

# California Water Quality Monitoring Council

## Council Meeting Notes

October 15, 2008, 8:30 AM to 5:00 PM

**Southern California Coastal Water Research Project  
3535 Harbor Blvd., Suite 110, Costa Mesa, CA**

Monitoring Council members in attendance:

Jonathan Bishop, Terry Macaulay (for Joe Grindstaff), Armand Ruby,  
Sam Mowbray, Steven Steinberg, Linda Sheehan, Steve Weisberg, Sarge Green

SB 1070 Work Group members in attendance:

Brock Bernstein, Valerie Connor, Melenee Emanuel, Karl Jacobs, Jon Marshack

ITEM: #	1	Assigned to:	Time:
<b>Title of Topic:</b>	<b>HOUSEKEEPING &amp; ANNOUNCEMENTS</b>	Jon Marshack	8:30 – 9:00
<b>Purpose:</b>	1) Approve notes from August 18, 2008 Council meeting 2) Review agenda for today's meeting 3) Council membership update (Jonathan Bishop, Jon Marshack) 4) Council member travel reimbursement for meetings (Jon Marshack) 5) Select November 2008 meeting date and time.		
<b>Desired Outcome:</b>	1) Approve August 18, 2008 meeting notes. 2) Information. 3) Select November meeting date and time.		
<b>Attachments:</b>	notes_8-18-08.pdf CMC Candidates Transmittal 9-11-08.pdf Per Diem Reimbursement.doc Travel Expense Claim Form.xls Per Diem for Excluded Employees.doc		
<b>Contact Person:</b>	Jon Marshack	<a href="mailto:jmarshack@waterboards.ca.gov">jmarshack@waterboards.ca.gov</a> , 916-341-5876)	
<b>Notes:</b>	<b>Council Membership</b> On September 11, 2008, Council Co-Chair Jonathan Bishop sent a letter to Cal/EPA Secretary Linda Adams and Resources Secretary Mike Chrisman requesting approval to: (1) replace Council member Geoff Brosseau with Armand Ruby, representing the regulated stormwater community; (2) replace Council member Roberta Larson with Samuel Mowbray, representing the regulated POTW community; and (3) add new Council member Sargeant Green, representing the water supply community. The letter concluded by saying that these		

	changes would be considered to be approved if no response was received by September 30, 2008. No such reply has been received. Therefore the Council membership changes are considered to be approved.
<b>Decisions:</b>	<p><b>Meeting Notes</b> August 18, 2008 Council meeting notes approved.</p> <p><b>November Meeting</b> The next Council meeting will be on November 18 from 10:00 a.m. to 4:00 p.m. at the Cal/EPA Building in Sacramento. This replaces the November 17 meeting scheduled earlier. In addition, the Council will hold a teleconference to discuss the next draft of the December recommendations report on October 28 from 3:00 to 4:00.</p>
<b>Action Items:</b>	<p><b>Council Member Travel Reimbursement</b> Council members who wish to be reimbursed for expenses incurred to travel to Council meetings are to complete the standard travel claim form according to the regulations for Per Diem for Excluded Employees and submit the form and all applicable receipts to Jon Marshack for processing.</p>

<b>ITEM: #</b>	2	<b>Assigned to:</b>	<b>Time:</b>
<b>Title of Topic:</b>	<b>REPORTS AND BRIEFINGS</b>	Jon Marshack	9:00 – 11:00
<b>Purpose:</b>	1) Update reports: <ul style="list-style-type: none"> <li>a) SWAMP Report on Bioaccumulation in Lakes (Val Connor)</li> <li>b) SWAMP Tiered QA (Val Connor)</li> <li>c) Water Data Institute (Val Connor)</li> </ul> 2) California Wetlands Monitoring Workgroup, CWMW (Josh Collins) 3) California Environmental Data Exchange Network, CEDEN (Karl Jacobs)		
<b>Desired Outcome:</b>	Information and receive Council recommendations.		
<b>Background:</b>	At the August 18, 2008 meeting, the Council approved the concept of the CWMW becoming a subcommittee of the CWQMC. The CWMW has developed potential components of a comprehensive CA wetland monitoring and assessment plan, including: comprehensive habitat and project mapping, standardized ambient assessment, standardized project assessment, standardized policy and program assessment, applied and targeted basic research, and public data and information management. Their WetlandTracker website ( <a href="http://www.wetlandtracker.org/">http://www.wetlandtracker.org/</a> ) is proposed to be the main focus for		

