

Schedule of Element Actions Table

See End Notes for additional information

			<u>Original Date</u>	<u>Revised Date</u>
1.0	Water Quality and Contaminant Control			
	1.1	TMDLs		
		1.1.1	Implementation of San Joaquin River at Vernalis Salt & Boron TMDL	
			Management Agency Agreement with US Bureau of Reclamation approved by Regional Board	October 2008
			USBR's draft monitoring and evaluation plan	January 2009
			USBR's long-term monitoring and evaluation plan incorporating stakeholder and Regional Board comments	July 2009
			USBR's draft compliance monitoring report	January 2010
			USBR's final compliance monitoring report incorporating Regional Board comments	July 2010
		1.1.2	Upstream San Joaquin River Salinity Objectives and TMDL	
			Scoping meeting to solicit public input regarding Basin Plan Amendment and potential environmental impacts	March 2009
			Funding from State Board Cleanup and Abatement Account will be requested to establish a contract for CEQA technical support services in preparing environmental documentation for Basin Plan Amendment.	July 2009
			Coordination of technical efforts with State Board southern Delta salinity objectives, including salinity objective development and San Joaquin River water quality modeling	Ongoing
		1.1.3	Stockton Deep Water Ship Channel Dissolved Oxygen TMDL	
			First of two rounds of studies required by the TMDL	Completed
			Contracting for final round of TMDL studies, initiating two years of new studies	February 2009
		1.1.4	Implementation of Delta Waterways Diazinon and Chlorpyrifos TMDL	
			Approved by USEPA	October 2007
			Implemented using the Irrigated Land Program. Compliance dates vary by watersheds (tributary to the Delta)	Ongoing
		1.1.5	Implementation of Stockton Urban Waterways Pathogen TMDL	
			Approved by USEPA	June 2008
			TMDL requirements are implemented through the City of Stockton and San Joaquin Counties NPDES municipal stormwater permits.	Ongoing

		1.1.6	Delta and San Francisco Bay Mercury TMDL		
			The San Francisco Bay mercury TMDL was approved by USEPA and is currently being implemented	February 2008	
			Central Valley Regional Water Board opened hearing for the Delta mercury TMDL	April 2008	
			Stakeholder process to address stakeholder concerns expressed during the April 2008 Delta mercury TMDL hearing meeting	July 2009	
			Central Valley Regional Water Board will hold second hearing meeting for the Delta mercury TMDL and Implementation Framework	Early 2009	January 2010⁴
			Stakeholder process to develop a detailed implementation plan for the Delta mercury TMDL	December 2010	
		1.1.7	North San Francisco Bay Selenium TMDL		
			Proposed numeric targets were presented to the advisory committee and other interested parties	September 2008	
			Draft technical report	April 2009	September 2009
			Final technical report	Fall 2009	Spring 2010
		1.1.8	San Francisco Bay PCB TMDL		
			TMDL approved by San Francisco Bay Regional Board	February 2008	
			Consideration by SWRCB followed by OAL and USEPA	March 2009	July 2009
		1.1.9	Old & Middle Rivers Dissolved Oxygen TMDL		
			Regional Board is continuing to assess relevant data to understand the impairment, and if needed prioritize TMDL development	Ongoing	
	1.2		Drinking Water Policy for the Central Valley		
			Staff held public scoping meetings for this project	August 2008	
			Central Valley Regional Water Board staff is working with a stakeholder work group to complete technical studies necessary to develop policy recommendation	August 2009	
			Preparation of Central Valley Drinking Water Policy staff report describing process and products to date and policy options	October 2009	June 2009⁵
			Develop staff report and Board resolution based on preferred policy option	January 2010	
			Conduct peer review (if necessary) and respond to comments on draft staff report	January 2010	March 2010
			Conduct public review	April 2010	
			Central Valley Regional Water Board to consider adoption of policy	June 2010	

