

CALIFORNIA WATER QUALITY MONITORING COUNCIL

Monitoring Council Meeting Notes

Wednesday, May 29, 2013 – 9:00 AM to 4:00 PM

Large Conference Room
Southern California Coastal Water Research Project (SCCWRP)
3535 Harbor Blvd., Suite 110, Costa Mesa



Monitoring Council Members and (Alternates) in attendance:

Sara Aminzadeh	Paul Helliker	Armand Ruby
Jonathan Bishop	(Karen Larsen)	(Ken Schiff)
Sarge Green	(Phil Markle)	Stephen Weisberg

Others in attendance or (on the phone):

Arne Anselm, Ventura County Watershed Protection District
(Rich Breuer, State Water Resources Control Board, OIMA)
(Mark Emmerson, California Department of Public Health, Drinking Water Program)
(Terry Fleming, US Environmental Protection Agency, Region 9)
Stephanie Fong, State and Federal Contractors Water Agency
(Kelleen Harris, Monterey Bay Aquarium)
(George Isaac, Delta Stewardship Council)
Jon Marshack, State Water Resources Control Board – Monitoring Council Coordinator
(Stephen McCord, McCord Environmental) (Elizabeth Nielsen, URS Corporation)
(Angie Noorda, State Water Resources Control Board)
(David Osti, 34 North)
Steve Steinberg, Southern California Coastal Water Research Project – CEDEN Program Manager
(Meghan Sullivan, Central Valley Regional Water Quality Control Board)
(Lori Webber, State Water Resources Control Board, SWAMP)
(Alison Weber-Stover, The Bay Institute)
(Unknown participant, State Water Resources Control Board)

ITEM:	1
Title of Topic:	INTRODUCTIONS AND HOUSEKEEPING
Purpose:	1) Introductions (in the room and on the phone) 2) Review draft notes from March 7, 2013 Monitoring Council meeting 3) Review agenda for today's meeting
Desired Outcome:	a) Approve March 7, 2013 Monitoring Council meeting notes b) Preview what will be covered today and overall meeting expectations c) Adjust today's agenda, as needed
Attachment Links:	Notes from March 7, 2013 Council meeting
Contact Person:	Jon Marshack Jon.Marshack@waterboards.ca.gov , 916-341-5514
Notes:	Paul Helliker was introduced as the new Monitoring Council Co-Chair, representing the California Natural Resources agency. Paul is Deputy Director for Delta and Statewide Water Management at the Department of Water

	Resources.
Decisions:	Notes from the March 7, 2013 meeting of the Monitoring Council were approved with the April 11, 2013 amendments.
ITEM:	2
Title of Topic:	ANNOUNCEMENTS AND UPDATES
Purpose:	<p>These are brief informational items that could be expanded into more detailed discussions for future meetings:</p> <ul style="list-style-type: none"> a) Filling the vacancy on the Monitoring Council representing citizen monitoring organizations (Jon Marshack) b) Update on USEPA Healthy Watersheds Initiative, California Project (Lori Weber) c) Launch of updated California Wetlands Portal and EcoAtlas (Jon Marshack) d) New Domain name for the My Water Quality website, portals, and Monitoring Council Information (Jon Marshack) e) Application of the Bagley-Keene Open Meeting Act to the Monitoring Council (Jon Marshack) f) Update on the Safe Drinking Water Workgroup and development of a Safe-to-Drink Portal to be linked from the My Water Quality website (Mark Emmerson) g) California Environmental Data Exchange Network, CEDEN (Steve Steinberg) h) Other announcements and updates related to the Monitoring Council's mission pursuant to California Senate Bill 1070, statutes of 2006
Desired Outcome:	Information, comments and questions
Background:	<ul style="list-style-type: none"> a) Monitoring Council Vacancy – In February, John Norton tendered his resignation from the Monitoring Council. A vacancy announcement was posted in March and four persons applied for the position. The Monitoring Council Co-Chairs reviewed the applications and decided to interview the top two candidates. Those interviews will occur in June. b) Healthy Watersheds Initiative, California Project – At the March 7 Monitoring Council meeting, Corey Godfrey of Cadmus Group, contractors to USEPA, presented preliminary results of their multi-metric analysis of California watershed health. The Monitoring Council provided comment that the final Healthy Watersheds Assessment report should: stress the strengths and limitations of the analysis; identify where California needs to augment its monitoring efforts to allow future assessments to more accurately reflect watershed health and vulnerability; and identify where models perform poorly. The Monitoring Council's Healthy Streams Partnership met with Cadmus and USEPA on April 19 to further review results the analysis and provided additional specific recommendations. c) New Wetlands Portal and EcoAtlas – At the March 7 Monitoring Council meeting, Meredith Williams of SFEI presented a new proposed California Wetlands Portal and a new version of its data engine Wetland Tracker, called

