

**CALIFORNIA WATER QUALITY MONITORING COUNCIL**

**Monitoring Council Meeting Notes**

**Tuesday, February 23, 2016 – 10:00 AM to 4:00 PM**

Second Floor, Klamath Room  
Joe Serna Jr. Cal/EPA Headquarters Building  
1001 I Street, Sacramento



Monitoring Council Members and (Alternates) in attendance:

Jonathan Bishop	(Greg Gearheart)	(Travis Pritchard)
Beth Christman	Sarge Green	Armand Ruby
(Rebecca Franklin)	Karen Larsen	Steve Weisberg

Others in attendance or (on the phone):

Angela Akens, CA State Water Resources Control Board  
Beverly Anderson-Abbs, CA State Water Resources Control Board  
Rich Breuer, CA State Water Resources Control Board  
Megan Brooks, Delta Stewardship Council  
(Katharine Carter, North Coast Regional Water Quality Control Board)  
(Maggie Christman, Delta Stewardship Council)  
Val Connor, GEI Consultants, Inc.  
(Ali Dunn, CA State Water Resources Control Board)  
Terry Fleming, US Environmental Protection Agency – Region 9  
Karen Gehrts, CA Department of Water Resources  
Michael Gjerde, CA State Water Resources Control Board  
Tony Hale, San Francisco Estuary Institute – Aquatic Science Center  
(Yumiko Henneberry, Delta Stewardship Council)  
(Atley Keller, McCord Environmental, Inc.)  
Susan Keydel, US Environmental Protection Agency – Region 9  
(Peggy Lehman (CA Department of Water Resources)  
Regina Linville, CA Office of Environmental Health Hazard Assessment  
Jon Marshack, CA Water Quality Monitoring Council - State Water Resources Control Board  
Chris Marquis, CA State Water Resources Control Board  
Toni Marshall, CA State Water Resources Control Board  
(Hank Matz, Carmel Area Wastewater District)  
(Stephen McCord, McCord Environmental, Inc.)  
Sandy McNeel, CA Department of Public Health  
Nazar Kosmo, CA “We Are Water”  
(Carly Nilson, Lahontan Regional Water Quality Control Board)  
Sherri Norris, California Indian Environmental Alliance  
(Dan Orr, CA Department of Fish and Wildlife)  
(Dave Osti, 34 North)  
(Katlin Parker, CA State Water Resources Control Board)  
(Jodi Pontureri, CA State Water Resources Control Board)  
Zane Poulson, CA State Water Resources Control Board  
(Russ Ryan, Metropolitan Water District of Southern California)  
(Brienne Sakata, CA Department of Water Resources)  
Javier Silva, Sherwood Valley Band of Pomo Indians  
Jennifer Timmons, CA State Water Resources Control Board  
Marisa Van Dyke, CA State Water Resources Control Board  
Lori Webber, CA State Water Resources Control Board

<b>ITEM:</b>	<b>1</b>	
<b>Title of Topic:</b>	<b>INTRODUCTIONS AND HOUSEKEEPING</b>	
<b>Purpose:</b>	<ol style="list-style-type: none"> <li>1) Introductions (in the room and on the phone)</li> <li>2) Review draft notes from August 27, 2015 Monitoring Council meeting and the November 16, 2015 Planning Subcommittee meeting</li> <li>3) Review agenda for today's meeting</li> </ol>	
<b>Desired Outcome:</b>	<ol style="list-style-type: none"> <li>a) Approve August 27, 2015 Monitoring Council meeting notes and the November 16 Planning Subcommittee meeting notes</li> <li>b) Preview what will be covered today and overall meeting expectations</li> <li>c) Adjust today's agenda, as needed</li> </ol>	
<b>Attachment Links:</b>	<ul style="list-style-type: none"> <li>• <a href="#">Notes from August 27, 2015 Monitoring Council meeting</a></li> <li>• <a href="#">Notes from November 16, 2015 Planning Subcommittee meeting</a></li> </ul>	
<b>Contact Person:</b>	Jon Marshack	<a href="mailto:jon.marshack@waterboards.ca.gov">jon.marshack@waterboards.ca.gov</a> , (916) 341-5514
<b>Decisions:</b>	Notes from the August 27, 2015 Monitoring Council meeting and the November 16, 2015 Planning Subcommittee meeting were approved without amendment.	

