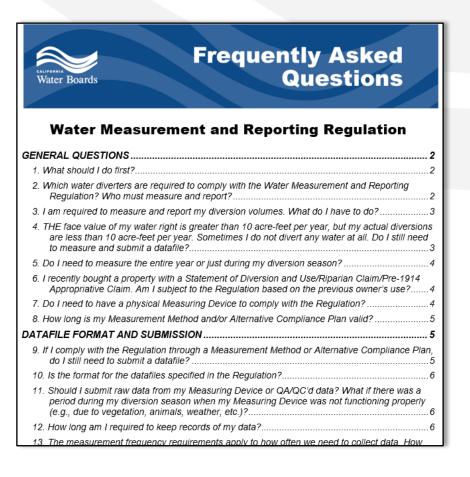
Submitted Datafile = Whether the diverter uploaded a measurement data file with their 2023 Annual Report

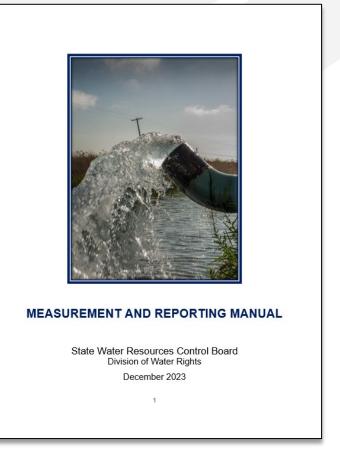


Tools

Datafile Templates
Measurement and
Reporting Manual
FAQs

	А	В	С	D	E	F	G	Н	I.
		Time	Raw		QA/QC			Volume	
	Date	(нн:мм	Measurement	Raw Unit of	Measurement	QA/QC Unit of	Volume	Diverted	
1	(MM/DD/YYYY)	24hr)	Value	Measurement	Value	Measurement	Diverted	Units	Data flags (optional; 200 char. max)
2	10/01/2022	15:28	0.00	Gallons per minute	0.00	Gallons per minute	0.0000	Acre-feet	
3	10/02/2022	14:02	2.01	Gallons per minute	0.00	Gallons per minute	0.0000	Acre-feet	Device reporting diversion when none occurred. Volume field shows corrected data
4	10/03/2022	15:23	0.00	Gallons per minute	0.00	Gallons per minute	0.0000	Acre-feet	
5	10/04/2022	13:58	0.00	Gallons per minute	0.00	Gallons per minute	0.0000	Acre-feet	
6	10/05/2022	12:22	0.00	Gallons per minute	0.00	Gallons per minute	0.0000	Acre-feet	
7	10/06/2022	13:54	174.57	Gallons per minute	174.57	Gallons per minute	0.8207	Acre-feet	
8	10/07/2022	12:46	210.67	Gallons per minute	210.67	Gallons per minute	0.8870	Acre-feet	
9	10/08/2022	13:23	192.83	Gallons per minute	192.83	Gallons per minute	0.8740	Acre-feet	
10	10/09/2022	12:53	295.17	Gallons per minute	295.17	Gallons per minute	1.2772	Acre-feet	
11	10/10/2022	15:43	189.23	Gallons per minute	189.23	Gallons per minute	0.9350	Acre-feet	
	40/44/0000		202.50		222.50				





Measurement and Monitoring Resources

Email:

DWR-Measurement@Waterboards.ca.gov

Water Measurement Website:

Regulation Text:





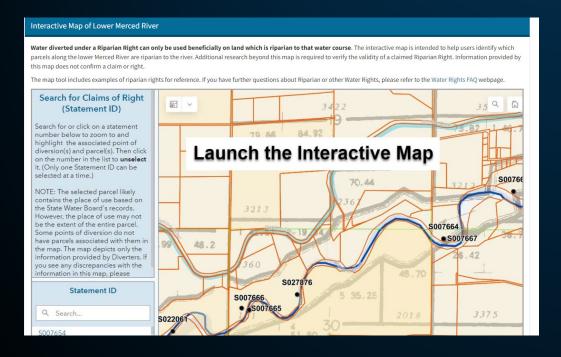
Reporting Accurately and On Time Matters!