[EcoAtlas](#). The Monitoring Council provided recommendations that the map layers in both tools clearly differentiate between currently farmed lands and functional wetlands in the Delta and elsewhere in the state and obtain Monitoring Council concurrence via email prior to public release. The Wetland Monitoring Workgroup proposed that the map interface show Delta wetlands as “palustrine farmed” and that disclaimer language be added that states that the California Aquatic Resources Inventory (CARI) map is not intended for regulatory purposes and does not serve as a jurisdictional delineation of wetlands. This proposed solution was sent back to Monitoring Council members for review. Co-Chair Jonathan Bishop rejected this proposal. Instead, the Wetland Workgroup will implement the Monitoring Council’s fallback recommendation, which is to gray-out the Delta area and to add a disclaimer that wetlands will be shown in the Delta once more detailed maps of the area become available. The new California Wetlands Portal and EcoAtlas are scheduled to be made available to the public in mid-June.

- d) ***New My Water Quality Web Address*** – To further reinforce the fact that the Monitoring Council is a multi-agency effort, rather than an project of the Water Boards, the web presence of all Monitoring Council and workgroup information and the *My Water Quality* portals are being moved to a new web address that does not have any direct connection with the Water Boards’ website. The new web address, www.MyWaterQuality.ca.gov, is expected to be launched by the end of May.
- e) ***Bagley-Keene Open Meeting Act*** – At the May 2009 meeting, Monitoring Council Members asked that a number of legal questions be answered. Then Assistant Chief Council of the State Water Board Ted Cobb and Staff Council Nathan Jacobsen provided responses, which Jon Marshack summarized to the Monitoring Council Members in the form of a [memorandum, dated July 6, 2009](#). The first section of the memo addresses application of the Open Meeting Act to the Monitoring Council.
- f) ***Safe to Drink Portal*** – A workgroup and portal devoted to the safety of water for drinking and related uses were envisioned as part of the Monitoring Council’s recommended [Comprehensive Monitoring Program Strategy for California](#). The Department of Public Health, Division of Drinking Water and Environmental Management is leading this effort. Funding is being supplied by the State Water Board for portal development assistance by staff of the Southern California Coastal Water Research Project and the Water Education Foundation (WEF). A workgroup has been assembled, drawing staff from CDPH, WEF, the State Water Board, Department of Water Resources, the Association of California Water Agencies, Environment Now, and the Carmichael Water District. An [update on this effort and a list of portal questions](#) were presented to the Monitoring Council at the November 29, 2012 meeting. The workgroup held its second meeting on February 25 to review the text of a portal mockup created by WEF, CDPH, and SCCWRP.
- g) ***CEDEN*** – Managed by the State Water Board, [CEDEN](#) is a central location to find and share information about California’s water bodies, including streams, lakes, rivers, and the coastal ocean. Many groups in California monitor water quality, aquatic habitat, and wildlife health to ensure good stewardship of our ecological resources. CEDEN aggregates these data and makes them accessible to environmental managers and the public. CEDEN also provides data to the *My Water Quality* web portals.

