

CALIFORNIA WATER QUALITY MONITORING COUNCIL

Monitoring Council Meeting Notes

Thursday, August 27, 2015 – 10:00 AM to 4:00 PM

First Floor, Training Room 1 East/West
Joe Serna Jr. Cal/EPA Headquarters Building
1001 I Street, Sacramento



Monitoring Council Members and (Alternates) in attendance:

Sara Aminzadeh	Terry Fleming	Parry Klassen	Armand Ruby
Jonathan Bishop	(Greg Gearheart)	Karen Larsen	(Stephani Spaar)
Beth Christman	Sarge Green	Phil Markle	Stephen Weisberg

Others in attendance and (on the phone):

(Beverley Anderson-Abbs, State Water Resources Control Board, Office of Info. Mgmt. & Analysis)
Allyson Bakboychuk, State Water Resources Control Board
Jarma Bennett, State Water Resources Control Board
Rich Breuer, State Water Resources Control Board
(Erick Bures, State Water Resources Control Board, Office of Information Mgmt. and Analysis)
(Barbara A. Cameron, City of Malibu)
(Katharine Carter, North Coast Regional Water Quality Control Board)
Josh Collins, San Francisco Estuary Institute
Kelsey Cowin, State and Federal Contractors Water Agency
Gary Darling, Department of Water Resources
(Stephanie Fong, State and Federal Contractors Water Agency)
(Rebecca Franklin, Association of California Water Agencies)
(Anna Garcia, Mojave Water Agency)
Karen Gehrts, Department of Water Resources
(Michael Gjerde, State Water Resources Control Board, Division of Water Quality)
(Tony Hale, San Francisco Estuary Institute – Aquatic Science Center)
Cliff Harvey, State Water Resources Control Board
Yumiko Henneberry, Delta Science Program
Rainer Hoenicke, Delta Stewardship Council
(Robert Holmes, California Department of Fish and Wildlife)
Kris Jones, Water Quality Monitoring Council, Department of Water Resources
Paul Jones, United States Environmental Protection Agency
(Dawn Koepke, McHugh, Koepke & Associates)
(Amy Little, State Water Resources Control Board, Division of Drinking Water)
Chris Marquis, State Water Resources Control Board
Jon Marshack, Water Quality Monitoring Council, State Water Resources Control Board
Nick Martorano, State Water Resources Control Board
(Stephen McCord, McCord Environmental, Inc.)
(Amye Osti, 34 North)
(David Osti, 34 North)
(Mark Pranger, Moss Landing Marine Labs)
(Jeremiah Puget, North Coast Regional Water Quality Control Board)
Taryn Ravazzini, Delta Stewardship Council
(Greg Reed, Los Angeles Department of Water and Power)
Russ Ryan, Metropolitan Water District
(Grant Sharp, Orange County Department of Public Works)
(Linda Sheehan, Earth Law Center)
(Wes Smith, Office of Environmental Health Hazard Assessment)

Jennifer Teerlink, California Department of Pesticide Regulation
(Casey Zweig, City of Malibu)

ITEM:	1	
Title of Topic:	INTRODUCTIONS AND HOUSEKEEPING	
Purpose:	1) Introductions (in the room and on the phone) 2) Review draft notes from May 29, 2015 Monitoring Council meeting 3) Review agenda for today's meeting	
Desired Outcome:	a) Approve May 29, 2015 Monitoring Council meeting notes b) Preview what will be covered today and overall meeting expectations c) Adjust today's agenda, as needed	
Attachment Link:	Notes from May 29, 2015 Monitoring Council meeting	
Contact Persons:	Kris Jones	kristopher.jones@water.ca.gov , (916) 376-9756
	Jon Marshack	jon.marshack@waterboards.ca.gov , (916) 341-5514
Decisions:	May 29, 2015 meeting notes were approved without amendment.	

ITEM:	2	
Title of Topic:	PUBLIC FORUM	
Purpose:	Any member of the public may address and ask questions of the Monitoring Council relating to any matter within the Council's jurisdiction under California Senate Bill 1070 (Statutes of 2006) provided the matter is not on the agenda.	
Desired Outcome:	Information and potential agenda topics for a future meeting. No decisions can be made regarding items that have not received prior public notice.	
Attachment Links:	California Senate Bill 1070 (Statutes of 2006)	
Contact Persons:	Jon Marshack	jon.marshack@waterboards.ca.gov ; (916) 341-5514
	Kris Jones	kristopher.jones@water.ca.gov ; (916) 376-9756
Notes:	No requests to speak were received.	

ITEM:	3	
Title of Topic:	ANNOUNCEMENTS AND UPDATES	
Purpose:	These were brief informational items that could be expanded into more detailed discussions for future meetings: a) Monitoring Council position changes (Jon Marshack) b) Meeting dates for 2016 (Jon Marshack)	

