



# RMP Data Management

## What do we do?

Provide access to high quality, reliable data

Maintain comparability of data across years

Maintain well-documented SOPs

## What's not working?

Time-consuming procedures — automate to improve our efficiency

# Who are we?



Upload and manage: John Ross, Amy Franz,  
Adam Wong, Shira Bezalel

QA/QC review: Donald Yee, John Ross, Susan  
Klosterhaus, Jay Davis

Exchange and database admin: Shira Bezalel

CD3 tool: Todd Featherston, Patty Frontiera

GIS: Kristen Cayce, Marcus Klatt, Jamie Kass



# RMP Data Management

## Budget (\$400K)

Status & Trends: \$250K

Program Data Management: \$120K

QA/QC studies: \$30K



# QA/QC Studies

Copper analyses

Reductive precipitation/column chelation

Blind and duplicate samples

Water dissolved/particulate vs. total

Cyanide – better method

Grainsize – light scattering vs. sieve

QAPP

# Activities – Status & Trends



14 Labs trained

35 2011 datasets

>400 Analytes

→ 209 PCB congeners

→ 50 PAHs and PBDEs, 35 pesticides

→ 13 trace elements

→ 25 ancillary measurements



# Activities – Maintenance

>888,000 Data results in RMP database

>6000 Archived samples

>600 Pages of documentation



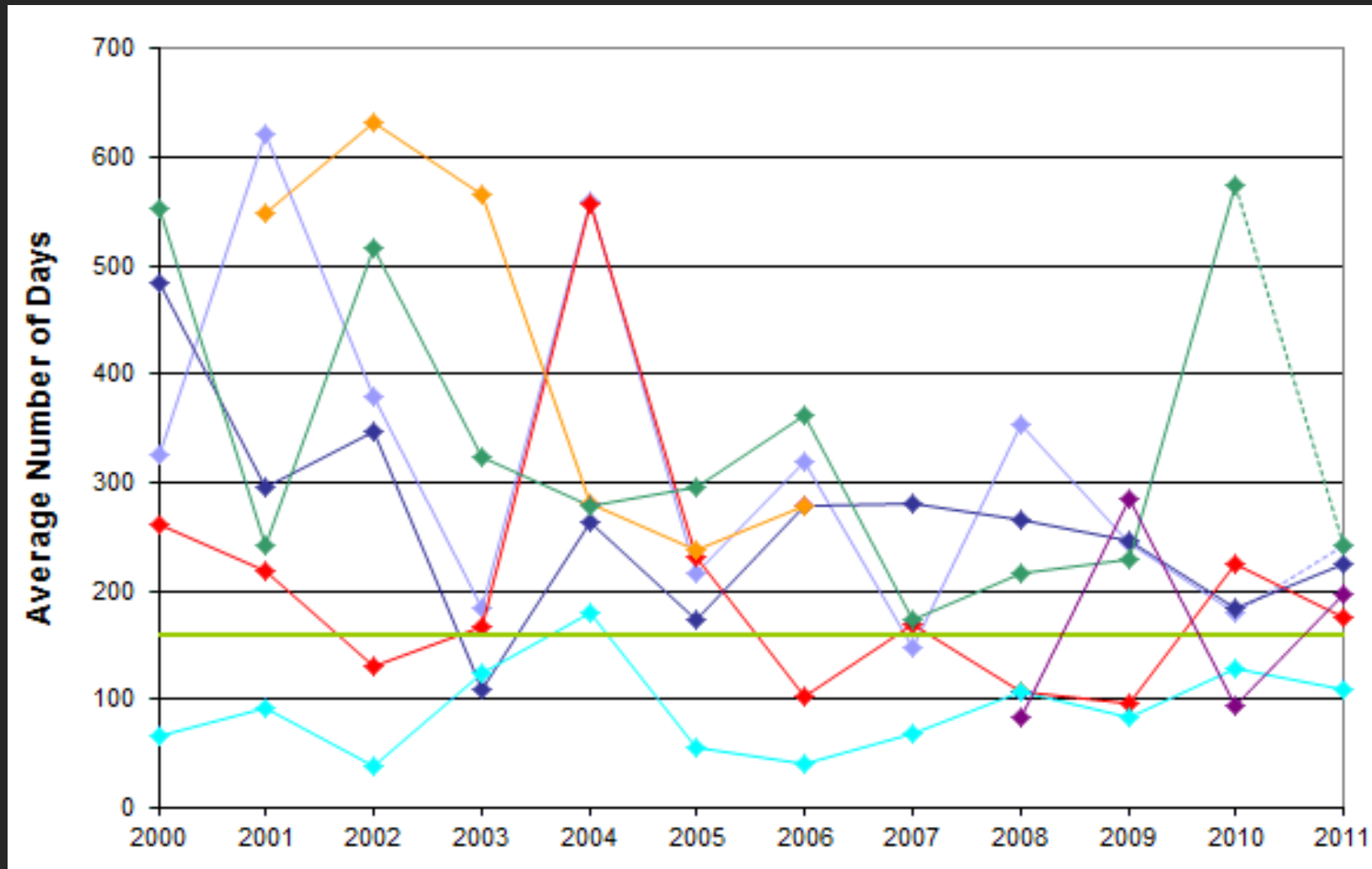
# Performance Metrics

Timeliness of data submittals