Attachment Links	<ul style="list-style-type: none"> a) Monitoring Council Governance (see Section B, Membership) b) Notes from March 7, 2013 Council meeting (see item 6) c) Notes from March 7, 2013 Council meeting (see item 3) e) Legal Questions and Answers, memorandum of July 6, 2009 f) ‘Safe to Drink’ Web Portal Development Status – presentation by Mark Emmerson Safe to Drink Workgroup web page Notes from November 28, 2012 Council meeting (see Item 4) g) California Environmental Data Exchange Network Update – presentation by Steve Steinberg CEDEN Website 	
Contact Person:	Jon Marshack	Jon.Marshack@waterboards.ca.gov , (916) 341-5514
Notes:	<ul style="list-style-type: none"> a) Monitoring Council Vacancy – Interviews to fill the vacancy for the Monitoring Council Member representing Citizen Monitoring Groups will occur on June 13. b) Healthy Watersheds Initiative, California Project – Based on comments provided by the Healthy Streams Partnership, USEPA decided to extend their contract with Cadmus Group in order to add additional interpretive information to their California Healthy Watersheds Initiative Project report. A final report is expected by October 2013. c) New Wetlands Portal and EcoAtlas – Sarge Green indicated that some land within the Sacramento-San Joaquin Delta is both farmed and wetland – with dual purpose. Jonathan Bishop mentioned that the agricultural community is concerned that historical wetlands could come under Sections 401 and 404 of the Clean Water Act. Better data are needed to delineate actual wetlands in the Delta before they can be properly displayed within the Wetland Portal and EcoAtlas. The California Aquatic Resources Inventory (CARI) map, that manages these data for both tools, will show the Delta area grayed-out in the initial launch of these tools, along with disclaimer language. Paul Helliker indicated that implementation of the Bay-Delta Conservation Plan will map wetlands as components of delta conveyance tunnels and habitat restoration projects. d) New My Water Quality Web Address – Terry Fleming mentioned that most portal funding to date has come from the Water Boards. The My Water Quality home page will retain the statement “hosted by the Surface Water Ambient Monitoring Program.” The link on “My Water Quality” buttons on various websites needs to be changed. e) Bagley-Keene Open Meeting Act – Paul Helliker asked whether public access via the web would satisfy the requirements of Bagley-Keene, allowing Monitoring Council Members to participate in meetings remotely. f) Safe to Drink Portal – Mark Emmerson provided an update on the development of a Safe-to-Drink portal. He explained that CDPH has put its main focus to date on back-end business processes. A new open source development website will allow workgroup participants to edit their Safe-to-Drink portal pages. The new DRINC electronic annual reporting system will capture CDPH records making them available to the public as they come in from water purveyors. CDPH has offered to post Consumer Confidence 	

Reports on the web with notice to rate-payers, in lieu of water purveyors producing paper copies. In addition CDPH's drinking water data will be available through a graphic user interface in the portal. Additional graphic elements are needed for the portal. The Safe to Drink portal is now expected to be ready for public launch in the 4th quarter of 2013. Terry Fleming emphasized that the portal needs to explain what the presented data mean, more than simply referencing MCLs, discuss health issues involved. Sarge green emphasized that source water information needs to be integrated, including groundwater quality information from the Water Board's GeoTracker GAMA system. Jon Marshack offered that a map will also be included to show which surface waters are listed as impaired for the drinking water use. Similar maps are presented in the Safe-to-Eat and Safe-to-Swim portals.

- g) **CEDEN** – Steve Steinberg provided an [update on CEDEN](#). Two methods are used to access outside data – translation crosswalks to access larger established data systems and data input into CEDEN using templates for smaller, newer sources. Data templates as Excel files provide consistent data formatting, vocabulary, and minimum data elements necessary for data to be useable. Additional fields are provided to add value to the data. Consistent terminology allows data comparison. Regional Data Centers (RDCs) provide user support. A crosswalk is being established with the Water Boards CIWQS regulatory information database to obtain receiving water data via web services. Data upload to the federal Water Quality Exchange (WQX) occurs quarterly at present. The CEDEN website, which has not been changed in 18 months, provides data downloads as Excel files; staff plans to improve this interface. CEDEN acts as a data platform for other systems, such as the *My Water Quality* portals, through data marts, which are partial-view data subsets. Data marts also allow CEDEN to manage data for other organizations, such as the Santa Ana Watershed Project Authority (SAWPA). Challenges include:

- Small organizations do not have much data management knowledge, which is time consuming for RDC staff
- More analysis and interpretation are needed to derive meaning from the data and a redesign of the CEDEN user interface may help
- Resource limitations necessitate choosing between pursuing historic data versus new data sets and types; need to set priorities.
- CEDEN now manages point data; other data types require linear or polygonal location information
- Creating interactions with other existing systems without placing data in CEDEN

