

Central Valley

MONITORING DIRECTORY

“Numerous water monitoring efforts are conducted by local, state, and federal agencies, regulated entities, and citizen monitoring groups. Many of these efforts are uncoordinated, and as a result funds and information are not being used as effectively as they could be. In addition, redundant monitoring activities can occur because of a lack of basic information relative to the scope of monitoring activities throughout the state. For example, there are 100 water quality monitoring efforts underway in the Central Valley alone, and coordination is minimal.”

(from Senate Bill 1070)

REGIONAL PERSPECTIVE

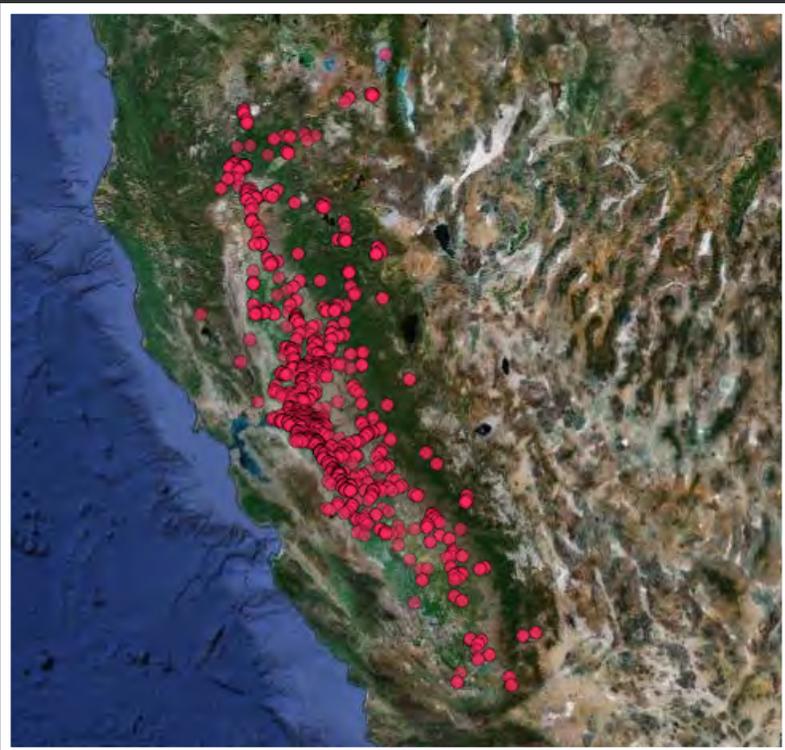
There are several dozen groups monitoring water quality in the Central Valley, including federal and state agencies, local water agencies, and regulated dischargers. In addition, there are many smaller monitoring efforts throughout the region conducted by watershed and citizen's groups. In a series of stakeholder interviews, we heard from several of these groups that they do not have a good sense of who else is monitoring what and where in the region. Most of the interviewed stakeholders agreed that an online resource would be a useful tool for finding out such information.

WHAT IT IS

The Central Valley Monitoring Directory is an online resource for basic information relative to the scope and extent of regional monitoring activities. It provides access to surface water monitoring program information and metadata.

PURPOSE

Promote and facilitate improved coordination of water monitoring across the region.



