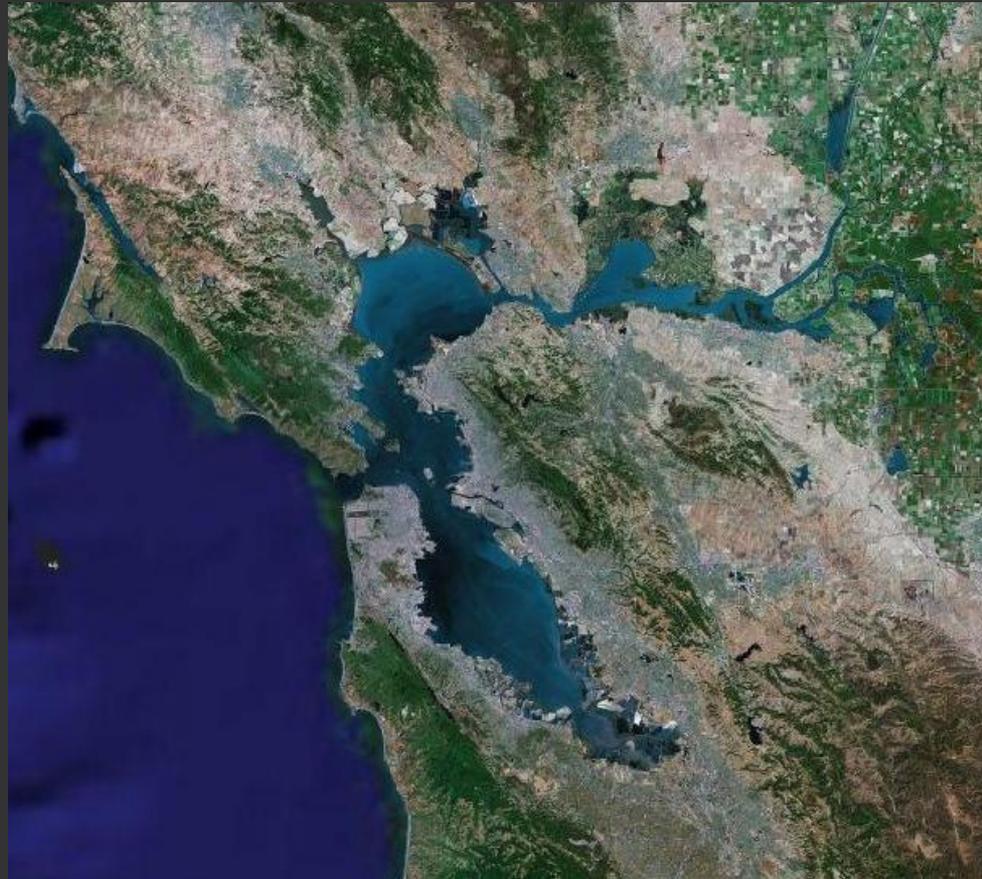
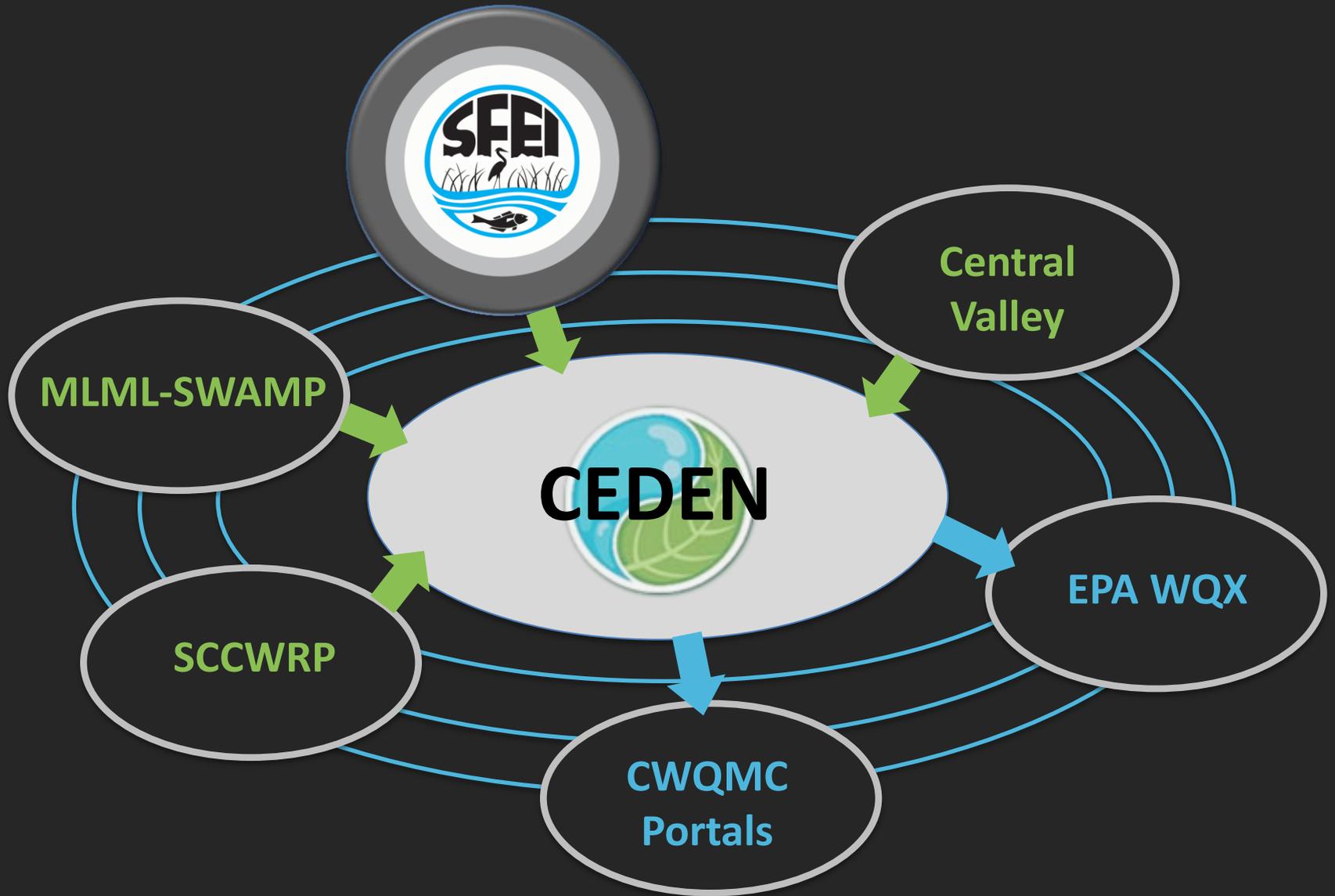


SFEI's Portal Development and Data Management



Data Management Work Group Meeting

November 22, 2011



Regional Data Center Services



Data Management Approaches

- Automate procedures
- SQL Server/PostgreSQL
- Performance tuning
- Monitor backups using scripts & alerts
- Secure, reliable, fast access to high quality data

Issues/Challenges

- Level of standardization
- Better integration of datasets and spatial stats
- Tool maintenance
- Incorporating new data types

Safe To Eat Portal

What are the Levels and Long-Term Trends in My Lake, Stream, or Ocean Location?

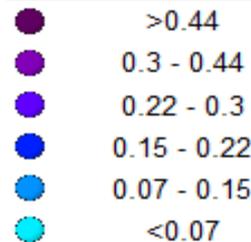
Select location from list. 

Zoom to county: 

Show counties

Map 

Mercury in Species
With Highest Avg
Concentration (ppm)
Years: 2007 - 2009



[Change Thresholds](#)

Contaminant Data

This interactive map allows you to explore fish contaminant data and from other studies. Data from 2007-2009 are shown by default.

- Select parameters of interest from the menus below and click on the map.
- To view data for all species at your water body, trends, or click on a specific species.
- Enter your own threshold or modify thresholds displayed on the map.
- Markers are general representations of sampling locations. Triangles indicate stream and river sampling locations. Circles indicate lake and reservoir sampling locations. Triangles indicate ocean sampling locations.

Select Species:

Species With Highest Avg Concentration 

Select Contaminant:

Mercury 

Select Start Date:

2007 

Select End Date:

2009 

Go

Reset

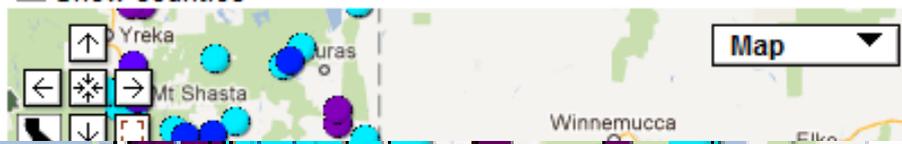
[Download Map Data](#)

What are the Levels and Long-Term Trends in My Lake, Stream, or Ocean Location?