Jonathan Bishop expressed the need to provide access to many data sources – small NGOs, counties, cities, state and federal agencies, and larger sources such as the Southern California Bight and Klamath programs. Steve Weisberg offered that CEDEN has become widely enough known and used to have reached “critical mass.” We can now ask “Why isn't your data in the system?” Steve Steinberg offered that this has its down-side – can we handle the needed capacity? When the State Water Board provided seed money for the RDCs, it asked that a plan be developed to make the systems self-supporting. Steve Weisberg offered that CEDEN is a ways away from this goal. Improved data output methods and custom data mart arrangements with organizations like SAWPA could move the system toward self-sufficiency. Support for CEDEN hinges on credibility, the state using/relying on its data, and providing custom user applications. Phil Markel

	<p>asked whether CEDEN can calculate results. Steve Steinberg responded “not yet,” but that some internal calculations will be added. Current projects involve obtaining more uniform geographic data coverage, access to the Department of Water Resources’ Water Data Library and Interagency Ecological Program (IEP) data. Many users are confused between “SWAMP comparable” and CEDEN’s data requirements, which are not the same. Karen Larsen explained that CEDEN templates plus SWAMP Measurement Quality Objectives (MQOs) mean “SWAMP comparable.” QA/QC evaluation and error checking issues still need to be improved, e.g., through clear and useful data flags and qualifiers. Entry of continuous data types will also be a challenge. Template changes also need better publicity.</p>
Decisions:	<p>c) <i>New Wetlands Portal and EcoAtlas</i> – The Monitoring Council has approved the new California Wetlands Portal and EcoAtlas for public release with the caveat that the Delta area will be grayed out and a disclaimer added that more accurate maps of Delta wetlands are needed.</p>
Action Items:	<p>d) <i>New My Water Quality Web Address</i> – Update link associated with “My Water Quality” buttons on various websites.</p> <p>e) <i>Open Meeting Act</i> – Jon Marshack will inquire with Water Board attorneys as to whether public access via the web would satisfy the requirements of Bagley-Keene, allowing Monitoring Council Members to participate in meetings from remote locations without violating public access and notice requirements.</p> <p>f) <i>Safe to Drink Portal</i> – Mark Emmerson of CDPH will present a mockup of the Safe to Drink portal at the August 28 meeting of the Monitoring Council</p>

ITEM:	3
Title of Topic:	CALIFORNIA ESTUARIES PORTAL MOCKUP
Purpose:	Stephanie Fong of the State and Federal Contractors Water Agency (SFCWA) presented a mock-up of a proposed California Estuaries Portal to be linked from the My Water Quality website
Desired Outcome:	Approval to build the portal
Background:	At the August 2012 Monitoring Council meeting, Val Connor of SFCWA provided an update on the efforts of the Estuary Monitoring Workgroup to develop a web portal that will present monitoring data and assessment information on the health of California’s estuaries, with an initial focus on the San Francisco Bay-Delta Estuary. Amye Osti of 34 North demonstrated the workgroup’s internal website, which provides a toolbox that allows workgroup members to bring together data, maps, reports, and other information and to use them to develop the stories that will be presented in the new portal. The Monitoring Council provided positive feedback on the efforts of the workgroup and the web tools they are using.
Attachment Links:	<ul style="list-style-type: none"> • California Estuary Monitoring Workgroup’s Estuary Portal – presentation by Stephanie Fong • Notes from August 29, 2012 Council meeting (see item 6)

