Wetland Tech Tools
Wetland Tracker and eCRAM Development

CWMW August 16, 2011

Where are the wetlands?
and how are they doing?

- Technology tools designed to help people find answers
  - Wetland Tracker
  - Wetlands Portal
  - Aquatic Atlas

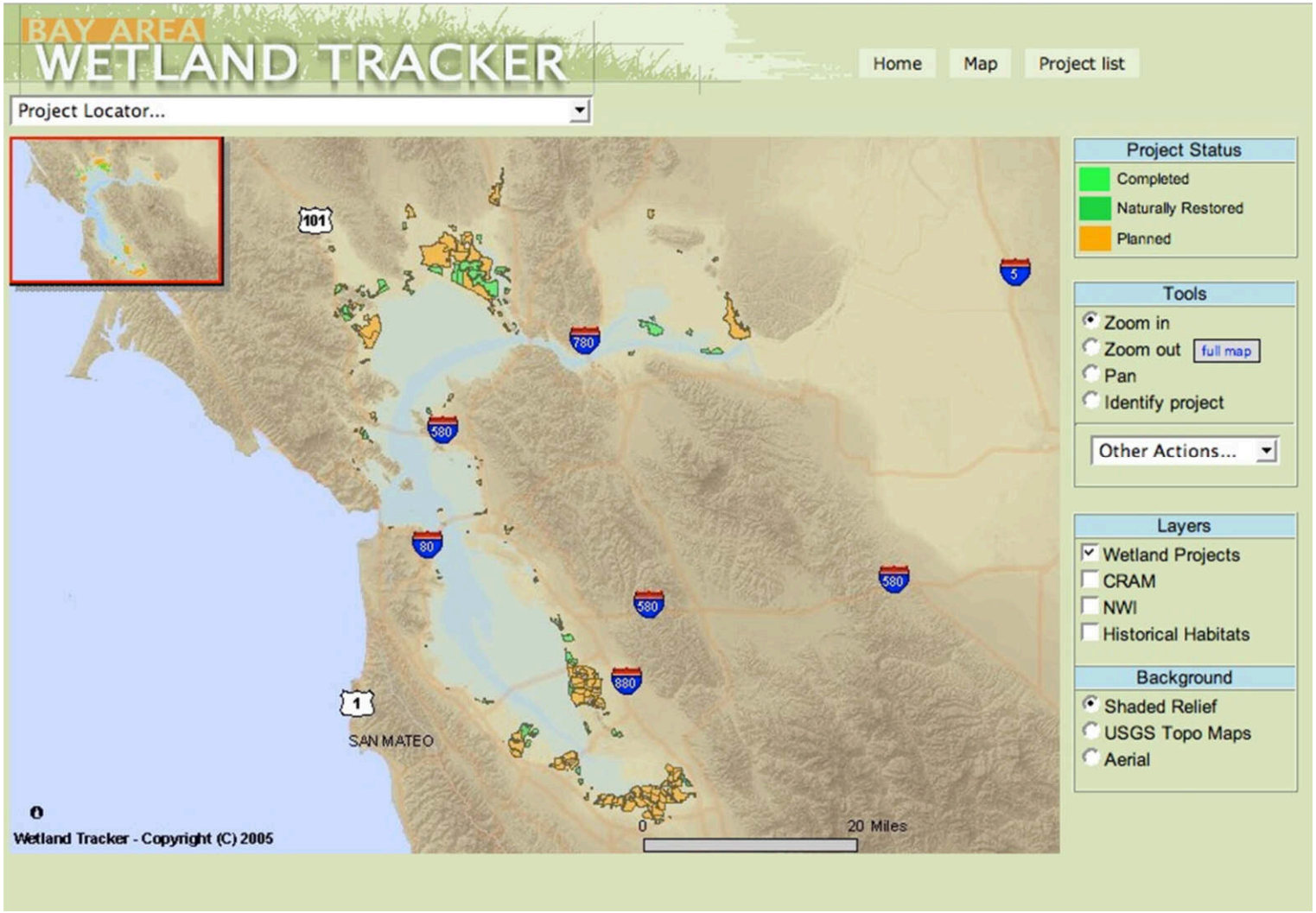
- The tools are currently providing some of the answers…

  …but they need to do more

Are the tools on track to support CWMW objectives?