	<p>c) Ocean Science Trust / Southern California Coastal Water Research Project joint post-doctoral fellow – MPA and ASBS Monitoring Coordination (Greg Gearheart, Liz Whiteman)</p> <p>d) CEDEN update and relationship with Clean Water Act Section 303(d) impaired waters listings (Jarma Bennett, Nick Martorano)</p> <p>e) Other brief announcements and updates related to the Monitoring Council's mission pursuant to Senate Bill 1070, Statutes of 2006</p>
<p>Desired Outcome:</p>	<p>Information and comment</p>
<p>Background:</p>	<p>a) Monitoring Council Position Changes</p> <ul style="list-style-type: none"> • Regulated Community, POTWs – In April of 2015, Mike Connor tendered his resignation and the California Association of Sanitation Agencies recommended that Phil Markle of the County Sanitation Districts of Los Angeles County (LACSD) replace Mr. Connor on the Council. Mr. Markle has served as the Alternate to Mr. Connor on the Monitoring Council. On May 13, a letter was sent from the Council Co-Chairs to the two Agency Secretaries recommending that Phil Markle become the Member representing POTWs. • Agriculture – Parry Klassen has indicated he will be resigning from the Monitoring Council and endorsing his Alternate, Bruce Houdesheldt of the Northern California Water Association, to take his place. Parry has offered to stay on as an Alternate in this position. <p>b) 2016 Meeting Dates – For the last few years, the Monitoring Council has met quarterly, in late February, late May, late August, and late November/early December. What are Council Member preferences for meeting frequency, days of the week, and times of the month for 2016?</p> <p>c) Joint OST/SCCWRP Science Integration Fellow – Recently, these two organizations collaboratively sponsored a fellowship to explore data exchange and joint assessment between monitoring programs of the Marine Protected Areas (MPAs) and Areas of Special Biological Significance (ASBSs). Julia Coates presented the results of her project, an index of ecosystem status for Southern California shallow rock reefs, to the Monitoring Council in May 2014 (see Item 7 of the meeting notes). In May 2015, Liz Whiteman of OST presented an update on the development of an ocean ecosystem workgroup and portal (see Item 7 of the meeting notes). During the discussion, Jonathan Bishop suggested that OST and SCCWRP explore funding options for an additional fellowship to further that effort, specifically relating to MPA and ASBS monitoring for rocky intertidal habitats. A new Science Integration Fellow would evaluate areas of intersection between monitoring efforts for MPAs, ASBSs, marine parks and sanctuaries and explore development of one or more working groups to synthesize multiple data streams into ecosystem condition assessments.</p> <p>d) CEDEN Update – The California Environmental Data Exchange Network has begun working with a contractor to create web services that will provide a two-way data connection with the federal Water Quality Exchange (WQX) that integrates monitoring data between USEPA, USGS, USDA, and others. Web services will also improve the CEDEN query tool and data feeds to the My Water Quality portals. In February 2015, the State Water Board amended California's Clean Water Act Section 303(d) Listing Policy</p>

	concerning the process by which the Impaired Waters List is compiled and adopted; to promote efficiencies in the manner in which data is solicited and assessed; and to streamline the public participation and water board review process. The amendment modified the definition of “all readily available data and information” to mean all data and information submitted to CEDEN.	
Attachment Links:	a) Phil Markle Recommendation Letter to Agency Secretaries d) Update on the use of CEDEN for Developing California’s Clean Water Act Section 303(d) List of Impaired Waters – presentation by Nick Martorano and Jarma Bennett CEDEN website	
Contact Persons:	Jon Marshack Kris Jones	jon.marshack@waterboards.ca.gov ; (916) 341-5514 kristopher.jones@water.ca.gov ; (916) 376-9756
Notes:	a) Monitoring Council Position Changes – Jon Marshack informed the group that Phil Markle has been accepted as the Monitoring Council Member representing Regulated Community – Publicly Owned Treatment Works. Jon also indicated that Parry Klassen and Bruce Houdesheldt still intend to switch places as Member and Alternate representing Agriculture. Jon is awaiting a formal letter of resignation from Parry and letter(s) of endorsement for Bruce. b) 2016 Meeting Dates – Jon Marshack asked whether the quarterly meetings still worked, and asked whether less frequent meetings should be considered. Steve Weisberg indicated that he felt that the quarterly meetings still seemed appropriate. Others agreed. Sarge Green also indicated that he felt that it would be worth having an annual meeting, where the workgroups report on their activities. Kris Jones reminded the group of previous discussions relating to having an annual Monitoring Council Conference or Workshop. Jonathan Bishop asked whether the public was interested in hearing about the activities of the Monitoring Council’s workgroups. Steve Weisberg felt that they did. Steve mentioned that the state of Maryland holds an annual conference focusing on the state’s monitoring efforts relating to water quality and ecosystem health; he added that while the public may not be interested in attending the Monitoring Council’s quarterly meetings, they might be interested in attending a conference. Jon asked whether Wednesdays in February, May, August, and November worked for the quarterly meetings. Beth Christman indicated that she has standing meetings on the fourth Wednesday of every month. Jon mentioned Tuesday’s as an alternative. The group agreed that Tuesdays in late February, May, August, and November would work for meetings in 2016. c) Joint OST/SCCWRP Science Integration Fellow – Greg Gearheart mentioned that there will be a fellowship to explore data exchange and joint assessment between monitoring programs of the Marine Protected Areas (MPAs) and Areas of Special Biological Significance (ASBSs) programs. He indicated that his staff is pursuing Water Board funding for half of the fellowship, with the rest paid for through the Resource Legacy Fund. Jonathan Bishop mentioned that the topic of integrating MPA and ASBS monitoring is of great importance to him—coordinating the monitoring and associated data to better understand the linkage between fisheries and water quality issues. Jonathan mentioned that the State Water Board has never worked directly with the Ocean Science Trust to better understand ocean	

issues; however, he expressed a keen interest in this effort and the improved coordination of these two programs.