	<p>providing information to the public and will directly complement the Council's California Water Quality Web Portal.</p> <p><i>Note: The CWMW will be holding their meeting on October 15 also at SCCWRP. The CWMW plans to join the CWQMC meeting for this portion of our agenda.</i></p>	
<b>Attachments:</b>	<p><i>Items 1(a), (b) and (c) to follow by separate email.</i></p> <p>wetlands_presentation_10-15-08.pdf ceden_10-8-08.ppt</p>	
<b>Contact Person:</b>	Jon Marshack	<a href="mailto:jmarshack@waterboards.ca.gov">jmarshack@waterboards.ca.gov</a> , 916-341-5876)
<b>Notes:</b>	<p><b>SWAMP Report on Bioaccumulation in Lakes</b> Results of monitoring 100 popular fishing sites plus more randomize monitoring shows widespread mercury contamination. Bob Brodberg of OEHHA will brief the State Water Board in two weeks. The monitoring design was agreed upon by OEHHA and the Water Boards and was peer reviewed. While good for screening purposes, OEHHA does not feel that the monitoring effort was sufficient to use to issue fish consumption advisories. More detailed monitoring in specific sizes of fish would be needed. There is a need to balance potential health effects of contaminants with the health benefits of eating fish.</p> <p><b>SWAMP Tiered QA</b> In evaluating how data are collected for various projects and programs (e.g., stormwater, NPDES discharges), there is a realization that all data does not need to be of the same quality. But the data need to be of sufficient quality to support decision making. For regulatory decisions that have considerable monetary consequences (e.g., impaired water body listing, 303(d)), the data would need to be of the highest quality, fully "SWAMP comparable". Toxicity data used to screen water bodies may require less rigor and at a lower expense. It is important to ensure that data developed for a specific limited purpose is not misused. Data should be flagged as meeting one of the tiers or sufficient meta-data should be submitted to allow data verification/validation at a later date. The Water Board's Stormwater Program will begin regional assessments next spring, which will necessitate development of appropriate tiered QA guidelines. Inter-calibration studies are needed, especially for future joint-agency exercises.</p> <p><b>California Wetlands Monitoring Workgroup (CWMW)</b> Josh Collins made a PowerPoint presentation on the activities of the CWMW. The state needs a picture of wetland conditions, but most monitoring is done for specific projects. Everyone needs ambient monitoring (e.g., to provide baseline for projects), but nobody wants to pay for it. A regional focus is needed to get local interests involved. Probabilistic (not just random) plus targeted monitoring is needed. Client driven approach provides local interests with the tools they need, while encouraging them to provide the data necessary for region-wide and statewide assessments. Regulatory requirements for project</p>	

monitoring needs to include a degree of ambient assessment to benefit the larger community. The use of standardized tools should be mandated by permit, grant, and contract provisions.

The CWMW has developed three levels of monitoring. Level 1 surveys map/inventory wetland numbers and delineate boundaries. In Level 2, the overall health of a wetland is measured with rapid assessment methods (California Rapid Assessment Method, CRAM). Level 3 monitoring provides a more detailed assessment of the health and function of a wetland. Each level builds on the information from the lower levels. Level 3 monitoring is used to validate Level 2 assessments, ideally allowing Level 2 assessments to be used as a predictor of Level 3 results. A toolbox is developed for each level and each class of wetland. Level 2 assessments also allow for estimates of net change in wetland conditions. Agreements are needed on the most important wetland functions to be assessed in Level 3.

The [California WetlandTracker](#) web portal is open sourced, allowing locals to modify the software for their specific uses. This provides increased communication, while feeding data into a larger system of regional data centers. Providing a data archive also benefits local organizations. For private interests, such services can be offered by subscription. Such client-driven relationships are crucial to the state being able to achieve statewide monitoring and assessment goals.

