

California's Surface Water Ambient Monitoring Program

SWAMP "Comparability" Data Management Overview



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Help Desk Services
Marine Pollution Studies Laboratory
Moss Landing Marine Laboratories
Moss Landing, California



State Board Webinar Schedule

- ✓ SWAMP Comparability: Overview
 - June 25, 2009: 11-12 (Valerie Connor)
- ✓ SWAMP Comparability: Quality Assurance
 - July 2, 2009: 11-12 (Quality Assurance Help Desk)
- SWAMP Comparability: Data Management
 - July 23, 2009: 11-12 (Data Management Help Desk)



Outline for Today's SWAMP Webinar

- Data Management Comparability
- Data Management Team Functions
- Background on Data Elements
- Help Desk
- Data Elements and Available Resources
- Questions



Building “Comparability”

- SWAMP is a state framework to coordinate consistent and scientifically defensible methods and strategies for improving water quality monitoring, assessment, and reporting.
 - Common Indicators
 - Comparable Methods
 - Quality Assurance Program
 - **Database Systems for Comparable data**
 - Information Exchange Network
 - Tool Box and Training

**Data Management Team @ Moss Landing Marine
Laboratories Marine Pollution Studies Lab**

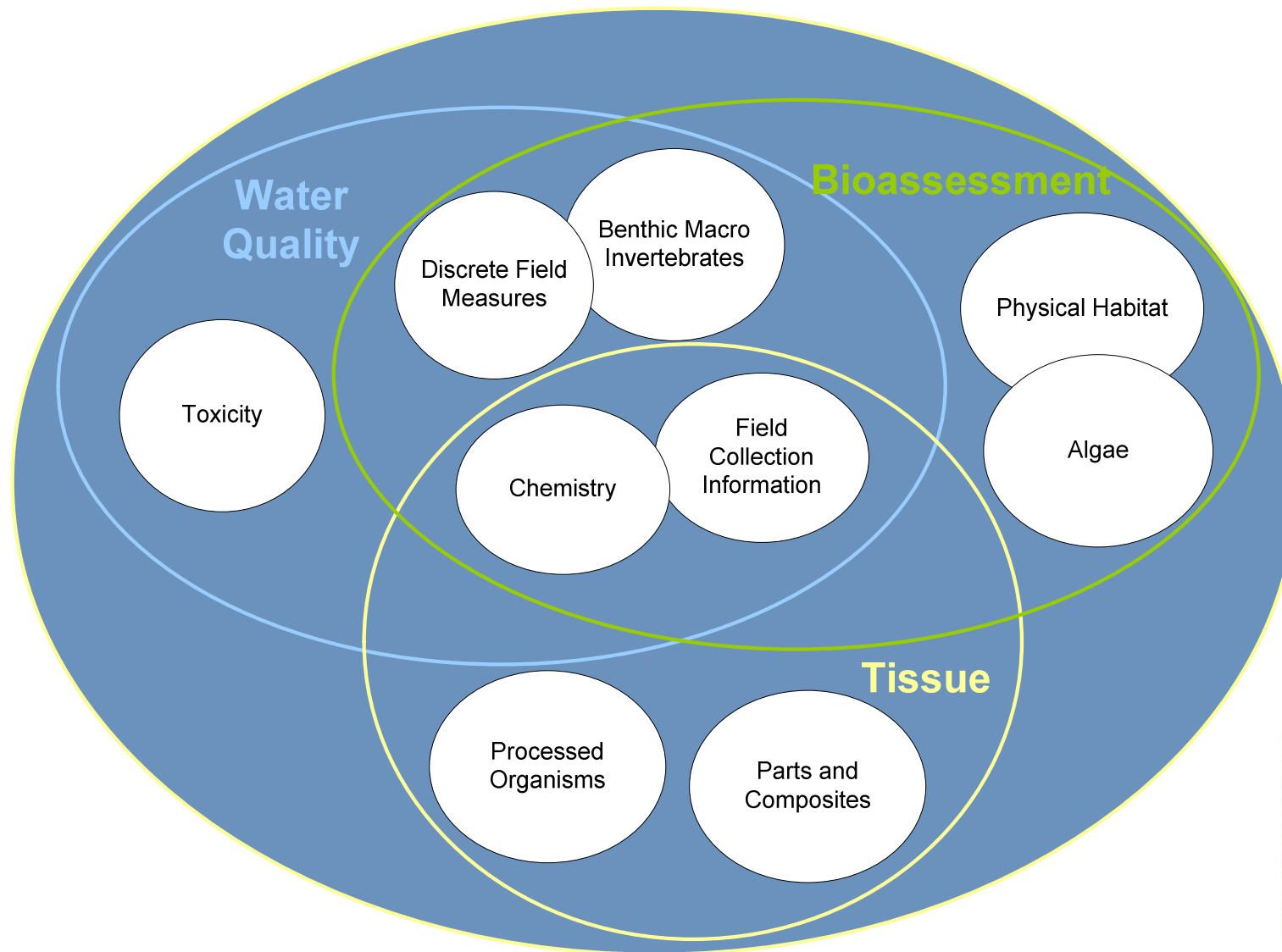


SWAMP Data Management Functions

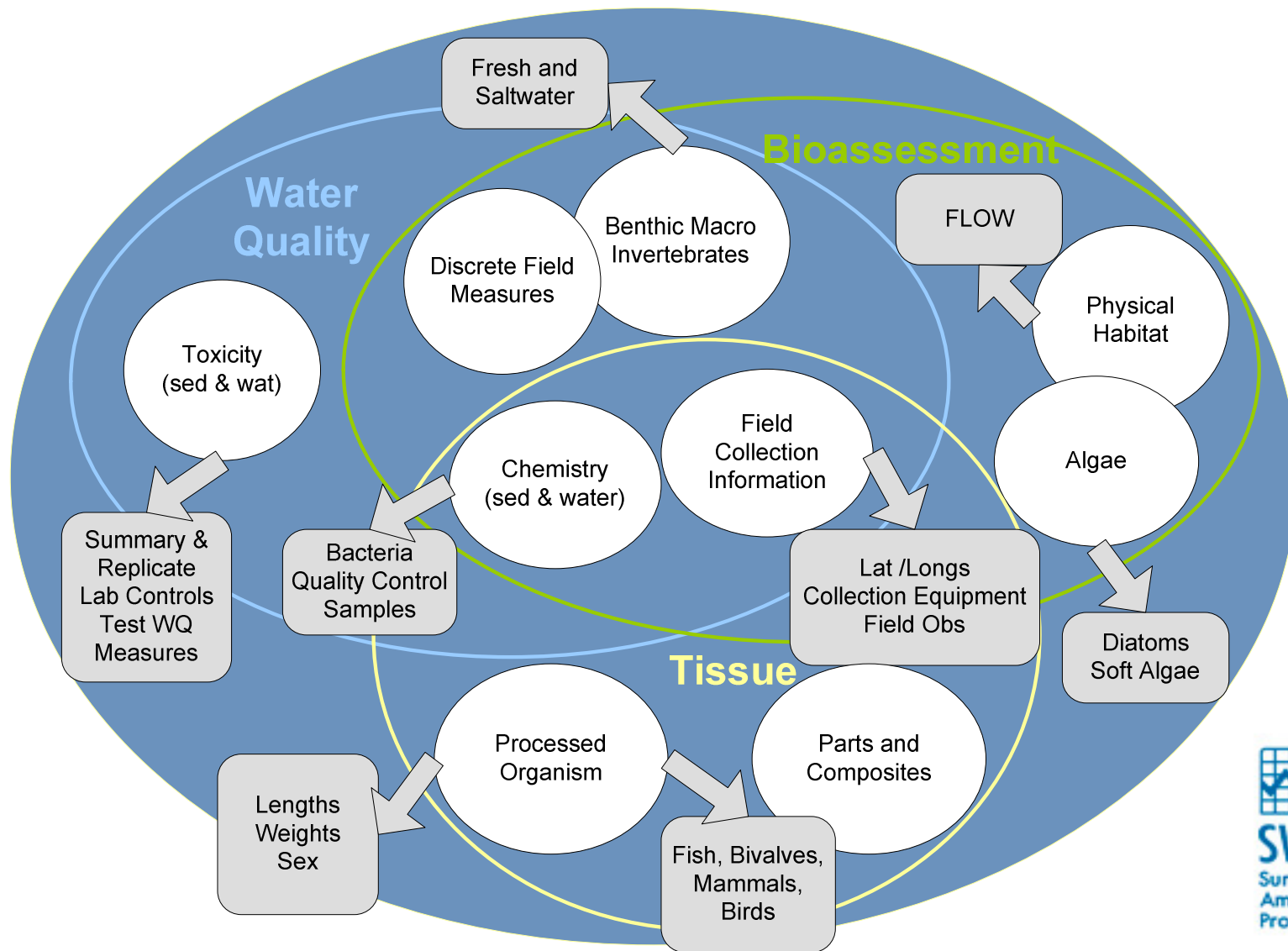
- State-wide monitoring projects
 - Healthy Lakes Program (Tissue)
 - Healthy Streams Initiative (Bioassessment)
 - Stream Pollution Assessment (Water Quality)
- 9 Regional Monitoring Programs
- State-wide “umbrella” Comparability Help Desk