Select location from list.

Zoom to county:

Show counties



Contaminant Data

This interactive map allows you to explore fish contaminant data and from other studies. Data from 2007-2009 are shown by default.

- Select parameters of interest from the menus below and click on the map.
- To view data for all species at your water body, trends, or compare to thresholds, click on the 'Data' tab.
- Enter your own threshold or modify thresholds displayed on the map.
- Markers are general representations of sampling locations. Triangles indicate streams and circles indicate lakes and reservoir sampling locations. Triangles indicate stream sampling locations.

Threshold	Units	Comments	Include?
0.44	ppm	OEHHA Advisory Tissue Level - No Consumption	<input type="checkbox"/>
0.3	ppm	USEPA National Recommended Water Quality Criterion and State Water Board 303(d) Threshold	<input checked="" type="checkbox"/>
0.22	ppm	OEHHA Fish Contaminant Goal	<input type="checkbox"/>
0.15	ppm	OEHHA Advisory Tissue Level - 1 serving/week	<input type="checkbox"/>
0.07	ppm	OEHHA Advisory Tissue Level - 2 servings/week	<input type="checkbox"/>

Submit



Go

Reset

[Download Map Data](#)

What are the Levels and Long-Term Trends in My Lake, Stream, or Ocean Location?

Select location from list.

Contaminant Data

Zoom

Big Bear Lake

Data

Trends

Nearby Locations

How does my location compare to nearby water bodies?

Change search parameters:

Nearby Water Body	Distance (mi)	Species	Mercury (ppm)
Lake Arrowhead	14.56	Species With Highest Avg Concentration (Largemouth Bass)	0.34 (2008)
Lake Gregory	19.44	Species With Highest Avg Concentration (Largemouth Bass)	0.19 (2008)
Silverwood Lake	22.62	Species With Highest Avg Concentration (Largemouth Bass)	0.49 (2007)
Spring Valley Lake	25.7	Species With Highest Avg Concentration (Rainbow Trout)	0.03 (2007)
Perris Reservoir	30.76	Species With Highest Avg Concentration (Largemouth Bass)	0.1 (2008)
Lake Evans	31.1	Species With Highest Avg Concentration (Largemouth Bass)	0.03 (2008)
Lake Mathews	40.16	Species With Highest Avg Concentration (Striped Bass)	0.21 (2007)
Lake Hemet	42.52	Species With Highest Avg Concentration (Common Carp)	0.11 (2008)
Lee Lake/Corona Lake	45.39	Species With Highest Avg Concentration (Largemouth Bass)	0.16 (2008)
Prado Lake	46.36	Species With Highest Avg Concentration (Largemouth Bass)	0.07 (2007)

Big Bear Lake

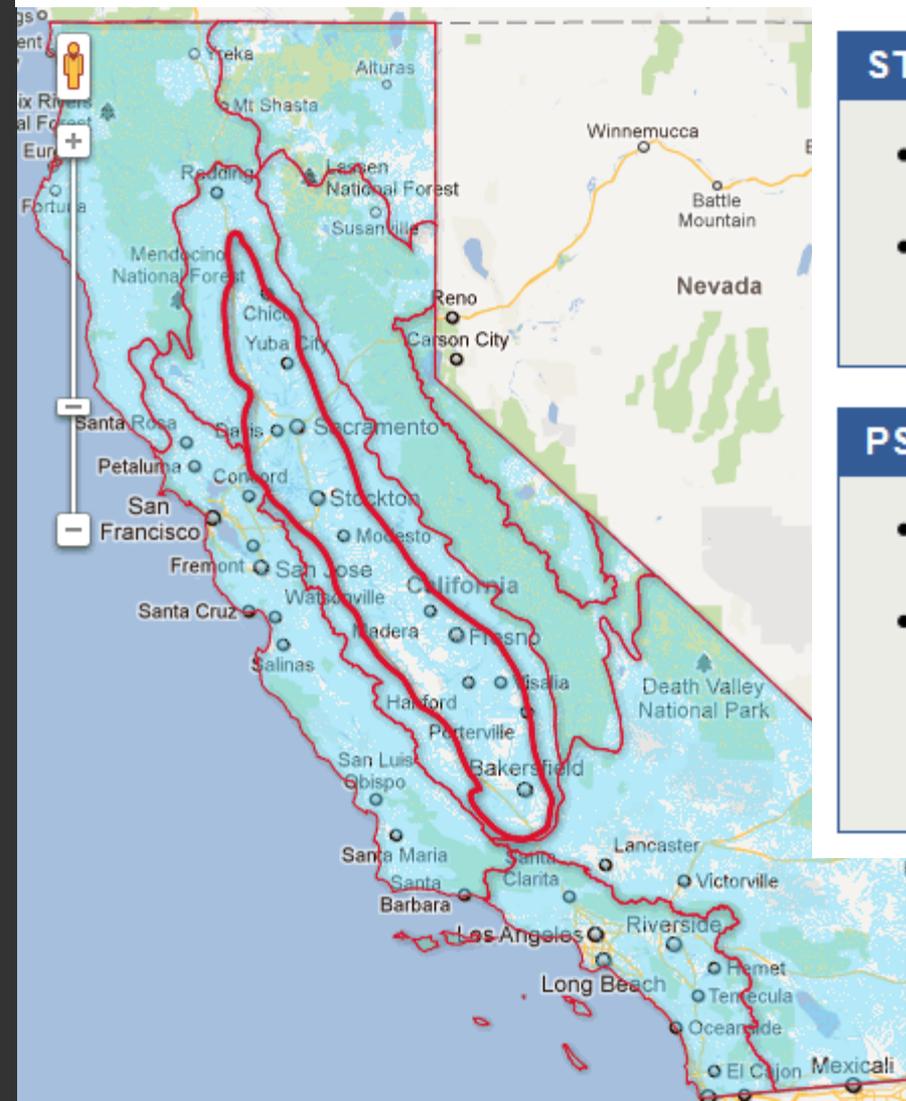
2007

Healthy Streams Portal

What is the Extent of Our Stream and River Resources?

PSA Regions

Central Valley



STATEWIDE STREAM AND RIVER SUMMARIES

- **Perennial** streams provide year round habitat and refuge for fish.
 - 71,695 km (44,549 miles)
- **Non-perennial** streams provide seasonal habitat and refuge for fish.
 - 238,617 km (148,270 miles)

PSA REGION CENTRAL VALLEY

- **Perennial** streams provide year round habitat and refuge for fish.
 - 3,445 km (2,127 miles)
- **Non-perennial** streams provide seasonal habitat and refuge for fish.
 - 15,879 km (9,802 miles)

Summaries based on NHD 100k dataset.

Wetlands Portal

CALIFORNIA WETLANDS

Search

California

Bay Area

- Project List
- Map
- Summaries
- Questions

Questions Answered

Background Info on Wetlands

About Wetlands Portal

Wetland Condition (CRAM)

California Environmental Data Exchange Network (CEDEN)