<b>ITEM:</b>	<b>2</b>	
<b>Title of Topic:</b>	<b>PUBLIC FORUM</b>	
<b>Purpose:</b>	Any member of the public may address and ask questions of the Monitoring Council relating to any matter within the Council's jurisdiction under <a href="#">California Senate Bill 1070 (Statutes of 2006)</a> provided the matter is not on the agenda.	
<b>Desired Outcome:</b>	Information and potential agenda topics for a future meeting. No decisions can be made regarding items that have not received prior public notice.	
<b>Attachment Link:</b>	<a href="#">California Senate Bill 1070 (Statutes of 2006)</a>	
<b>Contact Person:</b>	Jon Marshack	<a href="mailto:jon.marshack@waterboards.ca.gov">jon.marshack@waterboards.ca.gov</a> , (916) 341-5514
<b>Notes:</b>	No persons requested to address the Council.	

<b>ITEM:</b>	<b>3</b>	
<b>Title of Topic:</b>	<b>SWAMP – CALIFORNIA FRESHWATER HARMFUL ALGAL BLOOMS ASSESSMENT AND SUPPORT STRATEGY</b>	
<b>Purpose:</b>	Beverly Anderson-Abbs provided an introduction to and summary of the <a href="#">Statewide Harmful Algal Bloom Strategy</a> released by SWAMP	
<b>Desired Outcome:</b>	Information and comment	

<p><b>Background:</b></p>	<p>Harmful algal blooms (HABs) and algal toxins have increased globally in geographic range, frequency, duration, and severity in recent years. These increases have been attributed to various anthropogenic factors; the most significant of which include climate change, nutrient loading, and water residence time. HABs are problematic because they can affect multiple beneficial uses including recreation, aquatic life, and drinking water by reducing aesthetics, lowering dissolved oxygen concentrations, causing taste and odor problems, and producing potent toxins. SWAMP has developed a strategic plan for statewide coordination to address cyanoHABs and other Freshwater HABS. SWAMP is also funding a number of projects for assessment of HABs throughout the State and materials to support water managers who are dealing with HAB issues. These projects include satellite monitoring, a centralized website, and reporting system, guidance document on event response and management strategies, laboratory resources to support local event response, and a training program. Additionally, SWAMP is involved with the California CyanoHAB Network (CCHAB) to update the 2010 <a href="#">Guidance Document</a> for dealing with HABs.</p>	
<p><b>Attachment Links:</b></p>	<ul style="list-style-type: none"> <li>• <a href="#">Freshwater Harmful Algal Blooms (HABs) in California and SWAMP's Statewide Strategy</a> – presentation by Beverley Anderson-Abbs</li> <li>• <a href="#">California Freshwater Harmful Algal Blooms Assessment and Support Strategy</a></li> </ul>	
<p><b>Contact Person:</b></p>	<p>Beverley Anderson-Abbs</p>	<p><a href="mailto:beverley.anderson-abbs@waterboards.ca.gov">beverley.anderson-abbs@waterboards.ca.gov</a>; (916) 322-2014</p>
<p><b>Notes:</b></p>	<p>Beverly Anderson-Abbs presented information that cyanobacteria are found in water, worldwide. Some are harmless and some create harmful algal blooms that release toxins. These toxins can cause skin irritation, liver damage and death in dogs and livestock who ingest water and/or scums that contain the toxins. A number of environmental factors such as rising temperatures and nutrients in water and drought, which causes low water flows, have been linked to increasing blooms and toxin production. The <a href="#">California Freshwater Harmful Algal Blooms Assessment and Support Strategy</a> by SWAMP was released in January 2016 to help inform management decisions for protecting public health and the environment. The current focus for California is to monitor freshwater for blooms. Spatial trends are starting to be tracked by satellite imagery in California. Water bodies that are considered 'high risk' can receive regular monitoring.</p> <p>Travis Pritchard asked what the turnaround is for Satellite imagery. Beverly responded that the data are pulled and then posted, which could take 1 to 6 days.</p> <p>Karen Gehrts asked if the difference between water hyacinth and cyanoHABs can be detected from the satellite imagery in the delta. Tony Hale answered that the measured size and shape of the water body is important. Delta channels are typically too narrow to be resolved by existing satellite imagery. Satellite data will be verified against ground sampling in a pilot study. Susan Keydel added that cyanoHABs have different pigments from water hyacinth that the satellite detects.</p>	