Timeliness to upload/review data

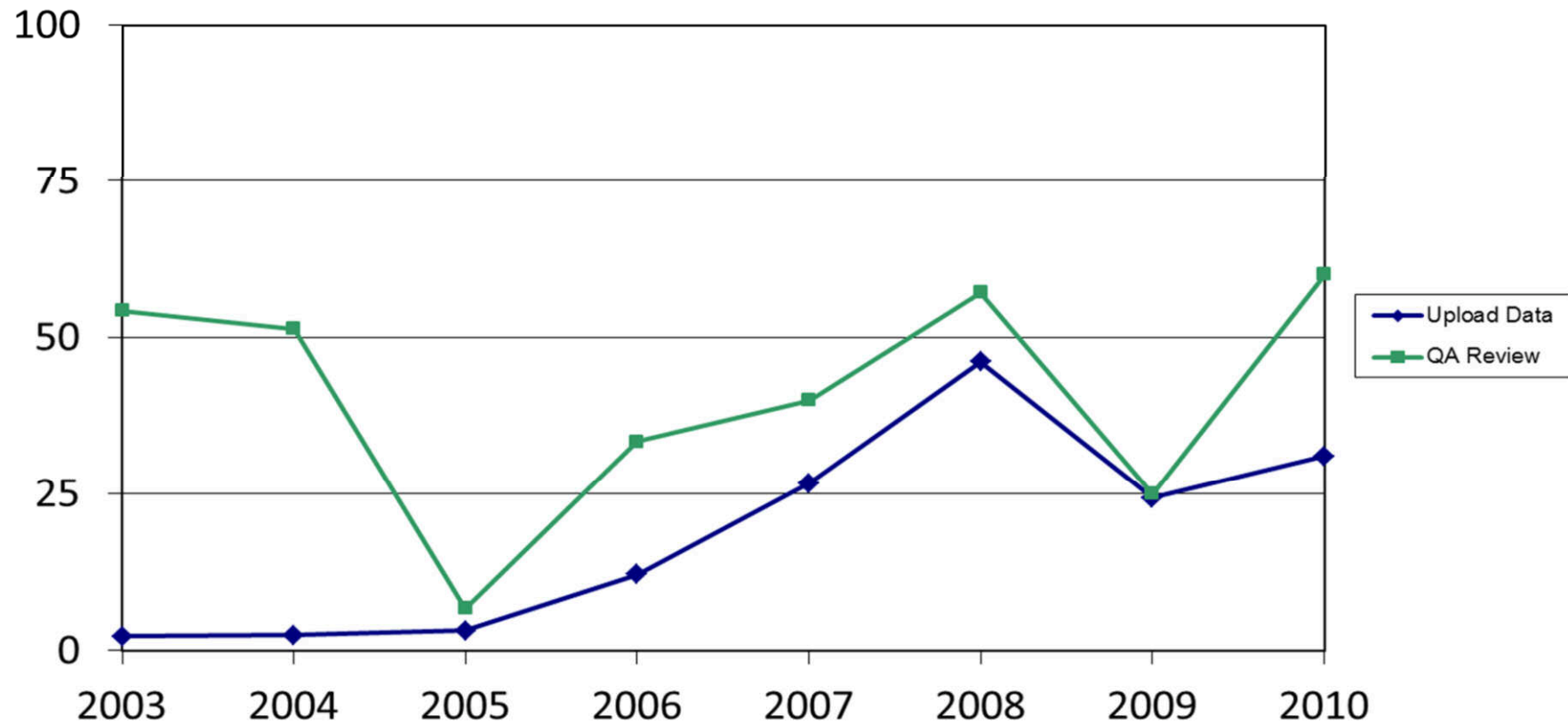
Web access to RMP data

# Timeliness of Data – Avg. days after collection





# Internal Timeliness – Percent >45 days

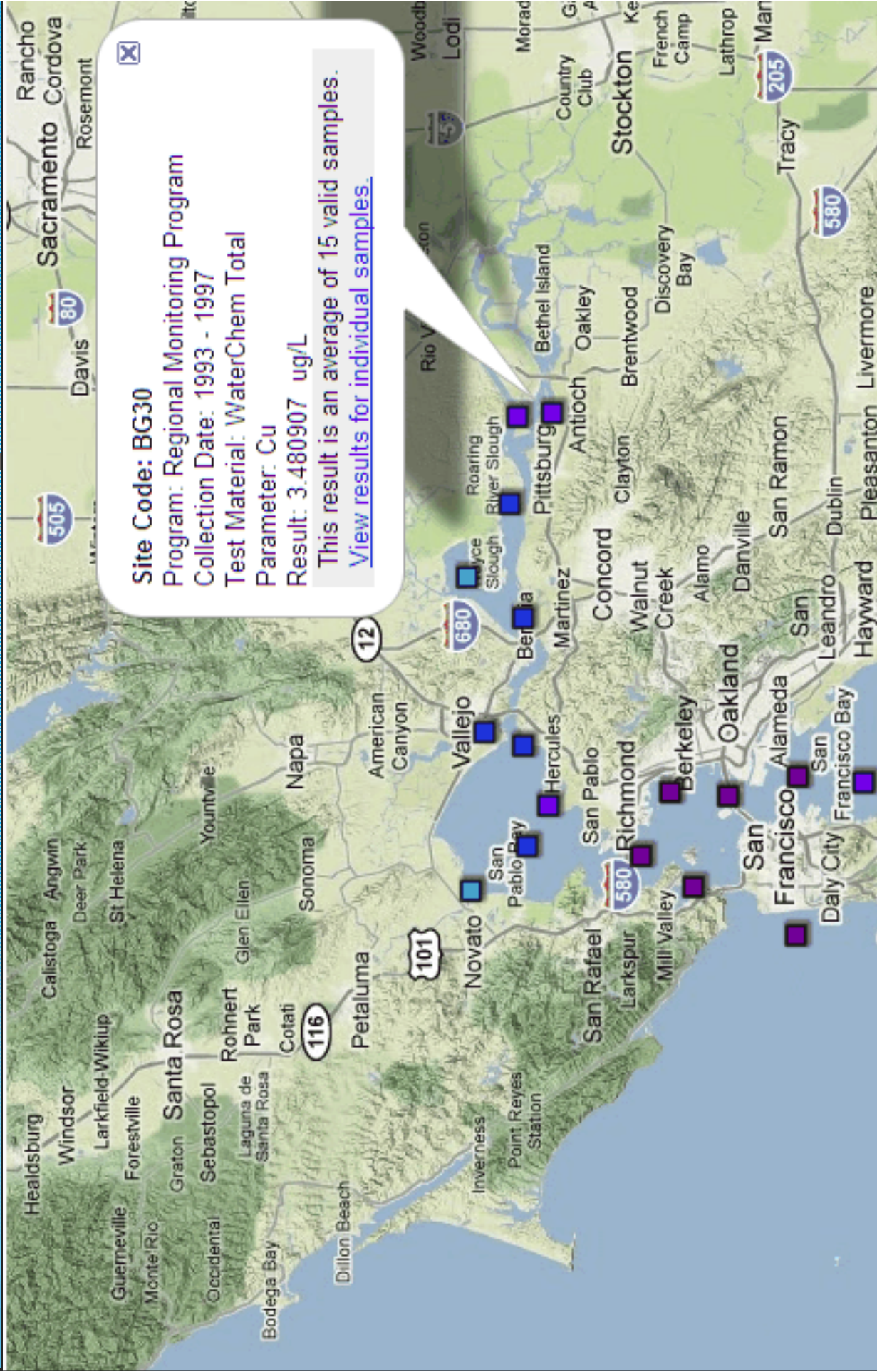


# CDS

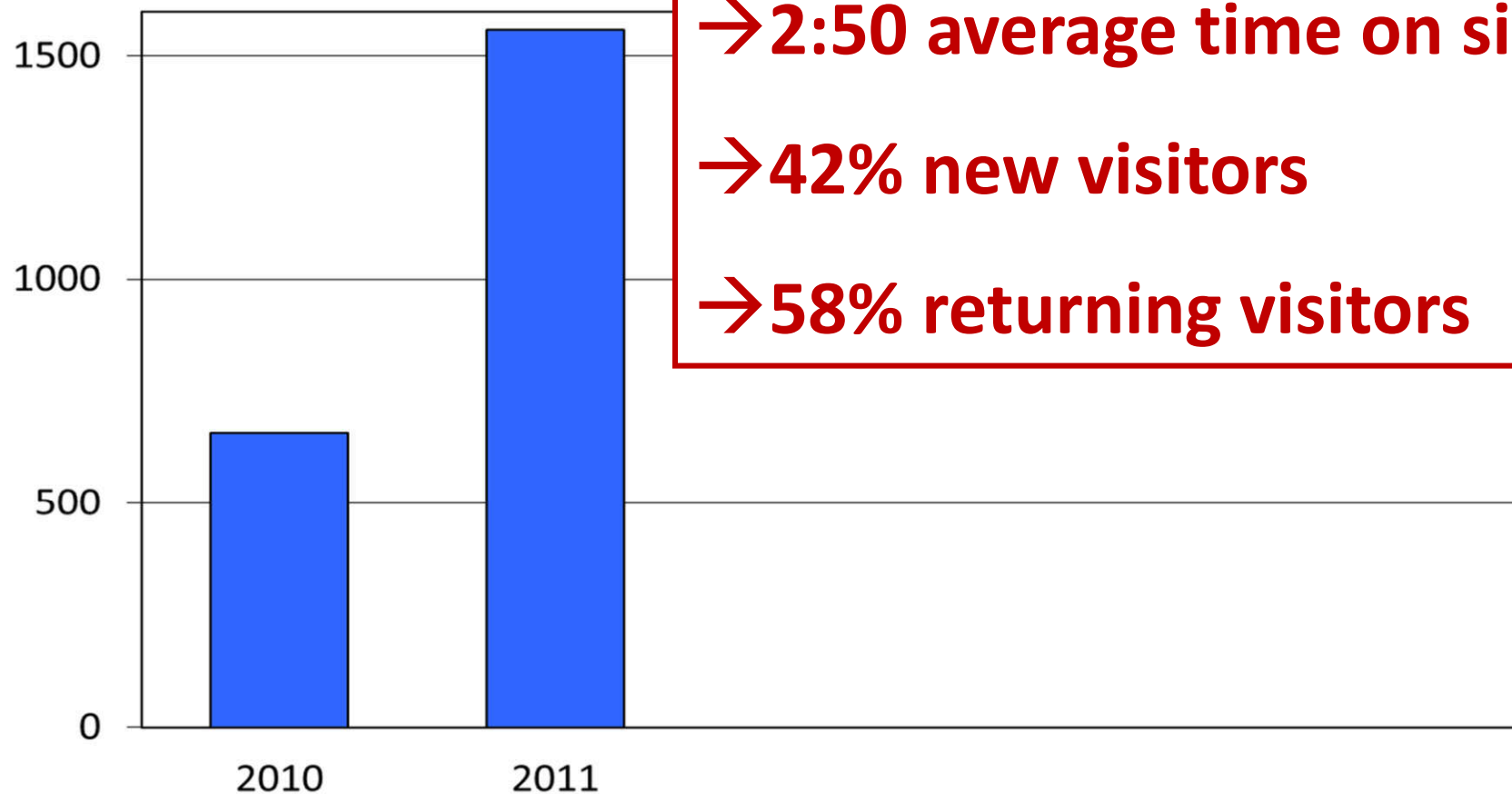
## Contaminant Data Display & Download

water  
sediment  
fish  
bivalves  
sport fish

0.0 0.1 0.2 0.3 0.4



# External Use of CD3 – Number of Queries



→ 2:50 average time on site

→ 42% new visitors

→ 58% returning visitors

# Environmental Data, Information, and Technology



Create dynamic, compelling, visually stimulating presentations of environmental information