1.3	Once-Through Cooling		
	CEQA scoping document for statewide policy with preliminary draft policy released	March 2008	
	Expert Review Panel presented draft findings on scoping document and preliminary draft policy	April- June 2008	
	CEQA scoping meetings on statewide policy held on May 8 and 13. Comments were due by May 20, 2008.	May 2008	
	Draft staff report and statewide policy released for public review and comment/ external scientific peer review and comment	December 2008	
	Public workshops to receive comments on draft staff report and statewide policy	February 2009	
	Draft Policy and Substitute Environmental Document (SED) for public review and external scientific peer review	April 2009	
	Revised SED and revised draft policy	June 30, 2009	
	Public workshops and response to comments leading to a final draft policy with proposed consideration by State Water Board	June 2009	
	The NPDES permit renewal process for Mirant's Contra Costa Power Plant is currently on hold, pending adoption of the Policy		Currently on hold⁶
	Evaluate the need for additional actions to prevent impacts to Fish and Wildlife beneficial uses	On-going	
1.4	Sediment Quality Objectives for Enclosed Bays & Estuaries		
	State Water Board adopted Phase I SQOs	February 2008	
	Sediment grab samples were collected throughout southern and central Delta for use in a multiple line of evidence approach	September - May 2008	
	Initiate Phase II of the SQOs	March 2009	
	CEQA Scoping Document	August 2009	
	CEQA Workshops	October 2009	
	Circulate Draft Staff Report	June 1010	
	State Board Hearing for adoption of Phase II SQOs	September 2010	
	State Board Hearing for adoption of Phase II SQOs	October 2010	
	Rule-making file submitted to Office of Administrative Law	December 31, 2010	
1.5	Invasive Species		
	USEPA Draft NPDES permit for ballast water/ vessel hull maintenance/ other discharges under the Vessel General Permit (VGP)	May 2008	
	Final Permit Issued by USEPA	December 18, 2009	

		The State Water Board issued a Clean Water Act Section 401 Water Quality Certification for U.S. EPA's Vessel General Permit	December 22, 2008	
		The State Water Board issued a Final Certification for U.S. EPA's Vessel General Permit	February 9, 2009	
		State Boards staff continue to work with the California Agencies Aquatic Invasive Species Team (CAAIST)	Next meeting-early 2009	
	1.6	Blue-Green Algae		
		DPH Contract – Develop and validate liquid chromatography/mass spectrometry (LC/MS) method(s) for cyanotoxins including, but not limited to, saxitoxin, anatoxin, and cylindrospermopsin.	June 2008-Fall 2008	Contract Canceled⁷
		DPH Contract - Develop decision tree and sampling plan for the collection, handling, and shipment of water, algal, and tissue samples	June 2008-December 2008	See Endnote⁷
		OEHHA Contract – Final Report on BGA Risk Assessment will be completed	Fall 2008	Summer 2009
		DPH Contract – Conduct LC/MS analysis for microcystins by collecting a maximum of 100 samples per year from throughout the State	June 2008-June 2010	See Endnote⁷
		DPH Contract - Perform evaluation of field/test kits for cyanotoxins	June 2009	See Endnote⁷
		Develop a prototype identification guide for common cyanobacteria (e.g. photomicrographs and a list of distinguishing features)	December 2009	
		Develop taxonomic identifications using microscopy in order to screen phytoplankton samples for the presence of potentially toxin-producing species	June 2010	
		The State and Regional Water Boards will assess the need to take additional actions to control for BGA blooms in the Delta and other areas of the State	Ongoing	
	1.7	Characterize Discharges from Delta Islands		
		A contract was executed with UC Davis (UCD), which includes a task to conduct monitoring and evaluate the potential impact of island drainage on beneficial uses in the Delta, with recommendations for future monitoring and studies	June 2008	
		Preparation of the draft monitoring plan and QAPP	April 2009	June 2009⁸
		Coordination with stakeholders and preparation of the final monitoring plan and QAPP	May 2009	June 2009⁹
		Initiate monitoring activities	May 2009	July 2009
		Final report with data and recommendations	March 2010	

1.8	Ammonia Effects on Delta Smelt and Algal Primary Productivity				
	1.8.1	Delta Smelt Survival Studies			
		State and Regional Water Boards contracted with researchers at UCD to conduct toxicity tests with larval Delta smelt to determine their sensitivity to ammonia		April 2008	
		Final report: The effects of ammonia/ um and wastewater treatment effluent-associated contaminants on Delta smelt		February 2009	April 3, 2009¹⁰
		Conduct follow-up studies as needed		April - July 2009	June – August 2009
	1.8.2	Algal Primary Production			
		Complete SFSU experiments in the northern Delta to determine whether ambient in-stream ammonium concentrations reduce algal growth rates		April 2009	July 2009¹¹
		Draft Report		June 2009	August 2009
	1.8.3	Additional Actions			
		Ammonia Literature Review and Data Analysis Draft UCD synthesis report on existing data, studies, and literature on the effects of ammonia on aquatic species			July 2009¹²
		Ammonia Summit to present studies and gather information related to the impact of ammonia on Delta species and develop recommendations for future study			August 2009
1.9	Selenium Screening Study for Delta				
		Results of Moss Landing Marine Laboratory analysis of selenium in about 100 fish collected from the Central Valley and Delta over the last eight years. The fish were obtained from a fish tissue archive that includes thousands of fish		July- October 2008	March 2009¹³
		Central Valley Regional Water Board to analyze and assess the data, prepare a written report, and present results to stakeholders for review, comment, and discussion of potential follow-up actions		November 2008- March 2009	July 2009 See Endnote¹³
		Meet with stakeholders to evaluate options for follow-up on study findings, as necessary		March - June 2009	July - August 2009
1.10	Agency Cooperation on In-Delta Pesticide Use				
		Meetings with Department of Pesticide Regulations, County Agricultural Commissioners, Department of Food and Agriculture, and Water Quality Coalitions to assess need for increased enforcement or restrictions on pesticide use in the Delta		July- December 2008	through June 2009
		Gather, compile, and assess information and develop recommendations for future steps including, but not limited to, development of an MOU		January- June 2009	See Endnote¹⁴

