

# California's Surface Water Ambient Monitoring Program

“SWAMP” Update -  
2003

Val Connor  
Division of Water Quality

# The Challenge:

- 190 hydrologic units (655 hydrologic sub-areas)
- 211,000+ miles rivers and streams
- Over 10,000 lakes (1.6+ million acres)
- Over 1,300,000+ acres of bays and estuaries
- 1,609 miles of coastline



# The Regulatory Challenge:

- CWA section 305(b) report
- CWA section 303(d) list, TMDLs
- Porter Cologne, Basin Plans
- Implementation, 319h
- CWA section 106(e)

# SWAMP

- Required by AB 982 (WC sec.13191)
- Comprehensive state program (surface water)
- Coordinate all Board water quality monitoring Programs/projects
- High Quality Data
- Comparable data



# Advisory Groups

- AB 982 Public Advisory Group
  - 12 “regulated” community
  - 12 “environmental” groups
- SWAMP RT (State and Fed. Agencies)
- Scientific Planning and Review Committee (SPARC)

# SWAMP November 2000

- Proposed a cost efficient monitoring program to meet all CWA needs for all water types and pollutant sources
- Requested
  - \$59 to \$115 million (\$4,900,000)
  - 87 to 132 PYs (10 PYs)
  - WDPF



# 2003-04 Reality Check

- Existing goals don't match the fiscal reality or current program
- Need realistic short-term objectives
- Need longer-term implementation strategy

# Implementation Strategy - due June 2004

- Monitoring Program Strategy
- Monitoring Objectives
- Monitoring Design
- Core Indicators of Water Quality
- Quality Assurance
- Data Management
- Data Analysis/Assessment (CALM)
- Reporting
- Programmatic Evaluation
- General Support and Infrastructure



# SWAMP Goals--2003

## Status

- Consistent and objective sampling, analysis and assessment methods:
  - Sampling: standard field protocols;
    - Training Module (CD) - March 2004
  - Analysis: performance based;
  - Assessment: 303(d) Policy - May 2004

# SWAMP Goals--2003

## Status

- Consistent data quality assurance:
  - Statewide QMP, 1st Ed.
  - Next Ed.: DQO's - screen Vs. definitive
- Tools:
  - Training Course (January 2004)
  - Template (Nov. 2003)
  - Bill Ray, SWAMP QAO



# SWAMP Goals--2003

## Status

- Centralized data management -
  - SWAMP database -
    - **chemical, toxicity and field data**
    - **tissue, pathogens, biological, habitat**

**FY 02-03**

**Discrete Field Information**

**Chemistry**

**Toxicity**

**Extended Field Information**

**SWAMP**

**Bacteria Indicators**

**FY 03-04**

**Tissue**

**Biological Assessment**

**Habitat Assessment**

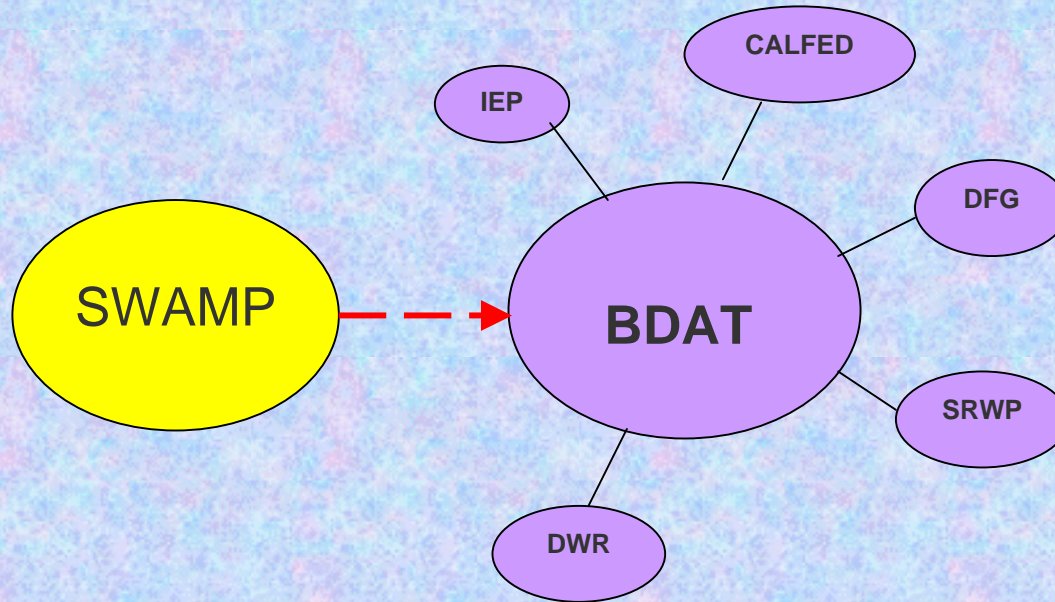


# SWAMP Goals--FY03-04

## Status (not yet!)

- Integrated data management
  - SWAMP--->BDAT (SCCWRP, RMP)
    - Link to STORET
  - SWAMP-->CA Water Quality Information System (CWQIS)
- Public Access

# Database Integration



**SWAMP = Surface Water Ambient Monitoring Program**  
**BDAT = Bay-Delta and Tributaries Database**  
**IEP = Interagency Ecological Program**  
**DFG = Department of Fish & Game**  
**SRWP = Sacramento River Watershed Program**  
**DWR = Department of Water Resources**  
**CALFED = State and Federal Interagency Group**



# SWAMP Goals--2003

## Status

- Monitor and interpret data for each hydrologic unit at least one time every five years
  - **1 - 2 years of data**
  - **Partner with local groups and agencies**
- Focus on all waters of the state without bias to known impairment
  - **US EPA EMAP Program**
    - **coastal & streams**
    - **probabilistic design**
    - **biological & habitat assessment**