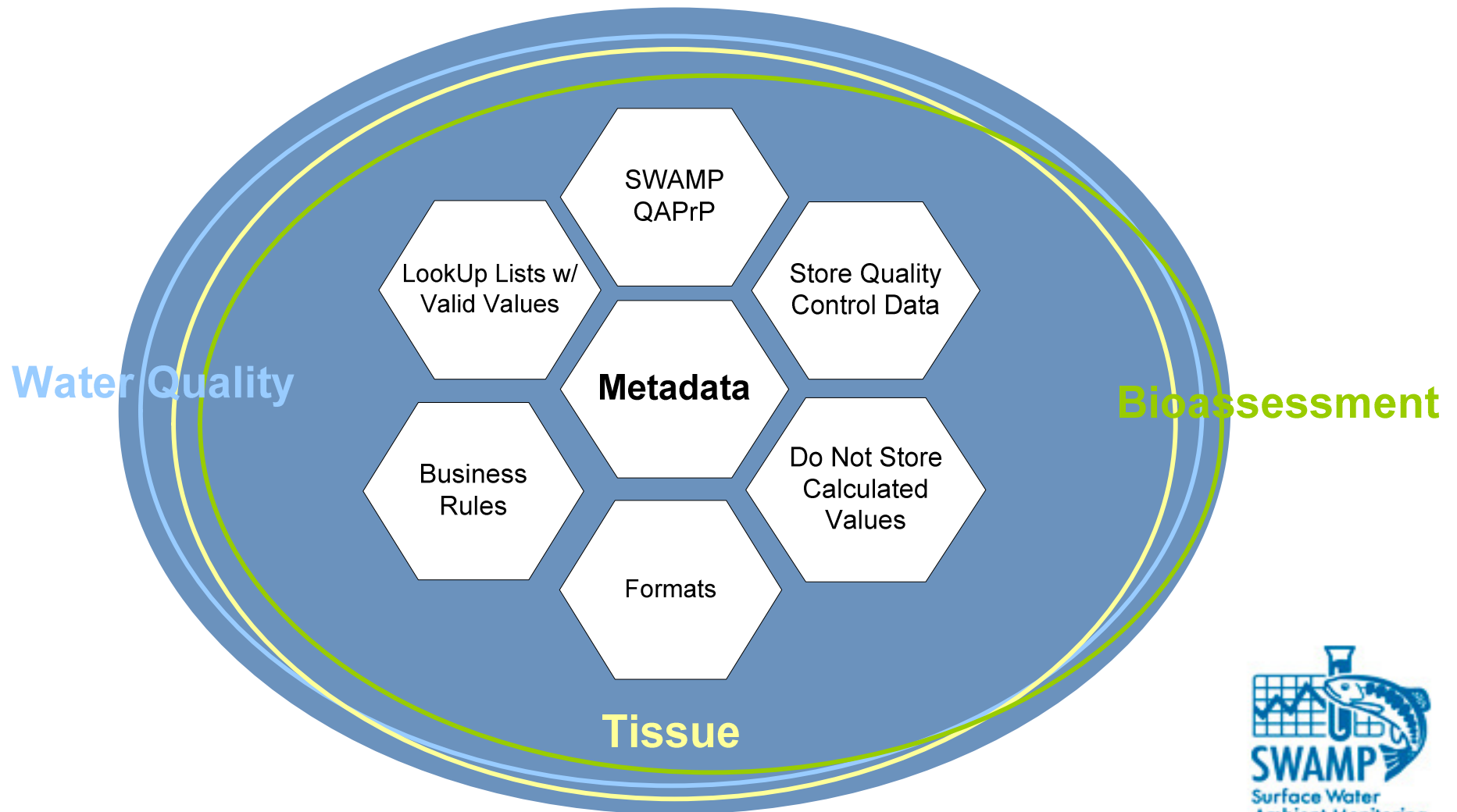
SWAMP v2.5 Data Elements



SWAMP v2.5 Data Elements



Components of SWAMP Data Comparability



Online Resources for Comparability

- STATE Waterboard Website

http://www.swrcb.ca.gov/water_issues/programs/swamp/

The screenshot shows the official website of the California State Water Resources Control Board (SWRCB). The header includes the CA.GOV logo, the California Environmental Protection Agency (CalEPA) logo, and the SWRCB name. A navigation menu at the top lists: Home, About Us, Public Notices, Board Info, Board Decisions, Water Issues (selected), Publications/Forms, and Press Room. A search bar is located in the top right corner. Below the navigation menu, a green banner reads "Programs | Available Documents | Hot Topics |". The main content area features a sidebar on the left with a link to "GOVERNOR SCHWARZENEGGER" and a list of links: Cal/EPA, State and Regional Water Boards' Map, Laws/Regulations, Plans/Policies, Programs, and Decisions Pending and Opportunities for Public Participation. The main content area has a breadcrumb trail: Home → Water Issues → Programs → Swamp. Below this is a large banner for the "SWAMP Surface Water Ambient Monitoring Program". The main content area is titled "SOUND SCIENCE FOR INFORMED WATER QUALITY MANAGEMENT" and includes a sub-menu: Welcome!, About, Tools, Reports, Contacts, and Links. The "Tools" sub-menu lists: Monitoring & Assessment Plans, Data