

# SB-88: Measuring and Monitoring Regulation

Clear Lake Watershed



Division of Water Rights, April 2023

# Agenda

## What is SB-88?

- Background
- Purpose
- Clear Lake Watershed

## SB88 Requirements

- Who Needs to Comply
- Qualified Individuals
- Minimum Measurement Frequency
- What to Report

## Additional Resources & Guidance

## Water Right Registration Overview



What Is SB-88?

# Background

- California Code of Regulations, Title 23 §§ 931-938
- Applies to approximately 12,000 diverters
  - Applicability of SB-88 depends on the face value or maximum diversion under the water right/claim
- Data submitted under SB-88 supplements and supports annual Water Diversion and Use Reports
- Allows flexibility between using measurement devices and measurement methods
  - Users may also propose Alternative Compliance Plans if they meet required criteria

# Purpose

- Evaluate water supplies and demands
  - Geographical and temporal variations
  - Sufficient supply in one region may occur concurrently with severe shortages elsewhere
  - Provides more robust dataset for comprehensive evaluation of statewide water use
- Improve administration of water rights
- Inform water planning decisions

# Clear Lake Watershed

- Heightened attention in the Clear Lake Watershed in response to declining populations of Clear Lake Hitch
- Most immediate threat is insufficient water in Clear Lake creeks and tributaries
- Clear Lake Hitch designated as Threatened Species in 2014