We use the data to evaluate water supply and demand

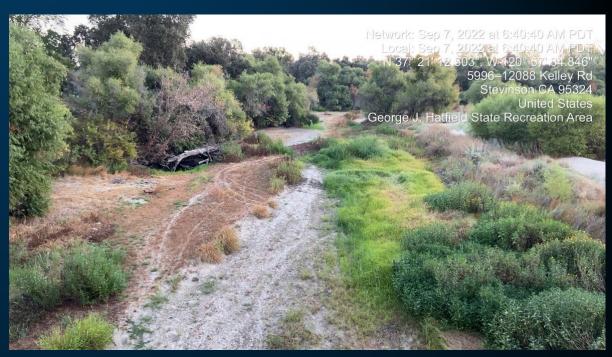
We use the data to improve our administration of the water right priority system

For the Merced River, we've used the data in several studies

Case Studies:



Interactive Map of Riparian and Pre-1914 Claims on the Lower Merced River



Photograph courtesy of CDFW 09/22/2022

River Flow and Diversion Analysis, 2022 Dry River Conditions

Merced River Analysis of Summer 2022 Preliminary Results

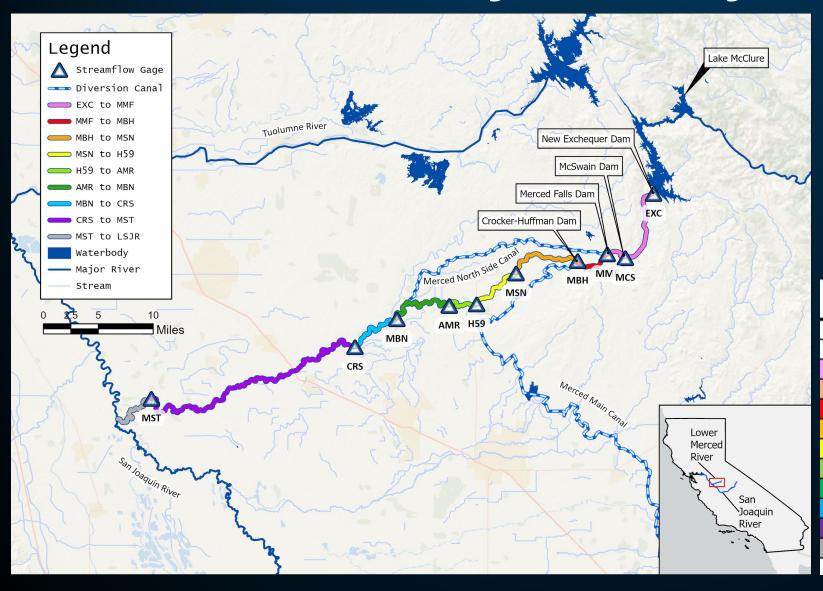
Comparison of River Flow and Diversion July – September 2022

Were flow losses larger than diversions?

Were water diversions larger than flow losses?

How do flow losses and diversions vary by river reach?

Merced River Analysis Study Area



Water Rights	
Licenses	22
Inactive	6
Claimed	75
Above McClure	14
TOTAL	117

Preliminary results do not cite

River Reach	River Mile	Length	PODs
Name	Range	river miles	(count)
Above EXC	N/A	N/A	14
EXCI to EXCO	63 to 63	0	7
EXC to MCS	63 to 56	6	3
MCS to MMF	56 to 55	1	6
MMF to MBH	55 to 52	4	3
MBH to MSN	52 to 46	5	12
MSN to H59	46 to 42	4	5
H59 to AMR	42 to 39	3	4
AMR to MBN	39 to 32	7	8
MBN to CRS	32 to 28	5	10
CRS to MST	28 to 5	23	45
MST to LSJR	5 to 0	5	8
TOTAL	N/A	63	125