2007 Wetland Tracker (v 2.0)

Bay Area Ony



Recently added tech tool functionality

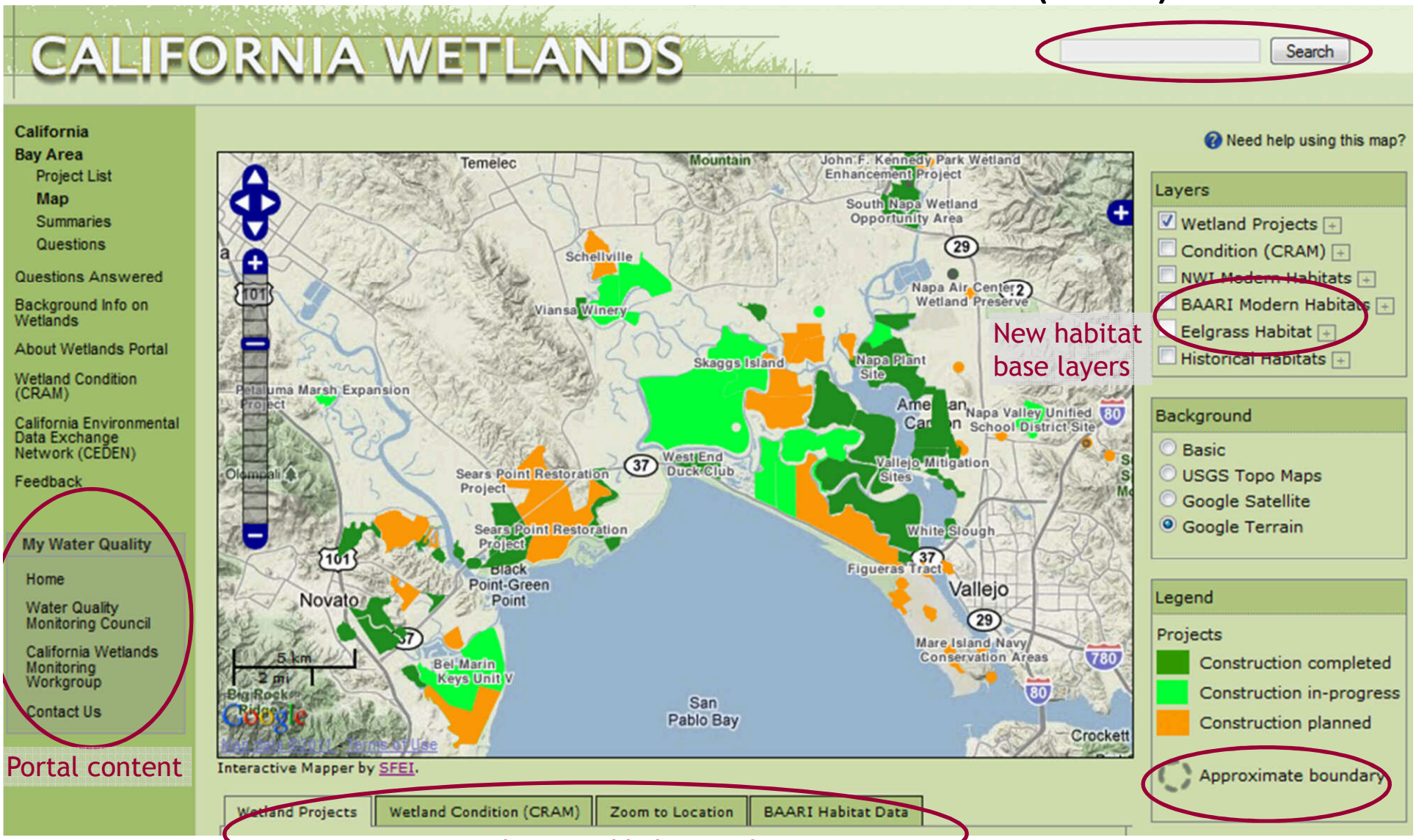
Online 401
- Online mapper
- Form submission
- Permit approval management

Project Activity Reports
- Downloadable pdf reports of changes resulting from project activity
  (RB2 only)
  Prop 50

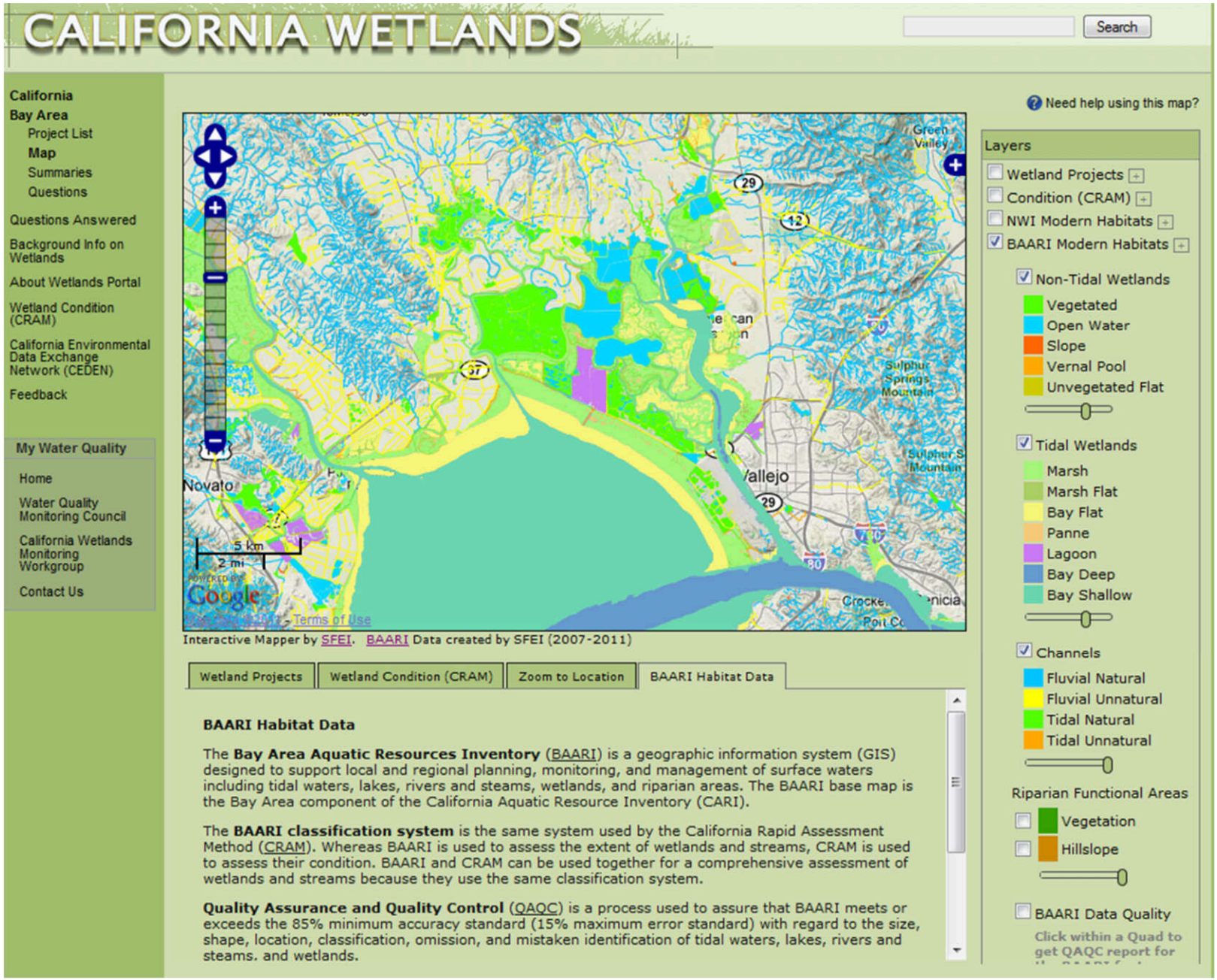
Improved Level 1 content
- Bay Area Aquatic Resources Inventory
- South Coast Eelgrass base layer