2.0	Comprehensive Monitoring Program		
	Completion of draft Delta contaminants synthesis report (prepared by UCD)	September 2008	July 2009 ¹⁵
	Establish process for stakeholder involvement, hold RMP stakeholder kick-off meeting, and organize stakeholder working groups	September 2008	
	Completion of draft report summarizing existing water quality monitoring programs in the Delta (prepared by Aquatic Science Center)	January 2009	July 2009 ¹⁶
	RMP strategy and alternative report(s)	July 2009	September 2009 ¹⁷
	Summary of options and needed resources	June 2009	Fall 2009
	Water Boards' consideration of options and associated resource needs	December 2009	
3.0	San Joaquin River Flow and Southern Delta Salinity Objectives		See Endnote ¹⁸
	Evaluate compliance with objectives and take enforcement as needed	Ongoing	
	Independent expert review report of current science RE: salinity objectives	April 2008- 4th Qtr. 2008	September 2009 ¹⁹
	Modeling analyses of potential water supplies needed to meet salinity objectives from various sources	August 2007 - 4th Qtr. 2008	4th Qtr. 2009 ²⁰
	Workshop to solicit information on DFG's SJR salmon escapement model, review of the VAMP, and other information	September 2008	
	NOP and Scoping for Bay-Delta Plan and Notice of Public Workshop regarding potential modifications to Salinity and SJRF Objectives	February 13, 2009	
	Water Quality Control Planning workshops to receive information on potential changes needed to the salinity and SJRF objectives	1st Qtr. 2009	See Endnote ¹⁸
	Prepare staff report regarding potential water quality control planning alternatives	1st – 2nd Qtr. 2009	See Endnote ¹⁸
	Modeling analyses for various alternatives and CEQA for potential modifications to WQ objectives and implementation	2nd Qtr. 2009 - 2nd Qtr. 2010	See Endnote ¹⁸
	Issue draft EIR for comment by responsible agencies	3rd Qtr. 2010	See Endnote ¹⁸
	Issue draft EIR for public comment	4th Qtr. 2010 - 2nd Qtr. 2011	See Endnote ¹⁸
	Prepare WQCP modifications	2nd - 4th Qtr. 2011	See Endnote ¹⁸
	Hold WR hearing to consider potential changes to WR requirements	2nd Qtr. 2011	See Endnote ¹⁸
	Prepare draft WR order	2nd - 4th Qtr. 2011	See Endnote ¹⁸
	Draft WQCP modifications and draft WR order for public comment	4th Qtr. 2011	See Endnote ¹⁸
	State Water Board meeting on draft WQCP modifications and draft WR order	1st Qtr. 2012	See Endnote ¹⁸