<b>ITEM:</b>	4	
<b>Title of Topic:</b>	<b>CALIFORNIA CYANOHAB NETWORK – UPDATE TO VOLUNTARY GUIDANCE FOR RECREATIONAL WATERS</b>	
<b>Purpose:</b>	Zane Poulson of the State Water Board, Sandy McNeel of the Department of Public Health, and Regina Linville of the Office of Environmental Health Hazard Assessment introduced updates to the <a href="#">Draft Voluntary Statewide Guidance for Blue-Green Algae Blooms</a> (July 2010) and updated the Monitoring Council on the concepts and progress of the <a href="#">California CyanoHAB Network</a> .	
<b>Desired Outcome:</b>	Information and comment on the proposed guidance updates and next steps for the California CyanoHAB Network.	
<b>Background:</b>	<p>In 2010 the State Water Resources Control Board (State Water Board) the California Department of Public Health (CDPH) and the Office of Environmental Health Hazard Assessment (OEHHA) made available a <a href="#">Draft Voluntary Statewide Guidance for Blue-Green Algae Blooms</a> (Guidance Document) in an effort to assist local agencies and organizations in dealing with recreational water use impacts from harmful algal blooms in California waters. Since that time additional research has been completed on harmful algal blooms and additional information has been made available.</p> <p>The State Water Board, CDPH, OEHHA and U.S. EPA have been working together, along with other valuable partners, including tribes, local government agencies, water managers, California Department of Fish and Wildlife, and scientific institutions to update portions of the Guidance Document. These updates were presented to the California CyanoHAB Network on January 21, 2016. We plan to make these draft updates available on the web for the 2016 Harmful Algal Bloom season, which typically begins around June in many waters in the State.</p>	
<b>Attachment Links:</b>	<ul style="list-style-type: none"> <li>• <a href="#">California CyanoHAB Network, A Workgroup of the California Water Quality Monitoring Council</a> – presentation by Zane Poulson, Sandy McNeel, and Regina Linville</li> <li>• <a href="#">Cyanobacteria in California Recreational Water Bodies: Providing Voluntary Guidance about Harmful Algal Blooms, Their Monitoring, and Public Notification by the Blue Green Algae Work Group (July 2010 Draft)</a></li> <li>• Proposed updates <ul style="list-style-type: none"> <li>○ <a href="#">Decision Tree and Narrative for Posting and De-posting Health Advisories for CyanoHABs</a></li> <li>○ <a href="#">Signage</a></li> <li>○ <a href="#">CyanoHAB Trigger Levels for Human Health</a></li> <li>○ <a href="#">Appendix A – Description of cyanotoxin triggers in recreational waters</a></li> </ul> </li> </ul>	
<b>Contact Persons:</b>	Zane Poulson Angela Akens	(916) 341-5488; <a href="mailto:zane.poulson@waterboards.ca.gov">zane.poulson@waterboards.ca.gov</a> (916) 341-6899; <a href="mailto:angela.akens@waterboards.ca.gov">angela.akens@waterboards.ca.gov</a>
<b>Notes:</b>	Zane Poulson presented an updated decision tree for posting and de-posting health advisory signs for CyanoHABs. The 2016 decision tree does not provide comprehensive information but points to where more detailed information can be	

located. He asked for feedback on the recent work products that the group has produced. Terry Fleming encouraged completing the updated voluntary guidance document in 2016 and to allow people to start using it.

Sandy McNeel of CDPH presented new caution, warning and danger signage. Terry Fleming commented that all three signs include the no swimming symbol, making them appear too similar. He suggested that there be only two signs and that the caution sign should advise people to exercise caution for swimming rather than have the sign show 'no swimming'. Karen Larsen added that it would be important to coordinate with the Drinking Water Program on messaging at the local level, for example explaining that tap water may not be harmful at the same time that local surface waters are experiencing HABs. Zane Poulson suggested that once the portal is active, a QR code could be added to the sign to provide easy access to more detailed information.

Regina Linville of OEHHA presented information about the derivation of trigger levels for human health. Safe doses in humans were derived from data on effects in animal studies and extrapolating that information to a dose where humans are not harmed using very conservative assumptions. A tiered approach will give water body managers flexibility to react to various levels of cyanotoxins in water. This tiered approach uses increasingly-conservative uncertainty factors to derive triggers at the caution, warning, and danger levels. Terry Fleming indicated that EPA will be developing recreational use water quality criteria for some cyanotoxins that include dermal exposure and wants to know why OEHHA has not considered that route of exposure. Regina explained that that microcystins are unlikely to be absorbed through the skin due to their large molecular size. Anatoxin, which can be absorbed through the skin, will not be covered by EPA's criteria.