Objectives

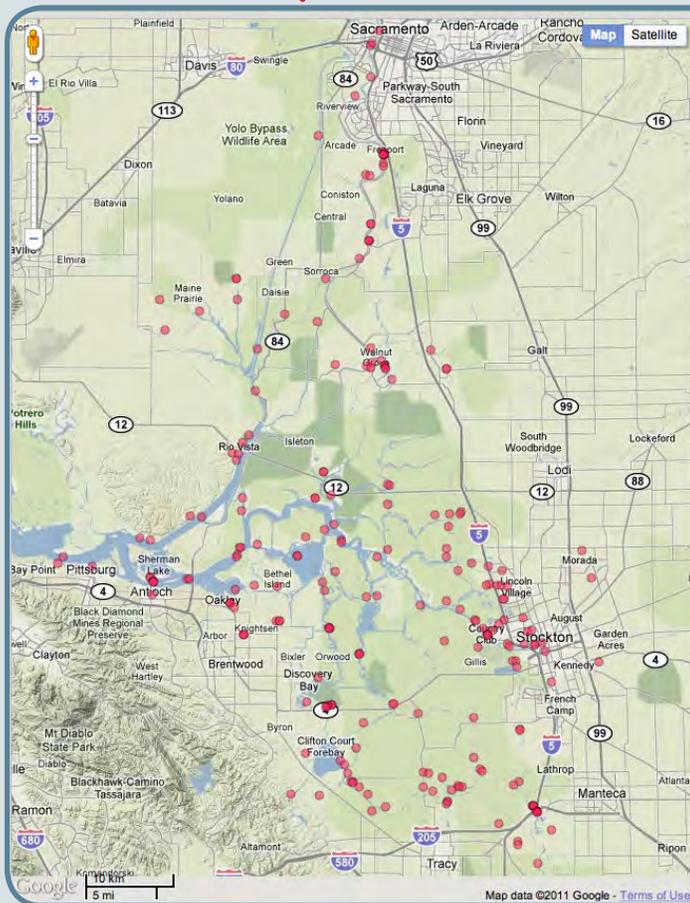
- Provide an up-to-date online directory for information on ongoing water quality monitoring efforts in the Central Valley;
- Make it easier and less time consuming for regulatory agency staff and other monitoring groups and data users to find and track information about ongoing surface water monitoring activities in the region;
- Provide a low-maintenance, interactive online resource that can be self-populated and continuously updated by participants as new efforts emerge and others are discontinued.

KEY FUNCTIONS

Interactive Monitoring Mapping Viewer

A navigable map showing monitoring locations in the Central Valley reported to the Monitoring Directory.

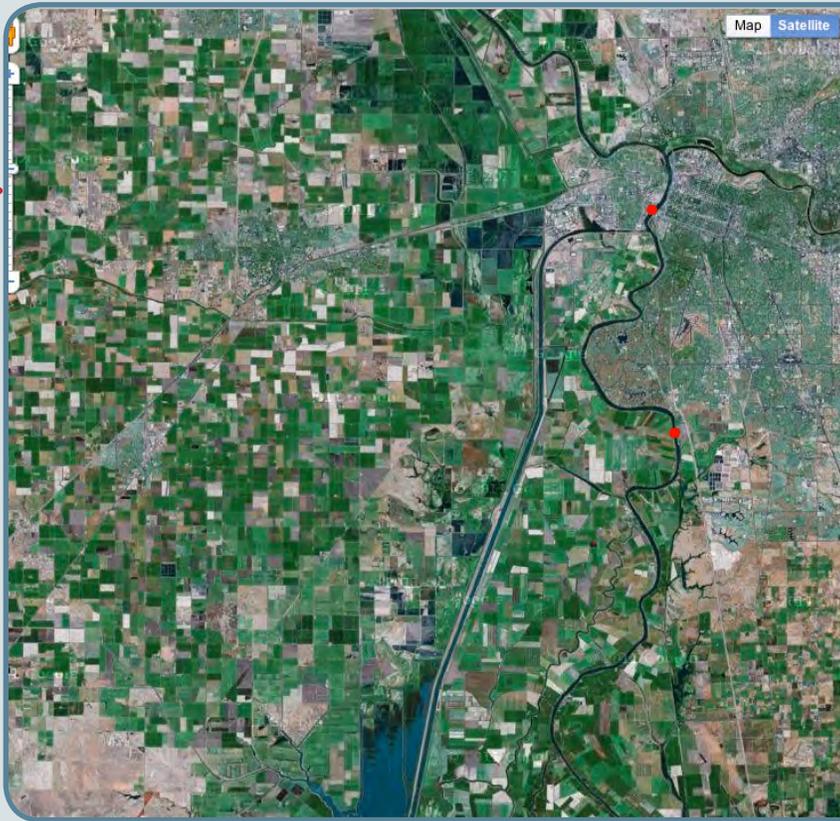
Displays monitoring sites and information selectively by program, organization, analyte, or sampling location.