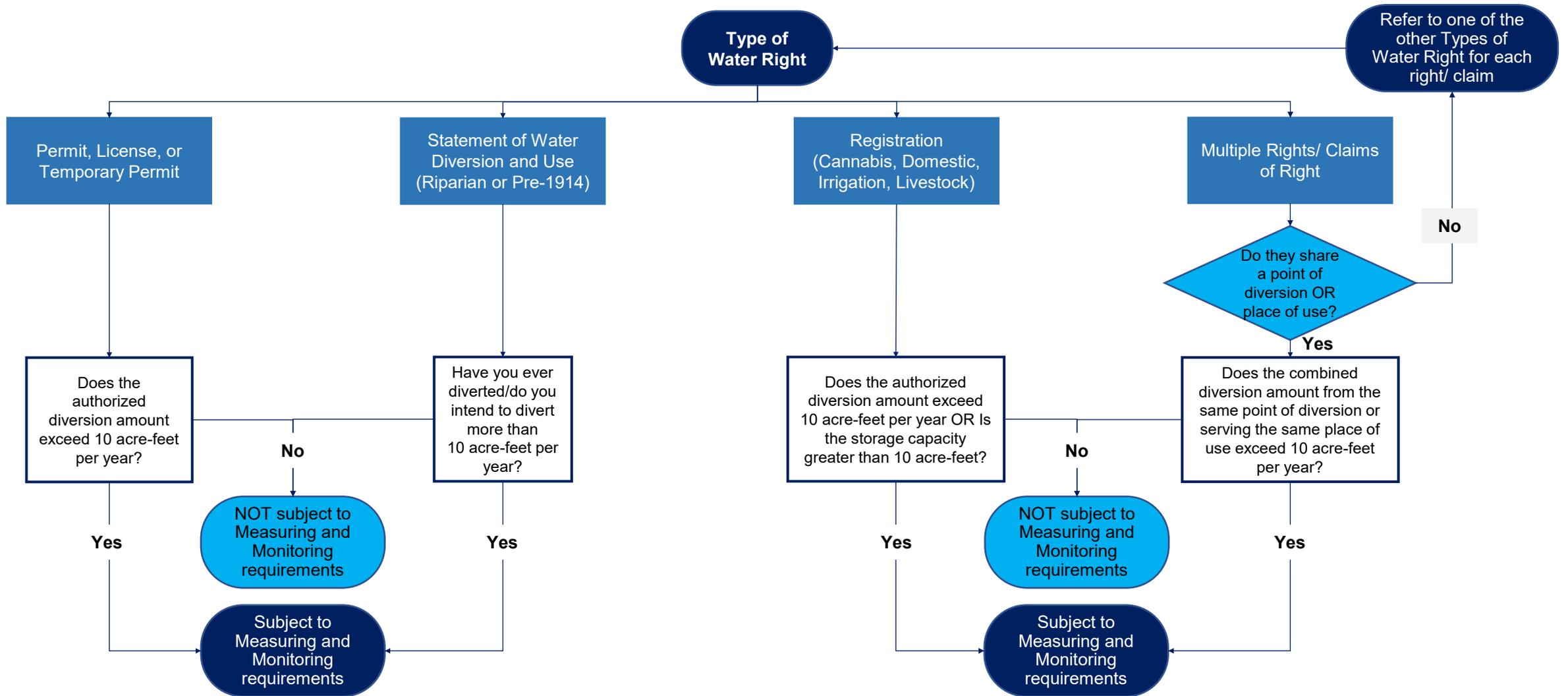


(Richard Macedo, California Department of Fish and Wildlife)



# Requirements

# Who Needs to Comply?



# Qualified Individuals

## Diversions of at least 100 acre-feet per year (AFY)

- **California registered Professional Engineer** or person under the supervision of a California registered Professional Engineer who is employed to install, operate, and maintain water measurement and reporting devices or methods
- **California licensed contractor for C-57 well drilling**
- **California licensed contractor for C-61 Limited Specialty/D-21 Machinery and Pumps**
- Any water right owner, diverter, tenant, or employee thereof who has **completed a training course on measurement devices offered by the University of California Cooperative Extension**

## Diversions less than 100 AFY

- Person trained and experienced in water measurement and reporting

# Minimum Measurement Frequency

## Hourly

- Direct Diversion: **1,000 acre-feet per year (AFY)** or more
- Diversion to Storage: Storage capacity of **1,000 acre-feet (AF)** or more
- Additional telemetry requirements apply to direct diversions of more than **10,000 AFY** or diversions to storage if storage capacity is **10,000 AF** or more

## Daily

- Direct Diversion: **100 AFY** or more
- Diversion to Storage: Storage capacity of **200 AF** or more

## Weekly

- Direct Diversion: **10 AFY** or more
- Diversion to Storage: Storage capacity of **50 AF** or more

## Monthly

- Diversion to Storage: Storage capacity of **10 AF** or more

# What to Report

- **Report of Measurement Device**
  - Only need to complete once per device
  - Make/Model/Serial Number/Device Type
    - Both measurement devices and recording/logging devices
  - Installation date and name of installer
  - Accuracy certification
  - Date of most recent (re)calibration
- **Data files**
  - *Optional interim template is available; more formal guidance to come*
  - Machine-readable formats (.csv, .xls, .xlsx, .txt, .dat)
  - Descriptive column headings
  - Include units of measurement (e.g., cubic feet per second, acre-feet)
  - One data file per device
  - Data to include:
    - Date and time
    - Device reading, with units
    - Amount diverted, with units (cumulative volume)

# Examples of Acceptable Data Formats

The image displays three examples of data tables, each with callouts pointing to specific features:

- Example 1 (Left):** A table with columns A, B, and C. Callouts point to:
  - Date/Time:** Column A (e.g., 7/2/2018 5:00)
  - Units:** Column B (e.g., Flow Rate (GPM))
  - Cumulative Volume:** Column C (e.g., Totaliser (AF))
- Example 2 (Right):** A table with columns A, B, C, D, and E. Callouts point to:
  - Date/Time:** Column A (e.g., 4/25/2017 8:23:03 AM)
  - Units:** Column B (e.g., Pulse (GALLONS))
  - Cumulative Volume:** Column D (e.g., Cumulative (gal))
  - Single Table:** The entire table structure
  - Column Headings:** The header row (Date, Time, Pulses [GALLONS], Cumulative [gal])
- Example 3 (Bottom):** A table titled "Measuring ID 000987" and "Statements: S000633". Callouts point to:
  - Column Headings:** The header row (Station, Station Parameter, Interval, Measurement, Reading Date, Reading, Unit, Validation, Comment)