Terry suggested that OEHHA should develop guidance on how the various trigger levels might be used for 303(d) impaired waters listing, to increase statewide consistency with respect to which of the tiered levels are used for assessment purposes.

Steve Weisberg indicated that the design of this project parallels that of swimming advisories based on bacterial indicators and swimming restrictions developed by the coastal beach groups. The beach groups use two types of signage, one that warns of increased bacteria levels and the other that closes swimming at the beach. Local public health organizations should be responsible for posting warning signs and closures, as is the case for coastal beaches. He also urged that a process is needed to memorialize the trigger levels to avoid becoming underground regulations that result in lawsuits. Local business interests are likely to object to postings that result in a loss of business. He stressed that California should have a consistent protection program statewide. Timing is important for issuing warnings as sometimes signage may not go up until two weeks after a bloom event begins. Predictive models, based on factors that affect bloom formation and satellite imagery would help anticipate blooms. Spatial and temporal variability should also be factored in, as was done with bacterial indicators of beach water quality. The beach groups are using models to help with predicting blooms. CyanoHABs should also be considered in developing nutrient criteria thresholds and Zane can provide the linkage with that program.

Karen Gehrts urged that ecosystem health and effects of cyanoHABs also be considered. Ecosystem restoration projects tend to slow down water flows, which could enhance HABs.

	<p>Armand Ruby commented that the 2016 update to the decision tree is a substantial improvement over the 2010 version. But the fact that OEHHA's action levels factor into different trigger levels will be confusing to users. He suggested that OEHHA formally endorse the trigger levels to increase confidence and clarity. He also recommended that satellite imagery be used as an early warning action trigger and that this be added to the trigger chart. Beverley Anderson-Abbs said that satellite imagery is being considered for a potential action trigger to start sampling. QPCR genetic data could also be used in this way.</p> <p>Sarge Green expressed concern about labs being set up to meet demand and have a rapid response turn around.</p> <p>Michael Gjerde asked for Zane Poulson to make a presentation to the coastal beach workgroups in May as this project has a lot of overlap with what coastal health regulators are doing at freshwater and marine beaches with respect to posting.</p> <p>Steve Weisberg recommended that spatial and temporal variability be explored as to their effect on decision making and signage. Sue Keydel agreed that it would be beneficial to know where toxin levels are likely to be high, but that monitoring costs to document variability need to be considered. Steve mentioned that beach monitoring for bacterial indicators settled on sampling ankle-deep water.</p>
<b>Decisions:</b>	<p>Council members expressed general support for CCHAB efforts to date, but had a number of concerns that should be addressed (see the above Notes).</p>
<b>Action Items:</b>	<p>There appeared to be consensus among the Council Members that the toxin trigger levels be more formally adopted to avoid legal challenges.</p>

<b>ITEM:</b>	<b>5</b>
<b>Title of Topic:</b>	<b>ANNOUNCEMENTS AND UPDATES</b>
<b>Purpose:</b>	<p>These are brief informational items that could be expanded into more detailed discussions for future meetings:</p> <ul style="list-style-type: none"> <li>a) Monitoring Council membership changes (Jon Marshack)</li> <li>b) Update from the Data Management Workgroup (Tony Hale, SFEI)</li> <li>c) Inland Beaches Workgroup (Carly Nilson, Lahontan Regional Water Board)</li> <li>d) Update on CA Estuary Monitoring Workgroup and Portal (Val Connor)</li> </ul>
<b>Desired Outcome:</b>	Information and comment
<b>Background:</b>	<ul style="list-style-type: none"> <li>a) <b>Monitoring Council Membership Changes</b> <ul style="list-style-type: none"> <li>• <b>Public</b> – Sara Aminzadeh has resigned from the Public position on the Monitoring Council, effective January 19. Staff will be seeking replacement candidates to represent the Public constituency, specified in the Council's Governance document as "Individual Waterkeepers; Natural Resources Defense Council; Heal the Bay; Southern California Watershed Alliance."</li> <li>• <b>Division of Drinking Water</b> – Karen Larsen has been appointed as the</li> </ul> </li> </ul>

State Water Board Deputy Director to lead the Division of Water Quality. Since she no longer represents the Division of Drinking Water, a new Monitoring Council Member will need to be selected by that Division. Bruce Burton is the Alternate for this Council position.