Tracker has been improved through multiple appropriate funding sources

Current Statewide Wetland Tracker (v 2.1)



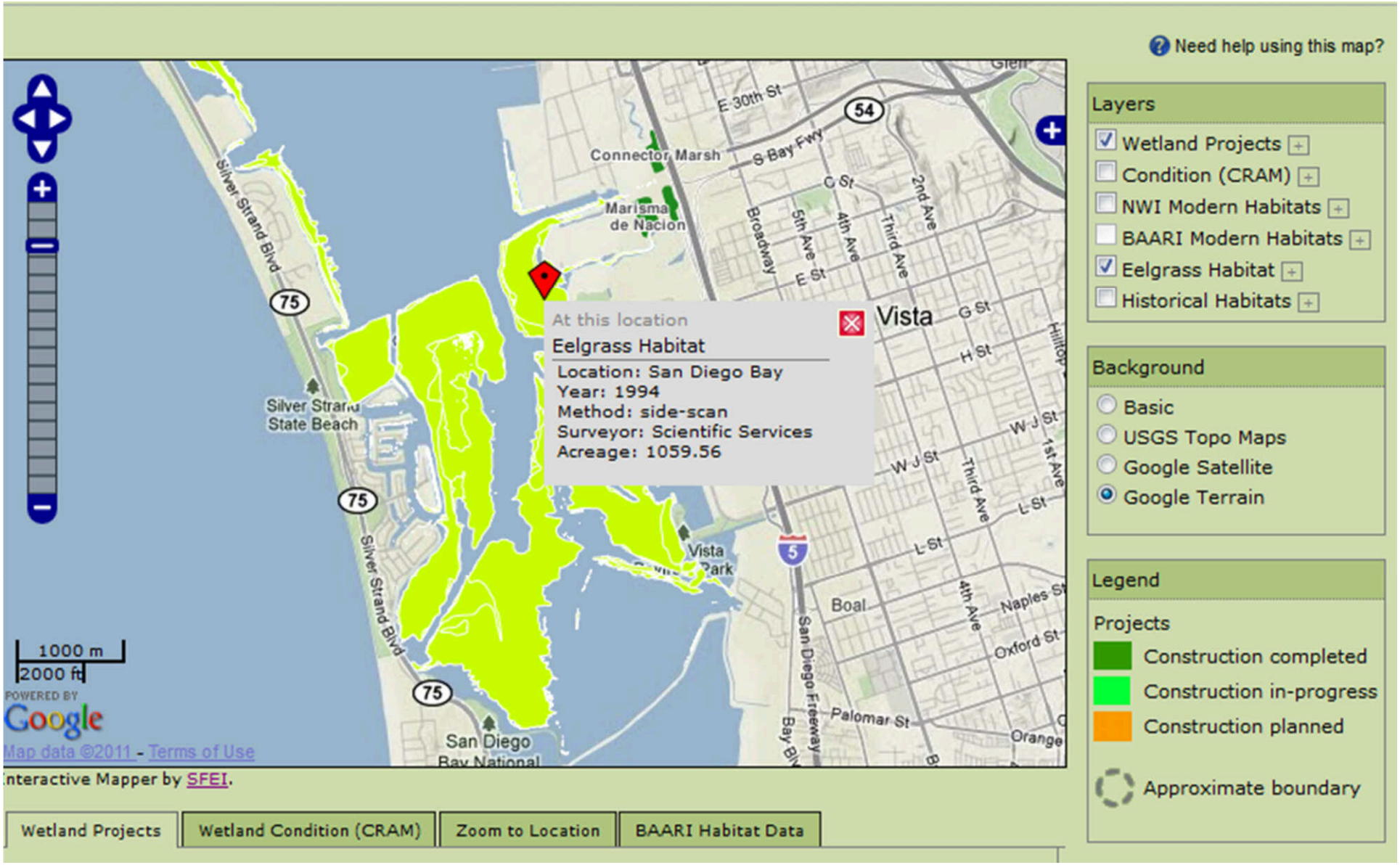
WT 2.1 Extent


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
Need help using this map?
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
Channels
Fluvial Natural
Fluvial Unnatural
Tidal Natural
Tidal Unnatural
Riparian Functional Areas
Vegetation
Hillslope
BAARI Data Quality
Click within a Quad to get QAQC report for
Novato
Vallejo
Green Valley
Sulphur Springs Mountain
5 km
2 mi
Google
Terms of Use
Interactive Mapper by SFEI. BAARI Data created by SFEI (2007-2011)
Wetland Projects
Wetland Condition (CRAM)
Zoom to Location
BAARI Habitat Data
BAARI Habitat Data
The Bay Area Aquatic Resources Inventory (BAARI) is a geographic information system (GIS) designed to support local and regional planning, monitoring, and management of surface waters including tidal waters, lakes, rivers and steams, wetlands, and riparian areas. The BAARI base map is the Bay Area component of the California Aquatic Resource Inventory (CARI).
The BAARI classification system is the same system used by the California Rapid Assessment Method (CRAM). Whereas BAARI is used to assess the extent of wetlands and streams, CRAM is used to assess their condition. BAARI and CRAM can be used together for a comprehensive assessment of wetlands and streams because they use the same classification system.
Quality Assurance and Quality Control (QAQC) is a process used to assure that BAARI meets or exceeds the 85% minimum accuracy standard (15% maximum error standard) with regard to the size, shape, location, classification, omission, and mistaken identification of tidal waters, lakes, rivers and steams. and wetlands.