Sources, Comparability, Tool Development, Methods, Data Management, Quality Assurance, and Indicator Development. At the bottom, there is a "SWAMP HIGHLIGHTS..." section with several links: New: Bioaccumulation Report Available, Download: 2008 SWAMP Brochure, Citizen Action: Clean Water Team, Sign up: SWAMP Monitor Newsletter, Downloadable Posters, Moss Landing Marine Laboratories, Download: Regional Fact Sheets, California Environmental Data Exchange Network, and Improving Quality Assurance Programs. A large SWAMP logo is visible on the right side of the page.

CA.GOV CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
STATE WATER RESOURCES CONTROL BOARD

Home About Us Public Notices Board Info Board Decisions **Water Issues** Publications/Forms Press Room

Programs | Available Documents | Hot Topics |

GOVERNOR SCHWARZENEGGER
Visit his Website

- Cal/EPA
- State and Regional Water Boards' Map
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Home → Water Issues → Programs → Swamp

SWAMP
Surface Water Ambient Monitoring Program

SOUND SCIENCE FOR INFORMED WATER QUALITY MANAGEMENT

Welcome! About Tools Reports Contacts Links

- Monitoring & Assessment Plans
- Data Sources
- Comparability
- Tool Development
- Methods
- Data Management
- Quality Assurance
- Indicator Development

SWAMP HIGHLIGHTS...

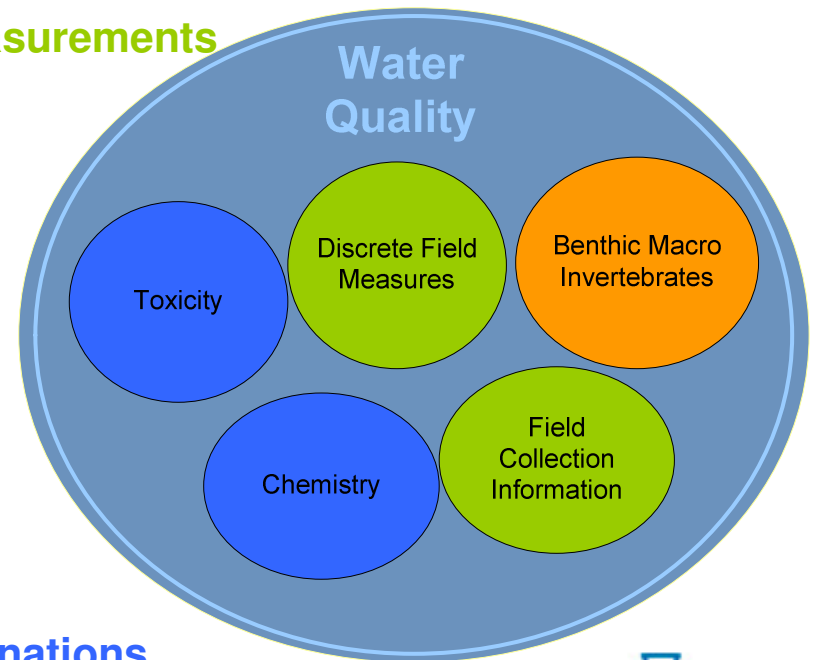
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SWAMP
Surface Water Ambient Monitoring Program