Contact Persons:	Stephanie Fong	SFong@sfcwa.org , (916) 400-4840
Notes:	<p>The workgroup's initial effort is to transform the Department of Water Resources' D-1641 Delta water quality report into an interactive web-based format that is more useful to agency staff. Included will be data from 1975 to the present.</p> <p>The initial portal focus will be the living resources of the San Francisco estuary, a topic that has not been addressed by the other portals. The portal will present visualizations of trends in key biological resources. Due to their controversial nature, identification and evaluation of drivers of biological condition will not be included in the initial portal release. The portal will address three general audiences with differing level of detail – the general public, more scientific novice users, and agency scientists. The portal will use special icons to identify fish, water, habitat, and other key features. A statewide overview of estuaries will be included, addressing What? Where? Why important? and What is being done? Jonathan Bishop stressed that analysis of what the data mean needs to be presented, e.g., through indices such as water quality objectives and TMDLs. Terry Fleming offered that judgments on which species are present may be beneficial, e.g., which are native, which are invasive, which should not be there. Steve Weisberg offered that the current limitations on data being presented and what is not known should be highlighted. He also suggested that benthic data should be emphasized, as they allow comparison with objectives that exist for higher salinity estuarine waters. Statewide data on nutrients and macro-algae and dissolved oxygen endpoints would also be helpful. Armand Ruby agreed that benthic data should have a high priority, along with invasive species. Sara Aminzadeh suggested that the audience for this portal was a bit different from the others, especially in its usefulness to the general public; the portals needed to engage the public more generally. Karen Larsen stressed the usefulness of portal development in guiding coordination of monitoring. Stephanie Fong responded that the workgroup is beginning to develop relationships between organizations. Phil Markel suggested that existing monitoring programs should be summarized by type, frequency, and who is involved. Armand Ruby asked that the San Francisco Bay RMP be tied in. Stephanie responded that one goal is to develop a State of the Estuary Report for 2015 that covers the entire Bay-Delta estuary. Sarge Green offered that this portal will have the most crossover between water quality and water supply issues. Value judgments should be avoided and neutral terminology emphasized. Think functionally – how estuaries work as a whole, the coming together of fresh and marine waters.</p>	
Decisions:	<p>The workgroup appears to be on the right track with portal development. Concern that portal may be too data centric. Plan for portal is more complex than others. Bring in data sources (e.g., benthos, DO, macro-algae) beyond what data the water contractors have to offer.</p>	
Action Items:	<p>Workgroup should begin to build the portal, but should return for additional critique at later dates.</p>	

ITEM:	4
Title of Topic:	ANNUAL PROGRESS REPORT ON THE MONITORING COUNCIL, WORKGROUPS, AND MY WATER QUALITY INTERNET PORTALS
Purpose:	Jon Marshack presented the draft progress report for approval

Desired Outcome:	Approval of the annual report to the Secretaries of the California Environmental Protection Agency and the California Natural Resources Agency	
Background:	<p>At the March 7, 2013 Monitoring Council meeting, Jon Marshack made a presentation regarding progress made in 2012 by the Monitoring Council and its eight workgroups to improve California's program to monitor and assess the quality of our waters and the health of associated ecosystems and to provide the resulting data and information to decision makers and the public via the Internet. The Monitoring Council provided direction that the report should present accomplishments (50%), challenges (25%), and opportunities on the horizon for which agency managers help is needed to achieve success (25%).</p> <p>The legislation also calls on the Cal/EPA Secretary, in consultation with the Natural Resources Secretary, to conduct a triennial audit of the effectiveness of the monitoring program strategy. The annual progress reports are intended to assist the Agency Secretaries with this audit.</p>	
Attachment Links:	<ul style="list-style-type: none"> • Notes from March 7, 2013 Council meeting (see item 7) • 2012 Annual Progress Report to the Agency Secretaries • 2012 Monitoring Council Workgroup Annual Reports <ul style="list-style-type: none"> ○ Safe Drinking Water Workgroup ○ Safe to Swim Workgroup ○ Bioaccumulation Oversight Group (Safe to Eat Fish and Shellfish) ○ Wetland Monitoring Workgroup ○ Healthy Streams Partnership ○ Estuary Monitoring Workgroup ○ Data Management Workgroup ○ Water Quality Monitoring Collaboration Network 	
Contact Persons:	Jon Marshack	Jon.Marshack@waterboards.ca.gov , (916) 341-5514
Notes:	<p>Steve Weisberg indicated that the draft report is accurate, but suggested restructuring the report to emphasize what the Monitoring Council wants from the Agency Secretaries – five to ten more specific recommendations. A legislative hearing on Monitoring Council progress was suggested. Lack of dedicated program funding is the key barrier to overall success. The original theory was to use progress to date to entice the legislature to appropriate funds to create a more stable program. But the economic downturn squashed that plan. So, the highest priority need is funding. The second need is management support at all three agencies and at each department within those agencies. Dedicated staff at each department would improve the balance of agency participation. An independent third-party review of the program was suggested.</p>	
Decisions:	<ul style="list-style-type: none"> • Agreed on current draft progress report including changes suggested by Dale Hoffman-Floerke and Sarge Green. Accept Dale's deletions on first page. • Offer to make a presentation to department heads at a future agency executive management meeting (at end of progress report letter). • Change the focus for the next progress report to include more specific needs. 	