Feedback

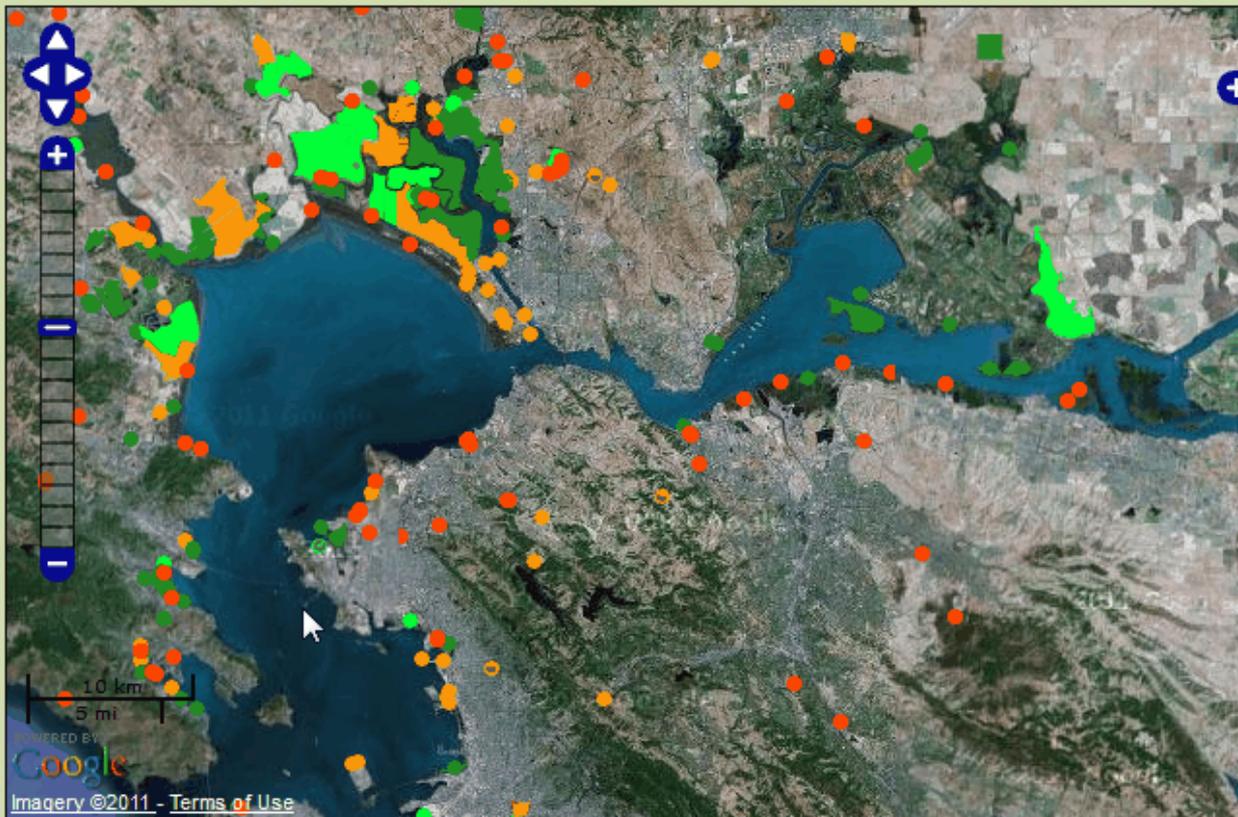
My Water Quality

Home

Water Quality Monitoring Council

California Wetlands Monitoring Workgroup

Contact Us



Interactive Mapper by SFEI.

Wetland Projects

Wetland Condition (CRAM)

Zoom to Location

BAARI Habitat Data

Project Locator...

Need help using this map?

Layers

- Wetland Projects
- Condition (CRAM)
- NWI Modern Habitats
- BAARI Modern Habitats
- Eelgrass Habitat
- Historical Habitats

Background

- Basic
- USGS Topo Maps
- Google Satellite
- Google Terrain

Legend

Projects

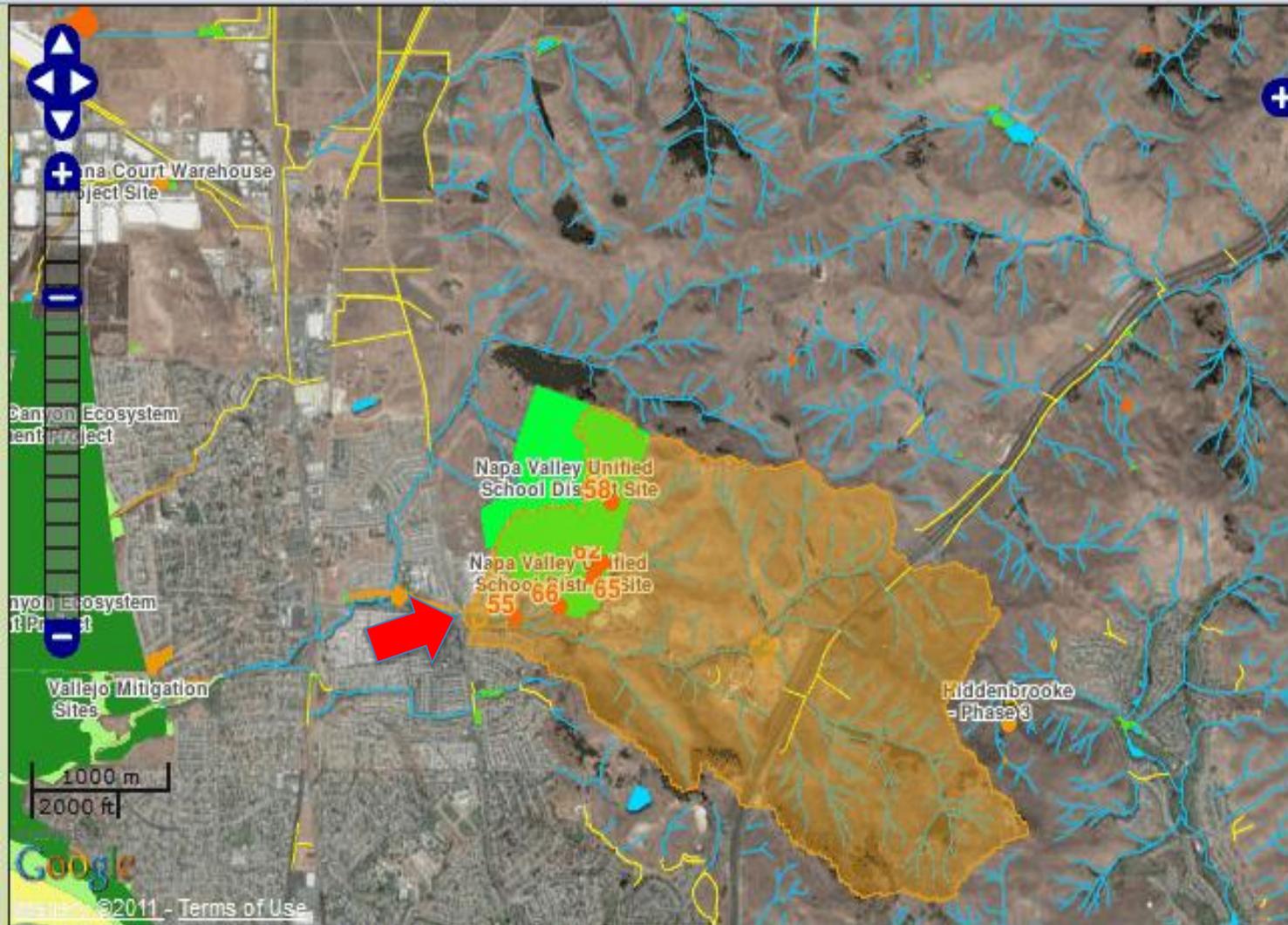
- Construction completed
- Construction in-progress
- Construction planned

 Approximate boundary

Condition

 CRAM Assessment

Basin Delineation Tool



Layers

- Wetland Projects +
- Condition (CRAM) +
- NWI Modern Habitats +
- BAARI Modern Habitats +