Extent


Need help using this map?
Layers
Wetland Projects
Condition (CRAM)
NWI Modern Habitats
BAARI Modern Habitats
Non-Tidal Wetlands
Tidal Wetlands
Channels
Fluvial Natural
Fluvial Unnatural
Tidal Natural
Tidal Unnatural
Riparian Functional Areas
Vegetation
Hillslope
BAARI Data Quality
At this location
BAARI Stream Habitat
Fluvial Ditch
Bouverie Wildflower Preserve
500 m
1000 ft
Google
Terms of Use
Interactive Mapper by SFEI. BAARI Data created by SFEI (2007-2011)

Wetland Tracker 2.1 Extent



Condition: eCRAM development

6 module development efforts are underway

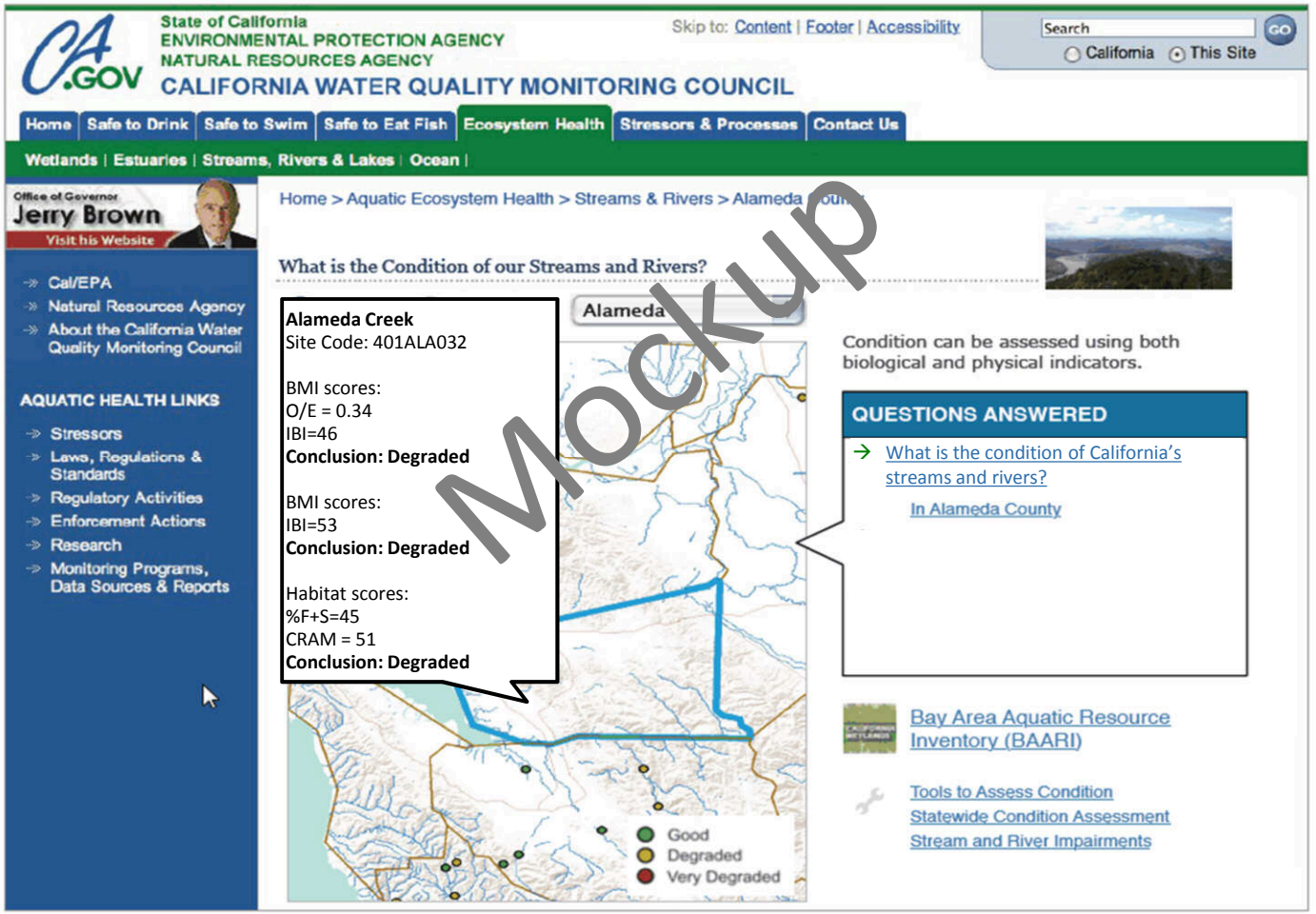
Module
Perennial depressional
Seasonal depressional
Wet meadow
Arid streams
Vernal pool
Bar-built estuaries