Action Items:	<ul style="list-style-type: none"> • Ask each workgroup to provide their top two recommendations that will be included in a future progress report to the Agency Secretaries. • Identify where increased coordination is needed and with whom. • Seek legislative involvement next year through key policy committees (Sara Aminzadeh?)
ITEM:	5
Title of Topic:	COLLABORATIVE REGIONAL MONITORING PROGRAMS: AREAS OF SPECIAL BIOLOGICAL SIGNIFICANCE (ASBSs)
Purpose:	As part of the Monitoring Council's review of collaborative regional monitoring programs throughout California, Ken Schiff presented the monitoring plan for ASBS
Desired Outcome:	Information and discussion
Background:	<p>Over the course of several meetings, the Monitoring Council has heard from many collaborative regional monitoring programs regarding how they were formed, what made them successful, and the challenges they face. The goal has been to elucidate the reasons why some collaborative regional monitoring efforts are successful and whether and how those successes can benefit or be transferred to other monitoring efforts.</p> <p>The State Water Board has created 34 Areas of Biological Significance (ASBSs) in order to preserve and protect especially valuable biological communities in our coastal and ocean waters. Even though the California Ocean Plan prohibits the discharge of waste to ASBSs, a survey conducted by SCCWRP has observed approximately 1,658 outfalls in and near these areas. As a result, the State Water Board has initiated regulatory actions, establishing special protections through the Ocean Plan's exception process. The intent of these regulatory actions is to maintain natural water quality within the ASBS.</p> <p>Both ASBS dischargers and regulators face a lack of information in at least three categories. First, it is uncertain what constitutes natural water quality. Second, it is uncertain which discharges exceed natural water quality limits. Third, it is uncertain to what level discharges outside of ASBSs may impinge on ASBS water quality; these indirect discharges are often independent of ASBS direct discharges that are the focal point of ASBS regulation.</p> <p>Monitoring requirements focus on the creation of regional monitoring programs as the most cost effective way to assess water quality in ASBSs. Programs are being put in place to assess reference sites and impacts to ASBSs in three coastal areas – Southern, Central, and Northern California.</p>
Attachment Links:	CWQMC Regional Monitoring Series: Areas of Special Biological Significance – presentation by Ken Schiff
Contact Person:	Ken Schiff kens@sccwrp.org ; (714) 755-3202
Notes:	Ken Schiff delivered a presentation on ASBS monitoring . This is a program that started regionally and has been expanded statewide. Marine Protected Areas (MPAs) are refugia established by the California Department of Fish and Wildlife

to help fisheries recover and to protect them into the future. ASBSs are established by the State Water Board as water quality protection areas, not necessarily related to fisheries. There is some overlap between MPAs and ASBSs. Water Board regulations require maintenance of “natural water quality” within and “no discharge of waste” to ASBSs. However “natural water quality” is not likely to exist anywhere along California’s coast and there are many existing discharges into ASBSs, including stormwater discharges.

This effort began with the Bight '08 collaborative ambient regional monitoring effort in Southern California, which included municipalities, universities, industries, and regulatory agencies. The focus was on wet weather, monitoring before and after major storms. Reference sites were selected to approximate natural water quality and a definition was developed, based on biodiversity surveys. Results indicated that polynuclear aromatic hydrocarbons (PAHs) were elevated above the Ocean Plan water quality objective and half of all monitored constituents were found in concentrations that are higher than Ocean Plan objective daily maximum values. In summary, ASBSs discharge sites were not found to be too different from reference sites. Approximately 15 percent of ASBS sites exceeded thresholds.

The Bight '08 effort was expanded to ASBSs statewide. The State Water Board adopted special exceptions for existing dischargers to ASBS as long as natural water quality was maintained. Compliance monitoring could be conducted by individual discharges or by regional groups. Most dischargers formed into one of three regional discharger groups in southern, central, and northern California. The Northern California dischargers were essentially strangers to each other. Central California dischargers knew each other through NPDES and stormwater coalitions. In Southern California, some new stakeholders were added to those who had participated in Bight '08. For administration, Central California dischargers selected a lead agency and a leading contractor to perform the monitoring. In Northern California, dischargers continued to monitor individually, but with coordination supplied by facilitators. Caltrans participates in all three regional programs. Effects in some ASBSs were found to be caused by up-current non-ASBS dischargers. The Ocean Observing Systems have developed map-based plume tracking methods to help elucidate these relationships.