Programs Organizations Analytes Sites Help									
Program	Lead Organization	No of sites	Basin	Bioassessment	Bulk Organics	Disinfection Byproducts	General Sediment Quality	General Water Quality	Hydrology
<input checked="" type="checkbox"/>	Central District - Surface Water Monitoring	DWR	48	Delta				22 sites	40 sites
<input checked="" type="checkbox"/>	Continuous Multiparameter Monitoring (IEP Environmental Monitoring Program)	DWR	6	Delta				6 sites	6 sites
<input checked="" type="checkbox"/>	Continuous Recorder Sites (DWR)	DWR	2	Delta				2 sites	2 sites
<input checked="" type="checkbox"/>	Continuous Recorder Sites (USBR)	USBR	14	Delta				14 sites	
<input checked="" type="checkbox"/>	Delta Flows Network	USGS	29	Delta				13 sites	29 sites
<input checked="" type="checkbox"/>	DWR Operations & Maintenance - State Water Project Water Quality Monitoring	DWR	4	Delta				4 sites	
<input checked="" type="checkbox"/>	IEP Environmental Monitoring Program: Discrete Water Quality Sampling	IEP	9	Delta				9 sites	9 sites
<input checked="" type="checkbox"/>	Irrigated Lands Regulatory Program	CVRWQCB Show Partners	7	Delta				7 sites	6 sites
<input checked="" type="checkbox"/>	Municipal Water Quality Investigations	DWR	6	Delta				5 sites	
<input checked="" type="checkbox"/>	National Water	USGS	4	Delta				3 sites	1 sites

[Download Excel](#)

