

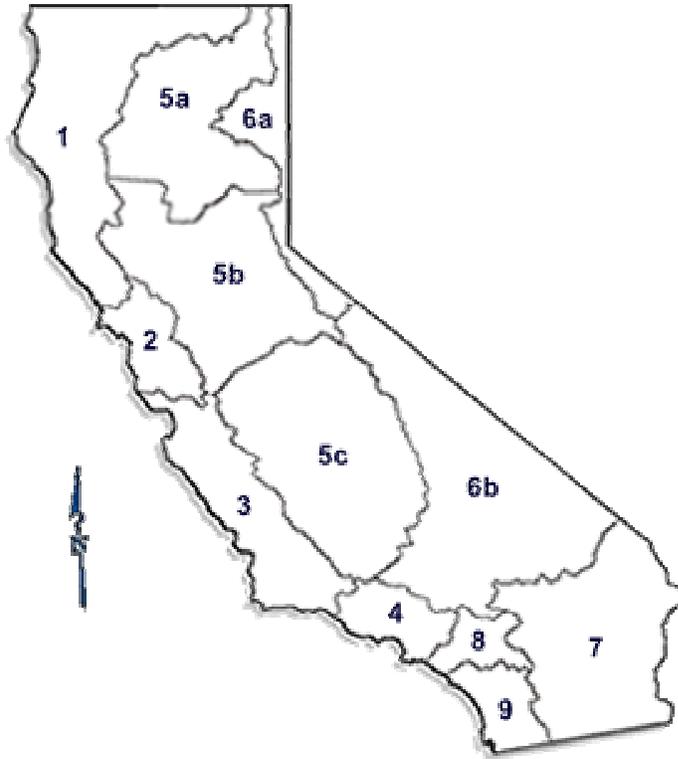
#### **Section A4. SWAMP Program Organization**

The SWAMP Program functions administratively under the leadership and auspices of the Assessment and TMDL Support Unit, within the TMDL Section of the Division of Water Quality at the California State Water Resources Control Board (SWRCB), and concurrently, is administered and managed regionally by SWAMP staff at the state's nine Regional Water Quality Control Boards (RWQCB's). The general mode of programmatic management and decision-making for administrative and technical issues is through consensus discussions that take place primarily at regular (bi-monthly) meetings of the SWAMP Roundtable. The Roundtable currently has representation from SWAMP staff at the SWRCB and all RWQCB's; representation from SWAMP staff from the California Department of Fish and Game, San Jose State University Foundation/Moss Landing Marine Laboratories, and the University of California-Davis/Granite Canyon Laboratory; and representation from the Morro Bay Foundation; and other agencies and organizations as desired and appropriate. Due to the complexity of describing the SWAMP program organization in detail, a thorough description of the SWAMP-specific programmatic organization and responsibilities is provided in **Appendix A**, along with all SWAMP participant contact information from Table 1 in Section A3.

#### **General Overview of the State Water Resources Control Board and the Regional Water Quality Control Boards**

The SWRCB was created by the Legislature of the state of California in 1967. The overall mission of the SWRCB is to ensure the highest reasonable quality of waters of the state, while allocating those waters to achieve the optimum balance of beneficial uses. The joint authority of water allocation and water quality protection enables the SWRCB to provide comprehensive protection for California's waters. The SWRCB consists of five full-time salaried members, each filling a different specialty position. Board members are appointed to four-year terms by the Governor and confirmed by the Senate. There are nine RWQCB's. The mission of the RWQCB's is to develop and enforce water quality objectives and implementation plans that will best protect the beneficial uses of the State's waters, recognizing local differences in climate, topography, geology and hydrology. Figure 1 provides a map of the geographic areas of jurisdiction of each RWQCB in California. Each RWQCB has nine part-time members appointed by the Governor and confirmed by the Senate. RWQCB's develop "basin plans" for their hydrologic areas, issue waste discharge requirements, take enforcement action against violators, and monitor water quality. The task of protecting and enforcing the many uses of water, including the needs of industry, agriculture, municipal districts, and the environment is an ongoing challenge for the SWRCB and RWQCB's.