# Examples of Unreadable Data Formats

Back Wash Total	Back Wash %	Permeability gpm/39812/tmp		VFD LINE PUMP	PH	water temp	Chlorine res.			CL-2 GEN. run hrs.	Total hours	Gals. 8%CL-2 made added	Oper. Init.
		Rack #1	Rack #2				Flow	Filter	Delv.				
184,000	5.77%	0.0018	0.0017	21.4	6.9	58.8	0.00	1.90	1.41	563.0	10.0	1800	KD
170,000	6.27%	0.0022	0.0018	20.8	6.9	58.5	0.00	1.60	1.75	563.0	0.0	0	KD
190,000	6.47%	0.0035	0.0024	21.7	6.9	58.4	0.00	2.10	1.54	563.0	0.0	0	KD
170,000	6.12%	0.0024	0.0021	21.4	6.9	58.6	0.00	1.80	1.55	578.0	15.0	2700	KD

**Lake Oroville Data Collection**

Lake Oroville surface elevation is measured by a constant flow bubbler system. Resulting Data is then transferred using three systems. One system transmits lake elevation and precipitation data hourly to NOAA (National Oceanic and Atmospheric Administration) via GOES (Geostationary Operational Environmental Satellite) radio. NOAA's data in turn is transferred to the CDEC (California Data Exchange Center). A second system uses a Campbell Scientific data logger to transfer lake elevation data to a web-based address. A third system transfers lake elevation via PLC and fiber optic network for use in the Wonderware and Alstrom SCADA (Supervisory control and data acquisition) systems. Real-time SCADA system data is monitored by Senior Hydro Electric Plant Operators 24-hours a day in the Area Control Center at Hyatt Power Plant. Elevation stage data is converted to a volume of acre feet using a storage capacity table.

Data is posted to CDEC at [https://cdec.water.ca.gov/dynamicapp/staMeta?station\\_id=ORO](https://cdec.water.ca.gov/dynamicapp/staMeta?station_id=ORO)

**Sump Pump @ POD 2 (Permit 28907)**

Date	Water Reading	Water Diverted (AF)	Hatcha Gage
January 1	388069		
January 31	388069	0.00	
February 28	388069	0.00	
March 31	388069	0.00	
April 30	388069	0.00	
May 31	388069	0.00	
June 30	388069	0.00	
July 31	388069	0.00	
August 31	388069	0.00	
September 30	388069	0.00	
October 31	388069	0.00	
November 30	388069	0.00	
December 31	388069	0.00	
Total		0.00	

**Water Transferred from South to North Reservoir (Permit 1752)**

Date	Water Reading	Water Transferred (AF)	Water shall not be transferred between Sept. 30 and May 31
January 1	675254		
January 31	675254	0.00	
February 28	675254	0.00	
March 31	675254	0.00	
April 30	675254	0.00	
May 31	675254	0.00	
June 1	675254	0.00	
June 30	675254	0.00	
July 31	675254	0.00	

Date	Time	Millitm	Marker	Tag	Status	Value
12/3/2019	23:03:24		468	[[OH]PLC]		8.536699
12/3/2019	23:03:24		468	[[OH]PLC]		118.5342
12/3/2019	23:03:24		468	[[OH]PLC]		0
12/3/2019	23:03:24		468	[[OH]PLC]		0
12/3/2019	23:03:24		468	[[OH]PLC]		119.5

Hyperlink

Junk Data (not Diversion)

Image

Multiple Tables/Sheets

No Units

RANCH RR WATER USE TALLEY SHEET

PUMPS 1/2

DATE	FROST	IRRIG	START TIME	STOP TIME	HRS RUN	BLOCK NUMBER
5-11-19	X		1:00 PM	2:00 PM	2	10-12-14
5-12-19	Y		9:00 AM	2:00 PM	6	12-24-55-7
5-20-19		X	7:00 AM	2:00 PM	5.5	4-54-7-9-9
5-26-19		X	7:00 AM	10:00 AM	3	1-2-3-10-12
6-4-19		X	9:00 AM	2:00 PM	5.5	4-13
6-11-19	X		6:30 AM	1:00 PM	4.5	8-13-21
6-13-19	X		12:00 PM	7:00 PM	7	8-13-9-11
6-18-19	X		10:00 AM	4:00 PM	6	7-6
6-18-19	X		7:00 AM	2:00 PM	6.5	4-7
6-17-19	X		11:00 AM	2:00 PM	8.5	4-13
6-21-19	X		7:00 AM	12:00 PM	5	4-9-13
6-24-19	X		11:30 AM	4:30 PM	5	4-9-13
6-24-19	X		11:00 AM	3:00 PM	4	10-14-17
7-2-19	X		9:00 AM	3:00 PM	7	4-9-13-1
7-5-19	X		10:15 AM	2:00 PM	4	4-9-13-
7-8-19	X		1:00 PM	5:30 PM	4.5	4-9-12-
7-10-19	X		2:00 AM	11:00 AM	4	1-23-10-14-
7-12-19	X		9:00 AM	2:00 PM	5	2-3-10-17
7-15-19	X		11:00 AM	4:00 PM	5	18-14-12
7-17-19	X		11:30 AM	5:00 PM	5.5	18-10