Transform raw data into useful information for different audiences



# EDIT Focus Areas

Regional Data Center

Data management services

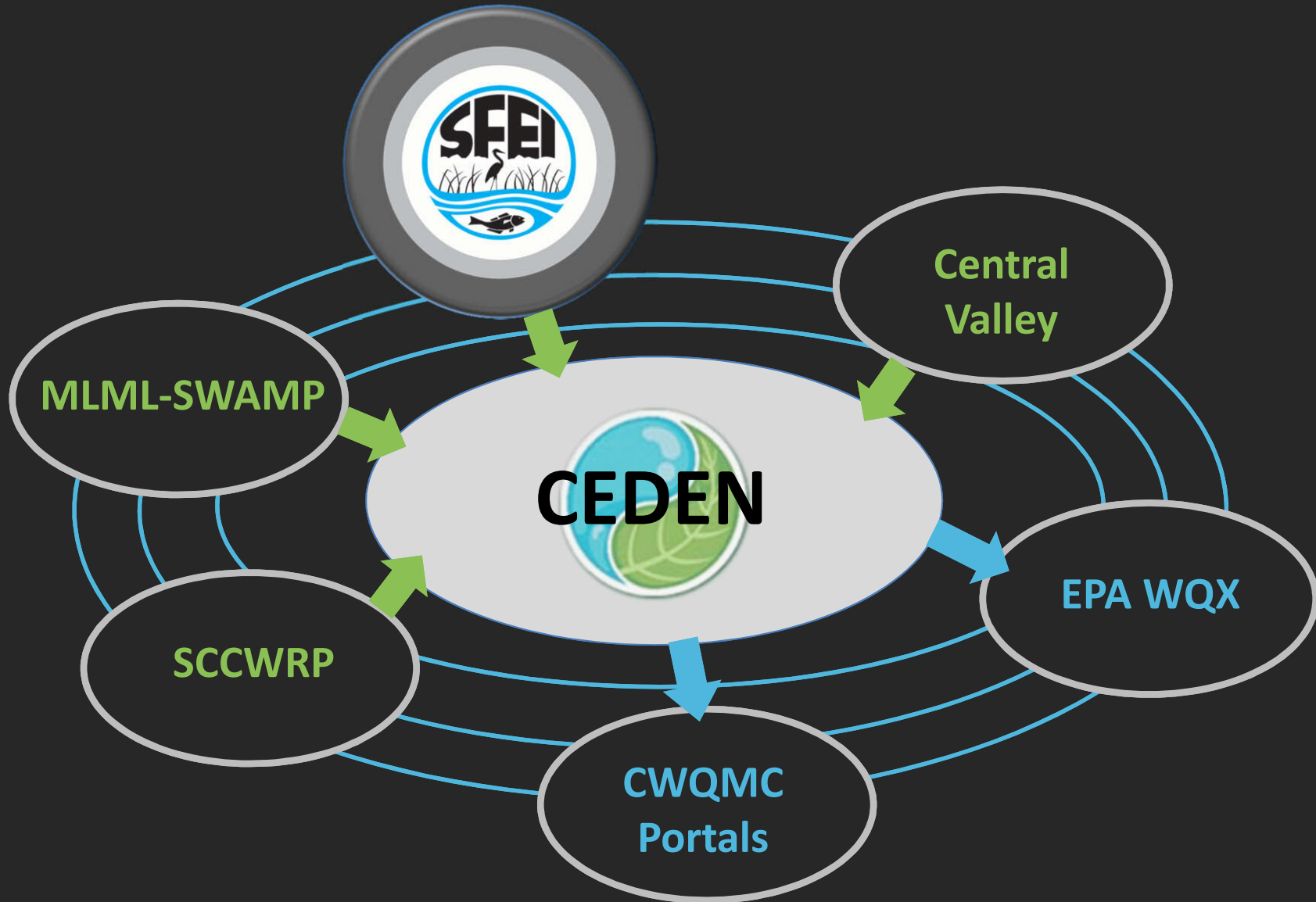
GIS

Web site design and management

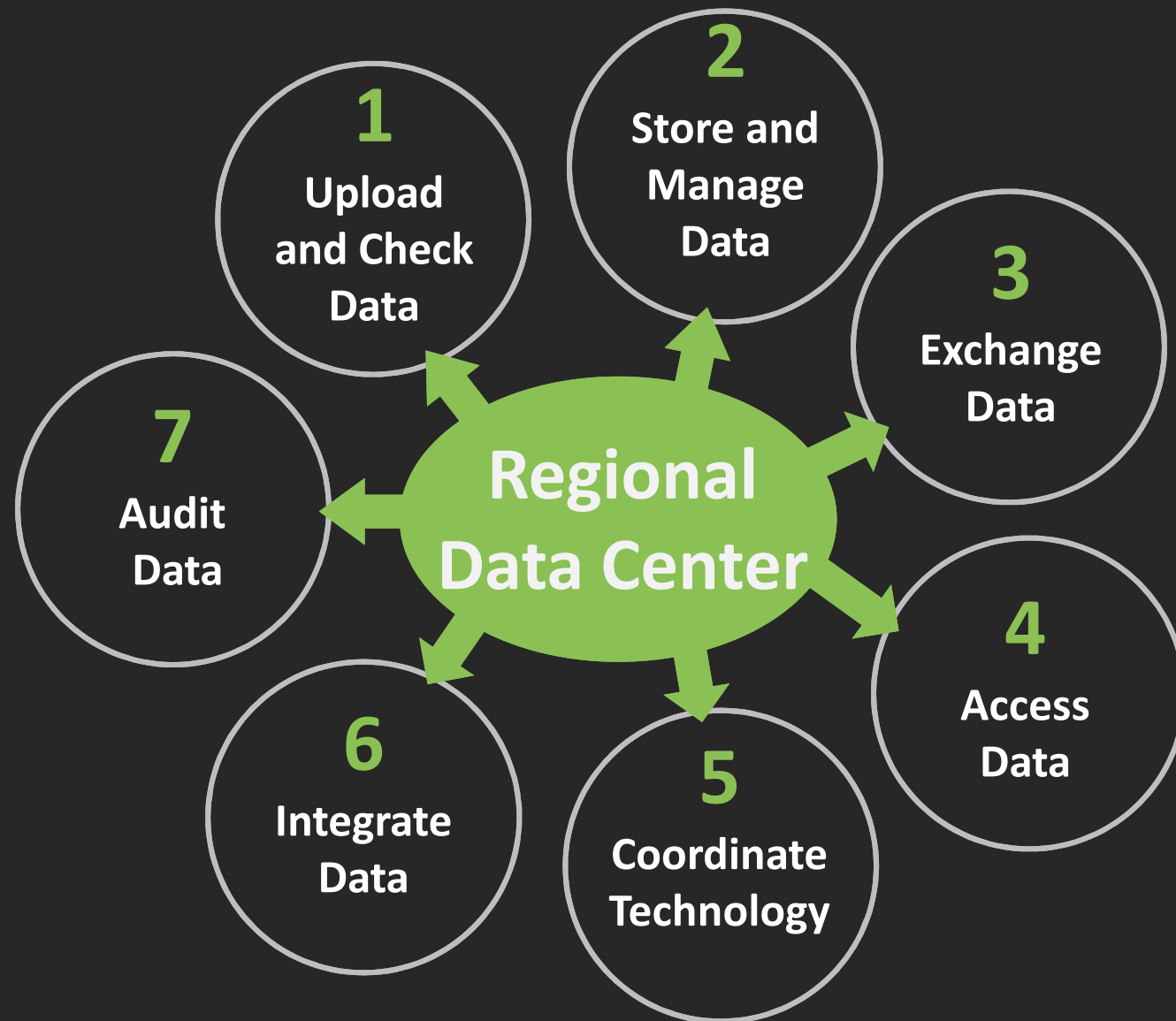
Web mapping/tool development

Systems and IT infrastructure

# Regional Data Center



# RDC Services





# CEDEN

CALIFORNIA ENVIRONMENTAL DATA EXCHANGE NETWORK

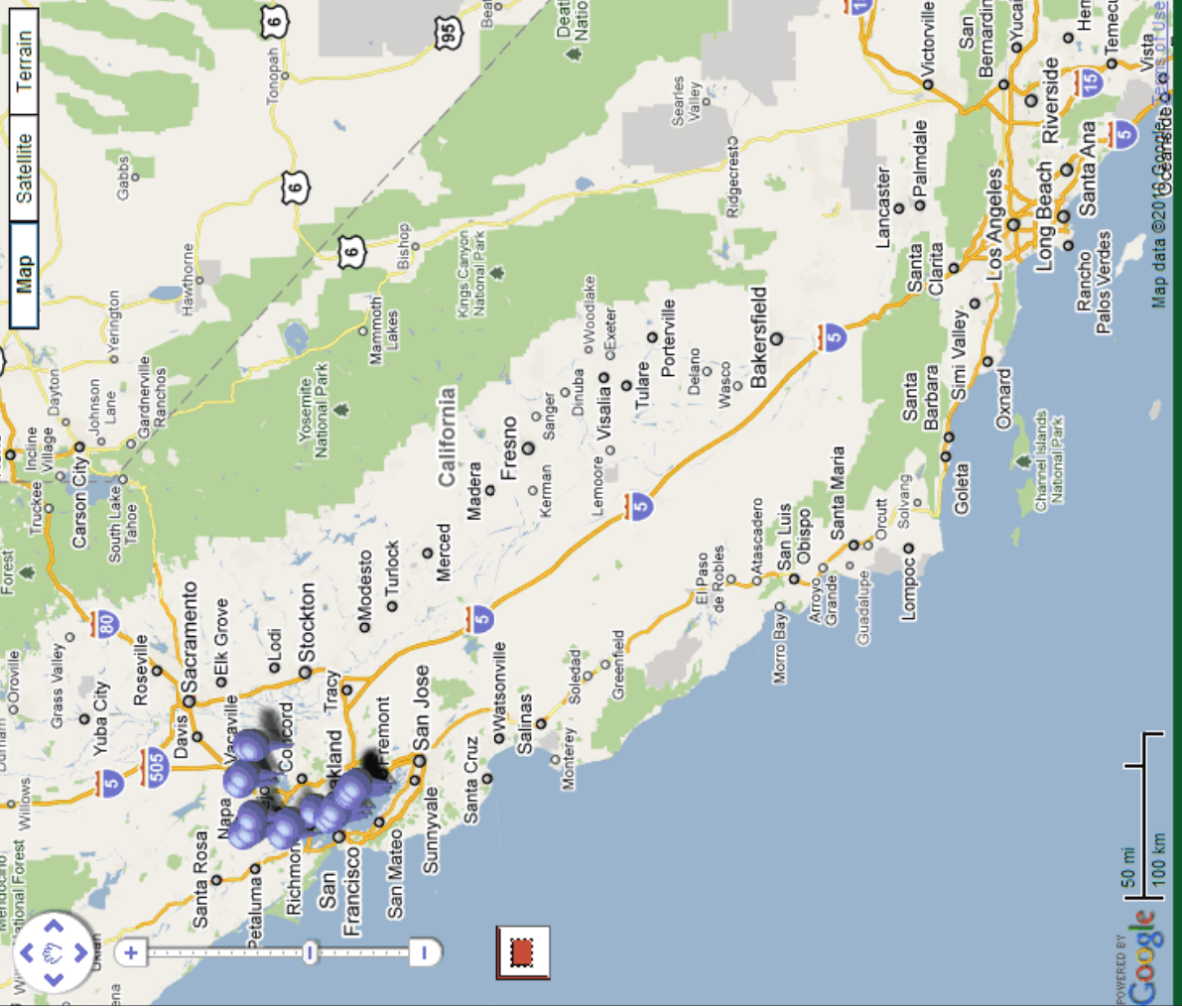


Home

About Us

Submit Data

Access Data



RESULT CATEGORY:  Water Quality  Toxicity  Field Data

Turn off automatic mapping of stations.

Click Map Stations at any time to show stations on the map

MAP STATIONS MAP COUNTIES MAP HUC-8

SHOW QA SHOW STATIONLU HELP

START OVER

- Programs [Select] SFEI
- Projects [Select] 2007RMP Status & Trends
- Parameter Groups [Select] pcbs
- Parameters [Select] PCB 033\_Totals
- Stations [Select]
  - Central Bay (CB021W)
  - Central Bay (CB022W)
  - Central Bay (CB023W)
  - Dumbarton Bridge (BA30)
  - Lower South Bay (LSB027W)
  - Lower South Bay (LSB028W)
  - Lower South Bay (LSB029W)
  - Lower South Bay (LSB030W)
  - Lower South Bay (LSB032W)
  - Sacramento River (BG20)

Include stations that are missing tablings

Available date range: Aug-07-2007 to Aug-16-2007

From:

To:

RETRIEVE DATA

Non-QA Data Only

First 1000 Records Only