- d) **CEDEN Update** – Nick Martorano and Jarma Bennette provided a [presentation](#) regarding an effort underway to create web services that will provide a two-way data connection between CEDEN and the federal Water Quality Exchange (WQX). During the presentation, Jonathan Bishop clarified the goals and background of this effort. He indicated that the Water Board receives large amounts of data in the form of datasheets, which needs to be entered into CEDEN. Currently, Water Board staff are behind on processing their 303(d) listings, and their situation was getting worse with more groups collecting data. Jonathan indicated that there needed to be a more efficient way of processing those data within a reasonable time frame.

Following the presentation, Phil Markle asked whether there was any plan to replace water quality data entry into the California Integrated Water Quality System (CIWQS) with entry into CEDEN? Jarma Bennett mentioned that one reason why they do not currently want to go directly from CIWQS to CEDEN is because they need to get certain regulatory compliance data, which are managed in CIWQS. Sarge Green asked about the CEDEN user group—who are they? Jarma mentioned that there are some CSUS members, some laboratories, as well as data providers. Steve Weisberg congratulated the group on their efforts. He indicated that he thinks they have three things going for them: 1) having a purpose for the data system and linking these data to a system for 303(d) listings; 2) transparency; and 3) the fact that they have past the “critical threshold,” where there is now enough data in the database where others will want to put their data into CEDEN. Steve continued by asking about their biggest vulnerability. Nick indicated that getting caught up, and dealing with issues long after data were entered/collected. He added that the volume of data is also growing, which has made the process of catching up more difficult. They are working to try and improve their approach to make it more efficient to process the data.

Jonathan Bishop mentioned that an additional concern is the speed with which technology is developing—technology is often obsolete by the time it’s released. He indicated that this is an ongoing issue for the state when it comes to IT development efforts. Sara Aminzadeh mentioned that she has been pleased with how responsive the CEDEN group has been with citizen scientists. She mentioned that the group was great about providing time series and narrative data. Sara mentioned that there is a need for ongoing CEDEN training. She urged Jonathan Bishop and the State Water Board to provide money for similar training.

- e) **Other brief announcements and updates** – Karen Larsen indicated that the State Water Board’s Division of Drinking Water will release their Water Quality Data System by September 7th with water quality inquiry reports to Geotracker. Karen indicated that this presents an opportunity for the Safe Drinking Water Workgroup to begin building the Drinking Water Portal. There is a need to combine surface water source data with CEDEN.

Steve Weisberg mentioned that he was asked to participate in a review panel on the Environmental Laboratory Accreditation Program. A report with findings will be finished by late October or early November. Steve mentioned that he could present these findings at a future Monitoring Council meeting.

Action Items:	<ul style="list-style-type: none"> • Jon Marshack will send out an online poll to Members and Alternates offering potential dates for 2016 Monitoring Council Meetings. • Steve Weisberg will present findings of a review of the Environmental Laboratory Accreditation Program at the December Monitoring Council meeting.
ITEM:	4
Title of Topic:	SUSTAINABLE GROUNDWATER MANAGEMENT ACT (SGMA)
Purpose:	Erik Ekdahl of the State Water Board's Office of Research, Planning & Performance provided an overview on California's new groundwater management law and how it is being implemented.
Desired Outcome:	Information and discussion
Background:	<p>SGMA provides a new framework to support local groundwater management. Implementation will be through formation of local groundwater sustainability agencies (GSAs) that develop groundwater sustainability plans for their basin. These sustainability plans will rely on the new tools and authorities SGMA grants to GSAs. All alluvial basins identified in Department of Water Resources (DWR) Bulletin 118 as high or medium priority must implement sustainability plans. GSAs must be formed in these high or medium priority basins by mid-2017, and must have sustainability plans in place by either 2020 or 2022, depending on the condition of the basin. If a basin fails to form a GSA, does not adopt a sustainability plan, or has a plan that DWR has found inadequate, the State Water Board will begin a state intervention process. During state intervention, the State Water Board has authority to collect groundwater pumping data and use that information to develop an interim management plan. An overview of current activities related to SGMA will be provided, including data management planning, coordination with DWR, and DWR development of regulations for sustainability plan requirements and basin boundary changes.</p>
Attachment Links:	<ul style="list-style-type: none"> • Update on Sustainable Groundwater Management Act Implementation – presentation by Erik Ekdahl • Sustainable Groundwater Management Act (SGMA) • Additional information on SGMA
Contact Person:	Erik Ekdahl erik.ekdahl@waterboards.ca.gov ; (916) 341-5316
Notes:	<p>Erik Ekdahl made a presentation regarding the Sustainable Groundwater Management Act (SGMA). During his presentation, Erik provided background regarding this legislation, the role of the State Water Board and the Department of Water Resources, and coordination between these two agencies. He also provided an overview SGMA's current activities, including data management planning. SGMA is not intended to be a water quality control mechanism; however, significant water quality impacts can be considered.</p> <p>Following his presentation, Parry Klassen asked whether the information provided from this effort would result in the State Water Board telling farmers to</p>

	turn off their pumps. Erik indicated that any such order would be under the authority of the groundwater sustainability agencies (GSAs); however, he did not think that it will get to the point of requesting farmers to turn off their pumps. Rather, it would be more likely that they may require the farmers to monitor how much water they are using, for example. While it's technically within the law for the SWRCB to do that, Erik did not think that would happen (at least not in the near future).
Action Items:	Consider providing an information item at a future Monitoring Council meeting on oil field activities, including water quality and regional monitoring efforts.