Merced River Reported Information

Best Available Data - retrospective water balance

Limited real-time information

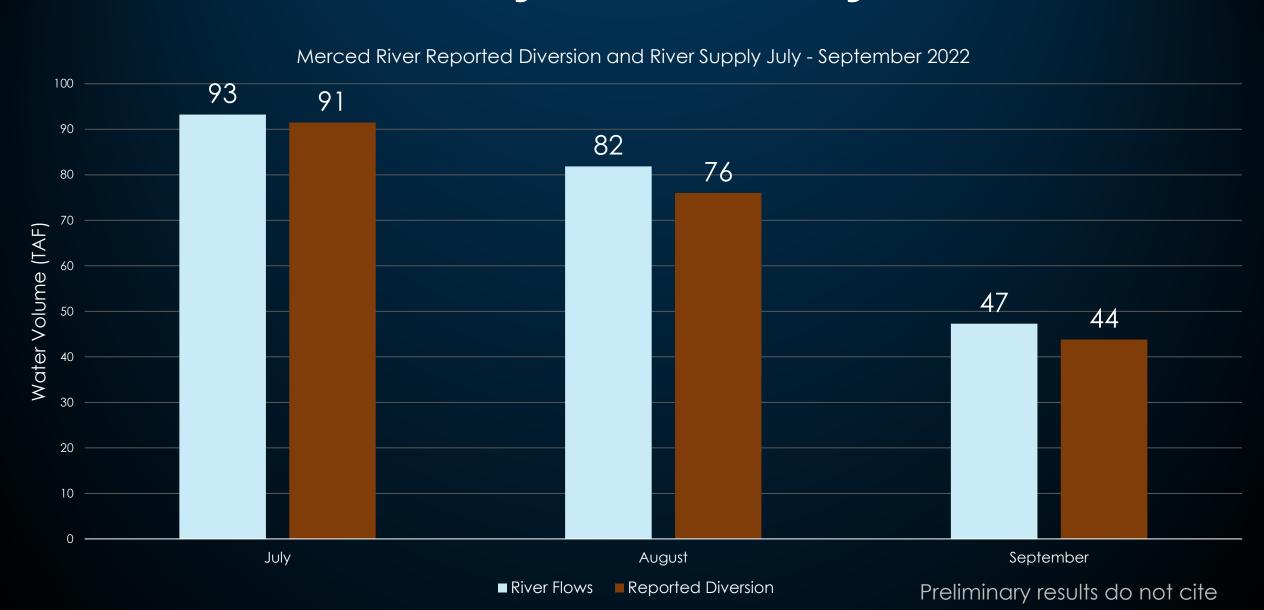
Multiple sources of information

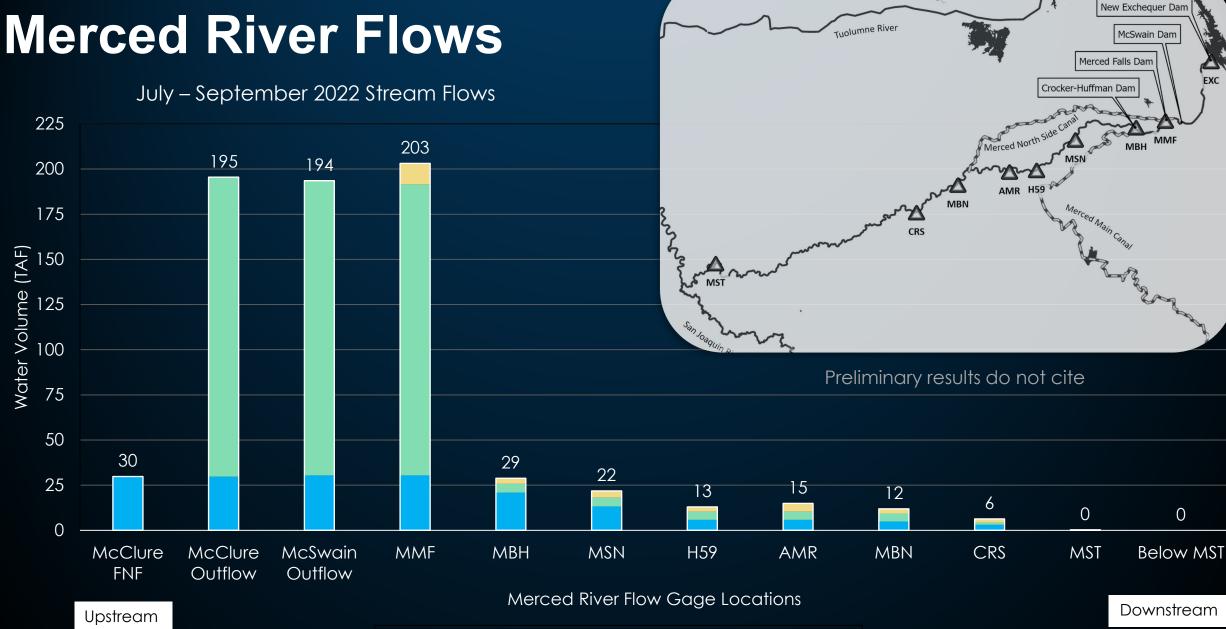
Inconsistencies in reported data

96% submitted Annual Reports

55% submitted Measurement Devices (16 WR with multiple PODs)