Record Count:

Download Format:  excel

POWERED BY Google





- Home
- Safe to Drink
- Safe to Swim
- Safe to Eat Fish
- Ecosystem Health
- Stressors & Processes
- Contact Us

My Water Quality - hosted by the Surface Water Ambient Monitoring Program (SWAMP) |

GOVERNOR  
SCHWARZENEGGER



Visit his Website

- Cal/EPA
- The Resources Agency
- About the California Water Quality Monitoring Council
- State & Regional Water Boards
  - Performance Report
- Web Portal Partners
- Monitoring & Assessment Programs, Data Sources & Reports
- Water Quality Standards, Plans and Policies
- Regulatory Activities
- Enforcement Actions
- Research
- About SWAMP
- SWAMP Tools



## Welcome to My Water Quality

This web portal, supported by a wide variety of public and private organizations, presents California water quality monitoring data and assessment information that may be viewed across space and time. Initial web portal development concentrates on four theme areas, with web portals to be released one at a time. Click the [Contact Us](#) tab for more information.

The Monitoring Council seeks to provide multiple perspectives on water quality information and to highlight existing data gaps and inconsistencies in data collection and interpretation, thereby identifying areas for needed improvement in order to better address the public's questions. Questions and comments should be addressed through the [Contact Us](#) tab.