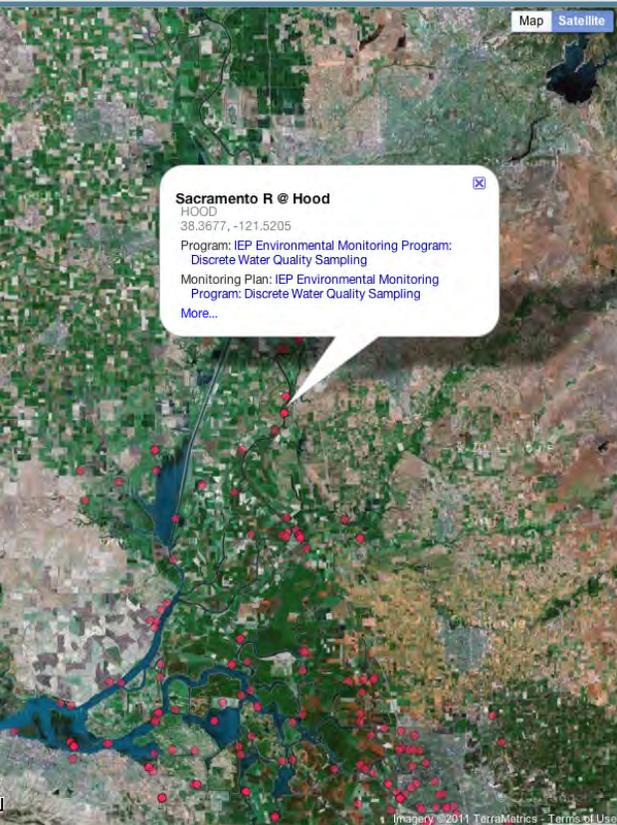




Map Satellite

Programs Organizations Analytes Sites Help

Analyte Group	Analyte	<input type="checkbox"/>	# of sites	Basin
Bioassessment	Benthic Macroinvertebrates	<input checked="" type="checkbox"/>	2 sites	Delta
	Macrophytes	<input type="checkbox"/>	2 sites	Delta
	Periphyton	<input type="checkbox"/>	2 sites	Delta
	Pheophytin	<input type="checkbox"/>	8 sites	Delta
	Physical Habitat	<input type="checkbox"/>	2 sites	Delta
	Phytoplankton	<input type="checkbox"/>	5 sites	Delta
	Dominant Organism	<input type="checkbox"/>	2 sites	Delta
	Pheophytin a	<input type="checkbox"/>	2 sites	Delta
	Bulk Organics	Oil & Grease	<input type="checkbox"/>	11 sites
Disinfection Byproducts	Total Residual Chlorine (TRC)	<input type="checkbox"/>	10 sites	Delta
	Trihalomethanes	<input type="checkbox"/>	23 sites	Delta
General Sediment Quality	Sediment Oxygen Demand (SOD)**	<input type="checkbox"/>	8 sites	Delta
	Particle Size	<input type="checkbox"/>	10 sites	Delta
	pH**	<input type="checkbox"/>	2 sites	Delta
General Water Quality	Solids Fraction	<input type="checkbox"/>	2 sites	Delta
	Alkalinity	<input type="checkbox"/>	45 sites	Delta
	Dissolved Oxygen (DO)	<input type="checkbox"/>	108 sites	Delta
	Electrical Conductivity (EC)	<input type="checkbox"/>	114 sites	Delta
	Effluent/River Dilution Ratio**	<input type="checkbox"/>	1 sites	Delta
	Oxidation Reduction Potential**	<input type="checkbox"/>	10 sites	Delta
	Resistivity**	<input type="checkbox"/>	10 sites	Delta



Map Satellite

Programs Organizations Analytes Sites Help

Sacramento R @ Hood
 HOOD
 38.3677, -121.5205
 Program: IEP Environmental Monitoring Program: Discrete Water Quality Sampling
 Monitoring Plan: IEP Environmental Monitoring Program: Discrete Water Quality Sampling
 More...

<p>Sacramento R @ Hood (HOOD) Basin: Delta Sub Basin: North Delta Watershed: Sacramento Delta Latitude: 38.3677 Longitude: -121.5205 Show on Map View Program View Monitoring Plan Hide monitored parameters</p> <p>Basin: Delta Sub Basin: North Delta Watershed: Sacramento Delta Monitoring Plan: IEP Environmental Monitoring Program: Discrete Water Quality Sampling Sample Type: Hydrology Parameter Group: Hydrology Frequency: Monthly Hydrology - other Sample Type: Water Quality Parameter Group: General Water Quality Frequency: Monthly Dissolved Oxygen (DO), Electrical Conductivity (EC), Secchi Depth, Temperature, Total Dissolved Solids (TDS), Total Suspended Solids (TSS), Turbidity, Volatile Suspended Solids (VSS) Parameter Group: Major Ions & Minerals Frequency: Monthly Chloride, Silica dioxide Parameter Group: Nutrients Frequency: Monthly Ammonia NH3, Chlorophyll a, Chlorophyll a Fluorescence, Inorganic Nitrogen, Organic Nitrogen, Orthophosphate PO4, Phosphorus, Total Kjeldahl Nitrogen (TKN)</p>
<p>North Bay Aqueduct @ Barker Slough PP (BKS) Basin: Delta Sub Basin: North Delta Watershed: Sacramento Delta Latitude: 38.276 Longitude: -121.788 Show on Map View Program View Monitoring Plan Show monitored parameters</p>
<p>North Bay Aqueduct @ Cordelia Forebay (CPP) Basin: Delta Sub Basin: North Delta Watershed: Sacramento Delta Latitude: 38.227 Longitude: -122.134 Show on Map View Program View Monitoring Plan Show monitored parameters</p>
<p>Mallard Slough (MS) Basin: Delta Sub Basin: North Delta Watershed: Sacramento Delta Latitude: 38.035951 Longitude: -121.928061 Show on Map View Program View Monitoring Plan Show monitored parameters</p>
<p>Sacramento River at Clarksburg Marina (510LSAC08) Basin: Delta Sub Basin: North Delta Watershed: Sacramento Delta Latitude: 38.38431 Longitude: -121.51872 Show on Map View Program View Monitoring Plan Show monitored parameters</p>

Download Excel

KEY FUNCTIONS

continued

Searchable Directory

A listing of monitoring programs reported to the Monitoring Directory. Browse directory tables by program listings or use the map to call out stations of interest and retrieve program information, metadata, contacts and links, and sampling locations.