ITEM:	5	
Title of Topic:	PROPOSED CHANGES TO THE CALIFORNIA ESTUARIES PORTAL	
Purpose:	Monitoring Council Assistant Director Kris Jones presented a mock-up of proposed changes to the look and feel of the Estuaries Portal as well as an example Delta Data Dashboard concept.	
Desired Outcome:	Feedback and approval to redesign the Estuaries Portal	
Background:	<p>At the September 2014 Monitoring Council meeting (see Item 7 of the meeting notes), Stephanie Fong proposed updating the look and feel of the Estuaries Portal. While no mock-ups were presented at that meeting, the Monitoring Council did approve the request by the California Estuary Monitoring Workgroup (CEMW) to develop an updated look and feel for the Estuaries Portal, as long as the updated portal maintains the question-driven approach for navigation. However, it was noted that the current look and feel of the portals is limited by the State Water Board's use of an older state webpage style template. Given their existing staff resources, the Water Board has been unable to transition to newer state webpage style template. Water Board IT staff have since indicated that they will transition to an updated and more flexible state web page style template and that they would like to use the My Water Quality homepage and Portals to demonstrate this new model.</p>	
Attachment Link:	<ul style="list-style-type: none"> • Proposed Changes to the California Estuary Portal – presentation by Kris Jones • Current California Estuaries Portal • Notes from the September 3, 2014 Monitoring Council meeting (see Item 7) 	
Contact Person:	Kris Jones	kristopher.jones@water.ca.gov ; (916) 376-9756
Notes:	<p>Kris Jones made a presentation regarding proposed changes to the look and feel of the Estuaries Portal. These updates would include a hybrid approach for navigation, and would make use of drop down menus similar to those used on other State websites (e.g., DWR). The motivation for this suggested change was to make navigation more intuitive and to improve the user's ability to find content on the portal. Kris presented a new mockup for the Estuary Portal homepage, as well as several dashboards for viewing data relating to managing salinity in the Delta, distribution and abundance for fish in the Delta. He also presented a mockup for visualizing habitat restoration data—a potential collaborative</p>	

	<p>opportunity for the California Estuary Monitoring Workgroup and the California Wetland Monitoring Workgroup, in conjunction with the Delta Conservancy.</p> <p>Following his presentation, Jon Marshack mentioned the potential issue with the State Water Board's current website, which uses an older template. He indicated that the State Board's IT staff have indicated that they will transition to an updated and more flexible state web page style template and that they would like to use the My Water Quality homepage and Portals to demonstrate this new model. Jonathan Bishop indicated that he likes having the first page of the portal be a map interface. Kris Jones indicated that the idea behind the updated homepage is that the Workgroup wanted to have the homepage highlight new and interesting content. He indicated that they also wanted to make the content accessible to different audiences (including non-technical users); Kris mentioned that the map is important to include, and could be included as a highlighted item in the rotating banner on the homepage.</p> <p>Greg Gearheart asked about the timeline for this project. Kris indicated that the timeline will depend on the State Water Boards IT effort relating to the new webpage template; however, he indicated that it could be as soon as 6 months to one year. Overall people liked the new look and feel. Armand Ruby indicated that he liked the mix of the tabs and the question driven approach. Tony Hale asked whether we plan to implement this new look and feel throughout all of the portals and the My Water Quality homepage. Will it be a phased approach? Kris indicated that he anticipated that it would be a phased approach, and would depend on any limitations with the State Water Board's IT staff.</p>
Decisions:	The Monitoring Council members approved the CEMW to redesign the Estuaries Portal.

ITEM:	6
Title of Topic:	DELTA PLAN INTERAGENCY IMPLEMENTATION COMMITTEE (DPIIC) – HIGH-IMPACT SCIENCE ACTIONS
Purpose:	Rainer Hoenicke of the Delta Stewardship Council's Science Program and Taryn Ravazzini, DPIIC Coordinator, discussed implementation of high-impact science actions identified by DPIIC and how the Monitoring Council's ecosystem health workgroups could be involved.
Desired Outcome:	Direction from the Council on workgroup involvement in DPIIC science actions.
Background:	The Sacramento-San Joaquin Delta falls within the jurisdiction of many state, federal, and local agencies. The Delta Plan Interagency Implementation Committee (DPIIC), comprised of the directors of many these agencies, serves as a high-level coordination body to align decision- and policy-making needs based on best available science associated with the immense challenges facing the Delta as the water supply hub for over 20 million people and a large part of California's farming sector. The DPIIC orchestrates the timely and strategic implementation of actions consistent with the policies and recommendations outlined in the Delta Plan. In May 2015, the DPIIC endorsed an initial list of high-impact science actions proposed by the Delta Agency Science Workgroup, prior to the development of the Science Action Agenda – a 3-5 year joint agency roadmap for reducing remaining uncertainties associated with contemplated