	State Water Board to consider changes to WQCP, WR order, and EIR cert	Prior to April 2012	See Endnote¹⁸
	Consider DWR's petition to change the CDO as necessary	Unspecified	See Endnote²¹
4.0	Suisun Marsh Management, Preservation, and Restoration		
	Water Boards staff will continue to support the interagency effort to develop a Suisun Marsh Plan (SMP). The Water Boards will also coordinate with the BDCP and Delta Vision related to these issues	Through completion of planning process	
	Water Boards staff will review and provide comments on draft EIR/ EIS.	Early 2009	Early 2010²²
	Water Board staff will review the final EIR/EIS. The Suisun Marsh Charter Group will also provide a proposed plan for determining what if any changes should be made to the water quality objectives included in the Bay-Delta Plan for Suisun Marsh	Early 2010	
	The Water Boards will regulate, manage, and study pollutants in Suisun Marsh	Ongoing	
	San Francisco Bay Regional Water Board staff will continue to address development around Suisun Marsh to minimize impacts through the 401 Water Quality Certification Program, review of environmental documents, and working with local agencies	Ongoing	
	The Water Boards will consider taking additional actions as needed to protect beneficial uses of water within Suisun Marsh and Bay-Delta	As Needed	
5.0	Comprehensive Review of Bay-Delta Plan		
	BDCP Coordination	On-going	
	Solicit written input on factual issues concerning Delta's ecology	August 29, 2008	
	Workshop on Review of the 2006 Bay-Delta Plan	October 8, 2008	
	Staff will finalize a detailed scope of services for the periodic review of the Bay-Delta Plan and obtain a written commitment from BDCP Managers for any portion of the final scope of services they choose	As soon as possible after October 2008	
	Conduct an evidentiary hearing on critical issues affecting Delta's ecology	Nov-08	Canceled²³
	Participation in BDCP environmental review process and all BDCP Processes, working groups, and steering committee	Ongoing	
	Staff will review and comment on first draft BDCP	3 rd Qtr. 2009	
	Staff will review and comment on BDCP Public Draft EIR/EIS and Public Draft BDCP	4 th Qtr. 2009	
	WQC Planning workshop to consider potential changes to BD Plan	1st Qtr 2010	
	Review final BDCP EIR/S	2nd Qtr 2010	
	WR hearings to consider potential changes to WR license/ permit requirements and other measures to implement changes to BD Plan	2nd- 3rd Qtr 2010	

	Prepare proposed changes to BD Plan and WR decision or order	4th Qtr 2010 - 3rd Qtr 2011	
	Public review of draft changes to BD Plan and draft WR decision/ order	3rd- 4th Qtr 2011	
	Make any needed changes to draft	4th Qtr 2011	
	State Water Board adoption of draft changes to BD Plan, draft WR decision/ order	End 4th Qtr 2011	
	Consideration of any petitions related to changes in conveyance	Unspecified	
6.0	Reasonableness Proceeding		
	To be addressed by efforts within the Comprehensive Review of Bay-Delta Plan and through Staff participation in the BDCP process		
7.0	Water Right Investigation & Enforcement		
	Analyze and correlate State Water Board's water right records with property ownership, aerial photographs, crop mapping information, and data from DFG pertaining to diversion works. Compile data on a tracking database.	October 2008- January 31, 2009	
	Prepare and mail property owners a contact letter informing them of the Project and requesting information about the basis of their water rights.	February 15, 2009	
	The State Water Board will analyze individual claims based on submitted and available information, field inspections or aerial reconnaissance of facilities.	April - September 2009	
	Issue notices of enforcement actions.	November - December 2009	
	As warranted, conduct additional water right investigations and enforcement actions.	December 2009 - Ongoing	
8.0	Water Use Efficiency		
	8.1 Water Recycling		
	Draft Recycled Water Policy and Staff Report for public comment	November 2008	
	Draft Recycled Water Policy adopted by State Water Board at Board meeting	February 3, 2009	
	Recycled Water Policy approved by OAL	May 14, 2009	
	8.2 20% by 2020		
	Preparation of a multi-agency strategic plan	October 2008	August 2009²⁴
	8.3 Urban Water Conservation		
	State Water Board consideration of recommendations for an urban water conservation regulatory strategy following the 20% by 2020 plan	June 2009	See Endnote²⁴
	Draft analysis report of regulatory options	August 2009	

	8.4	Reasonableness of High Water Use		
		Evaluation of reasonableness of urban and agricultural high water use	End of 2012	
	8.5	Water Measurement Database		
		Feasibility report submitted to the Legislature estimating costs of a coordinated water measurement database	January 2009	
		Feasibility report is undergoing State Water Board final review, and will be sent to CalEPA	January 2009	
9.0		Other Activities		
	9.1	Delta Smelt Refuge Population		
		The Cleanup and Abatement Account (CAA) funds have been granted to DFG for the establishment and maintenance of a delta smelt refuge, including retrofitting egg incubation laboratory and juvenile and adult rearing systems, and perform pair-wise crosses of wild fish to create a genetically robust refuge population	June 4, 2009	
	9.2	Screening Diversions in the Delta & Tributaries		
		Actions being considered as part of the Periodic Review		
	9.3	Minimum In-Stream Flow Standards		
		DFG submitted a list of 22 priority streams for development of in-stream flow recommendations, including several Delta tributaries	August 2008	
		DFG provided a flow recommendation for Butte Creek to the Board	May 11, 2009	
		SWRCB will consider what actions to take to implement DFG's recommendations		
	9.4	Salinity Management Plan for the Central Valley (CV-SALTS)		
		Stakeholders to complete comprehensive work plan for activities leading to a Basin Plan Amendment	May 2009	
		Regional Board to consider stakeholder progress made and determine how to proceed with associated Basin Planning	June 2009	
		Stakeholders to identify project director and functioning management team for execution of their comprehensive work plan	August 2009	
		Contracting as needed for performance of various tasks in the comprehensive work plan finalized	November 2009	