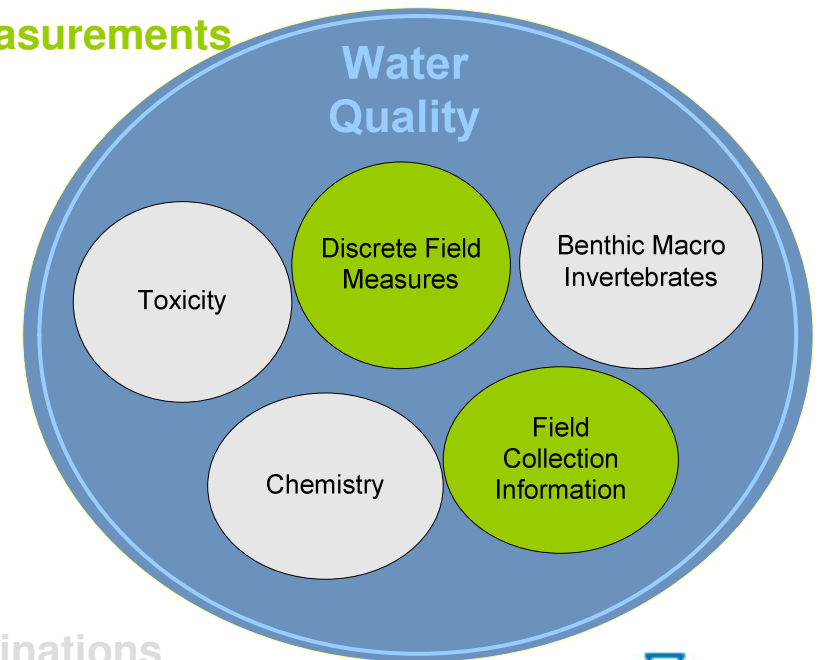
Water Quality Elements

- Meet project QAPP and SWAMP MQO requirements
- Sampling Protocols (not required)
 - F&G sampling SOP as example
- MS Access or Excel
- Field Collection Information & Discrete Field Measurements
 - Stations Template
 - Field Data Sheets (not required)
 - Field Data Templates
- Chemistry & Toxicity Data
 - Use Templates (Reporting Formats)
 - Documentation (Business Rules)
 - Use File and Batch naming conventions
 - Report in SWAMP analyte / unit / matrix combinations
 - Online Checker
- Benthic Macro Invertebrates (in review)
 - Marine: follow SCAMIT Taxonomy



Water Quality Elements

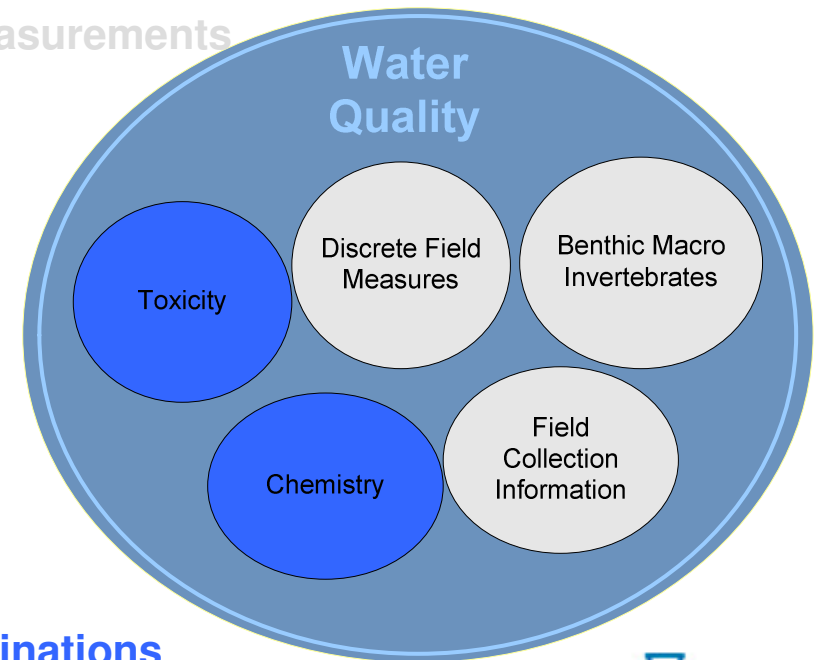
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Data Checker Error Reports