**Figure 1. Map of the nine California Regional Water Quality Control Board geographic areas of jurisdiction**



- RWQCB 1 = North Coast Region**
- RWQCB 2 = San Francisco Bay Region**
- RWQCB 3 = Central Coast Region**
- RWQCB 4 = Los Angeles Region**
- RWQCB 5 = Central Valley Region**
  - (5a) = Redding Office**
  - (5b) = Sacramento Office**
  - (5c) = Fresno Office**
- RWQCB 6 = Lahontan Region**
  - (6a) = South Lake Tahoe Office**
  - (6b) = Victorville Office**
- RWQCB 7 = Colorado River Basin Region**
- RWQCB 8 = Santa Ana Region**
- RWQCB 9 = San Diego Region**

### **Overview of SWAMP-specific Program Organization**

The primary functional organizational chart for the SWAMP program is shown in Figure 2, followed by organizational charts for SWAMP field and analytical laboratory contractual services in Figure 3 (California Department of Fish and Game Master Contract), Figure 4 (U.S. Geological Survey Master Contract), and Figure 5 (Contracts directly specified/administered by RWQCB's for SWAMP services).

### **RESPONSIBILITIES OF PRIMARY SWAMP STAFF AT PARTICIPATING ORGANIZATIONS**

Contact information and organizational structure information was previously provided for key SWAMP staff at participating entities in Table 1 (Section A3) and in Figures 2-5 (Section A4). Because of the very large number of agencies, organizations, and individuals involved in this SWAMP Program, this section provides a summary only, and for primary staff only. A summary chart of the major field, laboratory, administrative, and technical reporting activities of all participating SWAMP entities is provided in Table 2 at the end of Section A4. Due to the complexity of describing the SWAMP program organization in detail, a thorough description of the SWAMP-specific programmatic organization and responsibilities is provided in **Appendix A**, along with all SWAMP participant contact information from Table 1 in Section A3.

Table 2, starting on the next page, provides a matrix of responsibilities and lists the entities involved in data collection efforts within the nine Regional Boards and the DWQ Clean Water Team, the Citizen Monitoring Program of the SWRCB.



**Table 2b. Summary of SWAMP Laboratory, Administrative, and Technical Reporting Responsibilities for Organizations Conducting Statewide Services and for RWQCB 1 and 2**

Entity for whom service is being conducted	Agency, University, Corporation, or Other Entity Conducting Service (and showing contract "route" where can)	ANALYTICAL LABORATORY SERVICES								Other services (QA, Data Mgmt, Stats, Interp Rept)	
		Org	Metal	Convent	Tox	Benthic	Biolog	Bact/	Sed		
		Chem	Chem	W.Q.	Test	Infauna	Assess	Path	charac		
<b>State Water Resources Control Board--Statewide Services</b>											
Organizations providing services for SWAMP statewide (services for all regions)	CDFG--statewide planning assistance, including technical workshops, WQMCC meetings, and SPARC meetings, statewide QA planning/QA oversight										1
	CDFG/SJSUF--statewide planning assistance, including technical workshops, WQMCC meetings, and SPARC meetings										1
	CDFG/UCD Granite Cyn--statewide planning assistance, including technical workshops, WQMCC meetings, and SPARC meetings										1
	CDFG/SJSUF--statewide data mgmt										1
	CDFG/SJSUF/SCCWRP--social data mgmt										1
	CDFG/SJSUF/SFEI--centvall data mgmt										1
	CDFG/SJSUF/Frontier Geo--ext QA										1
	CDFG/SJSUF/Don Stevens--stats										1
<b>North Coast Regional Water Quality Control Board</b>											
RWQCB 1: North Coast Region	R1 staff										1
	R1 student contract staff										
	R1 citizen monitors										
	CDFG Nimbus--Organics	1									
	CDFG Nimbus--Conv WQ			1							
	CDFG/SJSUF--Metals		1								
	CDFG Nimbus/CSU Chico--ABL Bioassess						1				1
	CDFG/SJSUF/Applied Mar. Sci.--conv wq			1							
	CDFG/SJSUF/Sierra Foothills--conv wq			1							
	SWRCB/Sequoia Analytical										
	SWRCB/North Coast Labs										
SWRCB/Basic Laboratory											
USGS											
<b>San Francisco Bay Regional Water Quality Control Board</b>											
RWQCB 2: San Francisco Bay Region	R2 staff										1
	R2 student contract staff										1
	R2 citizen monitors										
	CDFG Nimbus--Organics	1									
	CDFG Nimbus--Conv WQ			1							
	CDFG/SJSUF--Metals		1								
	CDFG Nimbus/CSU Chico--ABL Bioassess						1				
	CDFG/SJSUF--Sample Collection										
	CDFG/UCD Granite Cyn--Tox Testing				1						
	CDFG/SJSUF/Applied Mar. Sci.--conv wq			1						1	
	CDFG/SJSUF/Sierra Foothills--conv wq			1							
SWRCB/Sequoia Analytical--bact								1			