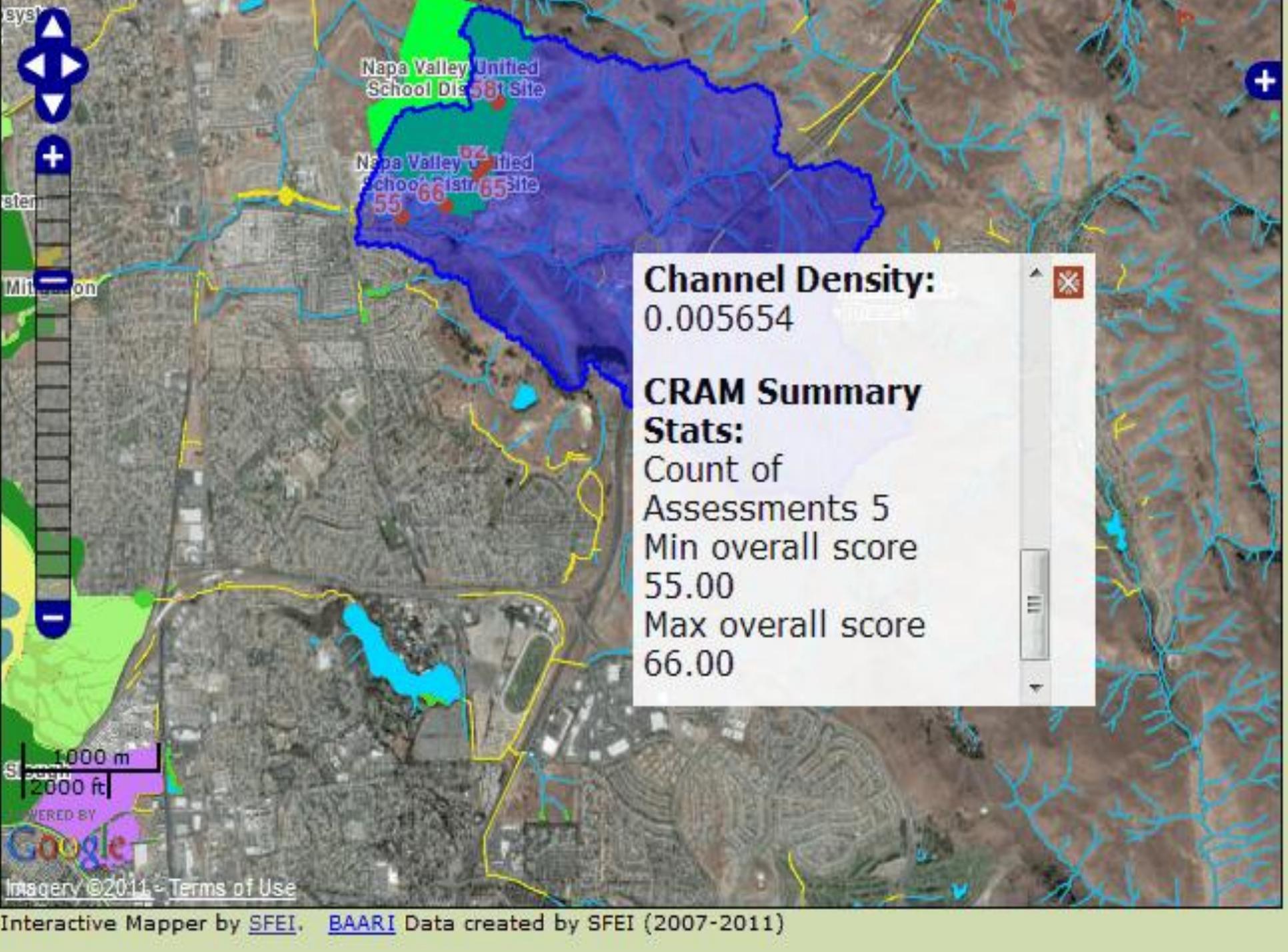
Non-Tidal Wetlands

- Vegetated
- Open Water
- Slope
- Vernal Pool
- Unvegetated Flat

Tidal Wetlands

- Marsh
- Marsh Flat
- Bay Flat
- Panne
- Lagoon
- Bay Deep
- Bay Shallow

Interactive Mapper by SFEI. BAARI Data created by SFEI (2007-2011)



Napa Valley Unified School District Site

Napa Valley Unified School District Site
55 66 65

Channel Density:
0.005654

CRAM Summary Stats:
Count of Assessments 5
Min overall score 55.00
Max overall score 66.00

1000 m
2000 ft

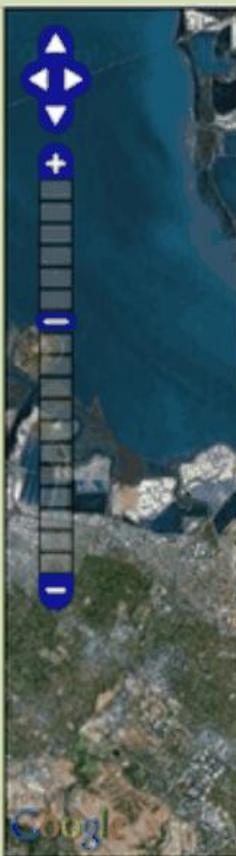
POWERED BY
Google
Imagery ©2011 - Terms of Use

New Filter Functions

CALIFORNIA WETLANDS

 Search

- California
- Bay Area
- Project List
- Map
- Summaries
- Questions
- Questions Answered
- Background Info on Wetlands
- About Wetlands Portal
- Wetland Condition (CRAM)
- California Environmental Data Exchange Network (CEDEN)
- Feedback
- My Water Quality
- Home
- Water Quality Monitoring Council
- California Wetlands Monitoring Workgroup
- Contact Us



Administrative

- 401 Permit Projects
- 1600 Permit Projects
- SFBJV Projects
- Trash

Habitats

- Modern habitats
- Historical habitats

Condition

- CRAM
- IBI
- Toxicity



Filter Data

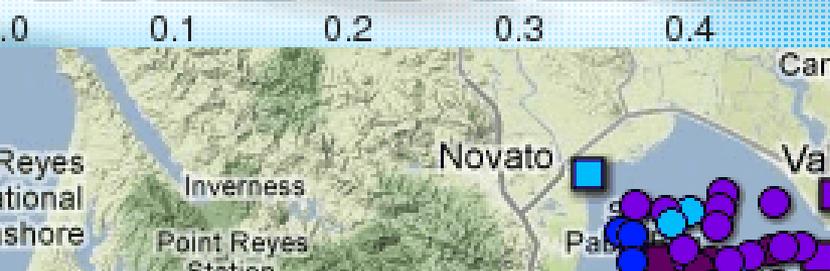
- Wetland Projects
- Wetland Condition (CRAM)
- Zoom to Location
- BAARI Habitat Data

Project Locator...

WEB QUERY TOOL



water
sediment
sport fish
tissue



WQT USER INTERFACE

Search Parameters:

Test Material:

Water

Program/Project:

Regional Monitoring Program

Start Year:

1993

End Year:

2010

Fraction:

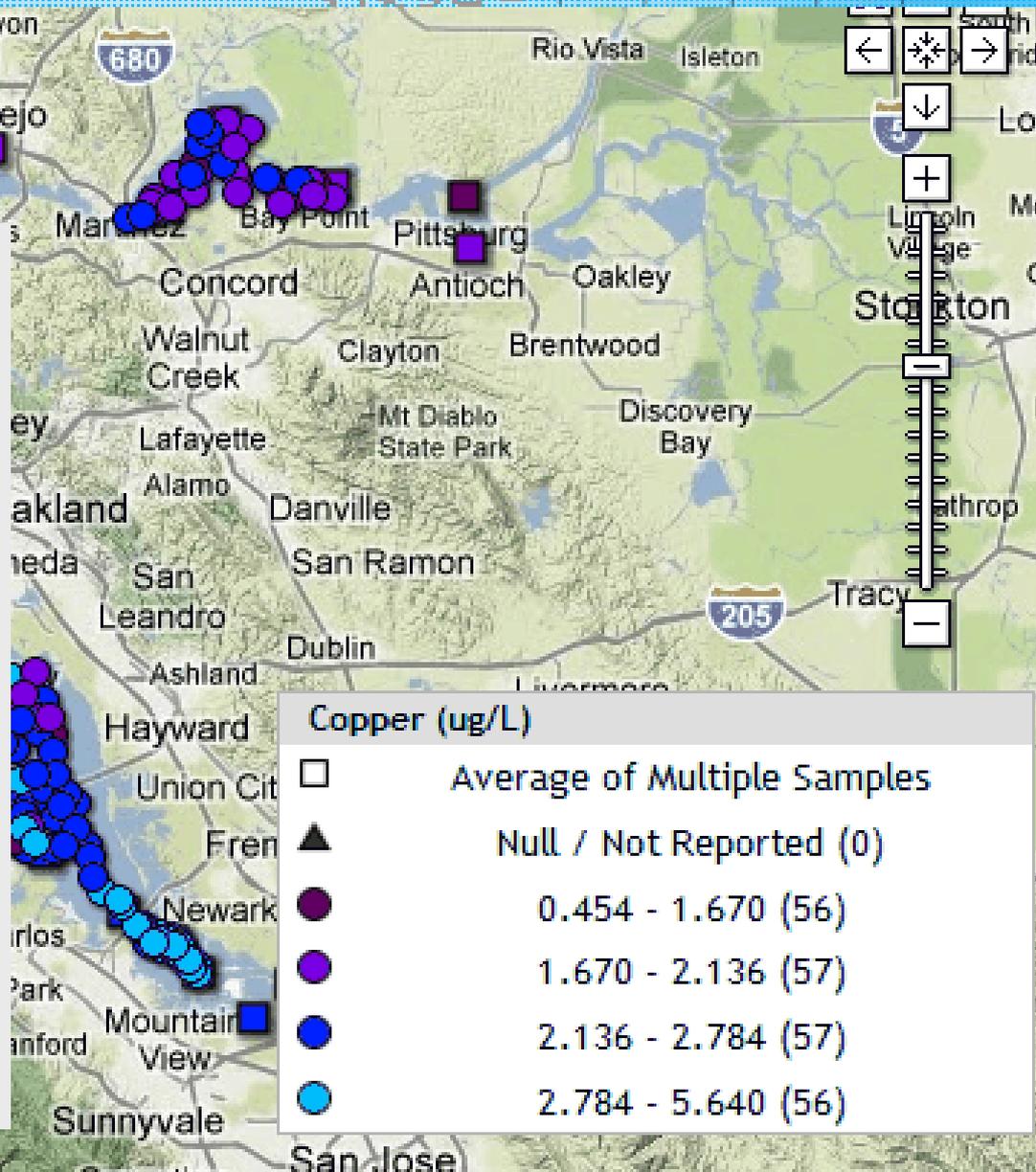
Dissolved

Parameter Type:

Trace Elements

Parameter:

Copper



Copper (ug/L)

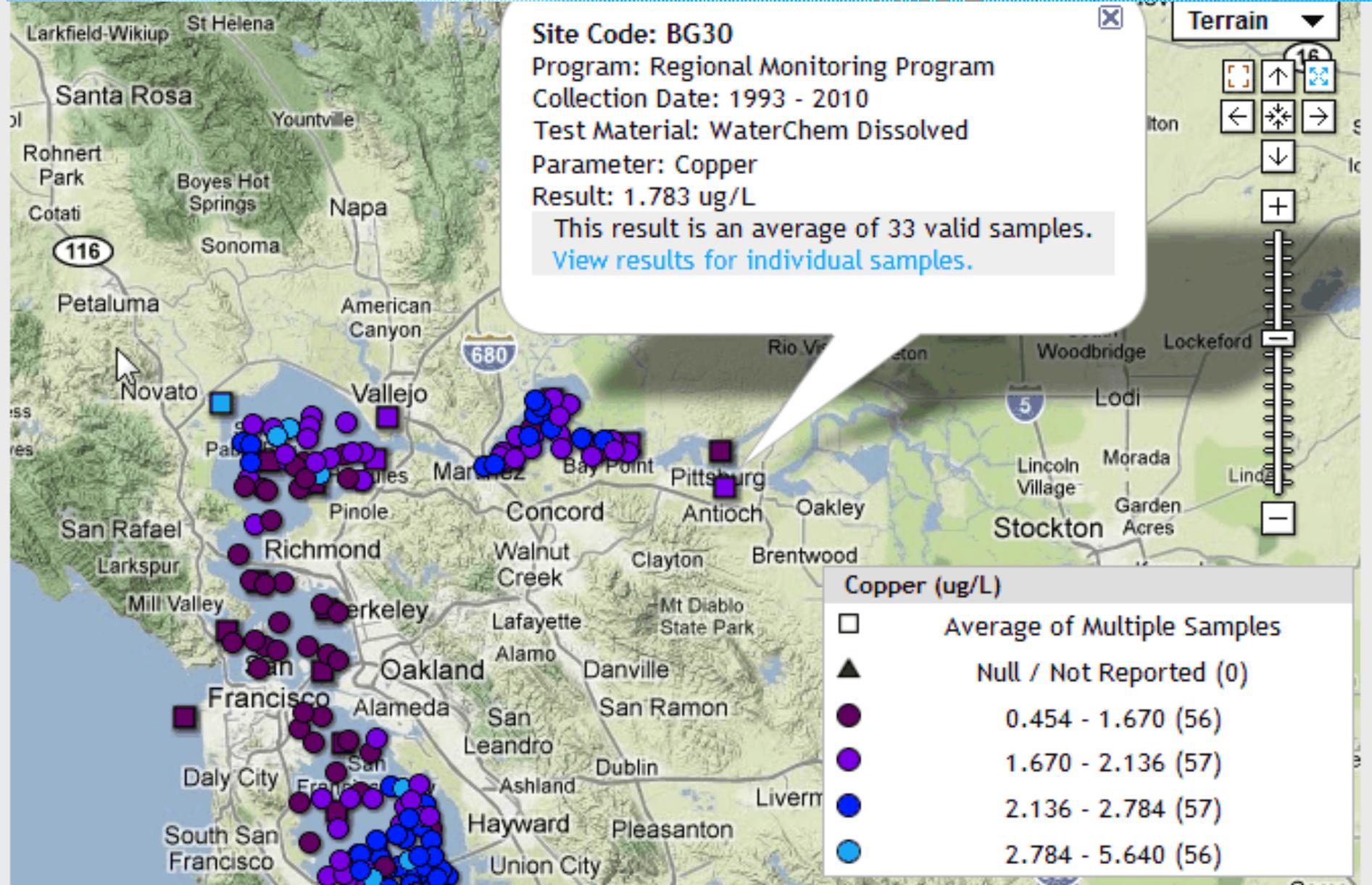
- Average of Multiple Samples
- ▲ Null / Not Reported (0)
- 0.454 - 1.670 (56)
- 1.670 - 2.136 (57)
- 2.136 - 2.784 (57)
- 2.784 - 5.640 (56)

WEB QUERY TOOL



Site Code: BG30
Program: Regional Monitoring Program
Collection Date: 1993 - 2010
Test Material: WaterChem Dissolved
Parameter: Copper
Result: 1.783 ug/L

This result is an average of 33 valid samples.
[View results for individual samples.](#)



Copper (ug/L)	
□	Average of Multiple Samples
▲	Null / Not Reported (0)
●	0.454 - 1.670 (56)
●	1.670 - 2.136 (57)
●	2.136 - 2.784 (57)
●	2.784 - 5.640 (56)

Individual Copper results for BG30

Date	Result	MDL	Units	Qualifier	Compliance Code
------	--------	-----	-------	-----------	-----------------

03/05/1993	2.94	0.00393	ug/L		Com
------------	------	---------	------	--	-----

05/27/1993	1.71	0.00393			
------------	------	---------	--	--	--

09/16/1993	1.7	0.00393			
------------	-----	---------	--	--	--

02/09/1994	2.2525	0.0008			
------------	--------	--------	--	--	--

04/28/1994	2.2377	0.0049			
------------	--------	--------	--	--	--

08/24/1994	2.1089	0.003			
------------	--------	-------	--	--	--

02/15/1995	2.343	0.0074			
------------	-------	--------	--	--	--

04/18/1995	1.623	0.005			
------------	-------	-------	--	--	--

08/23/1995	1.55	0.001			
------------	------	-------	--	--	--

02/14/1996	2.19	0.002			
------------	------	-------	--	--	--

04/23/1996	1.22	0.003			
------------	------	-------	--	--	--

07/22/1996	1.69	0.002			
------------	------	-------	--	--	--

01/29/1997	1.857296	0.0024			
------------	----------	--------	--	--	--

04/23/1997	1.65575	0.0119			
------------	---------	--------	--	--	--

08/06/1997	1.457365	0.0139			
------------	----------	--------	--	--	--

02/04/1998	1.8609	0.009835	ug/L		Com
------------	--------	----------	------	--	-----

04/16/1998	1.3498	0.01211	ug/L		Com
------------	--------	---------	------	--	-----

07/29/1998	1.4192	0.006053	ug/L		Com
------------	--------	----------	------	--	-----