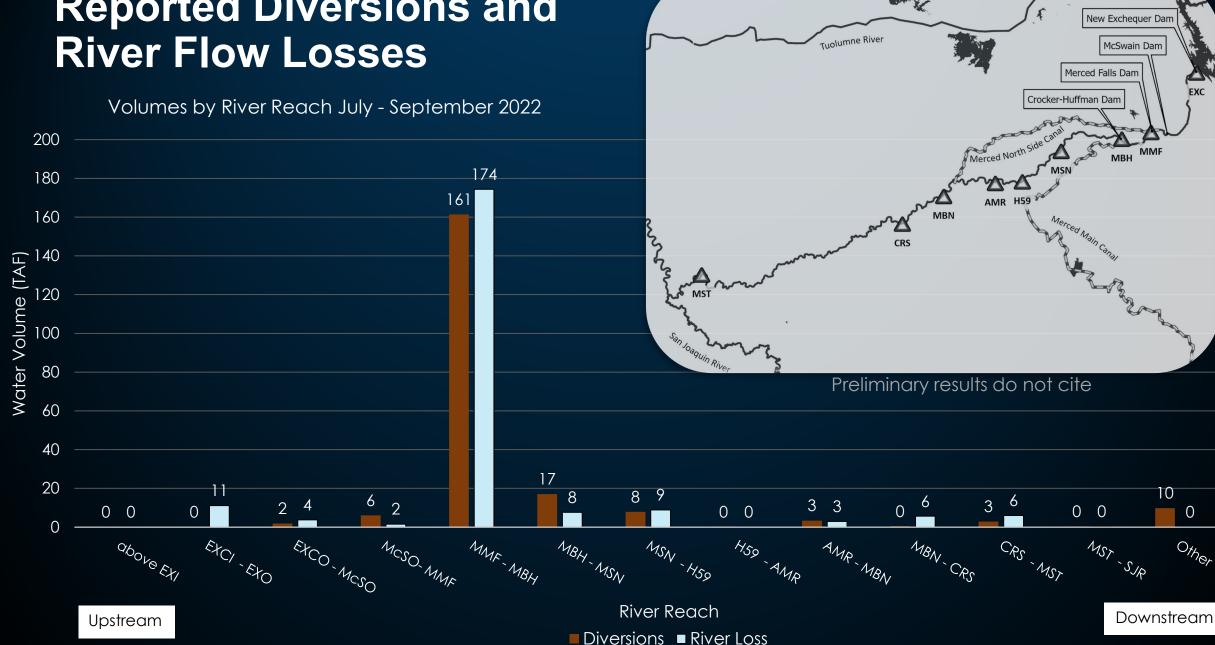
Merced River Analysis Summary





■ FNF ■ Storage Withdrawals ■ Accretions □ Total

Reported Diversions and

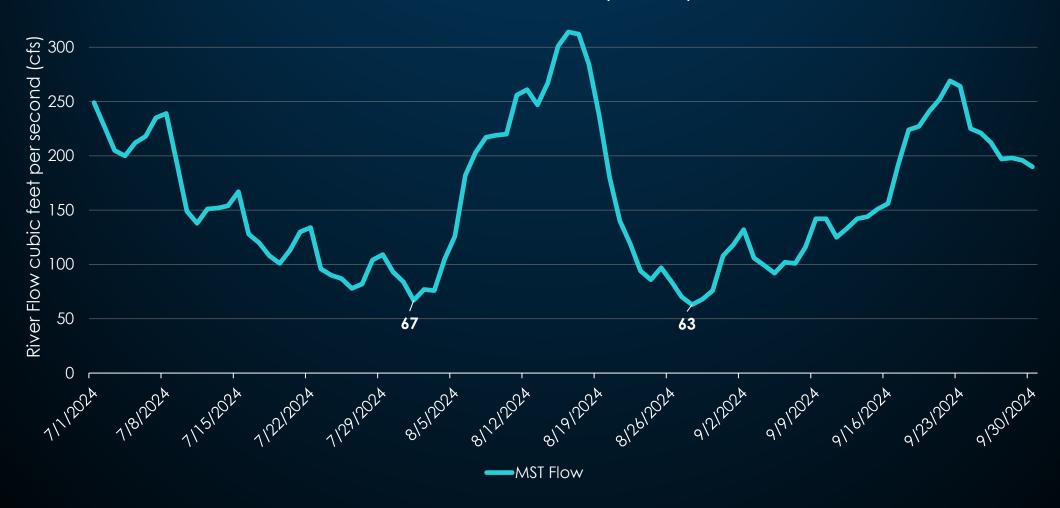


Take-aways

- Reported diversions ~ Reported river losses
 - Majority losses match reported diversion
- Reach by reach variability
 - 3 increasing reaches, 9 depleting reaches
- Consistent summer patterns
 - 17% potential unaccounted flow losses
 - 12% potential reporting error and/or river gains
- Accurate reporting is important

Merced River Flow Conditions Summer 2024

Merced River Flow near Stevinson July 1 - September 30, 2024