**Table 2d. Summary of SWAMP Laboratory, Administrative, and Technical Reporting Responsibilities for RWQCB 3, 4, and 5**

Entity for whom service is being conducted	Agency, University, Corporation, or Other Entity Conducting Service (and showing contract "route" where can)	ANALYTICAL LABORATORY SERVICES								Other services (QA, Data Mgmt, Stats, Interp Rept)
		Org Chem	Metal Chem	Convent W.Q.	Tox Test	Benthic Infauna	Biolog Assess	Bact/ Path	Sed charac	
<b>Central Coast Regional Water Quality Control Board</b>										
RWQCB 3: Central Coast Region	R3 staff									1
	R3 student contract staff									
	R3 citizen monitors									
	CDFG Nimbus--Organics	1								
	CDFG/SJSUF--Metals		1							
	CDFG Nimbus/CSU Chico--ABL Bioassess						1			1
	CDFG/SJSUF--Sample Collection									
	CDFG/UCD Granite Cyn--Tox Testing				1					1
	CDFG/SJSUF/Applied Mar. Sci.--conv wq			1					1	
SWRCB/Creek Laboratory			1				1			
SWRCB/BC Labs	1	1	1				1			
<b>Los Angeles Regional Water Quality Control Board</b>										
RWQCB 4: Los Angeles Region	R4 staff									1
	R4 student contract staff									
	R4 citizen monitors									
	CDFG Nimbus--Organics	1								
	CDFG Nimbus--Conv WQ			1						
	CDFG/SJSUF--Metals		1							
	CDFG Nimbus/CSU Chico--ABL Bioassess						1			1
	CDFG/SJSUF--Sample Collection									
	CDFG/UCD Granite Cyn--Tox Testing				1					1
CDFG/SJSUF/Applied Mar. Sci.--conv wq			1					1		
CDFG/SJSUF/Sierra Foothills--conv wq			1							
<b>Central Valley Regional Water Quality Control Board</b>										
RWQCB 5: Central Valley Region	R5 staff			1				1		1
	R5 student contract staff			1				1		
	R5 citizen monitors									
	CDFG/MLML/SJS Sample Collection									
	CDFG/UCD/Granite Cyn Tox Testing				1					
	CDFG/SJS/Applied Marine Sciences								1	
	SWRCB/UC Davis - Aquatic Toxicology Lab				1		1			1
	SWRCB/UC Davis - LAWR	1		1						
	SWRCB/UC Davis - Aquatic Limnology Lab			1						
	SWRCB/Plumas Corporation			1					1	
	SWRCB/Northern Cal-Nevada RCD			1					1	
	SWRCB/Twining Laboratories	1	1	1					1	
	SWRCB/Weck Laboratories		1							
	SWRCB/Basic Laboratory	1	1	1				1		
SWRCB/So. Dakota St. Univ.--Olsen Chem Lab	1	1	1							
SWRCB/Countyof Madera--Public Wks										
SWRCB/Sierra Foothill Laboratory			1				1			

**Table 2e. Summary of SWAMP Field Activity Responsibilities for Organizations Conducting Statewide Services and for RWQCB 6, 7, 8, 9 and DWQ**