Next L2 technology steps

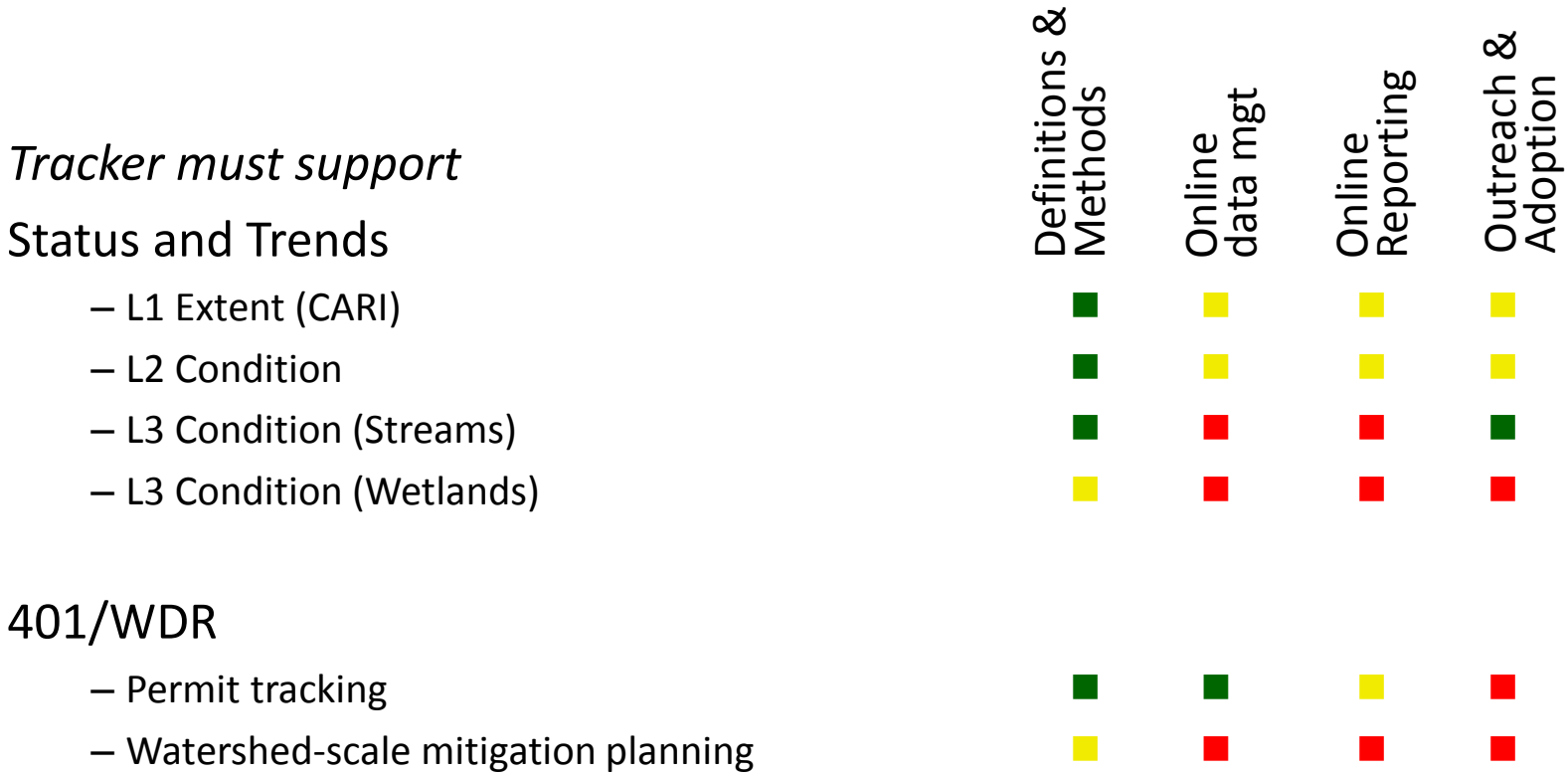
- **Address CRAM practitioner needs – data access, upload and download, summary reports!**
- www.cramwetlands.org to be subsumed within www.californiawetlands.org
- Redesign CRAM database and improve ease-of-use
- Align with SWAMP

Portals:

- Wetlands Portals portal on line through Wetland Tracker
  - Moving content to MWQ Wetlands Portal for consistency with other Portals
- Healthy Streams Portal under development
  - Includes toxicity, bioassessment, CRAM data views
  - Links to CEDEN



Overall status of tech tools



Tracker functionality: how to get from red to green

- Watershed delineation
- Use mapped feature polygons for data input/output
- Automated L1-L2 watershed summary reports
  - Aquatic resource extent
  - Ambient condition
  - Project information
- Move eCRAM into Tracker
- Advanced query and viewing tools
- Improved web site speed

Streamlined Permitting Process

g E... | Zimbra: Inbox (6738) | Colorado River Ma... | Smashing Magazine | *Pronto!(1) | Pisco Data Access | Pisco Data Product... | California Wetland... | app.californiaw

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
STATE WATER RESOURCES CONTROL BOARD

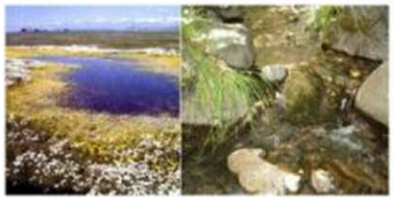
Online Application for 401 Certification/Waste Discharge Requirements

Log Out
Account

- My Applications
- Submitted Applications

Protecting Streams and Wetlands

Sat, 01/08/2011 - 22:22 — public (not verified)



Streams and wetlands are essential elements of California's natural heritage. In addition to their aesthetic qualities, they protect and enhance water quality throughout our state.

You should apply for Clean Water Act §401 Water Quality Certification and/or file a Report of Waste Discharge if you are planning a project that includes dredging, filling, or otherwise impacting waters of the United States and/or waters of California.

To begin an application, create an account or log in.

Read more about California's Dredge/Fill (401) and Wetlands Program.