The Monitoring Council discussed the relationship between theme or sub-theme based work groups or subcommittees, such as WMWG and the Monitoring Council. The Council gets the benefit of the focused expertise of the work group, while the work group gets access to a larger system of monitoring efforts, data management tools (i.e., regional data centers and CEDEN), and high level agency decision-makers. Through the Council, one work group can develop relationships with and pass along lessons learned to other work groups. The Council can use those lessons learned to develop policies and guidelines on how other work groups should be organized. On the downside, the Council's web portal structure and ground rules may constrain a work group.

### **California Environmental Data Exchange Network (CEDEN)**

Karl Jacobs gave a PowerPoint presentation overview of CEDEN. CEDEN is part of the state's move away from a single data repository system. CEDEN is a distributed system, accessing monitoring data housed at the State Water Board (SWAMP) and the Department of Water Resources and four regional data centers at Moss Landing Marine Lab (MLML), San Francisco Estuary Institute (SFEI), UC Davis, and Southern California Coastal Water Research Project (SCCWRP), keeping the primary data close to the source that generated it. Interoperability of the data requires standardization. CEDEN uses protocols, including "web services" developed by the National Environmental Information Exchange Network (NEIEN). This allows data sharing with federal and other state entities who also use NEIEN standards. This can be critical for watersheds that cross state lines,

such as the Klamath River. This also facilitates the upload of data to USEPA, as required by various statutes and regulations. USEPA grants are available to maintain data using NEIEN standards. Compliance with these standards is achieved by the data provider with assistance from CEDEN and data center staff. In January 2009, additional tools will be made available, including data upload tools for citizen monitors, data analysis tools, and data center derived tools. The Monitoring Council's web portal will be a primary access point CEDEN data.

As each agency develops its own databases, there needs to be built-in access to the data from outside, for example using web services. The Monitoring Council has influence to convince agencies and departments to think beyond their own data needs, broadening data access.

NEIEN focuses on water quality data. Additional federal data standards exist for other type of data, such as habitat. The inter-comparability between the various data standards needs to be examined.

**Water Data Institute**

Valerie Connor explained that State Board member Dr. Gary Wolff is interested in developing this institute to house both water quality and water quantity data. There is a similar focus as the Monitoring Council. It has not yet been decided whether the institute will use a centralized or distributed data management system. Pursuant to AB 1404, a feasibility study report (FSR) and cost analysis are being developed to provide interconnection of water quantity data between the Water Board's Division of Water Rights, the Department of Water Resources, and the Department of Public Health. The goal of the legislation is to better understand how that state's system of water allocation and delivery works. No funding for this work has yet been provided.

**Decisions:**

- 1) A recommendation regarding SWAMP Tiered QA should be in the December report. Additionally, a recommendation is needed on how to move QA concepts beyond SWAMP to other agencies. Inter-calibration studies are necessary.
- 2) Armand Ruby will be added to the team that reviews the Stormwater Program QA Guidelines.
- 3) The Council recommended continued relationships between theme and sub-theme based work groups, such as CWMW, and the Monitoring Council. The work group develops the portion of the web portal devoted to their theme or sub-theme and underlying monitoring and assessment efforts within an overall common interface structure guided by Monitoring Council policies and guidelines.
- 4) The Monitoring Council and work groups need to maintain a regionalized focus within a broader statewide framework so that both local and statewide needs are met.
- 5) The work group for each theme will identify data sources and

	<p>recommend appropriate levels of QA and data format comparability so that data can be accessed by CEDEN. Federal data standards will be given first priority.</p> <p>6) December report needs to maintain a focus that is broader than that of the Water Boards.</p>
<b>Action Items:</b>	<ol style="list-style-type: none"> <li>1) Prior to the next meeting, Valerie Connor will: <ol style="list-style-type: none"> <li>a) Send summary reports to Council members on the SWAMP Report on Bioaccumulation in Lakes, SWAMP Tiered QA, and the Water Data Institute.</li> <li>b) Talk with Brock about QA issues with non-contaminant monitoring data.</li> <li>c) Develop information on how other SB 1070-listed agencies are managing QA issues.</li> <li>d) Develop irrigated lands nitrate monitoring as an example of SWAMP tiered QA.</li> </ol> </li> <li>2) A WetlandTracker demonstration was requested for a future Council meeting.</li> <li>3) Eric Stein will send the SWAMP report on the three level wetland monitoring framework to Jon Marshack.</li> <li>4) Jon Marshack will send the CWMW PowerPoint to Monitoring Council members.</li> <li>5) Karl Jacobs will contact John Ellison at the Resources agency to discuss that agency's data infrastructure (e.g., CERES, IWRIS, BDAT) and how access can be provided through CEDEN.</li> <li>6) Terry Macaulay will provide information on Resources Agency <ol style="list-style-type: none"> <li>a) Strategy for organizing and access to data,</li> <li>b) List of major data systems, and</li> <li>c) Names of contacts.</li> </ol> </li> <li>7) Karl Jacobs will examine the inter-compatibility between various federal data standards.</li> <li>8) Valerie Connor will provide Brock Bernstein with the draft FSR for AB 1404.</li> </ol>