	<p>management actions intended to restore the ecosystem while reducing water supply reliance on the Delta. The Workgroup is the primary entity responsible for reporting to DPIIC and overseeing progress of these science actions. DPIIC endorsement gave the Workgroup the opportunity to pursue joint implementation and management of these science actions with the support of its parent agencies.</p> <p>During the Workgroup’s June meeting, it was suggested that some of the endorsed high-impact science actions build on efforts already initiated by workgroups of the Monitoring Council, create synergies among the myriad of initiatives and activities housed within individual agencies and consortia (e.g. Interagency Ecological Program, Monitoring Council workgroups), and fill gaps with coordinated funding sources.</p>
<p>Attachment Link:</p>	<ul style="list-style-type: none"> • Delta Plan Interagency Implementation Committee – High-impact Science Actions – presentation by Rainer Hoenicke and Taryn Ravazzini • DPIIC-Endorsed High-Impact Science Actions Tables
<p>Contact Person:</p>	<p>Rainer Hoenicke rainer.hoenicke@deltacouncil.ca.gov; (916) 445-5825</p>
<p>Notes:</p>	<p>Rainer Hoenicke and Taryn Ravazzini made a presentation regarding the Delta Plan Interagency Implementation Committee (DPIIC) effort, and the potential role of the Monitoring Council’s workgroups in the implementation of the high impact science actions approved by the DPIIC..</p> <p>Following the presentation, Jonathan Bishop asked for clarification regarding the goals of this presentation—is their goal to acquire support and direction from the Monitoring Council regarding workgroup involvement in DPIIC science actions? Rainer agreed that this was their goal. Jonathan expressed an interest in supporting efforts, which could help Water Rights staff evaluate impacts of different parameters on operations, say for displaying real time data and information which could help inform managers; Jonathan indicated that the State Water Board is regularly briefed on these issues by staff from the Department of Water Resources and the US Bureau of Reclamation. Rainer indicated that they are supportive of tools, such as the dashboards that are being developed by the Estuary Monitoring Workgroup, which can be used for real time and adaptive management purposes.</p> <p>Karen Gehrts asked Rainer about the Delta Stewardship Council’s resources to develop dashboards—are they able to help support these efforts? Rainer mentioned that there are multiple demands on their resources, but their first step is to look at the recommendations of the data summit and prioritize. Rainer indicated that the Delta Stewardship Council could also help serve as a joint committee to bridge federal and state efforts, which could help to coordinate and combine funding requests.</p> <p>Jonathan Bishop asked about drought related data and analyses of drought impacts—he indicated that the portals could host those data and associated information. Karen Gehrts mentioned that there is currently an Interagency Ecological Program effort to assess the ecological impacts of the drought in the Delta. Kris Jones mentioned that the Estuary Monitoring Workgroup (CEMW) is currently trying to conduct outreach to identify tools and dashboards, which help to address management questions. He added that the CEMW is trying to make the Estuary Portal relevant for the day to day work of agency staff and decision makers. Karen Gehrts recommended that the portals should be flexible to</p>

	<p>address various questions of management concern.</p> <p>Jonathan Bishop indicated that he thought that the Monitoring Council and its workgroups should work with the DPIIC effort where possible. Steve Weisberg and others agreed; however, the group decided to discuss these details after hearing Item 7 regarding the future direction of the Monitoring Council and its workgroups.</p>
Decisions:	The Monitoring Council agreed that its workgroups should coordinate and support the DPIIC effort, where possible; however, they indicated that the details may be affected by Monitoring Council deliberations upon its future direction.

ITEM:	7
Title of Topic:	MONITORING COUNCIL – WHERE DO WE GO FROM HERE?
Purpose:	Monitoring Council Director Jon Marshack set the stage and Council Co-Chair Alternate Greg Gearheart facilitated a discussion regarding future direction of the Monitoring Council.
Desired Outcome:	Direction from the Monitoring Council on future implementation of SB 1070 (Statutes of 2006).
Background:	<p>SB 1070 and an interagency Memorandum of Understanding tasked the Monitoring Council with developing recommendations to the Secretaries of the California Environmental Protection and Natural Resources Agencies to improve the efficiency and effectiveness of California's system of water quality and associated ecosystem health monitoring and assessment, and to ensure that the resulting data and information are made available to decision makers and the public via the internet. Initial recommendations were delivered in 2008 and experience implementing those recommendations led to the Monitoring Council's A Comprehensive Monitoring Program Strategy for California, delivered to the Agency Secretaries in 2010.</p> <p>The <i>Strategy</i> established a number of theme-specific workgroups, comprised of subject matter experts from a variety of governmental agencies and non-governmental organizations. Each workgroup was tasked with developing an internet portal to bring relevant monitoring data and assessment information for their theme to decision makers and the public. Portal development was envisioned as a mechanism to (1) highlight where gaps or redundancies existed in current monitoring programs, (2) where differences in methods or assessment strategies prevented combining data from multiple studies to enable broader or more in-depth assessments, or (3) where data management systems prevented sharing data across organizations and delivering it to the portals. Initial portal products capitalized on low-hanging fruit to create a proof-of-concept that would entice additional agencies and monitoring programs to participate in the theme-specific workgroups.</p> <p>SB 1070 and the Monitoring Council's <i>Strategy</i> charged us to do a lot more than just put information on the web, though. The workgroups were intended to form lasting relationships implementing a portal design that would both require and motivate parties to solve monitoring and assessment coordination and data integration problems, with a focus on directly addressing management questions. The portals were intended to provide a conceptual structure to initiate</p>

dialogues between existing and emerging monitoring programs, thereby providing the opportunity to think more broadly than could be done otherwise, and enabling broader-based assessments than were previously possible. The *Strategy* included a set of performance measures by which existing monitoring programs could be evaluated and with which to determine where improvements were needed.