Entity for whom service is being conducted	Agency, University, Corporation, or Other Entity Conducting Service (and showing contract "route" where can)	FIELD SAMPLE COLLECTION AND FIELD DATA MEASUREMENTS								
		Sample Collection					Pre-collect	Probe	Flow/veloc	Phys Habit
		Water	Sed	Tiss	Benth	Bugs	site recon	measure	measure	Assess
<b>Lahontan Regional Water Quality Control Board</b>										
RWQCB 6: Lahontan Region	R6 staff	1				1	1	1	1	
	R6 student contract staff									
	R6 citizen monitors									
	USGS--Carnelian Bay	1					1	1	1	
	SWRCB/UC Santa Barbara-SNARL					1	1	1	1	
	SWRCB/NEL Lab									
	SWRCB/High Sierra Labs									
	SWRCB/Desert Research Institute									
<b>Colorado River Basin Regional Water Quality Control Board</b>										
RWQCB 7: Colorado River Basin Region	R7 staff	1					1	1	1	
	R7 student contract staff									
	R7 citizen monitors									
	CDFG Nimbus--Organics									
	CDFG Nimbus--Conv WQ									
	CDFG/SJSUF--Metals									
	CDFG Nimbus/CSU Chico--ABL Bioassess					1	1	1	1	
	CDFG/SJSUF--Sample Collection	1	1					1	1	
	CDFG/UCD Granite Cyn--Tox Testing									
	CDFG/SJSUF/Applied Mar. Sci.--conv wq									
	CDFG/SJS/Babcock & Sons, Inc.									
CDFG/SJSUF--Sierra Foothills conv wq							1	1		
	USGS-San Diego	1	1							
<b>Santa Ana Regional Water Quality Control Board</b>										
RWQCB 8: Santa Ana Region	R8 staff	1	1		1		1	1	1	
	R8 student contract staff									
	R8 citizen monitors	1			1		1	1	1	
	SWRCB/ABC Labs				1		1	1	1	
	SWRCB/CRG Labs	1	1				1	1	1	
	SWRCB/SCCWRP									
<b>San Diego Regional Water Quality Control Board</b>										
RWQCB 9: San Diego Region	R9 staff					1	1	1	1	
	R9 student contract staff									
	R9 citizen monitors	1				1	1	1	1	
	CDFG Nimbus--Organics									
	CDFG Nimbus--Conv WQ									
	CDFG/SJSUF--Metals									
	CDFG Nimbus/CSU Chico--ABL Bioassess					1	1	1	1	
	CDFG/SJSUF--Sample Collection	1	1	1				1	1	
	CDFG/UCD Granite Cyn--Tox Testing									
CDFG/SJSUF/Applied Mar. Sci.--conv wq										
	CDFG/SJSUF/Sierra Foothills--conv wq									
<b>SWRCB/Division of Water Quality</b>										
DWQ	DWQ SWAMP staff									
	DWQ Clean Water Team staff	1	1			1	1	1	1	

**Table 2f. Summary of SWAMP Laboratory, Administrative, and Technical Reporting Responsibilities for RWQCB 6, 7, 8, 9 and DWQ**

Entity for whom service is being conducted	Agency, University, Corporation, or Other Entity conducting service (and showing contract "route" where can)	ANALYTICAL LABORATORY SERVICES								Other services (QA, Data Mgmt, Stats, Interp Rept)
		Org	Metal	Convent	Tox	Benthic	Biolog	Bact/	Sed	
		Chem	Chem	W.Q.	Test	Infauna	Assess	Path	charac	
Lahontan RWQCB 6: Lahontan Region	Regional Water Quality Control Board									
	R6 staff			1						1
	R6 student contract staff									
	R6 citizen monitors									
	USGS--Carnelian Bay	1	1	1						1
	SWRCB/UC Santa Barbara-SNARL						1			1
	SWRCB/NEL Lab	1	1	1						
Colorado River RWQCB 7: Colorado River Basin Region	Basin Regional Water Quality Control Board									
	R7 staff							1		1
	R7 student contract staff									
	R7 citizen monitors									
	CDFG Nimbus--Organics	1								
	CDFG Nimbus--Conv WQ			1						
	CDFG/SJSUF--Metals		1							
	CDFG Nimbus/CSU Chico--ABL Bioassess						1			1
	CDFG/SJSUF--Sample Collection									
	CDFG/UCD Granite Cyn--Tox Testing				1					
Santa Ana RWQCB 8: Santa Ana Region	Regional Water Quality Control Board									
	R8 staff									1
	R8 student contract staff									
	R8 citizen monitors									
	SWRCB/ABC Labs				1	1				
	SWRCB/CRG Labs	1	1	1				1	1	
	SWRCB/SCCWRP									1
San Diego RWQCB 9: San Diego Region	Regional Water Quality Control Board									
	R9 staff									1
	R9 student contract staff									
	R9 citizen monitors									
	CDFG Nimbus--Organics	1								
	CDFG Nimbus--Conv WQ			1						
	CDFG/SJSUF--Metals		1							
	CDFG Nimbus/CSU Chico--ABL Bioassess						1			
	CDFG/SJSUF--Sample Collection									
DWQ	SWRCB/Division of Water Quality									
	DWQ SWAMP staff									1
	DWQ Clean Water Team staff			1				1	1	1

Figure 2: State of California's **Surface Water Ambient Monitoring Program ("S.W.A.M.P.")**  
Organizational Chart for Primary-Level Responsibilities