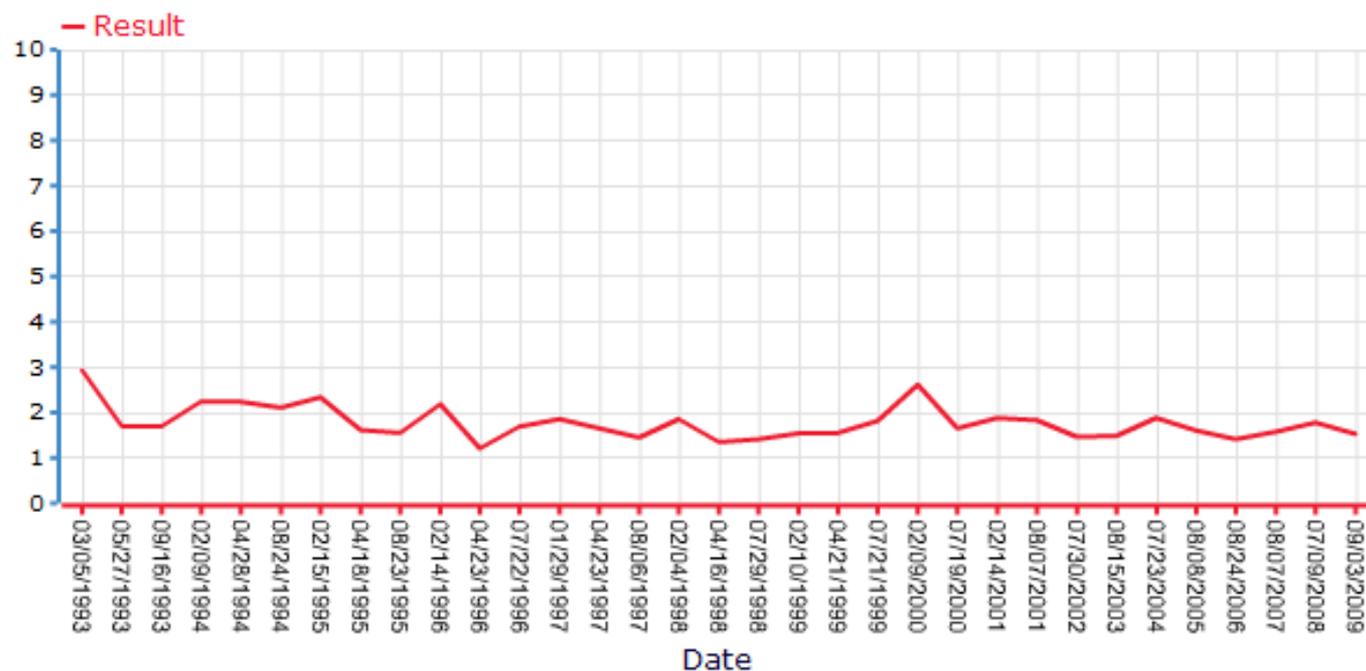
02/10/1999	1.5398	0.00915	ug/L		Com
------------	--------	---------	------	--	-----

04/21/1999	1.5567	0.00757	ug/L		Com
------------	--------	---------	------	--	-----

07/21/1999	1.82315	0.00504	ug/L		Com
------------	---------	---------	------	--	-----

Individual Copper results for BG30

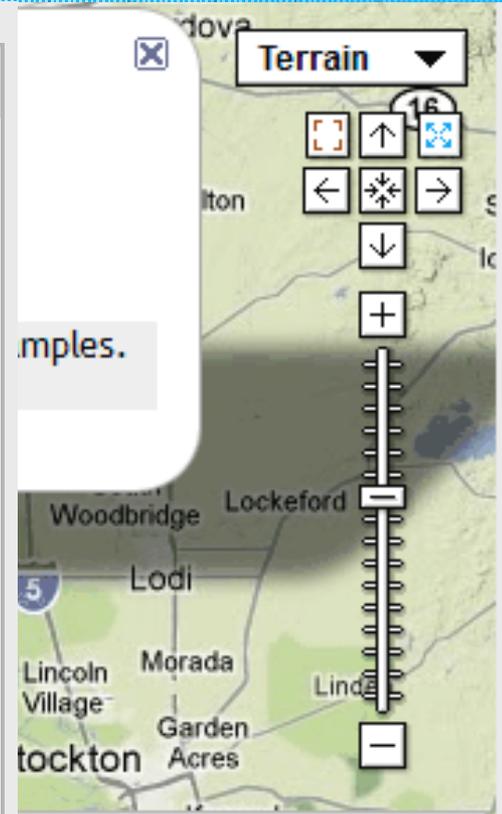
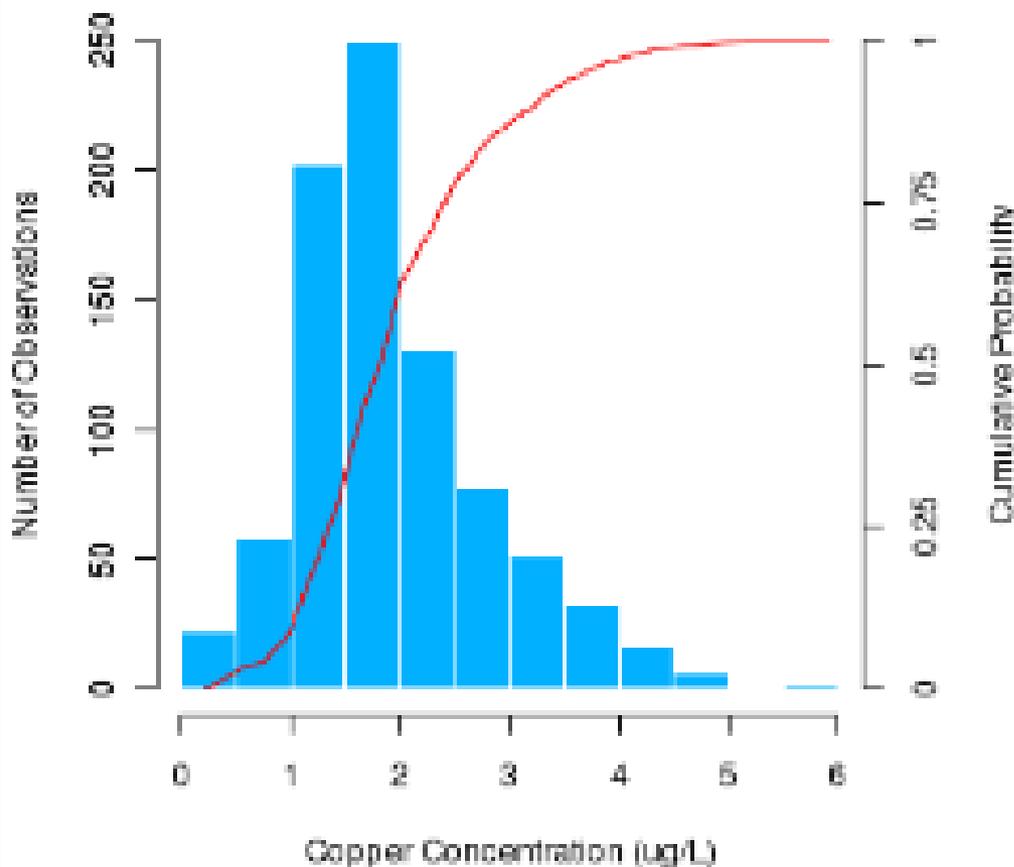
 Show/hide chart  Show/hide table