As part of the *Strategy*, the Monitoring Council took it upon itself to establish an implementation oversight role, guiding the workgroups in portal development and endorsing key monitoring and assessment improvement initiatives. Annual reports informed the agency secretaries of Monitoring Council progress in years between major report deliverables. In nearly every reporting, the Council made a number of recommendations, including the need for increased participation by departments within both agencies and dedicated funding for collaborative processes included within the *Strategy*.

One key decision made by the Monitoring Council was to provide a review deadline for each report sent to the agency secretaries. Transmittal letters gave the agency secretaries a date by which, if no comments were received, the Council would consider the agency secretaries to have concurred with the report. Written comments were never received from the agency secretaries on the major report deliverables nor on the annual progress reports. Individual briefings were held following submittal of the initial recommendations report and the *Strategy* document in which the agency secretaries praised achievements made by the Council and its workgroups. But no formal endorsement of Monitoring Council recommendations has ever been received.

SB 1070 and the MOU called for the Cal/EPA Secretary to conduct a triennial audit of the effectiveness of the *Strategy* in consultation with the Natural Resources Secretary. In late 2013, Cal/EPA Secretary Matthew Rodriguez was asked how he wanted the first audit to be conducted. In response, the Monitoring Council was asked to perform a self-audit. Each workgroup provided a self-evaluation and common themes emerged, which formed the basis of the first triennial audit report, delivered to the Agency Secretaries in December 2014. The audit concluded that the current effort based largely on volunteer actions and inconsistent funding was not sustainable and similar recommendations were made for increased departmental participation and dedicated funding.

Meetings were held with Cal/EPA Secretary Matthew Rodriguez and Undersecretary Gordon Burns. These meetings were reported on at the May 2015 Monitoring Council meeting ([see Item 4 of the meeting notes](#)). Additional discussions are planned.

Since the first triennial audit was completed, portal development progress for most themes has stymied over (1) availability of GIS-related staff time, (2) changes in database infrastructure needed to allow portals to access data, (3) lack of comfort by state agency IT personnel with open-source software solutions that have become key components of both estuaries and wetlands data management and visualization, and (4) uncertainty over control agency approval process for IT systems developed by third parties. Safe-to-Swim and Drinking Water workgroups have not met for well over a year, waiting for obstacles to be overcome.

A lack of dedicated funding and management support has caused workgroup leadership and departmental participation to remain problematic for a number of the Monitoring Council's workgroups. Meetings with the departments of Fish and

	<p>Wildlife and Pesticide Regulation staff to encourage participation have been answered with management declining to have their staff involved in workgroup efforts. The standardization of methods for monitoring, QA, and assessment has made progress mainly through the Wetland Monitoring Workgroup outreach efforts and within organizations already using SWAMP procedures. A workgroup for the ocean ecosystem health theme has yet to be formed; however, recent funding from Resources Legacy Fund and the State Water Board may lead to a joint graduate student fellow to be hired by the Ocean Science Trust and SCCWRP to begin the coordination process between MPA and ASBS monitoring efforts. The triennial audit's conclusion that the current largely-voluntary effort is not sustainable continues to be born out. It appears that progress will be made in the Sacramento-San Joaquin Delta, through actions by state and federal agencies already working to coordinate monitoring, assessment, data management, and visualization; this bodes well for the Estuary Monitoring Workgroup's efforts, at least for its Bay-Delta activities.</p>	
<p>Attachment Links:</p>	<ul style="list-style-type: none"> • Where do we go from here? – presentation by Jon Marshack • California Senate Bill 2070 (Statutes of 2006) • Memorandum of Understanding between Cal/EPA and CNRA (2007) • Monitoring Council's Initial Recommendations to Agency Secretaries (2008) • 2009 Annual Progress Report • Monitoring Council's Comprehensive Monitoring Program Strategy (2010) • 2011 Annual Progress Report • 2012 Annual Progress Report • First Triennial Audit of Implementing the Monitoring Council's Strategy (2014) 	
<p>Contact Person:</p>	<p>Jon Marshack Greg Gearheart</p>	<p>jon.marshack@waterboards.ca.gov; (916) 341-5514 greg.gearheart@waterboards.ca.gov; (916) 341-5892</p>
<p>Notes:</p>	<p>Jon Marshack made a presentation regarding the Monitoring Council's background, its success and failures. Following the presentation, Jonathan Bishop indicated that we have an opportunity to reassess our purpose and goals, particularly if we hope to implement at a higher level. Jonathan added that the Monitoring Council originally believed that the workgroups and portals would provide an incentive for various agencies to participate, however, this has not been the case. He suggested that the Monitoring Council and its workgroups might consider picking issues that are of critical importance (e.g., drought), which would help support the work of technical users and decision makers—making the efforts of the workgroups and the portals invaluable. Sara Aminzadeh agreed with Jonathan's assessment, but indicated that the Monitoring Council should also strongly consider the usefulness of data to the public. Sara indicated that the Triennial Audit revealed that the portals were mainly used by agency staff in Sacramento. She suggested that we consider the public user more as we move forward.</p> <p>Steve Weisberg and Armand Ruby asked more broad questions to elicit discussions. What is the Monitoring Council's reason to exist? Do we need to continue? Who would miss us if we were gone? This led to a discussion regarding the successes and failures of the Monitoring Council. The Wetland</p>	

Monitoring Workgroup (CWMW) was highlighted as a success. Steve Weisberg indicated that the group's success was likely because it brought together disparate groups for a common goal. He added that the Monitoring Council provided the workgroup structure, and asked Josh Collins (CWMW Co-Chair) for his thoughts. Josh indicated that he thought the group appreciated being part of the Council; however he also added that he thought the workgroup would likely have had the same level of success without the Monitoring Council.