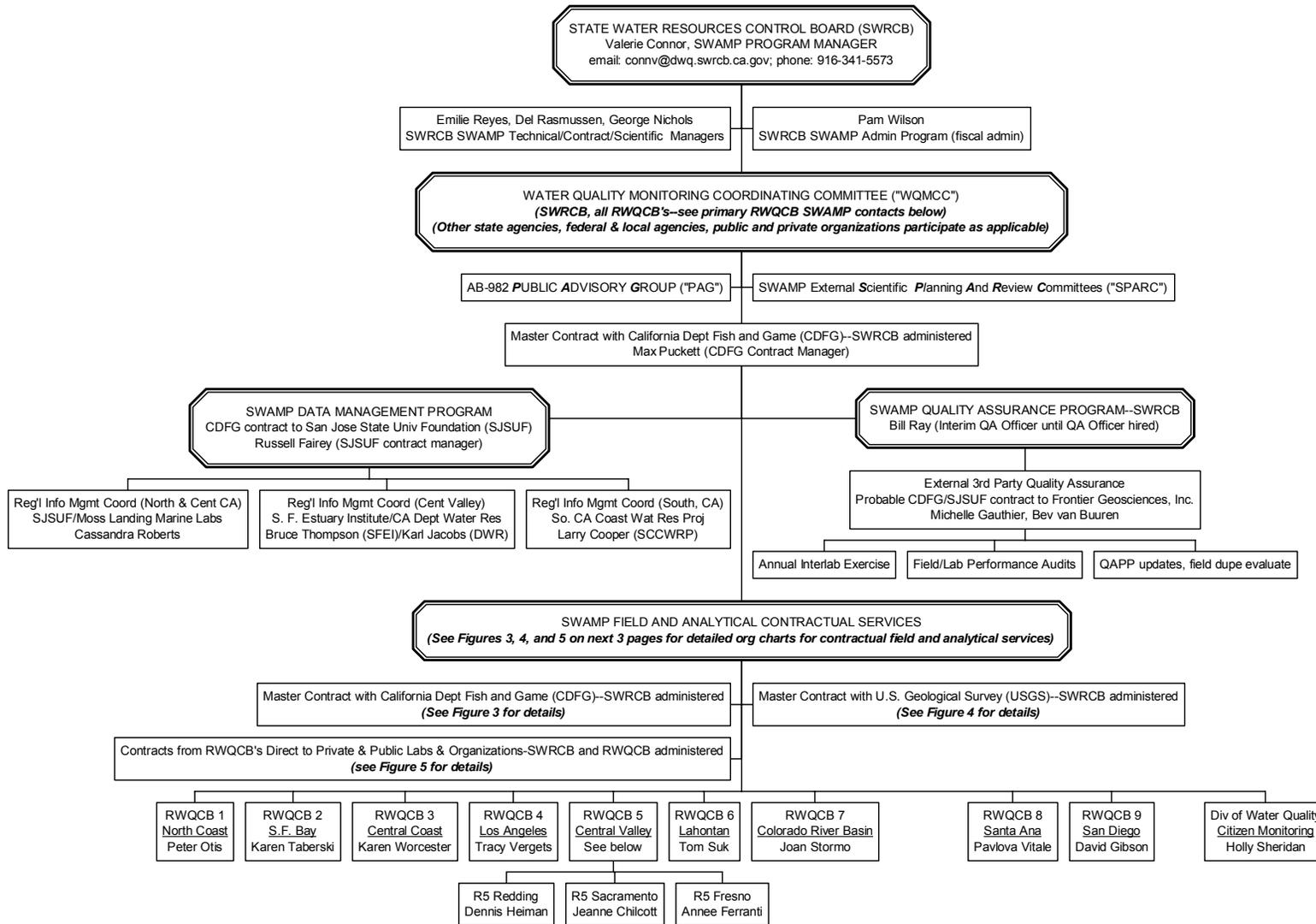
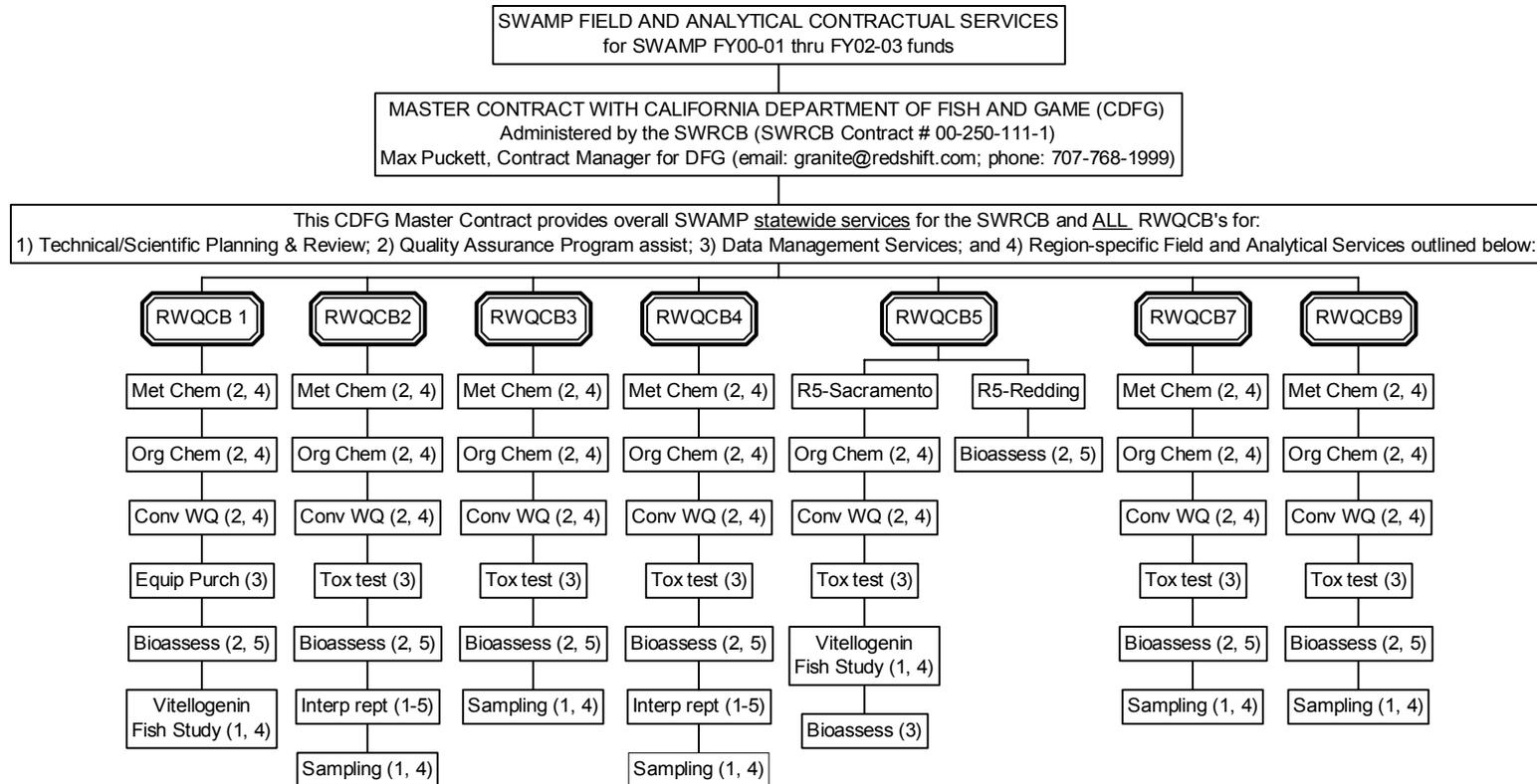