MAR | MAY | JUNE | JULY | AUG | SEPT | OCT | NOV | TOTALS



## **Measuring and Monitoring Regulations**

Phone: (916) 341-5300

Email: [DWR-Measurement@Waterboards.ca.gov](mailto:DWR-Measurement@Waterboards.ca.gov)

[waterboards.ca.gov/waterrights/water\\_issues/programs/diversion\\_use/water\\_measurement.html](http://waterboards.ca.gov/waterrights/water_issues/programs/diversion_use/water_measurement.html)

Additional  
Resources  
& Guidance



# Water Right Registrations Overview

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Senior Water Resources Control Engineer

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Divisions of Water Rights

# Water Rights Registrations Legal Basis

**“It is in the public interest to provide a timely, efficient, and economic procedure for the acquisition of rights to appropriate water...”**

§ 1228.1. of CA Statutory Water Code

## **Types of Water Right Registrations**

- **Small Domestic Use (SDU)**
- **Livestock Stockpond Use (LSU)**
- **Small Irrigation Use (SIUR)**
  - **Cannabis Small Irrigation Use (SIUR)**

# Do you need a Water Right (Registration)?

## Water Source(s)

- **Surface Water**
  - (Creeks, Rivers, Springs)
- **Mapped Subterranean Stream Diversion**
- **On-Stream Reservoir**

**Within DWR  
permitting authority**

**YES**

- **Percolating Groundwater**
- **Water Purveyor**
- **Rainwater Catchment**
- **Fully Contained Springs \*\***

**Outside of DWR  
permitting authority**

**\*\*Pending Spring evaluation**

**NO**

**Some  
Stockponds are  
Onstream  
Reservoirs**

**Onstream Reservoirs: Collects natural, concentrated, and channelized surface flows.**



**All onstream reservoirs are surface diversions and therefore will require a water right.**

# What type of water right registration do I need?

- **Small Domestic Use Registrations (SDU)**
  - For domestic uses, associated with dwelling
  - One SDU per diversion facility
    - Incidental irrigation and domestic stockwatering ok if supporting dwelling
- **Livestock Stockpond Use Registration (LSU)**
  - For watering of commercial livestock
  - No more than 1 LSU per 50 acres of land
- **Small Irrigation Use Registration (SIUR)**
  - Irrigation of commercial crops
  - Includes heat control/frost protection
  - No more than 1 SIUR per 20 acres of irrigated land
    - Cannabis crops requires a specific SIUR

All registration types above allow for additional uses of aesthetics, fire protection, recreation, and fish & wildlife enhancement<sub>20</sub>

# Water Right Registrations

Registration Type	Max Diversion to Storage	Max Direct Diversion Rate	Initial Fees	Annual Fees	Requires CDFW Notification
<b><i>Small Domestic</i></b>	10 Acre-ft/year	4,500 gal/day	\$250	\$100	Yes
<b><i>Livestock Stockpond</i></b>	10 Acre-ft/year	4,500 gal/day	\$250	\$100	Yes
<b><i>Small Irrigation</i></b>	20 Acre-ft/year	42,000 gal/day	\$750	\$100	No
<b><i>Cannabis Small Irrigation*</i></b>	6.6 Acre-ft/year	10 gal/min	\$750 <b>\$4,750**</b>	\$750 <b>\$1,000**</b>	LSAA coverage

**\*Cannabis Diversions prohibited from April 1 to October 31 of each year to preserve flows in dry months (Cannabis Surface Diversion Forbearance Period).**