Steve Weisberg suggested that there are three main goals the Monitoring Council should pursue: 1) break down silos across agencies to improve efficiency; 2) identify technical shortcomings and inefficiencies; and 3) make data available and accessible. Steve indicated that the Monitoring Council has previously devoted much of their efforts towards the third goal, which he felt was unsuccessful thus far. The Monitoring Council as a whole agreed with Steve's assessment.

Jennifer Teerlink of the Department of Pesticide Regulation asked whether the desired audience is the public or agency staff. Armand Ruby indicated that the motivation of SB 1070 was to address both, and he indicated that this goal was worthwhile. He added that the idea behind SB 1070 was altruistic, but despite our efforts, our successes have been minimal. The agencies do not want to support the effort and the public does not use the portals. He then asked the question—will coordination exist without the Monitoring Council?

One of the authors of SB 1070, Linda Sheehan, provided some background and insight by phone. She indicated that prior to SB 1070, it was extremely difficult for the public and decision makers to get information and data regarding water quality and ecosystem health. She added that the government spent and continues to spend considerable amounts of money collecting those data, but devoted little effort trying to make those data available to technical agency staff and decision makers. She added that there was a lot of resistance to coordination—and there still is. Linda stressed that the work is still important. She mentioned that part of the challenge is that agencies are not set up to coordinate. She also added that the Monitoring Council on its own may not be able to succeed in getting agencies to coordinate and make use of the portals; however, that is not the Monitoring Council's fault.

Sarge Green suggested that the Monitoring Council has two options to deal with their "growing pains." First, the Council needs to determine how they would like to move forward—he suggested that the legislation may need to be amended, for example. Second, he suggested that we need to work towards providing tools and products that will make the Monitoring Council indispensable.

The point was made that the Monitoring Council is not connecting to the agencies that still remain siloed. Jonathan Bishop clarified that silos are fine—we just need tunnels to connect those silos. He added that the Monitoring Council needs an advisory group that are outside the agencies, and suggested that perhaps the existing Monitoring Council members could be elevated to an advisory role to think about high level issues. Jonathan mentioned that perhaps CalEPA and Natural Resources Agency could then nominate Council members from their various agencies and departments—these agency representatives could become the new Monitoring Council. Greg Gearheart asked Jonathan whether he was suggesting that the Monitoring Council should stay the course, but just modify the governance structure. Jonathan confirmed that that was his suggestion.

Parry Klassen mentioned that the Monitoring Council and its workgroups are not providing products that agencies or the public cannot live without. Using a crop analogy, he suggested that we need to grow something that people want. He asked whether the Monitoring Council was limiting itself by dealing with only water quality issues—could we open up our scope to cover other interests. Armand Ruby added that he saw three products of the Monitoring Council that are still used today: 1) 303d listing policy; 2) TMDL policy; and 3) the State Water Ambient Monitoring Program (SWAMP). Armand mentioned that these are valuable accomplishments of the Monitoring Council. He then asked whether the Monitoring Council is still needed. Linda Sheehan suggested that she felt that the group should broaden and become flexible regarding their scope, so that we can address needs that would make the Council's work relevant (e.g., drought impacts).

Phil Markle then asked how we could demonstrate that data sharing is important. Greg Gearheart asked whether it is the Council's role to demonstrate that. Phil Markle added that we could pursue a legislative approach. Jon Marshack mentioned that the group had touched up a few of the issues the Council faces. For example, of the ten Monitoring Council members, only 3 represent agencies (two within the State of California). He added that these are the agencies that have stepped up. Those agencies who have not participated have given the most resistance.

Greg Gearheart asked whether the Monitoring Council should be able to address problems opportunistically, or should we be proactive and address problems we have identified as important. Jonathan Bishop indicated that he thought there are advantages to being opportunistic. Karen Larsen mentioned that she felt that there has been some success at the regional level with their regional monitoring programs—they are coordinating their monitoring efforts and working together. Jon Marshack added that the Monitoring Council has focused on statewide coordination, but that focus could change. Karen Gehrts mentioned that the Monitoring Council could serve a similar role to the Delta Stewardship Council, for example (e.g., focusing on the Delta to increase our relevance).

Steve Weisberg raised the question again regarding how the Monitoring Council has benefitted the Wetland Monitoring Workgroup. Josh Collins indicated that being part of the Monitoring Council was helpful in opening doors for meetings and getting the attention of certain groups. However, he added that any additional benefits were limited, given that the Monitoring Council had no power or authority to encourage organizations to participate.

Terry Fleming mentioned that he thought the group was missing the big picture. He added that no other group is looking at how all the pieces work together. He added that he felt that it is important to be nimble and think of the big picture. Armand Ruby thought that Josh Collin's comments were valid. Previously, the Monitoring Council has approached agencies telling them that we have a great idea—please fund us. However, he suggested that we might consider approaching the agencies and ask them how we can help them fulfil their goals. Jonathan Bishop mentioned that this task is nearly impossible with 1.3 staff members working on these efforts. He added that Undersecretary Gordon Burns has mentioned that we need to work towards supporting high level initiatives and subjects that are important to the State (e.g., the health of the Delta).