Programs	Organizations	Analytes	Sites	Help											
<input checked="" type="checkbox"/>	Program	Lead Organization	No of sites	Basin	Bioassessment	Bulk Organics	Disinfection Byproducts	General Sediment Quality	General Water Quality	Hydrology	Major Ions & Minerals	Mercury	Metals & Trace Elements	New & Emerging Contaminants	Nutrients
<input checked="" type="checkbox"/>	Central District - Surface Water Monitoring	DWR	48	Delta					22 sites	40 sites					
<input checked="" type="checkbox"/>	Continuous Multiparameter Monitoring (IEP Environmental Monitoring Program)	DWR	6	Delta					6 sites	6 sites	1 sites				6 sites
<input checked="" type="checkbox"/>	Continuous Recorder Sites (DWR)	DWR	2	Delta					2 sites	2 sites					
<input checked="" type="checkbox"/>	Continuous Recorder Sites (USBR)	USBR	14	Delta					14 sites						
<input checked="" type="checkbox"/>	Delta Flows Network	USGS	29	Delta					13 sites	29 sites					2 sites
<input checked="" type="checkbox"/>	DWR Operations & Maintenance - State Water Project Water Quality Monitoring	DWR	4	Delta					4 sites		4 sites	4 sites	4 sites		4 sites
<input checked="" type="checkbox"/>	IEP Environmental Monitoring Program: Discrete Water Quality Sampling	IEP	9	Delta					9 sites	9 sites	7 sites				9 sites
<input checked="" type="checkbox"/>	Irrigated Lands Regulatory Program	CVRWQCB Show Partners	7	Delta					7 sites	6 sites	2 sites		1 sites		7 sites
<input checked="" type="checkbox"/>	Municipal Water Quality Investigations	DWR	6	Delta					5 sites		5 sites				5 sites
<input checked="" type="checkbox"/>	National Water Quality Assessment	USGS	4	Delta					3 sites	1 sites	1 sites				4 sites

Central Valley Monitoring Directory

Program Info

Surface Water Ambient Monitoring - Central Valley

Organization Central Valley Regional Water Quality Control Board show partners	Start date End date Objectives
Program website view	Annual budget

Monitoring Plans

Name Sacramento Watershed Coordinated Monitoring San Joaquin River Monitoring and Supplemental Monitoring Seasonal Trend Monitoring at Central Valley Integrator Sites SWAMP Safe-to-Swim 2011

Program Information pages

Each program has its own pages, providing information on monitoring plans, objectives, contacts, sites, analytes, and data availability.

Monitoring Plan Info

Surface Water Ambient Monitoring Program (SWAMP) - Central Valley

Seasonal Trend Monitoring at Central Valley Integrator Sites

[Download Excel](#)

Organization
Central Valley Regional Water Quality Control Board

Program website
[view](#)

Plan contact
Alisha Wenzel
916-464-4717
awenzel@waterboards.ca.gov

Start date 01/01/2009

End date None

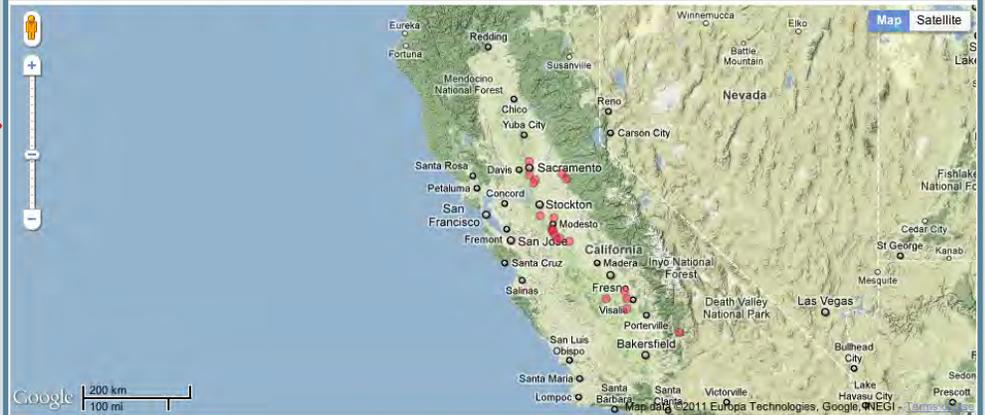
Objectives Monitoring is designed to answer the following questions: (1) What is the spatial variability of ambient water quality in the Central Valley? (2) What is the seasonal variability of ambient water quality in the Central Valley? (3) Is there evidence beneficial uses are not being protected? The sites that comprise this project are intended to serve as a long-term framework for a Central Valley trend monitoring program.