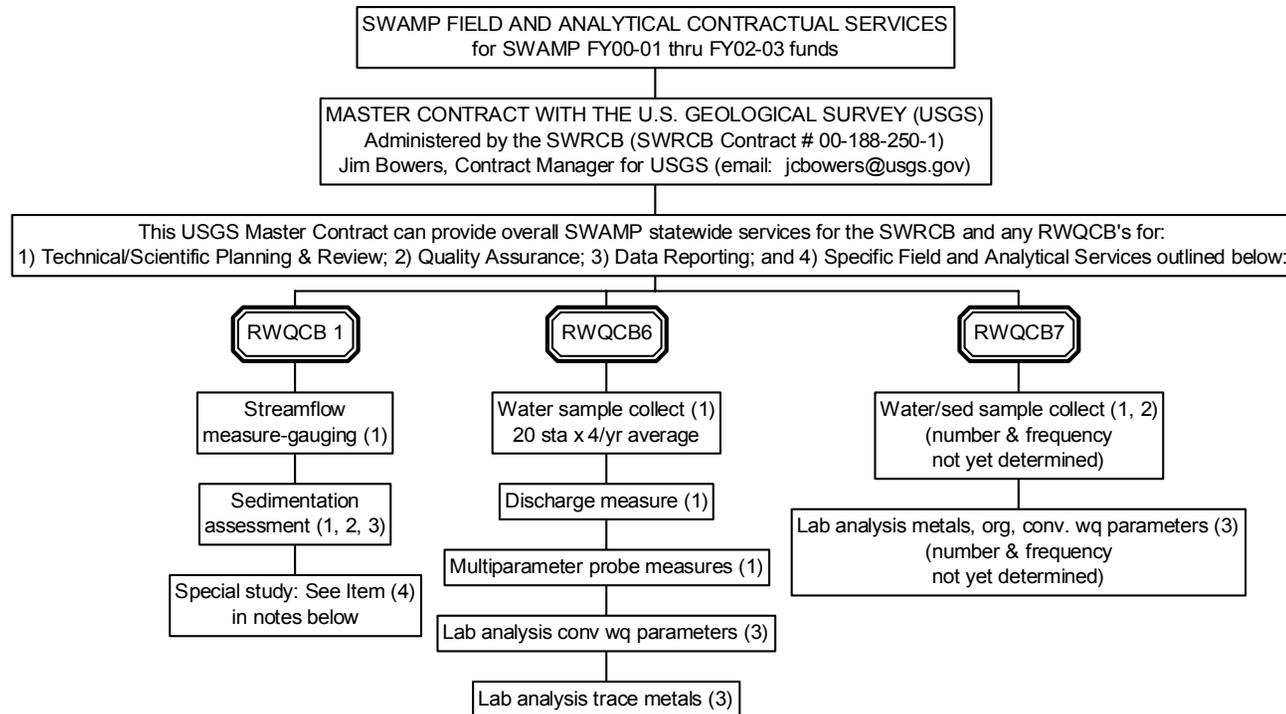
Figure 3. State of California's Surface Water Ambient Monitoring Program ("S.W.A.M.P.")  
 Details of Organizational Responsibilities for Field and Analytical Services  
 for the California Department of Fish and Game's Master Contract with the SWRCB