<b>ITEM: #</b>	3	<b>Assigned to:</b>	<b>Time:</b>
<b>Title of Topic:</b>	<b>CALIFORNIA WATER QUALITY WEB PORTAL</b>	Jon Marshack	11:00 – 12:00 & 1:00 – 2:00
<b>Purpose:</b>	Presentation on the development of a new theme-based web portal for water quality monitoring and assessment information.		

<b>Desired Outcome:</b>	Council comments, conceptual approval, and recommendations.	
<b>Background:</b>	<p>At the August 18, 2008 meeting, the Council agreed that:</p> <ul style="list-style-type: none"> <li>a) Efforts at monitoring program coordination, at least in the short-term, should be organized around the unifying concept of theme-based web portals, as outlined in Brock Bernstein's "Theme-based portals 8-11-08.doc".</li> <li>b) Such portals should provide multiple levels of user-focused assessment information as well as access to raw data.</li> <li>c) The example portal for the December report will focus on swimming safety at the 3<sup>rd</sup> level, based on the SWRCB Beach Water Quality website, with two levels above addressing the main themes and maps.</li> </ul> <p>An updated list of themes and subthemes was circulated to Council members for comment on August 26, 2008. The only comments received were those of Sarge Green, who was concerned that the following were not addressed -- Status of delivered, untreated surface water, specifically for urban, rural, and agricultural water supplies.</p> <p>The Cartooning Subcommittee (Terry Fleming, Steve Steinberg, and Parry Klassen), with assistance from Brock Bernstein and Jon Marshack, have met on two occasions to develop a mock-up of the portal, which was circulated to the Council for comment on September 17, 2008. Council member comments have been addressed in the latest version, which was also reviewed by the Cartooning Subcommittee on October 8.</p>	
<b>Attachments:</b>	Theme-based portals 08-11-08.doc Themes and Subthemes 08-26-08.doc Sarge Green Comments.pdf Web Portal Mockup 10-8-08.pdf Site Map 10-3-08.pdf	
<b>Contact Person:</b>	Jon Marshack	<a href="mailto:jmarshack@waterboards.ca.gov">jmarshack@waterboards.ca.gov</a> , 916-341-5876)
<b>Notes:</b>	Jon Marshack demonstrated the web portal test site, which is based on the mock-up distributed earlier, and titled "My Water Quality", and focused on the "Safe to Swim" theme. The work done so far was well received. The issue of merging the Water Boards' Surface Water Ambient Monitoring Program (SWAMP) website with the Monitoring Council's web portal was discussed. In the mock-up and test site, "hosted by the Surface Water Ambient Monitoring Program (SWAMP)" appears in the green bar below the home tab, reflecting the fact that SWAMP is currently funding web portal development. Two SWAMP links appear in the left navigation bar of all web pages and are accompanied by the SWAMP logo on the home page. As an alternative to the SWAMP links a separate SWAMP navigation tab at	