**\*\*Increased Initial and Annual Fees for Cannabis SIUR's with an onstream reservoir**

## How to obtain a Water Right Registration

### Access Forms/Cannabis Portal:

- Registration Forms (fillable pdfs) are available online for printing/hardcopy submissions
  - Staff also have some copies available today!
- Cannabis Registrations are submitted via an online Cannabis Portal

### General Steps:

1. Google: “**Water Rights Registrations**”, our informational page should be first link
2. Informational page provides resources on how submit your registration package depending on your desired type of right (SDU vs. LSU vs. SIUR)
3. Submit Registration package with complete payment to address on form (hardcopy mail or Cannabis Portal)



[Home](#) | [Waterrights](#) | [Water Issues](#) | [Programs](#) | [Registrations](#)

# Water Rights Registrations

**NOTICE!** The State Water Resources Control Board is currently transitioning from the COVID-19 emergency while also being redirected to drought emergency tasks. Staff continues most of these efforts remotely, but the processing of water right registrations has been impacted. Your patience is greatly appreciated.

For assistance, send an email to the Division of Water Rights at [dwr@waterboards.ca.gov](mailto:dwr@waterboards.ca.gov) or call 916-341-5300 to leave a message. Response times may take up to 3 business days.

Welcome to the State Water Board's Water Rights Registrations Program webpage. The State Water Board's Division of Water Rights administers California's water right system, including water right registrations. Since January 1, 1989, water right registrations have been available for expedited acquisition of appropriative water rights for certain small projects. For projects that do not meet the

## QUICK LINKS

- [Current Registration Certificate Holders](#)
- [Announcements](#)
- [Small Domestic](#)
- [Small Irrigation](#)
- [Livestock Stockpond](#)
- [Small Irrigation - Cannabis Use](#)



## Water Right Registrations Webpage

[https://www.waterboards.ca.gov/waterrights/water\\_issues/programs/registrations/](https://www.waterboards.ca.gov/waterrights/water_issues/programs/registrations/)

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- [Livestock Stockpond](#)
- [Small Irrigation - Cannabis Use](#)

# Water Right Registrations Applications

Please indicate County where your project is located here:

MAIL FORM AND ATTACHMENTS TO:  
State Water Resources Control Board  
**DIVISION OF WATER RIGHTS**  
P.O. Box 2000, Sacramento, CA 95812-2000  
Tel: (916) 341-5300 Fax: (916) 341-5400  
[Division of Water Rights Webpage](http://www.waterboards.ca.gov/waterrights)

## REGISTRATION FOR SMALL IRRIGATION USE APPROPRIATION

### **IMPORTANT**

The State Water Resources Control Board (State Water Board), Division of Water Rights is accepting registrations for Small Irrigation Use projects located within the geographic area identified in [Water Code section 1259.4](#) and [California Code of Regulations, title 23, section 2921](#) (see attached map).

Registrations may propose diversion to storage not to exceed 20 acre-feet per annum for the irrigation, frost protection, or heat control of currently cultivated lands. Use may also include incidental aesthetic, fire protection, recreational, or fish and wildlife purposes. Projects qualifying for registration include: 1) offstream storage reservoirs and 2) existing onstream storage reservoirs documented to be located on [Class III streams \(as defined in section A.1.6 of the Policy for Maintaining Instream Flows in Northern California Coastal Streams \(Policy\)\)](#) and to have been constructed prior to January 1, 2012.

Registration No. \_\_\_\_\_  
(Leave blank)

Please indicate County where your project is located here:

MAIL FORM AND ATTACHMENTS TO:  
State Water Resources Control Board  
Division of Water Rights  
P.O. Box 2000, Sacramento, CA 95812-2000  
Tel: (916) 341-5300 Fax: (916) 341-5400  
<http://www.waterboards.ca.gov/waterrights>

## REGISTRATION FOR LIVESTOCK STOCKPOND USE APPROPRIATION

Please leave the Registration No. field blank unless you have a current registration and are filing an amended form for the purpose of changing either the point of diversion or place of use.

Registration No. \_\_\_\_\_

The following information is provided to help you understand the general process necessary for you to register your water use with the Division of Water Rights.