Annual budget None

Basins & sub-basins monitored

- Delta (North Delta, South Delta)
- San Joaquin River (Lower San Joaquin River, Northeast Basin, Southeast Basin, Eastside, East Valley Floor, Grasslands, Westside)
- Sacramento River (Sacramento River)
- Tulare Lake (Tulare Lake)

[Return to Program Surface Water Ambient Monitoring Program \(SWAMP\) - Central Valley](#)



Sites Monitored

Name	Code	Latitude	Longitude	Map
American River at Discovery Park	519AMNDVY	38.60094	-121.50550	locate
Bear Creek near Bert Crane Road	535MER007	37.25556	-120.65194	locate
Cosumnes River at Twin Cities Road	531SAC001	38.29083	-121.37583	locate
Cross Creek at Highway 99	558CCR010	36.40437	-119.45697	locate
Dry Creek at La Loma Road	535STC206	37.64568	-120.98081	locate
Kings River at Jackson Avenue	551LK040	36.25580	-119.85510	locate
Merced River at River Road	535MER546	37.34972	-120.95778	locate
Mokelumne River at Highway 49	532CAL004	38.31250	-120.72083	locate
Mokelumne River at New Hope Road	544SAC002	38.23611	-121.41889	locate
Mud Slough downstream of San Luis Drain	541MER542	37.26388889	-120.9061111	locate
Orestimba Creek at River Road	541STC019	37.41389	-121.01417	locate
Packwood Creek at Road 68	558PKC010	36.269	-119.4211	locate
Sacramento River at Clarksburg Marina	510LSAC08	38.38431	-121.51872	locate
San Joaquin River at Airport Way	541SJC501	37.6756	-121.2642	locate
San Joaquin River at Crows Landing	535STC504	37.43194444444444	-121.0116666666667	locate

Showing 1 to 15 of 20 entries

Search:

Parameters Monitored

Group	Parameters	Frequency
General Water Quality	Dissolved Oxygen (DO), Electrical Conductivity (EC), pH, Specific Conductance [EC @ 25 deg C], Temperature, Turbidity	Quarterly
Organic Carbon (OC)	Dissolved Organic Carbon (DOC), Total Organic Carbon (TOC), undefined	Quarterly
Pathogens & Bacteria	E. coli, Total Coliforms	Quarterly

Showing 1 to 3 of 3 entries

Search:

Data Products Available

Item	Available Online	URL	Available by Request	Comment
Fact Sheets	Yes	http://www.waterboards.ca.gov/...	Yes	
Monitoring Plan	Yes	http://www.waterboards.ca.gov/...	Yes	

Showing 1 to 2 of 2 entries

Search:

Monitoring Program (SWAMP) - Central

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01/01/1999

None
1) To evaluate whether the most limiting beneficial uses in a specific water body are being protected and help identify sources of potential impairment. 2) Determine, over time, if implementation efforts are improving water quality. Data collected is also used to support the Salt & Boron and Selenium TMDL programs.