For the master Contract with CDFG, field and analytical services for specific Regional Boards, as listed by number (#) above & below, are provided by the following:

- 1) CDFG Moss Landing: Technical/scientific planning & review; quality assurance program; sample collect logistics & mgmt; contracts mgmt; interp rpts
- 2) CDFG Rancho Cordova/Nimbus: Technical/scientific planning & review; organic chemistry, conventional water quality, aquatic bioassessment; interp rpts
- 3) CDFG contract to UC Davis/Granite Canyon (Env. Tox. Dept.) & Aquatic Tox Lab (Vet Med): Technical/scientific planning & review, toxicity testing, interpretive reports; equipment purchases; vitellogenin fish studies & bioassessment & tox (UCD ATL).
- 4) CDFG contract to San Jose State Univ Fndtn/Moss Landing Marine Labs: Technical /scientific planning & review; statewide data management; trace metal & organic chem, sample collect & processing, sampling logistics & coordination, TSS/SSC, sed TOC, chlor-a; subcontract to Applied Marine Sciences (Houston, TX) for sed grain size, water TOC/DOC; subcontract to Sierra Foothills Lab (Jackson, CA) for boron; subcontract to CLS Labs (Rancho Cordova) for conv wq).
- 5) CDFG contract to California State University, Chico Research Foundation: Biological assessment field and analytical services.