1. The section titled *Program Limitations* contained within the *Process Guide* at the end of this form contains information about the Registration program. You should review that section to determine whether or not a registration will be accepted for your project. If you have questions about the Registration program, call the telephone number at the top of this page.
2. To submit a registration for your project, complete this form, providing attachments if necessary. The *Process Guide* at the end of this form may be helpful. If you have questions about this form, call the telephone number at the top of this page.
3. Review the Division of Water Rights' general conditions for this registration at [http://www.waterboards.ca.gov/waterrights/publications\\_forms/forms/forms/docs/sdulsu\\_conditions.pdf](http://www.waterboards.ca.gov/waterrights/publications_forms/forms/docs/sdulsu_conditions.pdf)
4. Send the following to the address at the top of this page: (1) completed form; (2) required attachments; and (3) a check or money order made payable to the Division of Water Rights for a \$250 filing fee. Please note that the \$250 filing fee is non-refundable.

Please indicate County where your project is located here:

MAIL FORM AND ATTACHMENTS TO:  
State Water Resources Control Board  
**DIVISION OF WATER RIGHTS**  
P.O. Box 2000, Sacramento, CA 95812-2000  
Tel: (916) 341-5300 Fax: (916) 341-5400  
<http://www.waterboards.ca.gov/waterrights>

## REGISTRATION FOR SMALL DOMESTIC USE APPROPRIATION

Registration No. \_\_\_\_\_

Please leave the Registration No. field blank unless you have a current registration and are filing an amended form for the purpose of changing either the point of diversion or place of use.

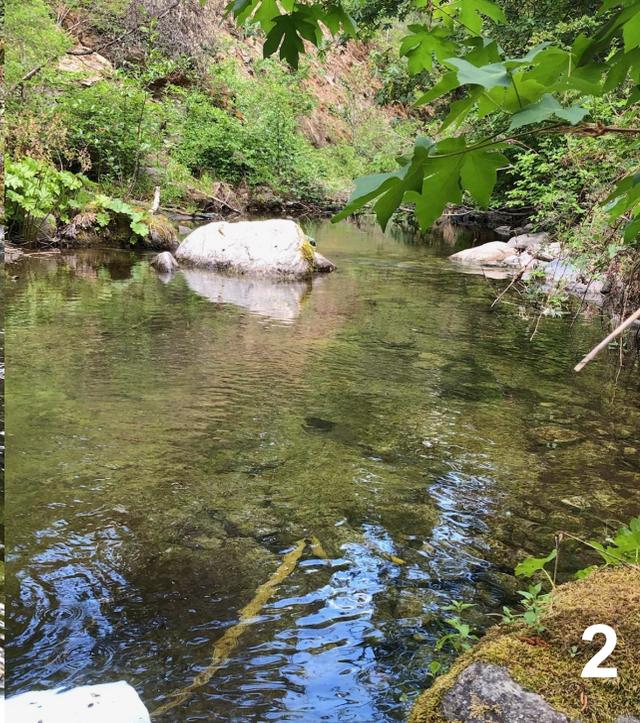
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2. To submit a registration for your project, complete this form and include any attachments. The *Process Guide* at the end of this form may be helpful. If you have questions about this form, call

**\*Cannabis SIUR applications are submitted  
via the Cannabis Cultivation Program  
Application Portal (Portal)**

## Information Requested in Registration Forms (1)

- Registrant/Landowner/Agent Contact Info
- Description of Diversion/Project
- Assessor's Parcel Number(s)
- Location of Point of Diversion (POD)
- Intended Purpose + Incidental Uses
- Estimated diversion rates (gallons/min)
- Estimated annual diversion volume (acre-feet)
- Water Storage Capacity (Tanks/Ponds/Bladders)
- Right of Access Documents (Easements)
- **Site Photos (See next slide)**



## Photo Requirements

1. Point of Diversion (Facing Upstream)
2. Point of Diversion (Facing Downstream)
3. Place of Use (Ex: House for SDU)
4. Storage Facility (Tanks and/or Reservoirs)

# Contact Information

## Measuring and Monitoring Regulations

Phone: (916) 341-5300

Email: [DWR-Measurement@Waterboards.ca.gov](mailto:DWR-Measurement@Waterboards.ca.gov)