None

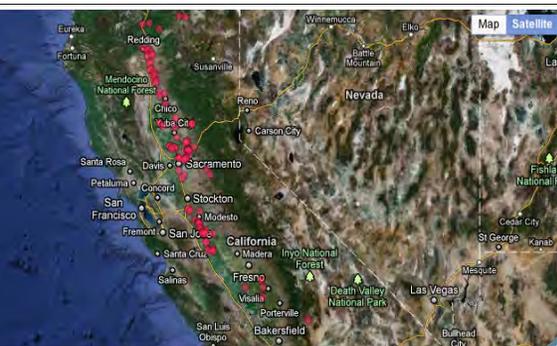
Basins & sub-basins monitored

- Delta (North Delta, South Delta)
- San Joaquin River (Lower San Joaquin River, Northeast Basin, Southeast Basin, Eastside, East Valley Floor, Grasslands, Westside)
- Sacramento River (Sacramento River)
- Tulare Lake (Tulare Lake)

ing Program

ntary Grasslands Bypass Project Monitoring

ntegrator Sites



Password-Protected User Domains for Adding/Updating Monitoring Program Information

A convenient tool for program managers to keep monitoring information updated.

Central Valley Monitoring Inventory - Data Entry

Program: Surface Water Ambient Monitoring Program (SWAMP) - Central Valley
 Plan: Seasonal Trend Monitoring at Central Valley Integrator Sites
 Contact:

First Name	Alisha
Last Name	Wenzel
Organization	Central Valley Regional Water Quality Control Board
Department	
Address	
City	
State	
Zip	
Phone	916-464-4717
Fax	
Email	awenzel@waterboards.ca.gov
Primary Contact	<input checked="" type="checkbox"/> Yes

[Return to Plan](#) [Save](#)

Logged in as waterboards (Central Valley Regional Water Quality Control Board) [Logout](#)

Central Valley Monitoring Inventory - Data Entry

Program: Surface Water Ambient Monitoring Program (SWAMP) - Central Valley
 Plan: Seasonal Trend Monitoring at Central Valley Integrator Sites

Monitoring Plan | **Sites** | Data Products | Contacts

[Edit selected sites](#) [Delete selected sites](#)

ID	Site Name	Basin	SubBasin	Status	Site Code
<input type="checkbox"/> 1606	American River at Discovery Park	Sacramento River	Sacramento River	Active	519AMNDVY
<input type="checkbox"/> 1610	Bear Creek near Bert Crane Road	San Joaquin River	Southeast Basin	Active	535MER007
<input type="checkbox"/> 1608	Cosumnes River at Twin Cities Road	San Joaquin River	Northeast Basin	Active	531SAC001
<input type="checkbox"/> 1621	Cross Creek at Highway 99	Tulare Lake	Tulare Lake	Active	558CCR010
<input type="checkbox"/> 1612	Dry Creek at La Loma Road	San Joaquin River	Eastside	Active	535STC206
<input type="checkbox"/> 1619	Kings River at Jackson Avenue	Tulare Lake	Tulare Lake	Active	551LK1040
<input type="checkbox"/> 1611	Merced River at River Road	San Joaquin River	Eastside	Active	535MER546
<input type="checkbox"/> 1798	Mokelumne River at Highway 49	San Joaquin River	Northeast Basin	Active	532CAL004
<input type="checkbox"/> 1609	Mokelumne River at New Hope Road	Delta	South Delta	Active	544SAC002
<input type="checkbox"/> 1616	Mud Slough downstream of San Luis Drain	San Joaquin River	Grasslands	Active	541MER542
<input type="checkbox"/> 1618	Orestimba Creek at River Road	San Joaquin River	Westside	Active	541STC019
<input type="checkbox"/> 1800	Packwood Creek at Road 68	Tulare Lake	Tulare Lake	Active	558PKC010
<input type="checkbox"/> 1622	Packwood Creek in pond upstream of Road 94	Tulare Lake	Tulare Lake	Inactive	558PKC005
<input type="checkbox"/> 1370	Sacramento River at Clarksburg Marina	Delta	North Delta	Active	510LSAC08
<input type="checkbox"/> 1371	San Joaquin River at Airport Way	San Joaquin River	Lower San Joaquin River	Active	541SJC501
<input type="checkbox"/> 1614	San Joaquin River at Crows Landing	San Joaquin River	Lower San Joaquin River	Active	535STC504
<input type="checkbox"/> 1615	San Joaquin River at Lander Avenue	San Joaquin River	Lower San Joaquin River	Active	541MER522
<input type="checkbox"/> 1620	South Fork Kern River at Fay Ranch Road	Tulare Lake	Tulare Lake	Active	554SKR010
<input type="checkbox"/> 1799	Sutter Creek at Highway 49	San Joaquin River	Northeast Basin	Active	532AMA002
<input type="checkbox"/> 1613	TID 5 Harding Drain at Carpenter Road	San Joaquin River	East Valley Floor	Active	535STC501