Read more

Reporting

Tracking net change due to permitted projects

RB2 downloadable reports

Project Gains and Losses by Habitat Type - 2008

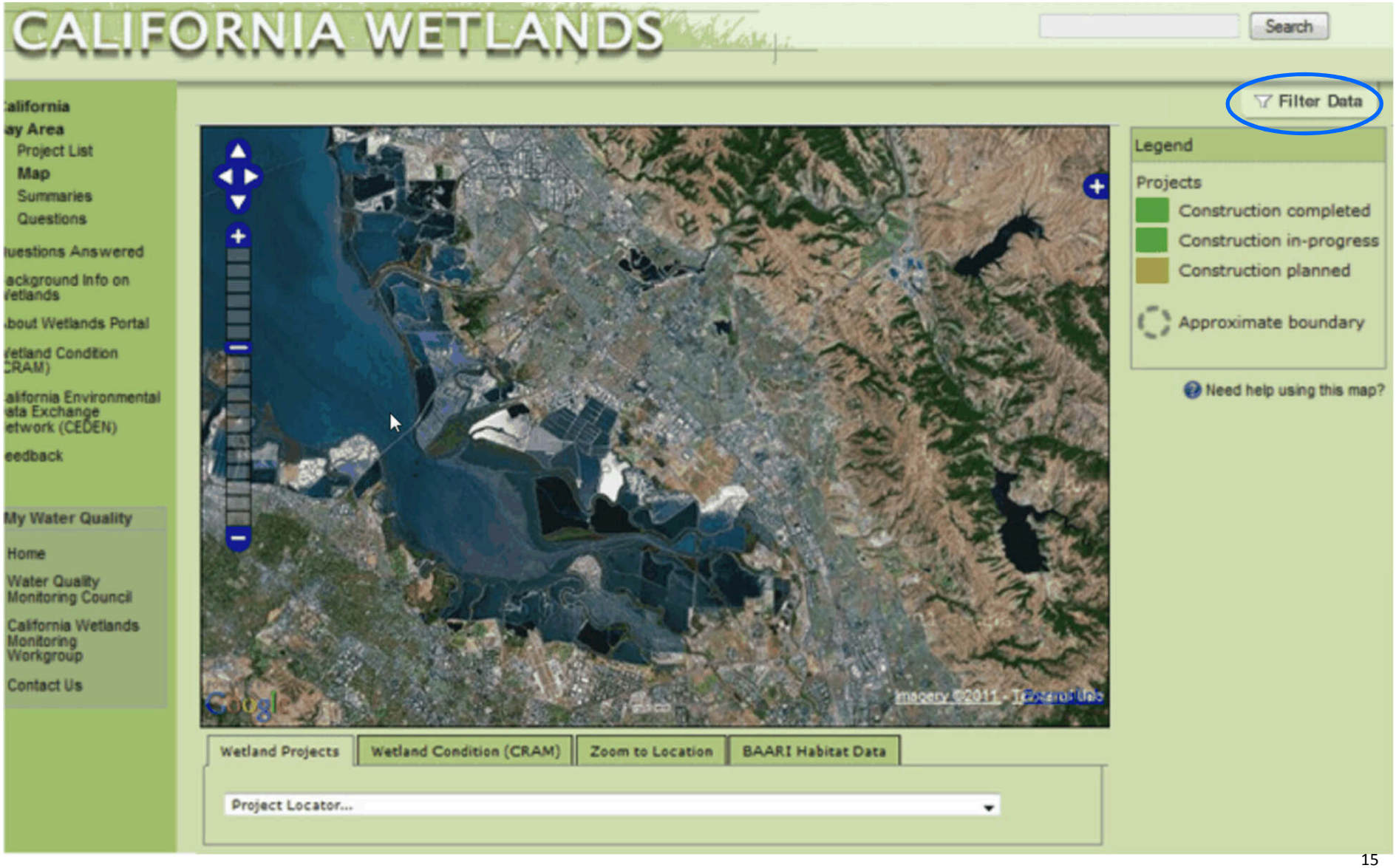
Print PDF

Wetland Areas (63 Projects[1])

				Acres[3] Gained[4]		Gain/Impact Ratio	Acres Improved (Other Than Gained)		Net Change in Acres	
Habitat Type	Number of Habitat Patches[2]		Permanently Impacted Acres	Restored	Created		Enhanced	Preserved	Gained or Lost	Improved
Vegetated estuarine wetlands	10	(16%)	0.0	0.0	1.4	0.0	0.3	6.4	1.4	6.7
Rivers and streams	15	(24%)	0.0	3.0	0.6	0.0	5.5	0.0	3.7	5.5
Lakes	0	(0%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Depressional wetlands	9	(14%)	0.0	0.1	1.4	0.0	0.1	4.1	1.5	4.2
Vernal pools and swales	4	(6%)	0.0	0.0	1.5	0.0	0.0	2.5	1.5	2.5
Playas	0	(0%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Seeps and springs wetlands	2	(3%)	0.0	0.0	2.0	0.0	0.5	0.0	2.0	0.5
Riparian areas	17	(27%)	0.0	0.8	9.1	0.0	22.3	1.2	9.9	23.4
Unknown wetland habitat	38	(60%)	0.0	1.1	0.5	0.0	8.3	3.2	1.6	11.5
Totals (acres)	95	(150%)	0.0	5.0	16.5	0.0	37.0	17.4	21.6	54.4