Grant monitoring is also part of ASBS monitoring. Proposition 84 included \$32 million for development of ASBS best management practices. \$1 million was set aside for coordination and consolidated grant monitoring using “SWAMP comparable” methods, data entry into CEDEN, and reporting to the legislature.

Steve Weisberg offered that this program could be used to foster greater cross-agency efforts, including rocky intertidal biological monitoring, spill-related impact monitoring by CDFW’s Office of Spill Prevention & Response (OSPR), perhaps with funding from the Bureau of Ocean Energy Management (BOEM).

Reference sites and a scoring system are needed. Jonathan Bishop recommended that ASBS and MPA monitoring could be synchronized and asked what the Monitoring Council could do to facilitate this. Complex biological information needs to be translated into scores that can be readily understood by decision makers and the public. Greater synthesis of the data and effectiveness metrics are needed to be able to assess program success by various agencies. Are conditions getting better or worse? Steve Weisberg suggested that a letter regarding funding could be sent to Mary Elaine Helix of MARINE. Various agencies could be polled to see that they would need from the Monitoring Council on this topic.

Action Items:	<ul style="list-style-type: none"> • Sara Aminzadeh will draft a supportive letter from the Monitoring Council to the Ocean Protection Council regarding ASBS and MPA coordination, requesting that some of the funds for MPA monitoring be dedicated to integration between MPA and ASBS programs. • Jonathan Bishop and Steve Weisberg will schedule conference calls on the development of metrics, offering SCCWRP services for coordination. Paul Helliker offered to assist with respect to CDFW-OSPR.
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ITEM:	6	
Title of Topic:	EPA’S NEW BEACH WATER QUALITY CRITERIA: qPCR METHODS FOR BACTERIAL INDICATOR MONITORING	
Purpose:	Steve Weisberg presented information regarding new EPA national recommended water quality criteria to protect contact recreational uses and genetic quantitative polymerase chain reaction (qPCR) methods for bacterial indicator monitoring of swimming safety at beaches and of shellfish beds	
Desired Outcome:	Introduction to these criteria and methods and understanding of how these could affect monitoring, assessment, and reporting for recreational water use	
Background:	New national recommended water quality criteria from U.S. EPA for the protection of contact recreational uses of water recently opened the door for using qPCR methods. Standard bacterial culture methods are slow to produce results. As a result, there is a substantial delay between the time of sampling and the ability of health officials to use the data to post beaches as potentially unsafe for swimming or to warn of potential health issues from eating shellfish from specific locations. New methods, such as qPCR, can provide results more rapidly, even on the same day that samples were taken, allowing more timely information to be given to decision makers and the public.	
Attachment Links:	<ul style="list-style-type: none"> • EPA’s New Beach Water Quality Criteria – presentation by Stephen Weisberg • USEPA 2012 Recreational Water Quality Criteria <ul style="list-style-type: none"> ○ Criteria news release ○ Criteria fact sheet 	
Contact Person:	Steve Weisberg	steveuw@sccwrp.org ; (714) 755-3203
Notes:	As a whole, the criteria could have a significant effect on the Safe to Swim portal and programs to protect swimming uses. According to Steve Weisberg, the new numeric bacterial indicator criteria could result in 23 percent more beach warnings and more “D” grades in Heal the Bay’s <i>Ocean Beach Report Card</i> . At the same time, they could result in fewer water quality impairment listings under Section 303(d) of the Clean Water Act, causing the state to expend fewer resources to correct problems. With two illness rate options, the new criteria provide less clarity about the level of protection that is needed. The Southern California Beach Water Quality Work Group (BWQWG) likes the new consistency between freshwater and saltwater criteria, the separate triggers for warnings, and dropping E. coli and fecal coliforms as indicators. However, the BWQWG believes that the new criteria’s reliance on Great Lakes information may not be applicable to Southern California. The BWQWG also believes that	