### IS OUR WATER SAFE TO DRINK?

Safe drinking water depends on a variety of chemical and biological factors regulated by a number of local, state, and federal agencies. [More>>](#)



### IS IT SAFE TO SWIM IN OUR WATERS?

Swimming safety of our waters is linked to the levels of pathogens that have the potential to cause disease. [More >>](#)



### IS IT SAFE TO EAT FISH AND SHELLFISH FROM OUR WATERS?

Aquatic organisms are able to accumulate certain pollutants from the water in which they live, sometimes reaching levels that could harm consumers. [More>>](#)



### ARE OUR AQUATIC ECOSYSTEMS HEALTHY?

The health of fish and other aquatic organisms and communities depends on the chemical, physical, and biological quality of the waters in which they live. [More>>](#)



### WHAT STRESSORS AND PROCESSES AFFECT OUR WATER QUALITY?

Beneficial uses of our waters are affected by emerging contaminants, invasive species, trash, global warming, acidification, pollutant loads, and flow. [More>>](#)

[waterboards.ca.gov/mywaterquality](http://waterboards.ca.gov/mywaterquality)

# Safe To Eat Portal

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

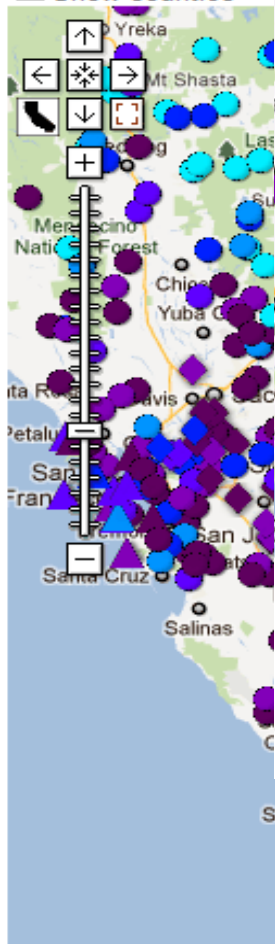
Select location from list.