Merced River ~ River Mile 1

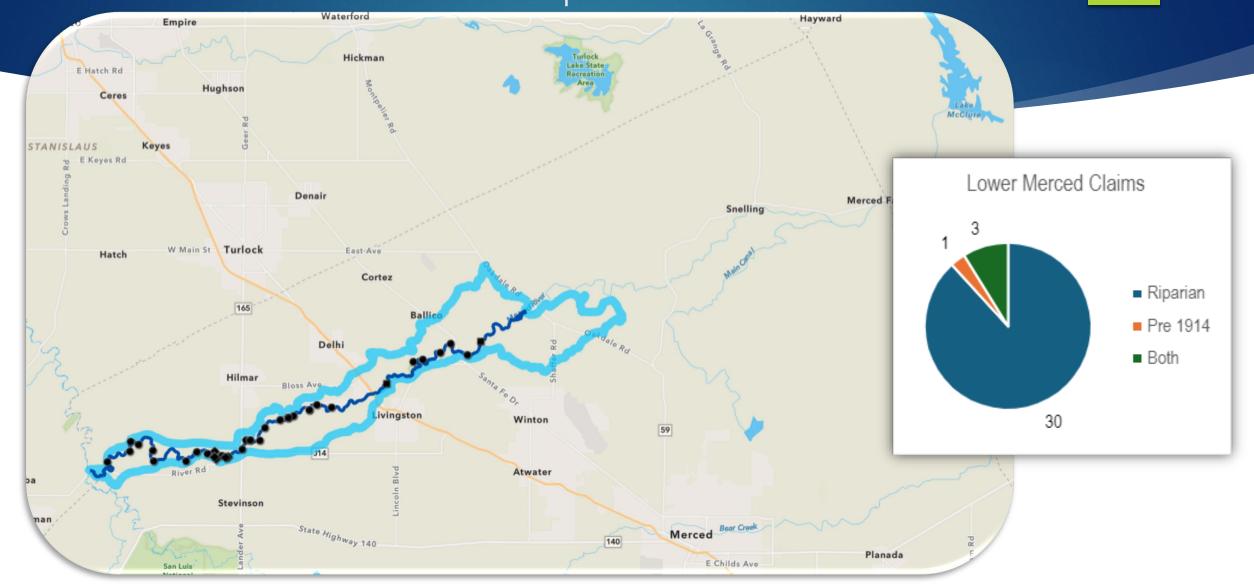
George J. Hatfield State Recreation Area





Photographs courtesy of CDFW 10/19/2022 and 5/19/2022 respectively

Riparian and Pre-1914 Claims Oakdale road to the San Joaquin River



Watershed Review

We found:

- outdated records
- diversions may not have a statement or water right on file
- riparian claims may be diverting on nonriparian land
- Inconsistencies in reported claim type

What we've done:

- contacted diverters via phone, email, and letters for more information
- conducted site visits