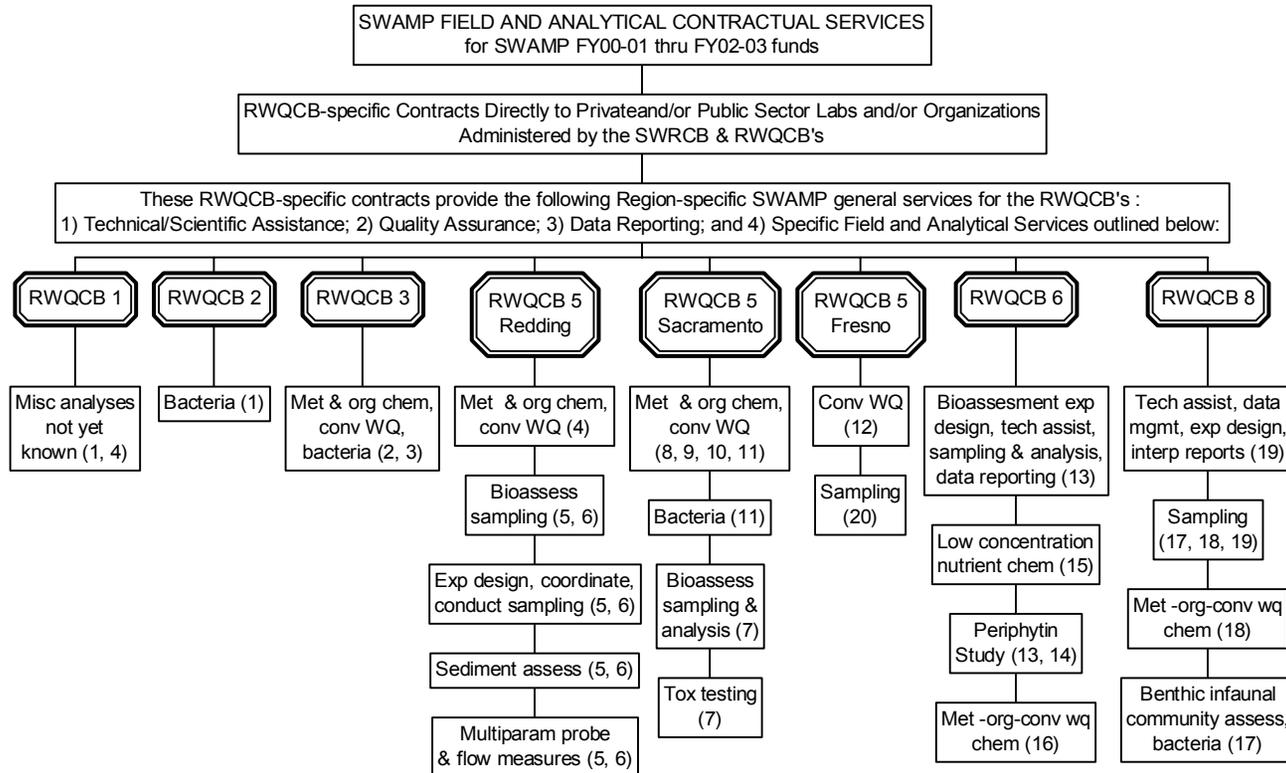
Figure 4. State of California's Surface Water Ambient Monitoring Program ("S.W.A.M.P.")  
 Details of Organizational Responsibilities for Field and Analytical Services  
 for the U.S. Geological Survey Master Contract with the SWRCB



For the master Contract from SWRCB to USGS, the following outlines of field and analytical services are provided to Regional Boards, as shown above:

- 1) Collecting and processing of sediment, and/or water, and/or streamflow (discharge) samples or other materials from California surface waters, including the use of all appropriate QA/QC measures necessary to collect and process samples, as outlined in respective task orders;
- 2) Field sample collection of suspended sediment, bed material, and bedload samples, complete or partial particle-size distributions, routine maintenance and repairs to gage structures and instrumentation, and necessary water quality sampling, as outlined in respective task orders;
- 3) Conduct water quality analytical chemistry on field-collected environmental samples as outlined in respective Task Order;
- 4) Evaluate the Board's water availability methodology of using the rational and drainage area ratio methods at ungaged locations in northern coastal California from San Mateo County to Oregon (North Coast region). These methods are used to estimate selected streamflow characteristics, which are used to evaluate applications to appropriate water. These characteristics include daily streamflow, various monthly and seasonal statistics, mean-annual discharge, and selected flood-frequencies and magnitudes. Quantify the accuracy and bias of the techniques to estimate streamflow statistics, identify regions where they perform relatively well or poorly and identify the combination of factors that may affect their applicability.

Details of Organizational Responsibilities for Field and Analytical Services  
for RWQCB-specific Contracts Direct to Private and/or Public Sector Labs and/or Organizations



1) Sequoia Analytical Labs (R1 & R2)--not thru swamp funds; 2) BC Laboratories, Inc. (R3); 3) Creek Environmental Laboratories, Inc. (R3); 4) Basic Laboratory, Inc. (R5-Redding); 5) Plumas Corporation (R5-Redding); 6) Northern California-Nevada Resource Conservation District (R5-Redding); 7) U.C. Davis Aquatic Toxicology Laboratory (R5-Sacramento); 8) Twining Laboratories, Inc. (R5-Sacramento); 9) Weck Laboratories (R5-Sacramento); 10) South Dakota State University/Olson Biochemical Laboratory (R5-Sacramento); 11) Sierra Foothills Laboratory, Inc. (R5-Sacramento); 12) U.C. Davis Aquatic Limnology Laboratory (R5-Fresno); 13) U.C. Sierra-Nevada Aquatic Resources Laboratory (R6); 14) Subcontract from U.C. SNARL to Professor Dean Blinn, No. Arizona University (R6); 15) High Sierra Water Laboratory, Inc. (R6); 16) Contract Lab (not yet known) (R6); 17) ABC Laboratories, Inc. (R8); 18) CRG Laboratories, Inc. (R8); 19) Southern California Coastal Waters Research Project (R8); 20) County of Madera Public Works Department.