### Contaminant Data

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

Zoom to county:

Show counties



### San Pablo Bay (5)

[View Safe Eating Guidelines for this water body.](#)

Data

Trends

Nearby Locations

### What are the most recent data for my location?

#### Contaminant Data For 2007 - 2009

Species	MERCURY (ppm)	Sample Year	Prep Code	Sample Type
California Halibut	0.18	2009	Skin off	Average of Composites
Jacksmelt	0.1	2009	Skin off	Average of Composites
Leopard shark	1.49	2009	Skin off	Average of Individuals
Shiner Surfperch	0.08	2009	Skin On, Scales Off	Average of Composites
Striped Bass	0.47	2009	Skin off	Average of Individuals

Go

Reset

[Download Map Data](#)

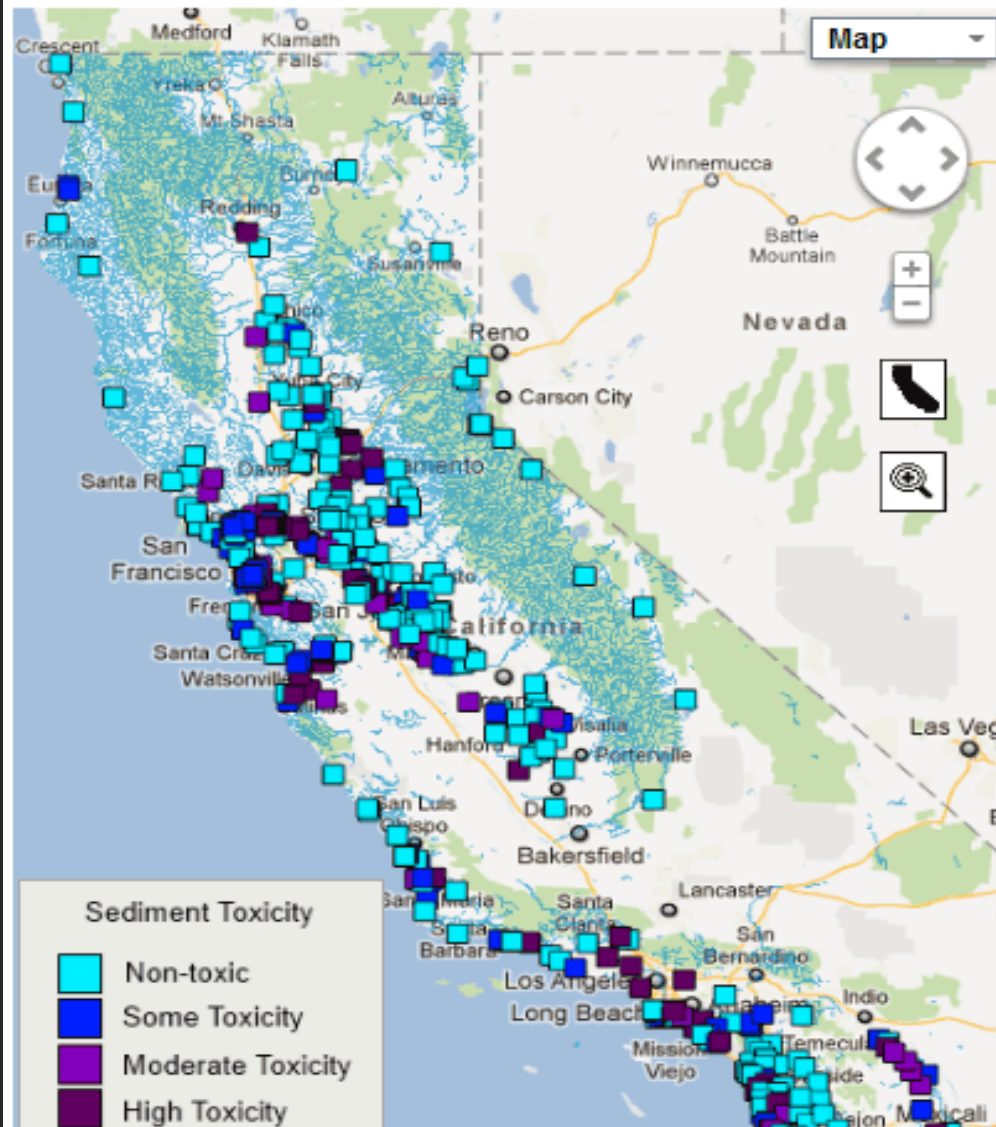
# Healthy Streams Portal



# Healthy Streams Portal

## California Streams, Rivers and Lakes

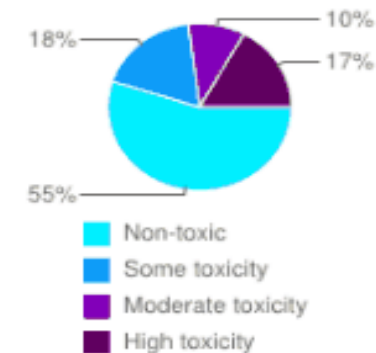
-- Select a Region Type --



### How toxic is the sediment in our streams

Sediment at the bottom of a stream or suspended in the water can contain these pollutants back into the water. Toxicity tests can determine if organisms express any adverse

In 2011 the State Water Board issued its [report](#) of nine years of data from 2001 and 2010, greater than 45% of sampled sites showed



This map shows data generated by:



[SWAMP](#)



[SFEI](#)

(Updated 3/21/12 )