1. Checks Template Formats

Moss Landing Marine Labs Mail - Inbox ... MPSL » SWAMP v2.5 Database SWAMP Data Checker Results

Error: Worksheet missing. Please include both a Results and a LabBatch worksheet. Spaces behind or in front of a worksheet name will cause errors with the loaders.

[Back to Main Page](#)

2. Checks Spreadsheet Content

Some errors ok
Some not

1	Errors in Results Worksheet									
2										
3										
4										
5	Error	ExcelRow	Field	Value	LabSampleID	StationCod	SampleDate	SampleTypeCod	Replica	AnalyteN
280	Sample not found in database	316	Columns B-N		L-024-09-15	635TRKSED	Sep 22 2008 12:00AM	Integrated	1	Thionazin
281	Sample not found in database	317	Columns B-N		L-024-09-15	635TRKSED	Sep 22 2008 12:00AM	Integrated	1	Tokuthion
282	Sample not found in database	318	Columns B-N		L-024-09-15	635TRKSED	Sep 22 2008 12:00AM	Integrated	1	Merphos
283	Sample not found in database	319	Columns B-N		L-024-09-15	635TRKSED	Sep 22 2008 12:00AM	Integrated	1	Trichlorona
284	Sample not found in database	320	Columns B-N		L-024-09-15	635TRKSED	Sep 22 2008 12:00AM	Integrated	1	Triphenyl p
285	Sample not found in database	321	Columns B-N		L-024-09-15	635TRKSED	Sep 22 2008 12:00AM	Integrated	1	Moisture
286	Missing CollectionTime, a required field.	342	CollectionTime	{IS NULL}	L-024-09-MB	LABQA	Jan 19 2009 12:00AM	LabBlank	1	Chlorpyrifo
287	Sample not found in database	342	Columns B-N		L-024-09-MB	LABQA	Jan 19 2009 12:00AM	LabBlank	1	Chlorpyrifo
288	Missing CollectionTime, a required field.	343	CollectionTime	{IS NULL}	L-024-09-MB	LABQA	Jan 19 2009 12:00AM	LabBlank	1	Chlorpyrifo
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290	Missing CollectionTime, a required field.	344	CollectionTime	{IS NULL}	L-024-09-MB	LABQA	Jan 19 2009 12:00AM	LabBlank	1	Diazinon

Data Checker Error Reporting

Unmatched LabBatch in Results Worksheet	28	LabBatch	"WPCL_L-396-02_W_TPHOS"	"IPS-Nut-05-47"	"LABQA"	"Jan 11 2006 12:00AM"	"CRM"	"1"	"Phosphorus as P"	"None"	"WPCL_L-396-02_W_TPHOS"
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[Back to Main Page](#)

Errors found in LabBatch Worksheet:

Error	Excel Row	Error Field	Erroneous Value	LabBatch	LabAgencyCode	LabBatchSubmissionCode	SubmittingAgencyCode	LabBatchComm
Unmatched LabBatch in LabBatch Worksheet	2	LabBatch	"WPCL_L-151-07_S_PBO"	"WPCL_L-151-07_S_PBO"	"DFG-WPCL"	"A"	"DFG-WPCL"	"{IS NULL}"

[Troubleshooting Report Errors & LookUp Lists](#)

Submit Data To SWAMP

[Back to Main Page](#)

Non-SWAMP projects cannot be submitted

Your data is not submittable for the following reason:

ProjectCode(s) not recognized, suggesting data is not SWAMP funded. Please contact [Susan Mason](#) at 831-771-4119



Where do I submit my data?