[Return to Program](#) [Add Organization](#) [Add Site](#) [Add Data Product](#) [Add Contact](#) [Save Plan](#)

Logged in as waterboards (Central Valley Regional Water Quality Control Board) [Logout](#)

Excel summary tables

Metadata obtained from program information pages or searches using the mapping viewer can be downloaded in Excel format.

	B	C	D	E	F	G	H	I
	Site Name	Site Code	Latitude	Longitude	Analyte Group	Analyte Name	Frequency	
2	American River at Discovery Park	519AMNDVY	38.60094	-121.5055	Organic Carbon (OC)	Total Organic Carbon (TOC)	Quarterly	
3	Bear Creek near Bert Crane Road	535MER007	37.25556	-120.65194	General Water Quality	Dissolved Oxygen (DO)	Quarterly	
4	Bear Creek near Bert Crane Road	535MER007	37.25556	-120.65194	General Water Quality	pH	Quarterly	
5	Bear Creek near Bert Crane Road	535MER007	37.25556	-120.65194	General Water Quality	Specific Conductance [EC @ 25 deg C]	Quarterly	
6	Bear Creek near Bert Crane Road	535MER007	37.25556	-120.65194	General Water Quality	Temperature	Quarterly	
7	Bear Creek near Bert Crane Road	535MER007	37.25556	-120.65194	General Water Quality	Turbidity	Quarterly	
8	Bear Creek near Bert Crane Road	535MER007	37.25556	-120.65194	Organic Carbon (OC)	Dissolved Organic Carbon (DOC)	Quarterly	
9	Bear Creek near Bert Crane Road	535MER007	37.25556	-120.65194	Organic Carbon (OC)	Total Organic Carbon (TOC)	Quarterly	
10	Bear Creek near Bert Crane Road	535MER007	37.25556	-120.65194	Pathogens & Bacteria	E. coli	Quarterly	
11	Bear Creek near Bert Crane Road	535MER007	37.25556	-120.65194	Pathogens & Bacteria	Total Coliforms	Quarterly	
12	Cosumnes River at Twin Cities Road	531SAC001	38.29083	-121.37583	General Water Quality	Dissolved Oxygen (DO)	Quarterly	

POSSIBLE FUTURE DIRECTIONS

Expansion to entire State

The State Water Resources Control Board's Surface Water Ambient Monitoring Program (SWAMP) is evaluating the possibility. SWAMP funds have been tentatively set aside.

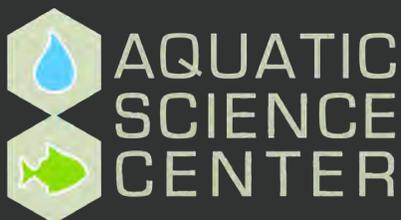
Integration with ecological monitoring inventory

Proposed as part of the Interagency Ecological Program (IEP) initiative to create an "aquatic science inventory" of existing and planned science and monitoring programs in the San Francisco Estuary, Central Valley, and nearby coastal ocean.

**FOR MORE
INFORMATION,
CONTACT:**

Thomas Jabusch
Phone: (510) 746-7340
Email: thomas@aquaticscience.org

4911 Central Avenue
Richmond, CA 94804



**TECHNICAL SUPPORT
CONTACT:**

(adding or editing monitoring
program information)

Anne Littlejohn
Phone: (916) 464-4840
Email: alittlejohn@waterboards.ca.gov
or
Calvin Yang
Phone: (916) 464-4730
Email: ccyang@waterboards.ca.gov