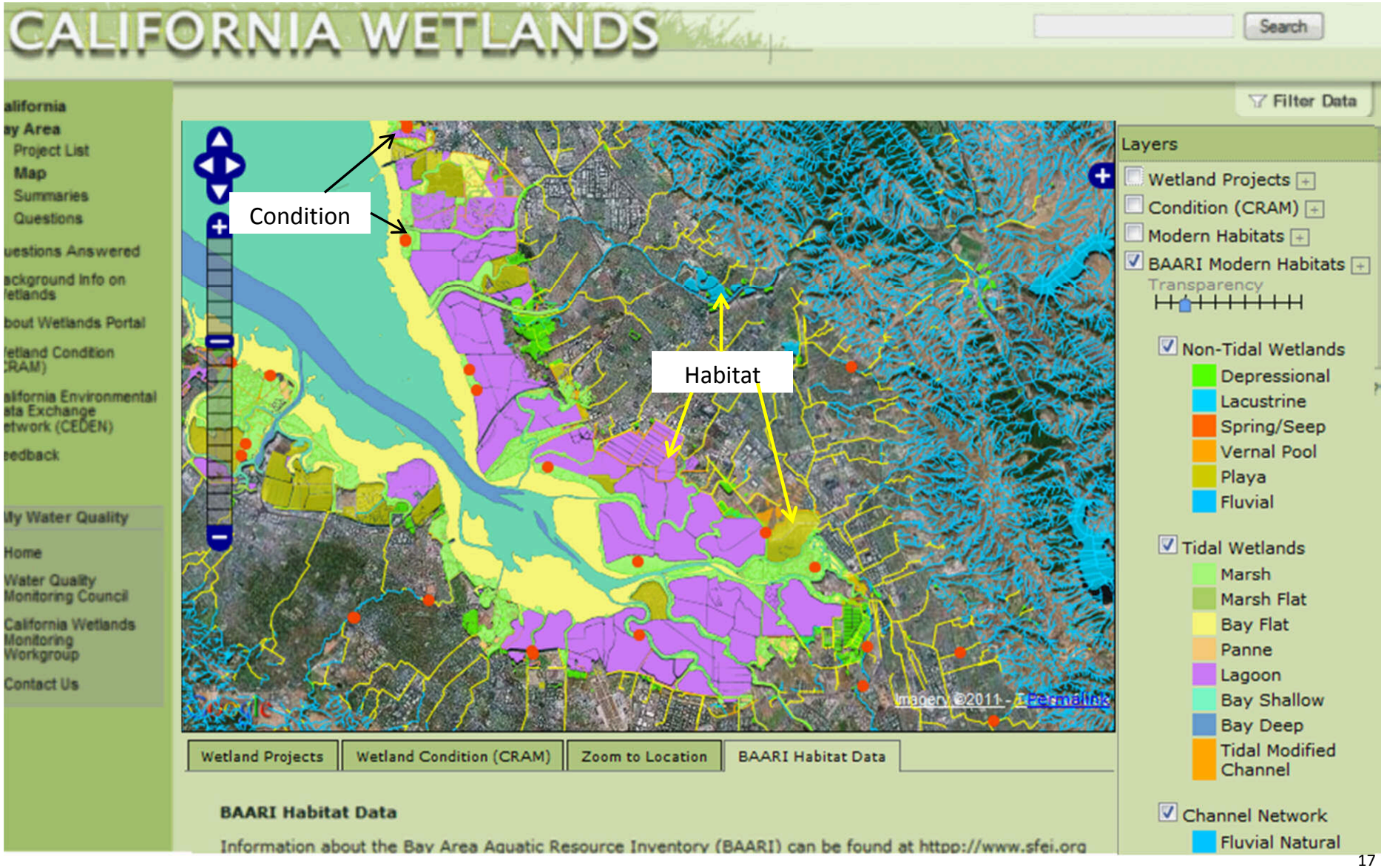
Tracker 3.0

Improved functionality - Advanced filtering

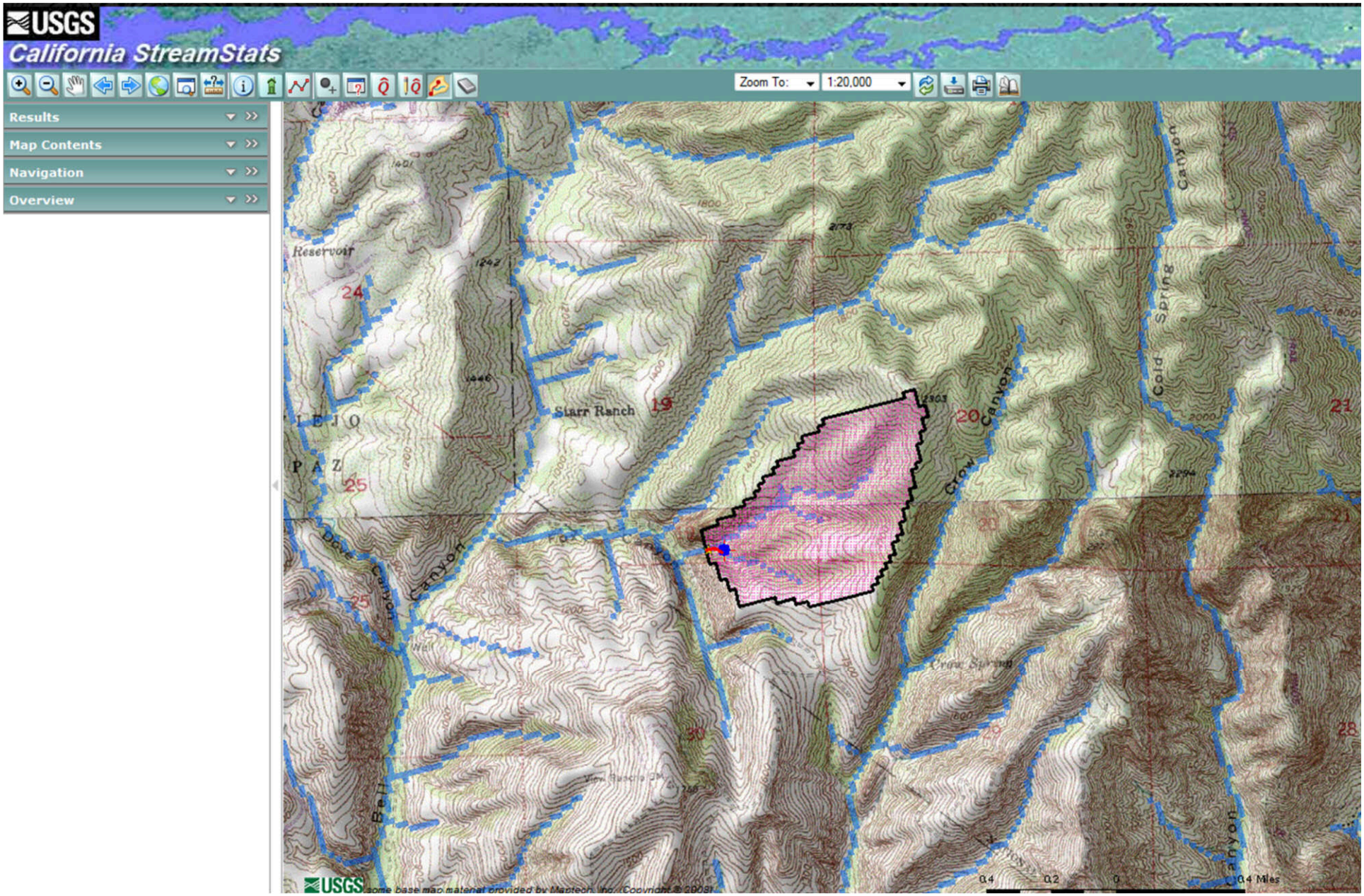


New filter functions proposed
Select content to be displayed from multiple categories