Using the Map



It is the diverter's responsibility to ensure records are correct and current Identify where riparian rights apply based on original boundaries

Verify that our records are current for your diversion

Correct location of POD

Current map showing POU



Review what rights or claims are on file



Understand your water rights

Lower Merced River Riparian and Pre-1914 Claims

Confluence to Cressey

Search for Claims of Right (Statement ID)

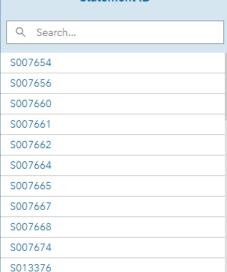
Search for or click on a statement number below to zoom to and highlight the associated point of diversion(s) and parcel(s). Then click on the number in the list to **unselect** it. (Only one Statement ID can be selected at a time.)

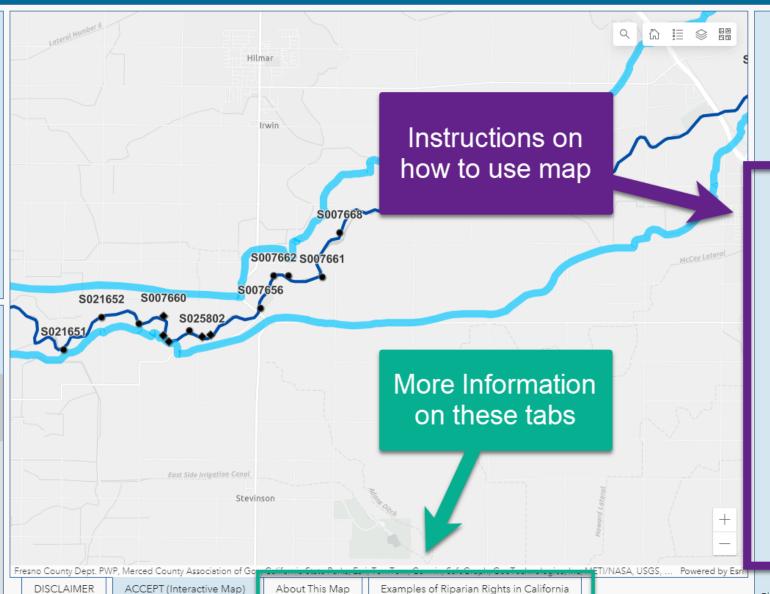
NOTE: The selected parcel likely contains the place of use based on the State Water Board's records. However, the place of use may not be the extent of the entire parcel. Some points of diversion do not have parcels associated with them in the map. The map depicts only the information provided by Diverters. If you see any discrepancies with the information in this map, please contact State Water Board staff.

Phone: (916) 341-5300

Email: dwr@waterboards.ca.gov

Statement ID







Claims on the Lower Merced River

- Riparian
- Riparian, Pre-1914
- Pre-1914

How to Use This Map

- Click on a Statement ID in the list or enter a Statement ID in the Search box to zoom to that location and highlight the associated parcel(s).
- When clicking on a map feature, multiple layers may get selected at the same time. This will be indicated in the pop-up information window, where you can view data for each layer by clicking on the arrows.
- Click on a point of diversion (Statement ID) to view the latitude, longitude, claim type, and Point of Diversion (POD) number.
- Click anywhere in a parcel to view the parcel number and a list of associated statement(s).
- Review the Place of Use (POU) associated with the POD for the statement of interest and identify whether the POU falls within the original riparian patent boundary lines.
- Click anywhere in a PLSS boundary to view the township/range/section numbers. The PLSS information can be used to search for the original patent.

wap wavigation

Click on the Legend icon to view the map

Lower Merced River Riparian and Pre-1914 Claims

Confluence to Cressey

Search for Claims of Right (Statement ID)