- **Agriculture** – Many months ago, Parry Klassen 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 offered to stay on as an Alternate in this position.

b) **Update from the Data Management Workgroup**

The Council's Data Management Workgroup (DMWG) meets regularly to coordinate information technology-related efforts, offer guidance and information to other Council workgroups, and advance information sharing regarding water quality data and technology opportunities.

During its most recent meetings, the DMWG has been tackling the recommendations published in the Delta Stewardship Council's white paper [Enhancing the Vision for Managing California's Environmental Information](#) and has formed subcommittees designed to develop informational products that further illustrate the concepts mentioned in the white paper. The resulting presentations, memos, and FAQ sheets will be of use to inform state agency decision makers of key concepts such as "data federation," "data management plans," and "web services."

In the [latest meeting](#), the workgroup sought additional guidance for its efforts through the formation of a steering committee composed of high-level decision makers with a stake in their agency's participation in information management initiatives. Such a steering committee could help to optimize the labor of the DMWG to participate in an emergent effort to implement the Delta Stewardship Council's recommendations. Potential steering committee members have been drafted. However, before the committee is convened, the DMWG must better lay the groundwork by defining a pilot project for the steering committee to tackle and a clearer outline of roles and intended outcomes.

c) **Inland Beaches Workgroup**

At the November 2015 Surface Water Ambient Monitoring Program strategic review meeting, the need for an inland beaches program was proposed. A subgroup of the SWAMP Roundtable developed a draft proposal including an inland beaches work group, a safe-to-swim portal upgrade that includes inland beaches bacterial indicator data from CEDEN with clear public messaging, promoting input of relevant bacterial indicator data into CEDEN, and a framework that potentially includes standard operating procedures for monitoring (ambient and targeted), development of a central location for access to methods and guidance documents, and guidance for performing microbial source tracking in inland surface waters.

d) **Update on CA Estuary Monitoring Workgroup and Portal**

The Estuary Workgroup is working on a significant revision to the existing portal, including the development of data dashboards under a new "management tools" tab. Significant progress has also been made in working with USFWS to include their fish data on the portal. Current challenges include how to add estuaries beyond the Bay Delta without a source of funding. The Estuary Workgroup received a green light from the Council to

	<p>update the portal. That update is one of the current areas of focus.</p>	
<p><b>Attachment Links:</b></p>	<p>b) <a href="#">Data Management Workgroup Update</a> – presentation by Tony Hale                  Delta Stewardship Council's white paper <a href="#">Enhancing the Vision for Managing California's Environmental Information</a>  <a href="#">Data Management Workgroup meeting notes, January 5, 2016</a></p> <p>c) <a href="#">Surface Water Ambient Monitoring Program (SWAMP) Freshwater Inland Beaches</a> – presentation by Carly Nilson</p> <p>d) <a href="#">CA Estuaries Portal</a> – presentation by Val Connor</p>	
<p><b>Contact Person:</b></p>	<p>Jon Marshack</p>	<p><a href="mailto:jon.marshack@waterboards.ca.gov">jon.marshack@waterboards.ca.gov</a>; (916) 341-5514</p>
<p><b>Notes:</b></p>	<p>a) <b>Monitoring Council Membership Changes</b></p> <p>Agriculture – No formal resignation has yet been received from Perry Klassen. Letters of recommendation from agricultural interests for Bruce Houdesheldt have not yet been received.</p> <p>b) <b>Update from the Data Management Workgroup</b></p> <p>General recommendations were made in the Delta Stewardship Council's paper <a href="#">Enhancing the Vision for Managing California Environmental Information</a> which was published in September 2015. Tony Hale indicated that the Data Management Workgroup is developing more detailed information to reinforce and flesh out those recommendations regarding development of web services, data management plans, and data federation and is seeking input and information to promote data sharing. The group recently received presentations from data repositories, including the National Water Quality Portal, the Water Quality Exchange (WQX), SWAMP, and CEDEN, some of which promote data sharing.</p> <p>The workgroup has proposed to form a steering committee to provide direct guidance to the workgroup effort and to provide management support for workgroup participation. The steering committee would differ from the Monitoring Council by providing more governmental department representation and direction from technology decision makers.</p> <p>Karen Gherts mentioned that there are a number of legislative bills that would provide mandates for greater collaboration and coordination of data management and data stewardship. She supports the formation of a steering committee and believes it will benefit the workgroup to implement these concepts.</p> <p>Jon Bishop believes that a steering committee would help to promote interagency coordination and broaden the data management focus, breaking down silos and developing open data platforms. Members should be in positions that provide leadership for data users within agency programs that inform information technology decision making (e.g., Greg Gearheart at the Water Boards or Rainer Hoenicke at the Delta Council). While their input may be valuable, chief information officers are generally focused on the day-to-day business of keeping information systems running.</p> <p>Greg Gearheart says that the steering committee needs to create <i>the</i> place to have conversations about data, engaging a wide variety of opinions to address data management issues, including agencies, water managers,</p>	