Steve Weisberg asked Jon Marshack for his thoughts on what direction the Monitoring Council should take. Jon indicated that he saw value in switching to a more pragmatic model. He added that he would also like to see an advocate

	<p>in the legislature. Jon also thought that having more successes to point to would elevate our value to the monitoring community.</p> <p>Sarge Green saw value in the idea of working on high level issues like the Delta to elevate the Monitoring Council—making us indispensable. He also thought that the groundwater issue is important for the Monitoring Council to pursue. Sarge liked the idea of bringing on other agencies to the Monitoring Council. He also thought that the Monitoring Council should have a regional coordinator to assess the needs of agency staff and decision makers (e.g., for issues like groundwater).</p> <p>Jonathan Bishop asked whether we should have a steering committee as well as a Monitoring Council composed of agency representatives. Greg Gearheart asked what the role would be for the advisory group. Jonathan thought that the advisory group would essentially serve the same role. The group would help facilitate workgroups, resolve issues, and elevate issues. He felt that it is better to have the advisory group be composed of members outside of the agencies. Greg mentioned that an advisory committee will help to address the public focus mentioned by Sara Aminzadeh.</p> <p>Greg asked whether there were any alternatives to the governance changes being proposed. Terry Fleming suggested that we could serve as an advisory committee to regional efforts (e.g., design of monitoring programs, indicators, etc.). However, he did not feel that the Monitoring Council currently has the “mojo” to pull that off. Sara Aminzadeh asked whether we know enough about our successes and failures to decide upon our future direction. She added that we need to have a cohesive vision to be able to successfully move forward. Greg Gearheart added that a new structure and vision could help bring potential partners to the table. Sara added that she did not feel that bringing in more agencies will make the Monitoring Council more relevant. Jonathan Bishop indicated that he did not feel that the Monitoring Council could become more relevant without getting additional agencies involved.</p> <p>Jonathan then suggested another alternative—the Monitoring Council could keep its current structure, but be more opportunistic regarding how it focuses its efforts. Greg indicated that this approach could mean that we modify the focuses of the workgroups and portals. Armand Ruby indicated that he did not feel that this suggestion was any different than our current approach. Paul Jones mentioned that when the Wetland Monitoring Workgroup (CWMW) was formed, it was targeted to address specific user needs. He suggested that the Monitoring Council could find groups like the Delta Stewardship Council, and seek out the champions from those agencies who are impassioned and would be willing to come to the table. He mentioned that when the CWMW began, membership was high, but shrank over time. It is then important to identify the needs of those members, and work towards goals to help support those needs. He added that this will keep members coming to the table, and in some cases, this can help bring in additional funding to support the group’s efforts. Jon Marshack indicated that the CWMW has members that are good advocates (e.g., SCCWRP, SFEI, and Moss Landing Marine Laboratories) that provide regular outreach to government agencies and others. State governmental representatives do not necessarily have the same motivations. He asked how that outreach component can be replicated?</p>
<p>Action Items:</p>	<p>Jon Marshack and Kris Jones will use their notes from this discussion to develop options for Council consideration. Jon and Kris will arrange a subcommittee</p>

	<p>meeting of Council Members to further develop options for the future direction of the Monitoring Council, which will be discussed at the next full Monitoring Council meeting on December 11. Jonathan Bishop, Sara Aminzadeh, Sarge Green, Steve Weisberg, and Phil Markle offered to participate on the subcommittee.</p>	
ITEM:	8	
Title of Topic:	NEXT MEETING AGENDA	
Purpose:	<p>Plan agenda for December 11, 2015 Monitoring Council meeting in Sacramento. Potential items include:</p> <ul style="list-style-type: none"> a) Data quality and data management standardization efforts of SWAMP (Melissa Morris) b) The California Freshwater Species Database (Jeanette Howard, The Nature Conservancy) c) Assessing aquatic habitat connectivity and low-flow ecological thresholds (Robert Holmes, CDFW Water Branch) d) Story-telling Initiative of the Water Board’s Office of Information Management and Analysis (Greg Gearheart) e) Possibility of holding a Monitoring Council annual conference f) Presentations from organizations within the Natural Resources agency (e.g., those identified in SB 1070) and next steps for outreach g) Department of Pesticide Regulation water quality and pesticide use data – possible options to get those data available and integrated onto one of the My Water Quality portals; Management Agency Agreement between DPR and the State Water Board will soon be rewritten (Dawit Tadesse) 	
Desired Outcome:	Develop agenda ideas for the December 11 meeting.	
Contact Persons:	<p>Jon Marshack Kris Jones</p>	<p>jon.marshack@waterboards.ca.gov; (916) 341-5514 kristopher.jones@water.ca.gov; (916) 376-9756</p>
Notes:	<p>Phil Markle expressed interest in hearing Item (c).</p> <p>The Monitoring Council agreed that the bulk of the agenda should be a follow-up item on the future direction of the Monitoring Council. Possible subtopics of that item could include:</p> <ul style="list-style-type: none"> • Outreach with the Legislature (Sara Aminzadeh) • Connections between DPIIC and Monitoring Council workgroups (Rainer Hoenicke) • Perspective of CalEPA <p>Jon also mentioned that the California CyanoHAB Network will present information on their voluntary draft guidance for addressing harmful algal blooms.</p>	