	<p>the statistical models behind the new health warning triggers are not compelling.</p> <p>The new EPA criteria allow the use of rapid indicator methods. Traditional culture-based methods take as long as 48 hours to obtain results, making beach warnings immediately out-of-date. Genetic material replication methods are much faster, taking as little as 1 hour, 40 minutes. SCCWRP performed a successful demonstration project using qPCR in Orange County in 2010. As a result, Orange County now wants to use that method at beaches for which variable results are common. However, the method used is not the same as the older qPCR method contained in the new EPA criteria. Los Angeles County will also participate in a pilot of the new methods. Special permits are needed from state agencies to use the rapid methods. SCCWRP has a grant to plan development of a “suitcase” method that is portable, fast, and automated. The rapid methods cannot be used on disinfected wastewater because chlorine kills bacteria while their genetic material remains in the water. Tannic and humic acids appear to interfere with the methods at some locations.</p> <p>The EPA criteria also open the door to using quantitative microbial risk assessment (QMRA) to develop site-specific recreational use criteria. Animal sources of indicator bacteria may pose lower pathogen risks to humans. Indicator bacterial re-growth at beaches may not be associated with pathogens. EPA has yet to issue guidance on QMRA. The criteria also permit the use of alternate indicators. Case studies likely will be needed upon which to develop guidelines.</p> <p>California has choices to make. State Water Board staff is committed to proposing changes to both the California Ocean Plan and the Enclosed Bays & Estuaries Plan through statewide rulemaking to turn the new EPA criteria into standardized freshwater and saltwater criteria and methods that would supersede any conflicting requirements in the Basin Plans of the Regional Water Boards. AB 411 requirements will also need to be changed at the same time. County health agencies need guidance on qPCR use and will need startup funding. Methods are evolving, changing equipment needs over time; how will consistency be addressed? Should California wait to embrace the rapid methods? How will California – Water Boards, Department of Public Health, Heal the Bay – react to the new criteria and the choices they present? According to Terry Fleming, BEACH Act states, including California, are expected to adopt new enforceable criteria within three years or EPA could promulgate criteria for their waters. Jonathan Bishop indicated that the Water Board rulemaking is likely not to address EPA’s beach warning criteria, leaving that to CDPH. Laboratory certification for new methods is also CDPH territory.</p> <p>The State Water Board now contracts directly with coastal counties to monitor swimming safety and will begin to enhance requirements related to data flow and data management procedures. Data submittal to EPA also needs to be improved.</p>
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ITEM:	7
Title of Topic:	MEETING WRAP-UP
Purpose:	<p>Plan agenda for August 28, 2013 Monitoring Council meeting in Sacramento. Potential items include:</p> <p>1) Update on the USEPA Healthy Watersheds Initiative, California Project to</p>

	<p>assess watersheds throughout the state and identify healthy watersheds</p> <ol style="list-style-type: none"> 2) Update on potential state stewardship for California’s portion of the National Hydrography Dataset and the National Wetlands Inventory (Jonathan Bishop and Dale Hoffman-Floerke) 3) California Estuaries Portal review and request for public release 4) Safe to Drink Portal mockup review and request to build the site 5) Development of Monitoring Council recommendations to improve grant project monitoring, data management, assessment, and reporting 6) Water Board new effort to gather groundwater monitoring data in support of a future groundwater protection strategy (Eric Oppenheimer, John Borkovich) 7) Monitoring Council and workgroup role in a proposed Delta Science Plan for organizing and integrating ongoing scientific research, monitoring, analysis, and data management among entities involved in the Delta 8) Ocean Ecosystem Health <ol style="list-style-type: none"> a) Plans for Ocean Ecosystem Workgroup and new Ocean Health Portal b) Marine Protected Area (MPA) Monitoring Enterprise (Liz Whiteman) 9) California Water Plan Update 2013, indicators project (Fraser Shilling) 10) Department of Fish & Wildlife monitoring (Glenda Marsh, Adam Ballard, Robert Holmes, Josh Grover, Chad Dibble, Pete Ode, Tom Lupo) <ol style="list-style-type: none"> a) Coordination b) Financial support c) Data Flow d) Data Management – CEDEN for water quality data? e) Monitoring Council endorsement of collaboration? 11) Possibility of holding an annual conference. A representative from the Maryland Monitoring Council should be invited to participate by phone (see May 2012 notes, Item 2d)
Desired Outcome:	Develop agenda for the next meeting
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Notes:	<ul style="list-style-type: none"> • Item (5) should include consideration of regionalization.
Decisions:	<ul style="list-style-type: none"> • The Monitoring Council expressed interest in hearing items (3), (4), (7), (8) and (9), above in August. Items (3) and (7) are related. • Item (7) should include how Monitoring Council, workgroup and portal efforts can make data more readily accessible. • Items (1), (2), and (6) were also of interest, but may not be ready to present in August.