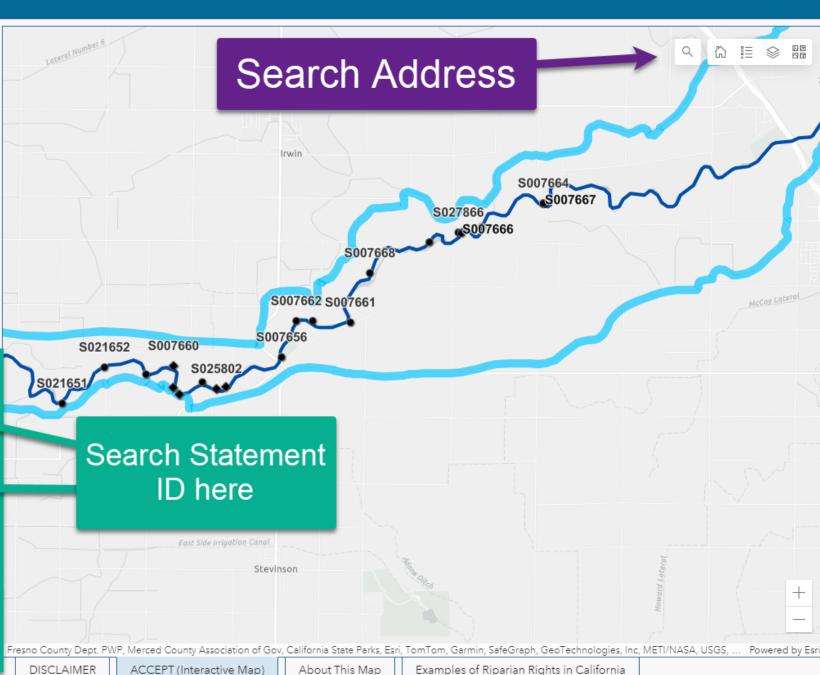
Search for or click on a statement number below to zoom to and highlight the associated point of diversion(s) and parcel(s). Then click on the number in the list to **unselect** it. (Only one Statement ID can be selected at a time.)

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Email: dwr@waterboards.ca.gov

\$\text{Statement ID}\$ \[\text{Q Search...} \] \$007654 \$007656 \$007660 \$007661 \$007662 \$007664 \$007665 \$007665 \$007667 \$007668 \$007674



Search for Claims of Right (Statement ID)

Search for or click on a statement number below to zoom to and highlight the associated point of diversion(s) and parcel(s). Then click on the number in the list to **unselect** it. (Only one Statement ID can be selected at a time.)

NOTE: The selected parcel likely contains the place of use based on the State Water Board's records. However, the place of use may not be the extent of the entire parcel. Some points of diversion do not have parcels associated with them in the map. The map depicts only the information provided by Diverters. If you see any discrepancies with the information in this map, please contact State Water Board staff.

Phone: (916) 341-5300

Email: dwr@waterboards.ca.gov

Statement ID

Q Search...