WEB QUERY TOOL

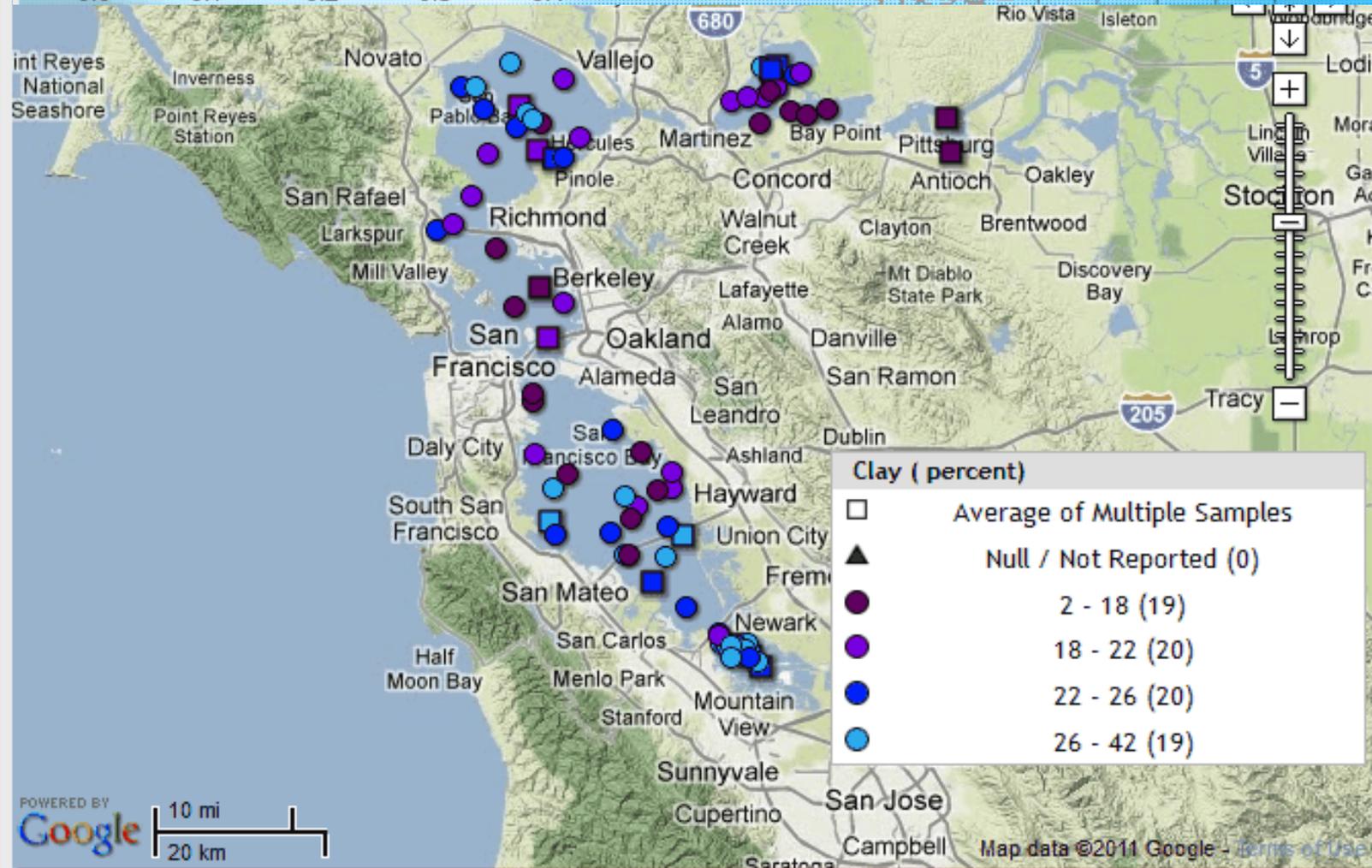


Distribution of Results



- age of Multiple Samples
- l / Not Reported (0)
- 0.454 - 1.670 (56)
- 1.670 - 2.136 (57)
- 2.136 - 2.784 (57)
- 2.784 - 5.640 (56)

WEB QUERY TOOL



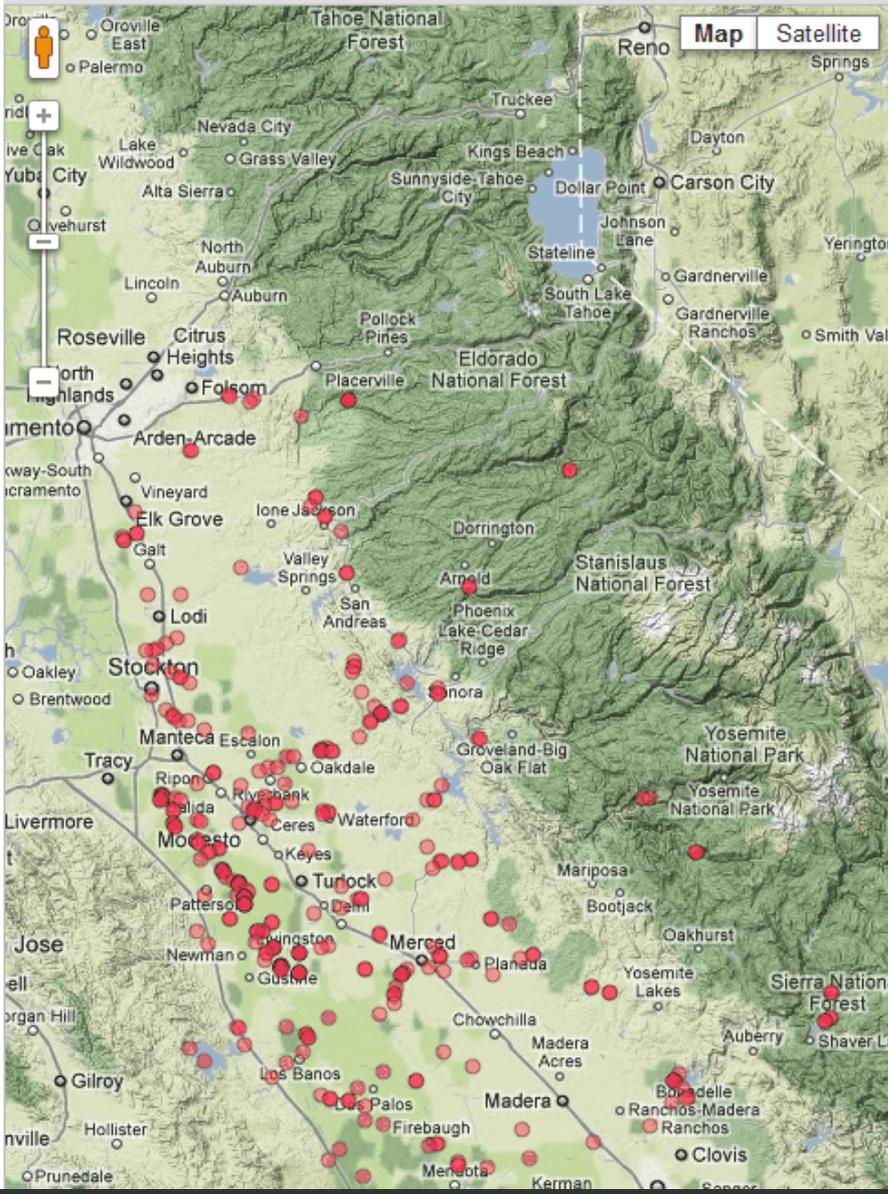
Display Notes:

- In 2008, the lab did not analyze larger grainsize fractions (e.g., % Gravel+Shell (>2mm)), and only fractions <2mm are available.
- In 2008, RMP switched grainsize labs from UCSC-DET to MLML-Aiello. Grainsize determination changed to an optical method.

Main Directory

Basins All Delta Sacramento River San Joaquin River Tulare Lake

Sub Basins All Eastside Grasslands Lower San Joaquin River Northeast Southeast Westside