	<p>the top of the page would provide access to SWAMP information.</p> <p>If another organization were to get involved in beach monitoring and assessment, how would we decide whether or not to add their information to the portal? What criteria for acceptance or relevance would be used?</p>
<p><b>Decisions:</b></p>	<p>1) The Council expressed a preference for reducing the presence of SWAMP in the Monitoring Council web portal. SWAMP is a single program within a single agency. The focus of the portal should be less on the Water Boards and more inclusive of other agencies and organizations – less biased and more balanced. The over-emphasis of SWAMP could drive away potential players from other agencies and organizations. We want to encourage others to get involved in the portal development process.</p> <p>More specifically, they provided the following direction:</p> <ul style="list-style-type: none"> <li>a) Retain the About SWAMP and SWAMP Tools links and the SWAMP logo in the left navigation bar of the Monitoring Council's home page;</li> <li>b) Remove the SWAMP navigation tab;</li> <li>c) Keep the language "hosted by the Surface Water Ambient Monitoring Program (SWAMP)" in the green bar below the home page tab to recognize that SWAMP resources are supporting the web portal effort;</li> <li>d) Remove the About SWAMP and SWAMP Tools from other portal pages. These could be replaced with more generic "Tools" and "About Monitoring" links, as appropriate.</li> </ul> <p>SWAMP projects, products and tools will be featured on pages of the portal where they are relevant to the theme or sub-theme being presented. SWAMP branding would be used in those cases, i.e., the SWAMP logo would appear to the right of the item in a manner similar to the way other organization logos are used.</p> <p>2) The work group responsible for a particular theme or subtheme would initially decide what data sets to include in their portion of the portal. The Monitoring Council will judge with an eye to foster an equality of focus.</p> <p>3) Move “National Beach Closures and Postings” from the “My Beach Today” page to the “Trends” page, since the data therein is not current.</p> <p>4) Differentiate which links take users out of the Monitoring Council's website from those to pages within the website, e.g., by opening a new window for links to outside pages.</p> <p>5) On the “Impaired Beaches” page, limit displayed listings to those that involve contact recreational use and/or bacterial indicators.</p>

<b>Action Items:</b>	<p>1) Jon Marshack will implement the web portal changes called for in “Decisions” above.</p> <p>2) In light of the AB 411 funding cuts for beach monitoring, the December report should include an assessment of long-term funding.</p>
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<b>ITEM: #</b>	4	<b>Assigned to:</b>	<b>Time:</b>
<b>Title of Topic:</b>	<b>DECEMBER 2008 CWQMC REPORT</b>	Brock Bernstein	2:00 – 4:00
<b>Purpose:</b>	Review and comment on preliminary draft of the first SB 1070 report.		
<b>Desired Outcome:</b>	Council comments and direction on the structure and content of the SB 1070 Report. Specific direction is needed on the recommendations that are presented.		
<b>Background:</b>	<p>Brock Bernstein has produced a preliminary draft first SB 1070 Report, which is due to be submitted to the Secretaries of Cal/EPA and the Resources Agency on December 1, 2008. Pursuant to California Water Code Section 13181(b), the report must include “recommendations for maximizing the efficiency and effectiveness of existing water quality data collection and dissemination, and for ensuring that collected data are maintained and available for use by decision makers and the public.” According to the notes of the August 18, 2008 Council meeting, the December report should address:</p> <ul style="list-style-type: none"> <li>a) Collaborative processes for data sharing</li> <li>b) Data management and assessment conventions</li> <li>c) Need for disclaimers against potential misapplication of data</li> <li>d) Tailoring data presentation methods to user needs</li> <li>e) Funding currently available</li> <li>f) Stable resource needs for future efforts</li> </ul>		
<b>Attachments:</b>	SB 1070 Report draft 10-08-08.doc		
<b>Contact Person:</b>	Brock Bernstein	<a href="mailto:brockbernstein@sbcglobal.net">brockbernstein@sbcglobal.net</a> , 805-646-8369)	
<b>Notes:</b>	<p>Brock gave an overview of his latest draft report. While the content of the report was well received, the Council members expressed a desire for a broader, less dry focus, particularly in Chapter 1. More Resources Agency information and grant programs organized by implementing agency could be added. In Chapter 3, the reason why the evaluations are being made need to be expressed up front. Barriers should be expanded to barriers and opportunities. Add an initial focus on why past and existing efforts have fallen short and why our proposal is</p>		