S021652

S021823

S021826

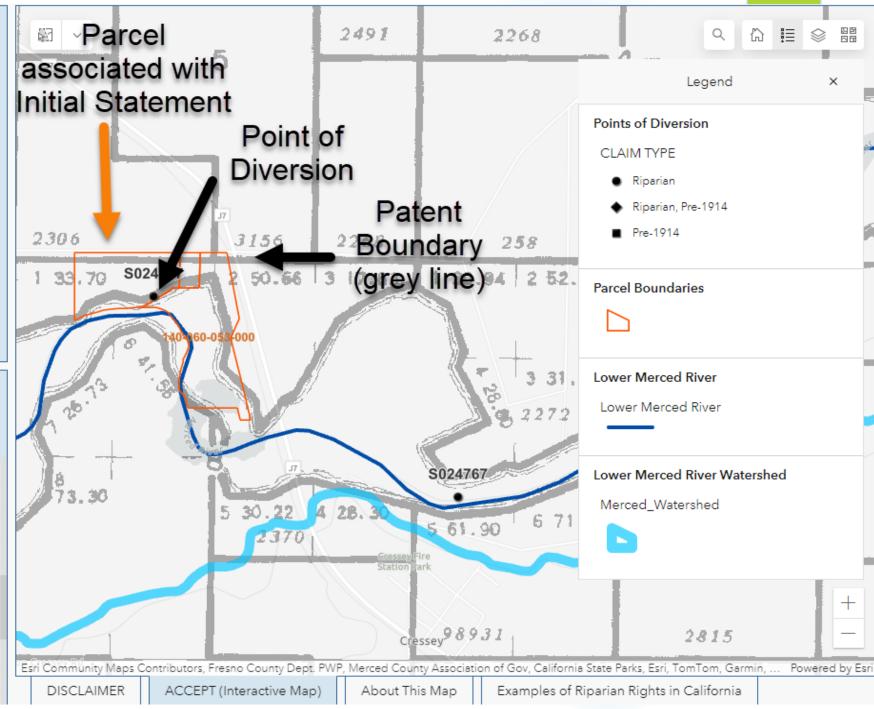
S021827

S021828

S022061

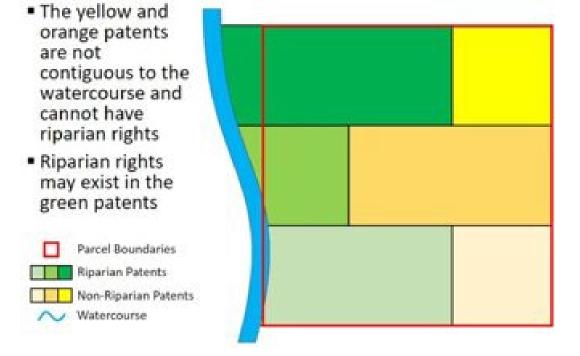
Statement ID List

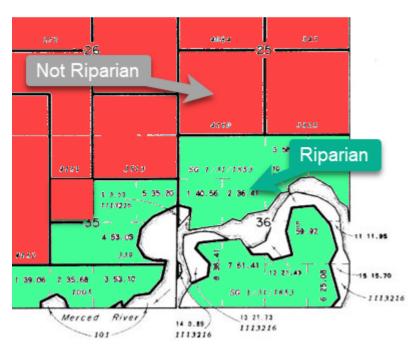
S024697



Understanding Riparian Land

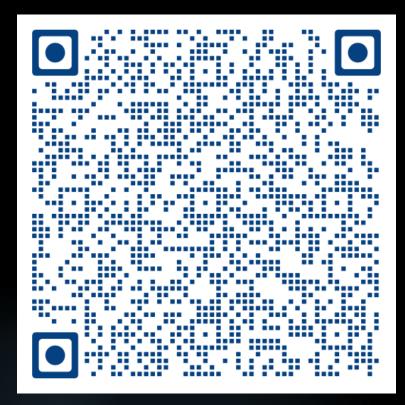
- Riparian rights are tied to land originally issued as riparian through land patents.
- Some parcels may have lost or retained rights over time.
- The map shows original patent boundaries, helping you verify if your parcel may riparian rights.
- The map does not confirm riparian rights





Next Steps

- ▶ Based on your findings from your review of the map, you may need to:
 - contact us to update our records (e.g., inactivate a statement no longer in use, place of use or point of diversion location in our records)
 - file an Initial Statement for your diversion
 - modify where you are diverting water to based on what is allowed under your right
 - apply for an appropriative right



Resources

Contact: 916-341-5300 or

DWR@waterboards.ca.gov for assistance



Home : Waterrights : Water Issues : Programs : Bay Delta : Merced : Riparian And Pre 1914 Claims

Lower Merced River Riparian and Pre-1914 Claims

This web page contains resources to help you identify if your property has a riparian right and where water diverted under a riparian right can be beneficially used.

The Merced River

The Merced River is a tributary of the San Joaquin River and is an important source of water for many Californians living in the San Joaquin Valley. Although reaches of the Merced are designated as National Wild and Scenic River, there are several dams and irrigation diversions which control the flow through the reaches of the lower Merced. This flow provides important habitat for many protected species including great blue heron, great horned owl, bald eagles, and Chinook salmon, but also provides water to residents for domestic use and for agricultural purposes.

The water users on the Merced River claim a mix of water rights including Appropriative Rights permitted by the California State Water Resources Control Board, pre-1914 Appropriative Rights, and Riparian Rights. The majority of water users on the Merced River are riparian users.

Interactive Map of Lower Merced River

Water diverted under a Riparian Right can only be used beneficially on land which is riparian to that water course. The interactive map is intended to help users identify which parcels along the lower Merced River are riparian to the river. Additional research beyond this map is required to verify the validity of a claimed Riparian Right. Information provided by this map does not confirm a claim or right.

The map tool includes examples of riparian rights for reference. If you have further questions about Riparian or other Water Rights, please refer to the Water Rights FAQ webpage.

Search for Claims of Right (Statement ID)

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