CEDEN California Environmental Data Exchange Network (www.ceden.org)

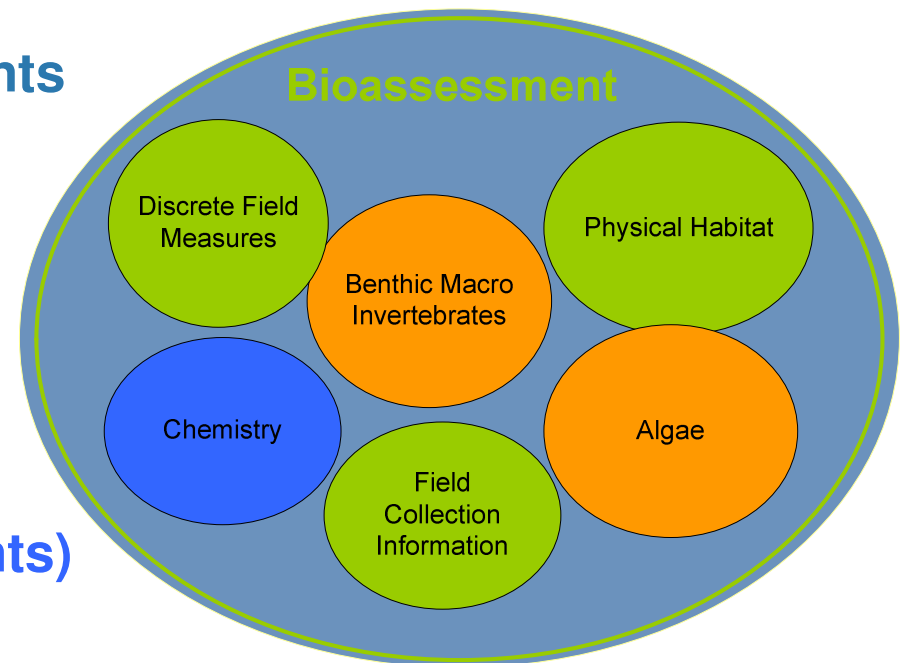
Regional Data Centers: receive regional as well as programmatic data

- UC Davis Aquatic Ecosystems Analysis Laboratory (UCD-AEAL)
Northern & Central Valley areas of CA,
Michael Johnson (mbjohnson@ucdavis.edu)
- San Francisco Estuary Institute (SFEI):
Northern CA and San Francisco Bay Region,
Cristina Grosso (cristina@sfei.org)
- Moss Landing Marine Laboratories-Marine Pollution Studies Lab (MLML-MPSL)
Central Coast of CA
Mark Pranger (pranger@mlml.calstate.edu)
- Southern California Coastal Water Resource Project (SCCWRP)
Southern CA
Shelly Moore (shellym@sccwrp.org)



- Meet project QAPP
- SWAMP MQO (in development)
- Sampling Protocols (REQUIRED)
 - DFG Wadeable Stream Assessments
- Field Collection, Field Measures, Physical Habitat: Full Method
 - Field Data Sheets (required)
 - MS Access Stream Assessment
- Chemistry Data (see WQ data elements)
- Benthic Macro Invertebrates & Algae
 - BMIs: Follow SAFIT Taxonomy
 - Algae: Working Group