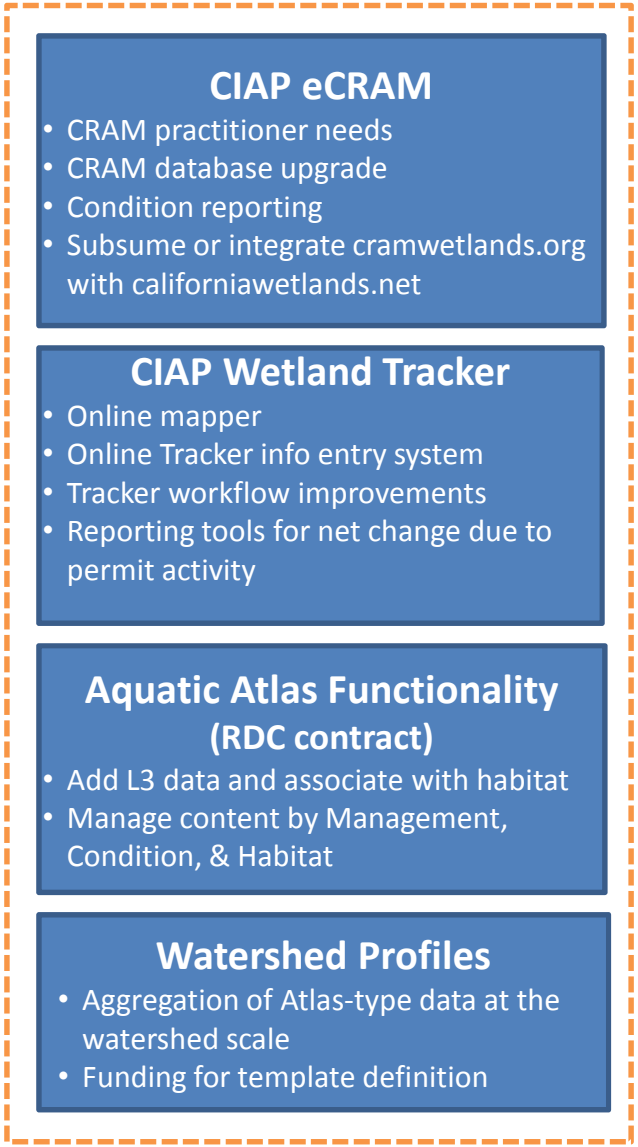
Map reloads based on filter selections



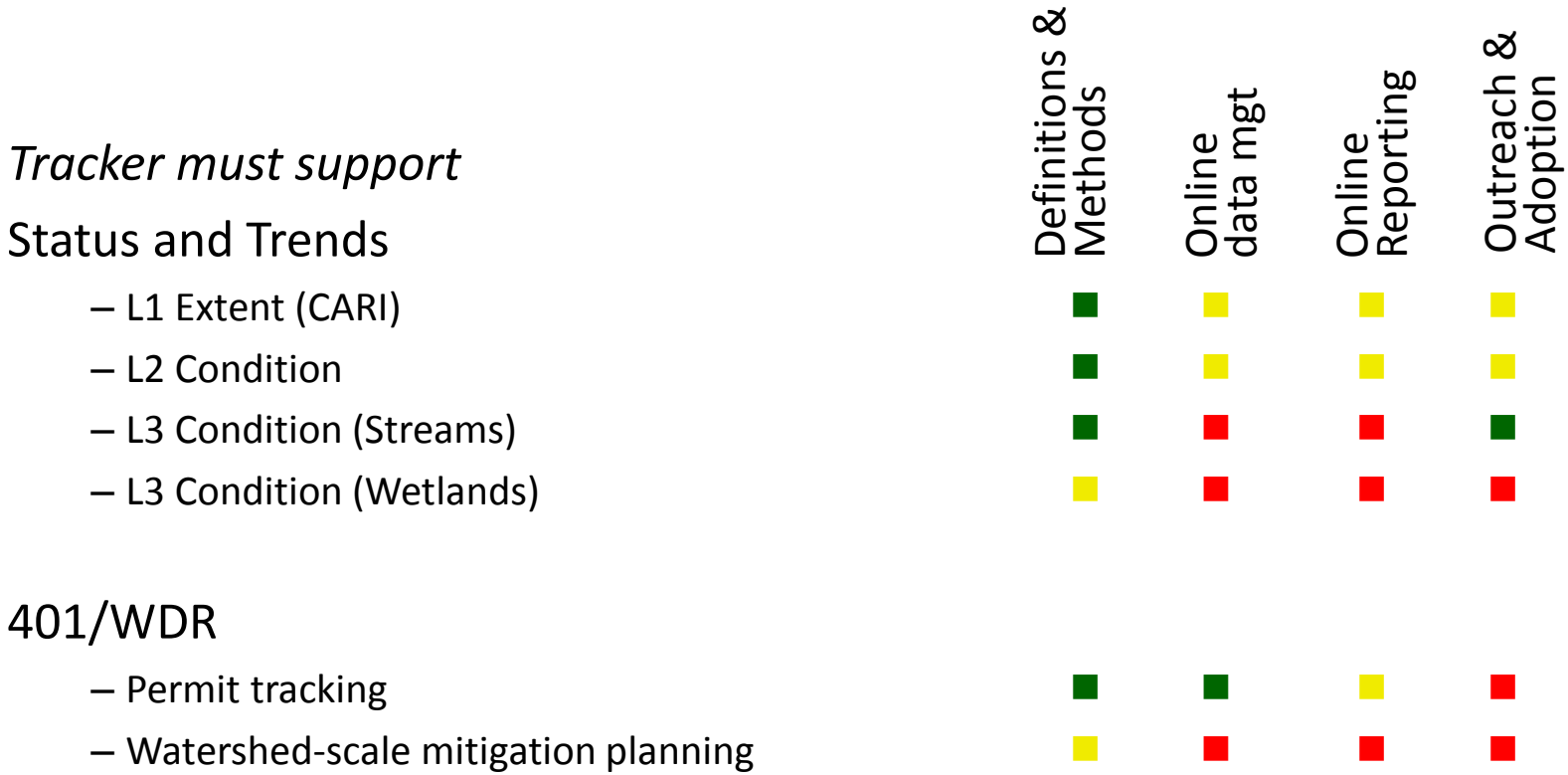
Watershed Delineation



Currently funded functionality improvements



Next steps for Wetland Tracker (3.0)



Next steps for Wetland Tracker (3.0)

Tracker must support

Status and Trends

- L1 Extent (CARI)
- L2 Condition
- L3 Condition (Streams)
- L3 Condition (Wetlands)

401/WDR

- Permit tracking
- Watershed-scale mitigation planning