legislative staffers, and academics.

c) ***Inland Beaches Workgroup***

Carly Nilson presented information about the formation and objectives of the new SWAMP Inland Beach Workgroup and asked for Council input and direction for the workgroup. As one of its tasks, the workgroup will encourage organizations with freshwater bacteria and bacteria source tracking data to enter those data into CEDEN. The workgroup would like to start an internal wiki to see what others are doing in this area and to share information. They would also like to add inland swimming safety data to the Safe-to-Swim Portal and to promote consistent monitoring, analytical, and data management practices.

Jonathan Bishop indicated that some county health departments sample inland beaches and asked whether the workgroup has reached out to those doing this monitoring. He feels that they could provide the workgroup with valuable perspectives and expertise. Jonathan asked whether a letter of support from the Monitoring Council would help to open this dialogue. There is a 2008 document on SWAMP website listing inland beaches that are monitored for bacteria. Erick Burres of the SWAMP Clean Water Team has been working on a data entry tool to help organizations get their data into CEDEN.

Sarge Green mentioned that there is also an overlap with drinking water system source water monitoring. Their data may also be valuable to the workgroup's goals.

Lori Webber stated that the Monitoring Council could help with outreach to County Health departments, to solicit for data input to CEDEN, by issuing a letter of support.

d) ***Update on CA Estuary Monitoring Workgroup and Portal***

Val Connor reported that the portal is getting an update and most agencies working in the Delta are part of the workgroup. Each section of the portal has a committee developing content.

A number of related regional efforts already maintain their own portals, including the San Joaquin River Watershed, Sacramento River Watershed, Bay-Delta Live, and the Department of Water Resources' D-1641 water quality conditions report. All currently share tools and datasets with each other and with the Estuary Portal using the same software platform developed by 34 North. They can also share applications as they are built. This demonstrates that there are other ways to slice the cake of water quality issues, in this case geographically, reacting to individual stakeholder needs and requirements, but allowing for data federation to enable broader assessments.

Bay-Delta Live presents data used for real-time operations, including fish trawl data from the U.S. Fish & Wildlife Service. The Estuary Portal will include data dashboards to present information needed by water managers and other agency decision makers. For example, a turbidity "heat map" can be used to determine the likely location of Delta Smelt, allowing pump operators to control water withdrawals to reduce or prevent fish entrainment. Val offered to come back to talk more about dashboards, customized to individual needs, such as those of the Delta Science Program.

Val made the case that through these tools, agencies and organizations

	<p>involved are no longer arguing about the data. Instead they are arguing about how much risk they are comfortable accepting in implementing the co-equal goals of water supply reliability and ecosystem restoration.</p> <p>Steve Weisberg thinks other estuaries, besides the delta, should be addressed. Management and public information needs should be addressed in different ways. Questions should be well defined and the data should be gathered from disparate sources. Having connections pulls it all together. Nutrients, trophic state (e.g., eutrophication) are also of concern for many estuaries and should also be addressed.</p> <p>Jonathan Bishop mentioned that collapse of the salmon fishery due partly to flow and temperature changes is a concern that would benefit from dashboards that integrate data on temperature, flow, fish, and reds. Val responded that the Sacramento River Watershed is focusing on this issue and there is a dashboard being developed to address it. Collecting data and setting up triggers is the next step for the group.</p>
<p><b>Decisions:</b></p>	<ul style="list-style-type: none"> <li>• <b>Data Management Workgroup</b> – Jonathan Bishop made a motion for the Monitoring Council to provide a letter of support for developing a steering committee and a commitment from the Council to help with recruiting members for the committee. Steve Weisberg seconded the motion. The motion passed unanimously.</li> <li>• <b>Inland Beaches Workgroup</b> – Sarge Green made a motion for the Monitoring Council to provide a letter of support for the workgroup to help with outreach to county health departments. Jonathan Bishop made a motion that the Inland Beaches Workgroup be a new workgroup of the Monitoring Council. All in were in favor of both motions.</li> </ul>
<p><b>Action Items:</b></p>	<ul style="list-style-type: none"> <li>• <b>Data Management Workgroup</b> – Monitoring Council staff will work with Tony Hale to develop a letter of endorsement for creation of a steering committee for the Data Management Workgroup.</li> <li>• <b>Inland Beaches Workgroup</b> – Monitoring Council staff will work with Carly Nilson to develop a letter of endorsement for enhancing outreach of the Inland Beaches Workgroup to county health departments and others who collect freshwater bacterial indicator data.</li> <li>• <b>Inland Beaches Workgroup</b> – Greg Gearheart will coordinate what is necessary to ensure that local agencies have a mechanism to enter their beach bacterial indicator data into CEDEN.</li> </ul>