	<p>needed.</p> <p>Funding will be needed to implement the Council’s vision. The report should discuss this in a phased manner. Can we redirect or leverage funding from existing monitoring efforts by eliminating redundancy or creating tradeoffs (e.g., reduce project or discharge monitoring to enhance regional assessments, as was done in the Bight program)? Is funding available through the National Water Quality Monitoring Council? Specific recommendations for funding will eventually be needed, based on costs to achieve early theme efforts. Baseline funding will be needed for data centers, CEDEN, etc.</p>
<p><b>Decisions:</b></p>	<ol style="list-style-type: none"> <li>1) Move the fact sheets on themes to an appendix while leaving the names of the programs, websites, and agency contacts in the body of the report. Summarize which themes/sub-themes are close to being ready, which are far away, and what can be done now.</li> <li>2) The report should be more readable by the agency secretaries, interested legislators and their staffs – less detail and more direct.</li> <li>3) Report organization – 5 to 6 pages containing the big messages, with the rest in appendices       <ol style="list-style-type: none"> <li>a) State the problem – lots of money is spent on monitoring, but there is poor access to the data – data is not integrated           <ol style="list-style-type: none"> <li>i) Inconsistencies in the data (e.g., QA)</li> <li>ii) Data inconsistently managed</li> <li>iii) No ready access to data that is user friendly</li> </ol> </li> <li>b) Describe the Council’s vision to correct the problem           <ol style="list-style-type: none"> <li>i) Present theme-based data portal</li> <li>ii) Monitoring Council provides a place for anyone to come to provide data and for development of standards that help them to work together.</li> </ol> </li> <li>c) Describe what needs to be done to implement the vision           <ol style="list-style-type: none"> <li>i) First bring existing pieces together</li> <li>ii) Safe to Swim, Wetlands, and Safe to Eat Fish/Shellfish are nearly ready to go and will be the initial focus (add Geotracker GAMA?)</li> <li>iii) Roadmap to work groups – others learn from those in initial focus themes.</li> <li>iv) Descriptions of themes and cross-theme concepts.</li> <li>v) Tie funding for data collection to making the data accessible.</li> </ol> </li> </ol> </li> <li>4) A number of organizations should be approached for funding       <ol style="list-style-type: none"> <li>a) Foundations</li> </ol> </li> </ol>

	b) Federal agencies c) National Water Quality Monitoring Council d) Proposition 50 partners
<b>Action Items:</b>	1) Brock will talk with Rufus Howell about whether drinking water could be added to the other three initial focus themes. 2) Brock will develop next draft of report and send to Council members. 3) Conference call on October 28, 3:00 to 4:00 PM to discuss draft with emphasis on evaluating the general level and focus of the report, not word-smithing. 4) Brock will revise the report as needed and send next draft to Council members for more detailed comments. Comments will be provided within 5 days in Track Changes mode with each comment identified as “critical” or “suggestion”. 5) Jon Marshack will develop a draft PowerPoint presentation, based on the draft report, to be finalized at the November 18 Council meeting. 6) Jonathan Bishop and Terry Macaulay will present the report to the State Water Board on December 2, using the PowerPoint presentation, with Jon Marshack as backup to discuss details. 7) The Council will conduct outreach to other organizations following December 2.

<b>ITEM: #</b>	5	<b>Assigned to:</b>	<b>Time:</b>
<b>Title of Topic:</b>	<b>EMERGING ISSUES</b>	Jon Marshack	4:00 – 4:30
<b>Purpose:</b>	Discuss emerging issues of relevance to the Monitoring Council that were not otherwise on this meeting agenda.		
<b>Contact Person:</b>	Jon Marshack	<a href="mailto:jmarshack@waterboards.ca.gov">jmarshack@waterboards.ca.gov</a> , 916-341-5876)	
<b>Notes:</b>	None.		

<b>ITEM: #</b>	6	<b>Assigned to:</b>	<b>Time:</b>
<b>Title of Topic:</b>	<b>MEETING WRAP-UP</b>	Jon Marshack	4:30 – 5:00
<b>Purpose:</b>	1) Summarize meeting. 2) Review action items.		

	3) Set date and agenda items for November meeting in Sacramento.	
<b>Contact Person:</b>	Jon Marshack	( <a href="mailto:jmarshack@waterboards.ca.gov">jmarshack@waterboards.ca.gov</a> , 916-341-5876)
<b>Notes:</b>	Good meeting. See above sections for action and agenda items.	
<b>Decisions:</b>	1) Next Monitoring Council meeting November 18 in Sacramento. 2) Conference call on October 28 from 3:00 to 4:00 PM to discuss direction of draft report.	

October 29, 2008