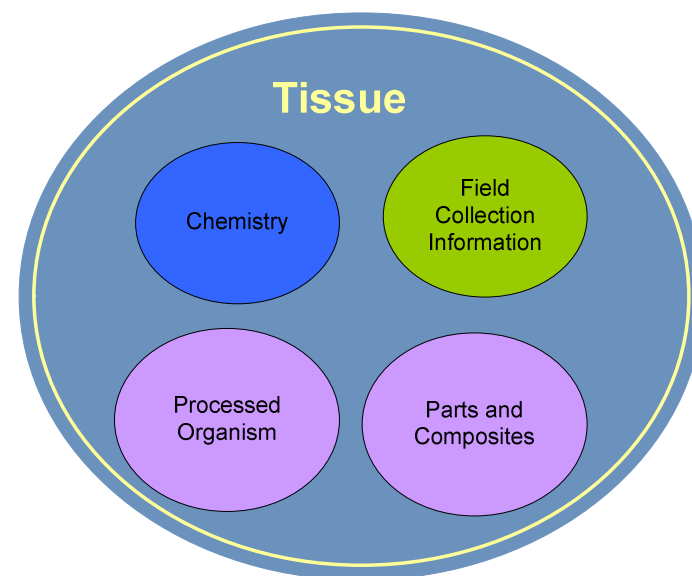
Bioassessment Elements





- Meet project QAPP and SWAMP MQO requirements
- Sampling Protocols (not required)
- MS Access or Excel
- **Field Collection**
 - **Field Data Sheets (Fresh & Saltwater)**
- Processed Organisms, Parts & Composites
 - Lab Homogenization Sheets
 - Templates
 - Documentation
- Chemistry Data (see WQ data elements)
 - Templates specific to Tissue
 - Documentation

Tissue Elements



Credits!

Cassandra Lamerdin: DM Coordinator / Tissue Elements & Loading / Project Liaison

Susan Mason: Web Content / Documentation / Toxicity Loading / Laboratory Liaison

Mark Pranger: Database Design / Toxicity Elements / RDC Liaison / CEDEN Coordination

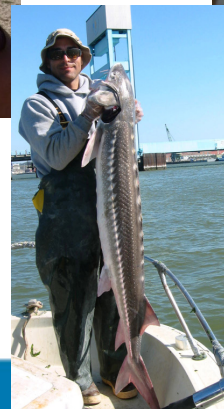
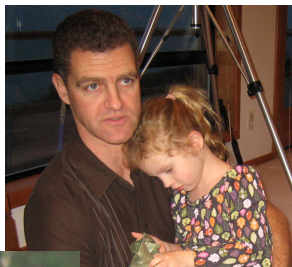
George Radojevic: Database Administrator / Data Transfers / Systems Automation

Kyle Reynolds (PT): Chemistry Loading

Marco Sigala: Bioassessment Elements & Loading / Logistics Coordination

Stacey Swenson: Help Desk / Verification Processes / Project Liaison

Brian Thompson: RDC and SWAMP Data Programmer / System Automation



SWAMP Data Management Comparability

hosted by the Marine Pollution Studies Laboratory.

Home | Swamp Comparability | Resources & Downloads | Data Checker | Online Data | FAQs | Calendar | Staff | FTP

Help Desk

Database Comparability

Quality Assurance Comparability

SWAMP Comparability: Overview*

- June 25, 2009: 11-12 (Valerie Connor)

SWAMP Comparability: Quality Assurance*

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SWAMP Comparability: Data Management

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*** webinars are posted**

The SWAMP Help Desk phone lines act as an information resource and assist participants and projects that are interested in achieving SWAMP-comparability. It is the intention of SWAMP to encourage comparability by providing participants with program-comparable database format, management guidelines and quality assurance systems. The phone lines are staffed by the SWAMP Data Management (DMT) and Quality Assurance (QAT) Teams to address database comparability and quality assurance comparability questions, respectively.

Database Comparability – Contact Stacey Swenson at 831-771-4114 or by [email](#)

The Help Desk Database services include:

- Distribution of available resources such as webinars on project information
- Addressing questions regarding SWAMP database comparability requirements
- Distribution of Microsoft Excel data templates and formats
- Distribution of a replicable/non-replicable Microsoft Access SWAMP database shell
- Limited information and technical support where interested party is organized in a group data management structure
- Regional, periodic informational seminars conducted in an organized group setting

The Help Desk Database services do not include:

- Technical support for maintaining and synchronizing Microsoft Access databases
- Distributing data from the Microsoft Access database
- Intensive Microsoft Access and SWAMP database training
- Management of data for groups outside of SWAMP-funded RWQCB and SWRCB monitoring programs

Quality Assurance Comparability – Contact Will Hagan at 206-525-0491 or by [email](#)

Help Desk Quality Assurance services include:

The [Staff](#) page lists the contact information for MPSL.

Official SWAMP Website

For comprehensive SWAMP content, visit the SWRCB's [official website](#)

CEDEN

California Environmental Data Exchange Network
[CEDEN Link](#)

FTP

Allows file sharing when conducting state and Regional Board SWAMP business on the [FTP site](#)

1. Online Resources
SWAMP- MLML
website

2. Comparability Fact
Sheet

3. Comparability
Webinars & More
Training

4. Help Desk
Email and Phone



Questions?