<p><b>ITEM:</b></p>	<p>6</p>
<p><b>Title of Topic:</b></p>	<p><b>MONITORING COUNCIL STRATEGIC PLANNING</b></p>
<p><b>Purpose:</b></p>	<p>Jon Marshack led a discussion of potential changes in direction of the Monitoring Council, including organization, governance, and emphasis.</p>
<p><b>Desired Outcome:</b></p>	<p>Consensus from the Monitoring Council on the organization’s future direction.</p>
<p><b>Background:</b></p>	<p>At the Monitoring Council’s August 27 quarterly meeting, the Council formed a Planning Subcommittee to develop ideas for full Council consideration. Jonathan Bishop, Sara Aminzadeh, Sarge Green, Steve Weisberg, and Phil</p>

Markle offered to participate on the subcommittee.

On November 16, the Planning Subcommittee met. But Jonathan Bishop and Sara Aminzadeh were unable to attend. Monitoring Council Alternates Greg Gearheart and Stephani Spaar were also in attendance. The Subcommittee heard from CalEPA Undersecretary Gordon Burns, who commended the Council for accomplishments to date and urged the Council to determine how it could support efforts of high importance to the administration. He advised the Council to once again apply for resources to address such issues. Gordon offered that a letter of support from CalEPA for the Monitoring Council was possible, once the Council had decided on its new direction.

After reviewing topics that arose from the Monitoring Council's August 27 discussion of the Monitoring Council's future, the Planning Subcommittee discussed current and future Monitoring Council membership and structure, existing focus of the Council and its workgroups, and potential changes in direction.

On February 1, Greg Gearheart, Stephani Spaar, Kris Jones, and Jon Marshack met to deliberate on the above information and to discuss options for the full Council's consideration.

Two major conclusions arose from these discussions:

- a) To more-fully engage additional state governmental organizations in the Monitoring Council's activities and to bring additional staff and resources to bear, members should be added to the Council structure to represent high-level managers of key departments including, but not limited to –
  - i) Department of Fish and Wildlife
  - ii) Delta Stewardship Council, especially its Delta Science Program
  - iii) Department of Pesticide Regulation
  - iv) Department of Forestry and Fire Protection (Cal Fire)

Letters of recommendation from the Agency Secretaries could be used to help recruit new members. Two options for adding members were discussed – creating a separate Steering Committee or merely adding members to the existing Monitoring Council. Membership by federal partner organizations has also been suggested.

- b) The Council needs to address water issues in a more pragmatic and flexible manner, rather than rigidly adhering to the current [matrix of water body types and beneficial use themes](#).
  - i) Workgroups should be formed and fostered based on current issues of importance to the administration, including those revolving around the Sacramento-San Joaquin Delta and the challenges of drought and climate change. What are the top water issues that are not currently being addressed?
  - ii) The Council should tap into existing collaborative structures, such as the Interagency Ecological Program (IEP) and the Delta Plan Interagency Implementation Committee (DPIIC), to explore how value can be added.
  - iii) The Council should no longer insist on a statewide focus for workgroups. Regionally focused efforts should also be encouraged.
  - iv) New issues should be embraced as they arise, such as harmful algal blooms and the cyanotoxins they create. Constituents of emerging