End Notes

¹ A draft plan was submitted in June. At that time, the Bureau, staff and interested parties decided to take the plan to the CV-SALTS group for input. Instead of a draft that will likely need extensive revision at the close of the MAA assessment period (2010), the group decided to use the initial draft as a starting point for development of a long-term plan with full stakeholder buy-in.

² Cleanup and Abatement Account funds were received in February 2009.

³ The contracting effort is currently on hold as a result of the bond freeze. Contract execution is contingent on the bond freeze being lifted, DWR approving the contract, and other State budgetary factors.

⁴ The Delta Mercury TMDL is delayed due to the addition of a facilitated stakeholder process (using the Center of Collaborative Policy) to address public concerns raised during the TMDL development process.

⁵ Funding for the technical studies was, and continues to be, suspended as a result of the freeze on bond-funds.

⁶ This element is delayed about 6 months from the schedule in the Strategic Workplan. The NPDES permit renewal process for Mirant's Contra Costa Power Plant is currently on hold, until the Policy is adopted.

⁷ The DPH contract was canceled due to nonperformance of contractor. Replacement contracts for tasks contained in DPH contracts are being processed. Since they are not executed, due dates for tasks in the scopes of work cannot be accurately estimated at this time.

⁸ Delayed due to staffing issues. It has been submitted to Leticia for review.

⁹ Timing is linked to QAPP completion.

¹⁰ This element was initially delayed approximately 3 months due to budget problems. Release of the final report on the effects of ammonia and wastewater treatment effluent-associated contaminants on Delta smelt was delayed due to an extension of the review process. Follow-up studies will include: (1) a repeat of the test designed to assess whether Delta smelt survival is negatively impacted by one or more contaminant(s) that are positively correlated with ammonia from SRWTP and (2) studies to establish ammonia effect concentrations (e.g., LC50) for two Delta smelt life stages (larval and juvenile).

¹¹ Delayed 6 to 12 months due to budget problems and adverse field conditions. The Study period is extended to allow for additional sampling efforts and associated experiments.

¹² Delayed due to staffing issues.

¹³ The selenium tissue analysis data were received by the Central Valley Regional Board in March 2009. Data analysis and reporting are delayed as a result of work load constraints.

¹⁴ As stated in the Strategic Workplan, there are currently no resources dedicated for the tasks associated with the element. Planning associated with this element is currently on hold awaiting the results from a recent study conducted by Dr. Don Weston (UC Berkeley) concerning the sources, seasonality, and toxicity of pyrethroid pesticides to the Delta; results from a forthcoming study designed

to characterize Delta island discharges (Dr. Michael Johnson - UC Davis); and completion of the UC Davis report synthesizing available data on contaminants in the Delta.

¹⁵ Preparation of the Contaminants Syntheses Report is delayed as a result of contracting and work load constraints.

¹⁶ Preparation of the Delta Water Quality Monitoring Summary Report is delayed as a result of contracting and work load constraints.

¹⁷ Release of the strategy and alternatives report is delayed to allow completion of the Contaminants Synthesis Report and the Delta Water Quality Monitoring Summary Report.

¹⁸ Most activities of this element are delayed by one-quarter due to work load.

¹⁹ Delayed due to dynamic models not available for evaluation.

²⁰ Alternative salinity objectives not available for analysis.

²¹ DWR has not submitted a petition.

²² EIR/ EIS is late.

²³ On November 18, 2008 the State Water Board voted not to proceed with the periodic review informational proceeding discussed in the Bay-Delta Strategic Workplan.

²⁴ The draft 20% x 2020 Water Conservation Plan was released on April 30 for public review and comment. A final public workshop was held on May 29th to receive public comment on the final draft statewide implementation plan for urban water conservation. The 20 x 2020 interagency team met on July 6 to review and address comments received on the draft plan. The final report will be available by August. Following the release of the final 20% by 2020 plan, the State Water Board will consider staff recommendations for an urban water conservation regulatory strategy. A report analyzing the regulatory options is expected to be completed in August.