# SWAMP Goals--2003

## Status

- Identify specific water quality problems
  - Evaluate all available information
- Assess effectiveness of water quality regulatory programs
  - Rely on other Board Programs
  - Initiated coordination efforts

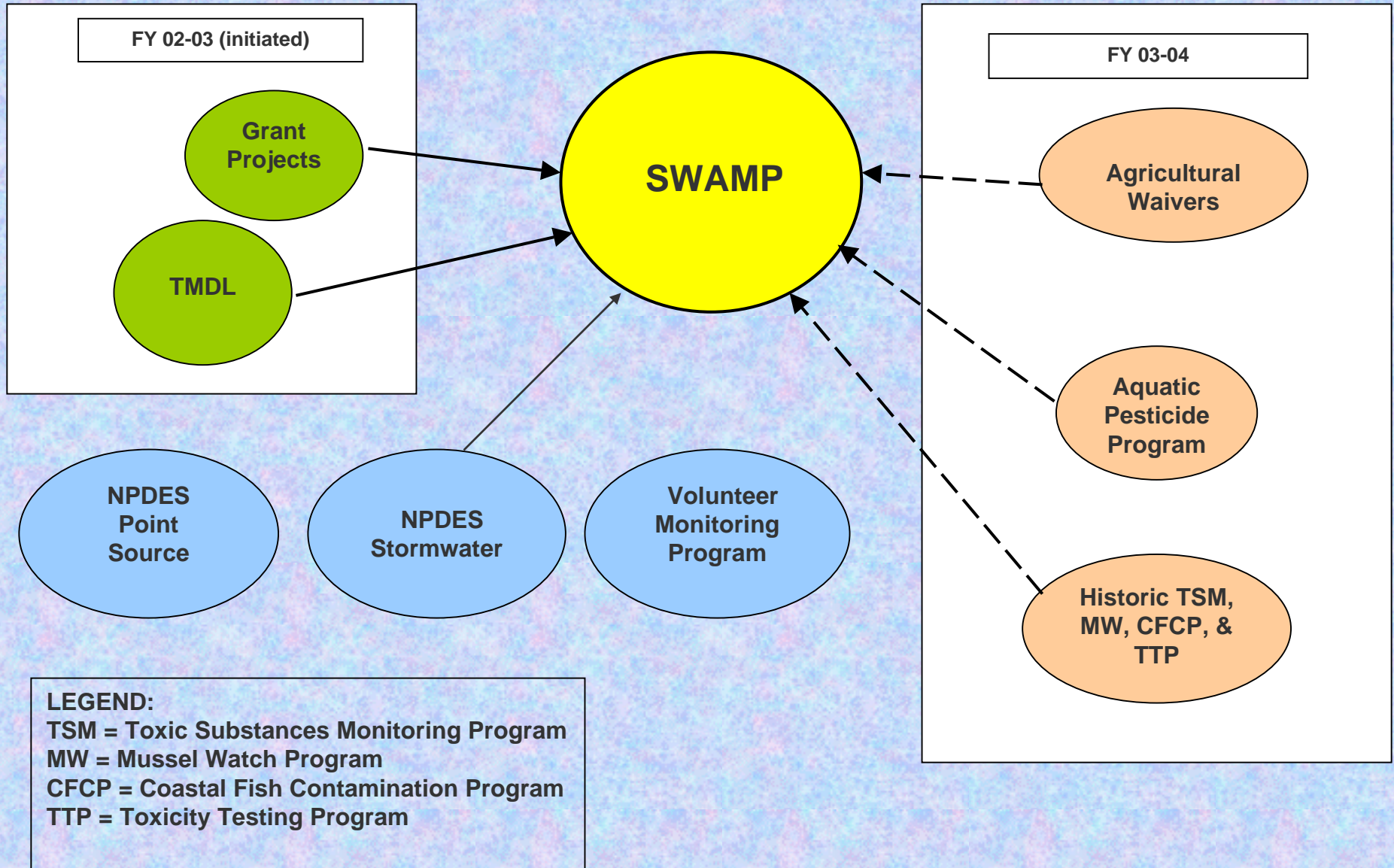


# Program Coordination

- FY 02-03:
  - TMDL Program
  - Grant Projects
- FY 03-04
  - (US EPA) EMAP (--->305b, 319h, EPIC)
  - Agriculture Waiver Program (R5)
  - Aquatic Pesticide Monitoring
- FY 04-05
  - Regional Storm water Monitoring
  - SB 72

# Monitoring Coordination

(Consistent data quality and reporting)





# Outstanding Issues - Insufficient Resources

- Increase in SWAMP “partners”
- Consistency/Comparability = Training
- QA Coordination
- Requesting/receiving data
- Resistance to change

# SWAMP Bioassessment Activities

- Summary Report of Existing Information (TT)
- Comparison of existing methods (SNARL, UCSB, CDFG)
- Establish Reference Conditions (CDFG, Region 5)
  - Sierra Foothill Region
  - Valley Floor



# SWAMP Bioassessment Activities

- EMAP (EPA, CDFG)
- CMAP (EPA, CDFG, NPS program)
- Regional monitoring plan design for NPDES stormwater permittees (SCCWRP)
- Method development for shallow estuaries (SCCWRP)

# Questions?

Val Connor

Assessment and TMDL Support Unit

Division of Water Quality

State Water Resources Control Board

(916) 341-5573

[connv@swrcb.ca.gov](mailto:connv@swrcb.ca.gov)

[swrcb.ca.gov/swamp](http://swrcb.ca.gov/swamp)