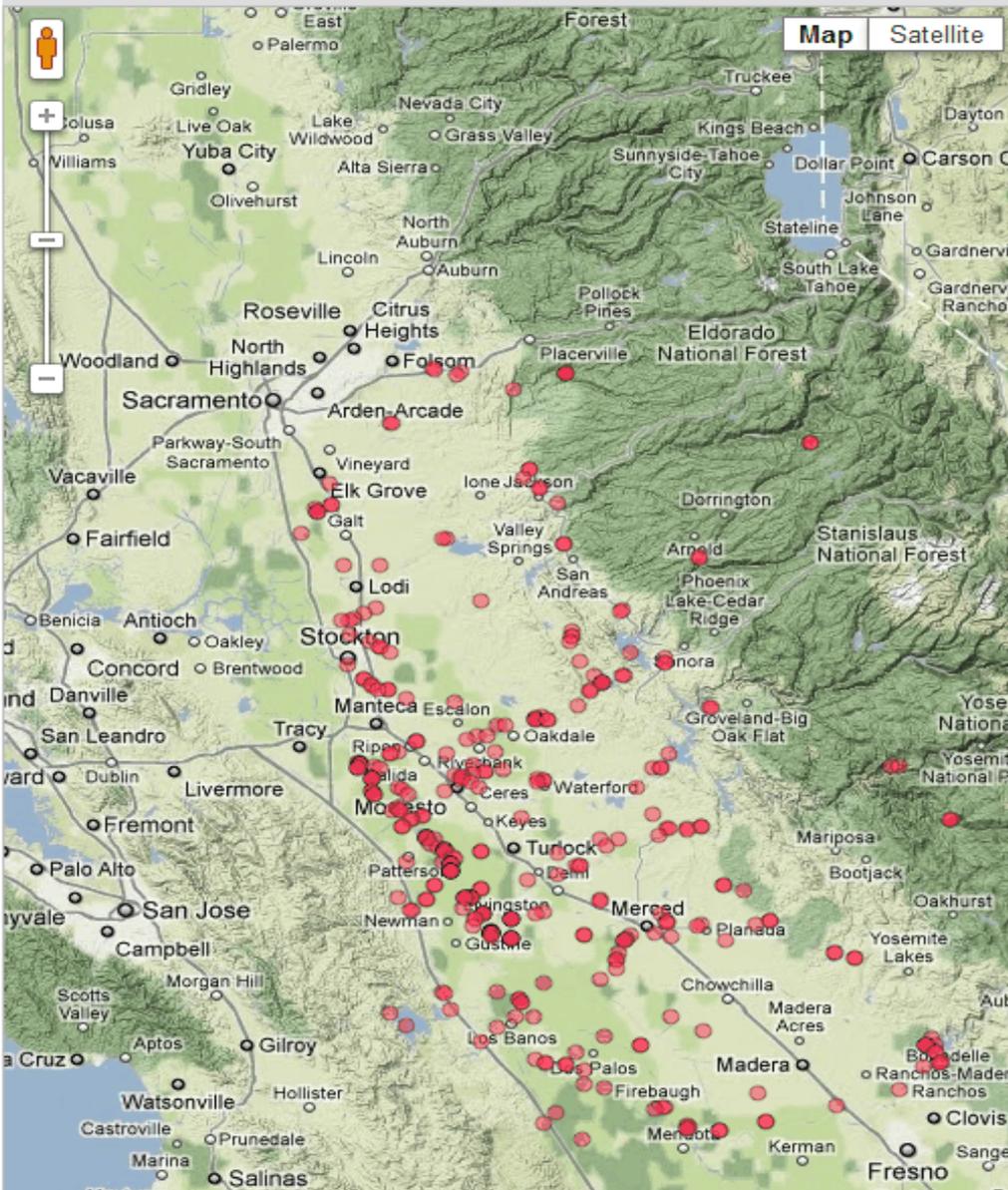


Programs Organizations Analytes Sites Help								
<input checked="" type="checkbox"/>	Program	Lead Organization	No of sites	Basin	Bioassessment	Bulk Organics	Disinfection Byproducts	Gener Sediment Quality
<input checked="" type="checkbox"/>	NPDES Self Monitoring Program	CVRWQCB Show Partners	98	San Joaquin River		7 sites	23 sites	7 sites
<input checked="" type="checkbox"/>	DWR Operations & Maintenance - State Water Project Water Quality Monitoring	DWR	2	San Joaquin River				
<input checked="" type="checkbox"/>	DWR San Joaquin District - Surface Water Monitoring	DWR	32	San Joaquin River				
<input checked="" type="checkbox"/>	Surface Water Ambient Monitoring Program (SWAMP) - Central Valley	CVRWQCB	30	San Joaquin River				
<input checked="" type="checkbox"/>	Grasslands Bypass Project	USBR Show Partners	10	San Joaquin River				

Main Directory

Basins All Delta Sacramento River San Joaquin River Tulare Lake

Sub Basins All Eastside Grasslands Lower San Joaquin River Northeast Southeast Westside



[Programs](#) [Organizations](#) [Analytes](#) [Sites](#) [Help](#)

Merced River nr Stevinson (MST)

Basin San Joaquin River Sub Basin Eastside Watershed Merced River

[Show on Map](#) [View Program](#) [View Monitoring Plan](#)

[Show monitored parameters](#)

Merced River at Cressy (CRS)

Basin San Joaquin River Sub Basin Eastside Watershed Merced River

[Show on Map](#) [View Program](#) [View Monitoring Plan](#)

[Show monitored parameters](#)

Merced River at Cressy (CRS)

Basin San Joaquin River Sub Basin Eastside Watershed Merced River

[Show on Map](#) [View Program](#) [View Monitoring Plan](#)

[Show monitored parameters](#)

Merced River nr Stevinson (MST)

Basin San Joaquin River Sub Basin Eastside Watershed Merced River

[Show on Map](#) [View Program](#) [View Monitoring Plan](#)

[Show monitored parameters](#)

Merced River, US or at intake pipe (R-1)

Basin San Joaquin River Sub Basin Eastside Watershed Merced River

[Show on Map](#) [View Program](#) [View Monitoring Plan](#)

[Show monitored parameters](#)

Merced River, 100 ft DS of discharge along path of the effluent p

Basin San Joaquin River Sub Basin Eastside Watershed Merced River

[Show on Map](#) [View Program](#) [View Monitoring Plan](#)

[Show monitored parameters](#)

Merced River at Hatfield Park (MER546)

Basin San Joaquin River Sub Basin Eastside Watershed Merced River

[Show on Map](#) [View Program](#) [View Monitoring Plan](#)

Monitoring Program
Name

Surface Water Ambient Monitoring Program (SWAMP) -
Central Valley

Program Status

Active

Monitoring Objectives

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

URL

http://www.waterboards.ca.gov/centralvalley/water_issues/swamp/inde

Start Date

01/01/1999

End Date

Annual Budget

Funding Source

SWAMP

Organizations

Organization	Program Lead
Central Valley Regional Water Quality Control Board	<input checked="" type="checkbox"/>
California Department of Water Resources	<input type="checkbox"/>



Return to Program List

Add Organization

Add Plan

Save Program

Transitional Ecotone

Transitional Ecotone Vegetation Data Management

[Home](#)[Create New Form](#)[List My Forms](#)[Manage Covers & Species](#)[Manage Projects & Sites](#)[Logout](#)

✓ New Form

- ✗
- Project and Sample Site Name field is required.
 - Collection Date field is required.

[Home](#)

TED Data Entry Form

Jump to: [Bottom](#)

[SAVE](#)[Intertidal](#)[Low](#)[Middle](#)[High](#)[Bottom Upland](#)[Top Upland](#)

▼ Sample Site Information

Project and Sample Site Name ***Sub-Sample Site Number ***

If your project and site are not listed, click on the Manage Projects & Sites tab to add. Default is zero.

Collection Date *

Format: mm/dd/yyyy

Datum**Beginning Latitude****Beginning Longitude**

Report to 4 decimal places if possible. Capture lat/lon at the beginning of the sample site backshore

Transitional Ecotone Vegetation Data Management

[Home](#) [Create New Form](#) [List My Forms](#) [Manage Covers & Species](#) [Manage Projects & Sites](#) [Logout](#)



- Listing Cover / Species Records for All Agencies.
- Click [HERE](#) to add a new record.

[Home](#)

Manage Covers

ID	Cover/Species Code▲	Biotic?	Scientific Name	Common Name	Native Status	Comment	Approved?
120	ABIOTIC	0	C	coarse			yes
119	ABIOTIC	0	F	fine, <2mm	unknown		yes
1	ACMI	1	Achillea millefolium	Yarrow	native		yes
116	AC_sp	1	Acacia sp.	Acacia	non-native		yes
2	AECA	1	Aesculus californica	Buckeye	native		yes
3	AMME	1	Amsinckia menziesii	Common Fiddleneck	native		yes
4	ANAR	1	Anagallis arvensis	Scarlet Pimpernel	non-native		yes
5	ARCA	1	Artemisia californica	California sagebrush	native		yes

Transitional Ecotone Vegetation Data Management

[Home](#)[Create New Form](#)[List My Forms](#)[Manage Covers & Species](#)[Manage Projects & Sites](#)[Logout](#)

- Listing Forms for your organization: SFEI
- Click on a Form ID to view / edit the form data.
- Click [here](#) to export all saved form data to a CSV file (created by SFEI and other organizations.)

[Home](#)

List My Forms

Form ID	Project Name	Site Name	Collection Date	Created By	Date Last Modified	Form Status	Approved By
204	Eden Landing Ecological Reserve	Eden Landing C	2011-01-01	pattyf (pattyf@sfei.org)	2011-08-24 13:03:03	approved	sb
206	Eden Landing Ecological Reserve	Eden Landing A	2010-08-13	pattyf (pattyf@sfei.org)	2011-07-11 17:56:54	in progress	
203	Martin Luther King Jr. Regional Shoreline	MLK New Marsh East Bank	2010-05-19		2011-04-27 17:45:29		
214	Eden Landing Ecological Reserve	Eden Landing A	2010-02-17	pattyf (pattyf@sfei.org)	2011-06-30 17:18:52	in progress	
205	Martin Luther King Jr. Regional Shoreline	MLK Damon Marsh North West	2010-01-20	pattyf (pattyf@sfei.org)	2011-05-31 18:23:27	in progress	
201	Eden Landing Ecological Reserve	Eden Landing A	2010-01-19	pattyf (pattyf@sfei.org)	2011-05-01 23:25:00	in progress	
208	Martin Luther King Jr. Regional Shoreline	MLK New Marsh East Bank	2010-01-03	pattyf (pattyf@sfei.org)	2011-05-03 11:42:41	in progress	
199	Martin Luther King Jr. Regional Shoreline	MLK Damon Marsh North West	2010-01-02	pattyf (pattyf@sfei.org)	2011-04-27 16:15:34	in progress	

Issues/Challenges

- Level of standardization
- Better integration of datasets and spatial stats
- Tool maintenance
- Incorporating new data types