## Water Rights Registrations

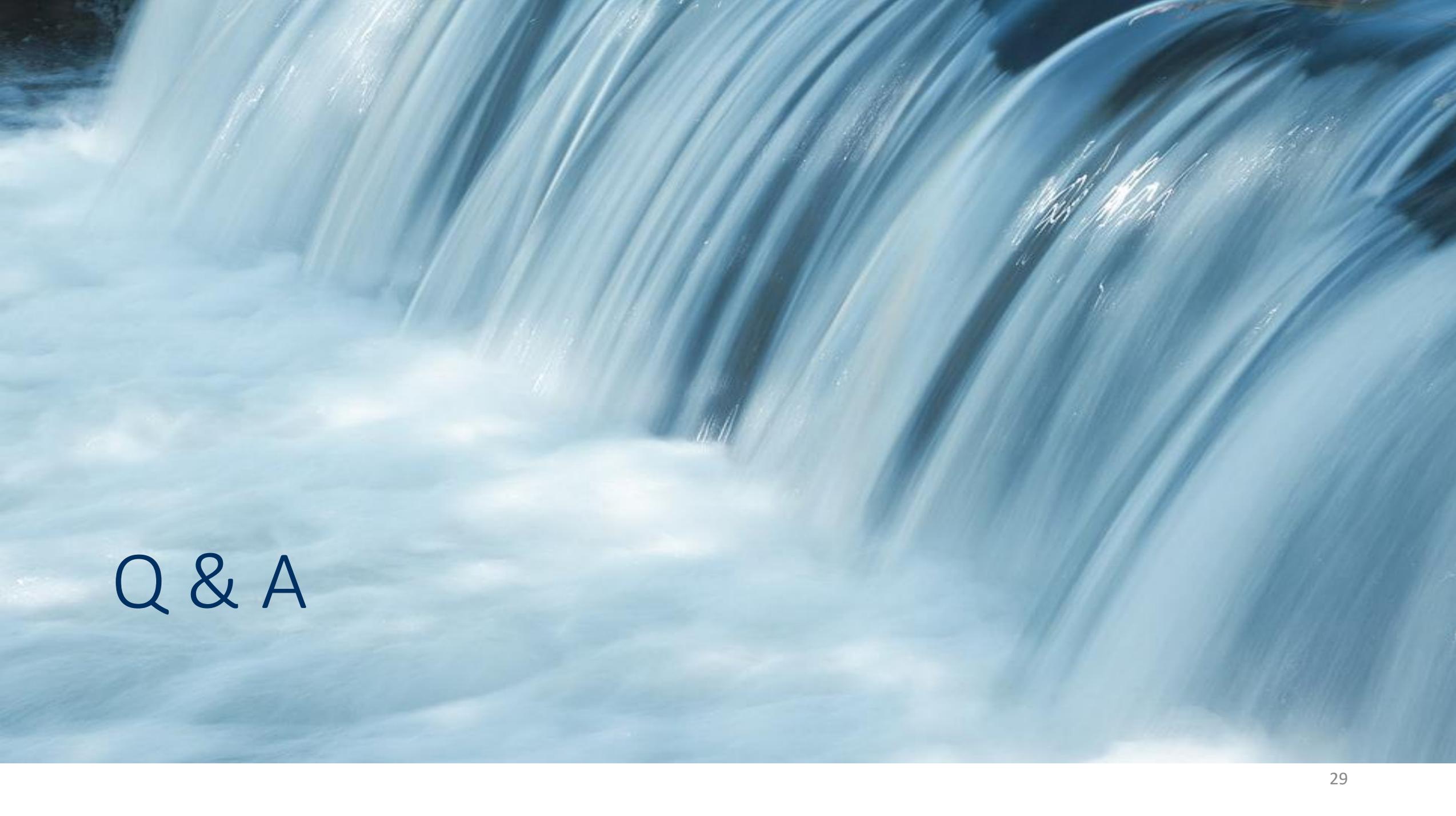
Phone: (916) 319-9427

Email: [CannabisReg@waterboards.ca.gov](mailto:CannabisReg@waterboards.ca.gov)

## Clear Lake Hitch Project

Email: [ClearLakeHitch@waterboards.ca.gov](mailto:ClearLakeHitch@waterboards.ca.gov)





Q & A