# Future Initiatives

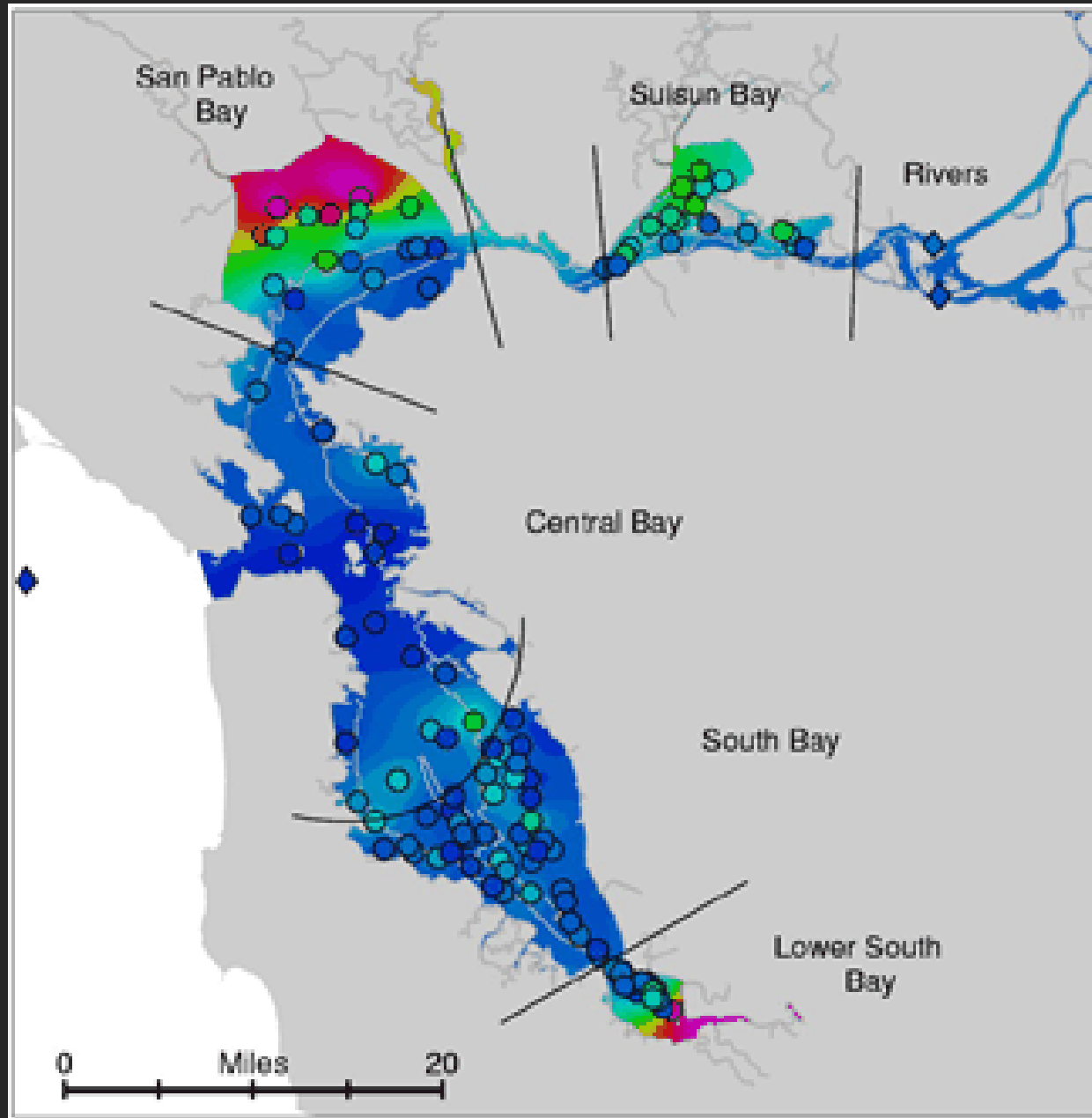
Improve efficiencies in uploading,  
formatting, reviewing and accessing data

Coordinate with Estuaries Portal

Enhance visualization tools

Coordinate with SFEI's strategic initiative to  
improve data accessibility

# Kriging Tool



# Landscape Profiles

California Wetlands Tracker [Home](#) [About](#)

San Francisco Bay Area : [Map](#) | [Projects](#) | [Summaries](#)

## Interactive Map

Layers ▾ [Legends](#) ▾ [Background](#) ▾ [Overlays](#) ▾

### Project Information

- Wetland Projects
- 1600 Permit Projects
- SFBJV Projects
- Trash

### Habitats

- Modern Habitats
- Modern Habitats
- Eelgrass Habitat
- Historical Habitat

### Modern Habitats - BAARI ✕

- Non-Tidal Wetlands

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



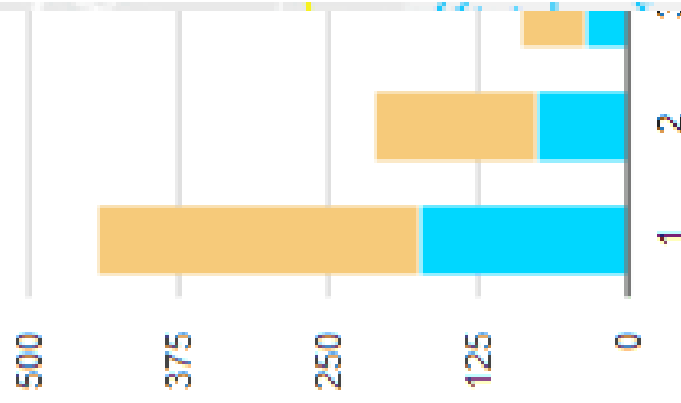
- Tidal Wetlands

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

# Interactive M

Stream Length: 854 miles

Streams - length



Channel Density: 0.003787

At this location

Wetland Condition (CRAM)

Brown's Island

Wetland Class: Estuarine

Non-Saline

Assessment Type: Ambient

Survey- *reference site*

Visit Date: 2007-10-25

Overall Score: 85

Attributes

Landscape: 100

Hydrology: 100

Physical Structure: 63

Biotic Structure: 78

Islands: 13

Wetland  
Development Project  
Measurements

Project

Survey  
Type: Ambient Survey







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improve data accessibility