	<p>concern (CECs) should be an important focus.</p> <ul style="list-style-type: none"> <li>v) Monitoring Council staff time should not continue to be focused on efforts that have proven to be unsuccessful.</li> <li>vi) Water quantity and water supply should be addressed in addition to water quality and aquatic ecosystems where those aspects logically fit the issues being addressed.</li> <li>vii) Improved data management, access to data, and data synthesis should remain key components of Monitoring Council and workgroup efforts.</li> <li>viii) Support for citizen monitoring through the Council’s Monitoring Collaboration Network should continue.</li> <li>ix) The Council could foster the formation of work teams for project-related collaboration to develop needed products.</li> </ul> <p>Finally, the name of our organization has proven to be problematic to growing participation. The name “Water Quality Monitoring Council” gives some individuals and organizations the impression that Council efforts are mainly focused on chemical and physical aspects of water. Dropping “Quality” or “Water Quality” from the name could encourage greater participation by organizations focusing mainly on biological aspects of water.</p>
<p><b>Attachment Links:</b></p>	<ul style="list-style-type: none"> <li>• <a href="#">Monitoring Council Strategic Planning</a> – presentation by Jon Marshack</li> <li>• <a href="#">Notes from November 16, 2015 Planning Subcommittee meeting</a></li> <li>• <a href="#">Notes from August 27, 2015 Monitoring Council meeting</a> (see Item 7)</li> </ul>
<p><b>Contact Person:</b></p>	<p>Jon Marshack      <a href="mailto:jon.marshack@waterboards.ca.gov">jon.marshack@waterboards.ca.gov</a>; (916) 341-5514</p>
<p><b>Notes:</b></p>	<p>Jon Marshack presented <a href="#">a set of questions and proposed responses</a> to initiate the strategic planning discussion. Steve Weisberg focused first on Question #11, <i>Is new legislation needed to refine and bolster the Monitoring Council effort?</i> He stressed that new legislation could help redefine the Council’s mission, reaffirm commitment to address the needs that informed the Council’s original legislation, and provide needed funding. He also focused on Question #12, <i>What can Council Members do to increase support for the Council’s efforts?</i> He said that non-governmental agency Council Members, such as himself, could address legislators and their staff. Travis Pritchard and Sarge Green agreed that they also could take this kind of action. State agency Council Members cannot address legislators without prior approval from the Governor’s office; but they can work with their departmental legislative affairs offices to propose amendments to legislation. But the entire Monitoring Council needs to be on the same page before such efforts are initiated.</p> <p>Jonathan Bishop voiced a new model for the Council, to assist coordinating water management in the state, including biological, chemical, and supply data and information. The Council needs to reconstitute its mission and goals to generate investment in its efforts. Several pieces of proposed legislation currently address issues that are already related to the Council’s original mission, for example those on data sharing (SB 573, AB 501, and AB 1755). If those become statute, they will need executive oversight that the Monitoring Council can provide and expertise that the Council’s workgroups can deliver. Council oversight can help agencies and organizations to stop arguing over the data and instead turn to what the data mean, paraphrasing a point raised earlier</p>

	<p>by Val Connor of the Estuary Workgroup.</p> <p>Armand Ruby stressed that there needs to be a compelling reason for the Council to exist. One approach is issue-driven. The Council's California CyanoHAB Network could address interagency coordination over harmful algal blooms called for in proposed legislation (AB 1470). The Delta crisis is another. An alternate approach is organization-driven, breaking down silos, bringing together disparate data, providing outlets for information through portals and dashboards.</p> <p>Without additional resources, the Council's efforts have reached their limits. The mandate of the Monitoring Council should be broadened to take on current issues of interest. The Council can steer efforts and coordinate activities. Council Members could use existing legislative bills to open the door with legislators and their staff to discuss other topics, i.e., strengthening the SB 1070 mandate and providing the Council with greater authority and resources. The Council is poised to address timely issues through an existing interagency and external stakeholder process. Council needs include funding and a greater mandate for increased departmental participation in the Council's workgroups to increase collaboration for improved monitoring efficiency. Annual reporting to and/or briefing of the legislature could also be mandated to refresh legislative interest.</p> <p>Talking points are needed for Council Members to use in initiating these conversations with sponsors of proposed legislation. The above discussion as well as why the Monitoring Council was created should be included in those talking points.</p> <p>Sherri Norris of the California Indian Environmental Alliance requested increased tribal representation with the Monitoring Council. Jon Marshack responded that the California CyanoHAB Network is the first of the Council's workgroups to include tribal representation. Sherri supports fish tissue data being displayed in the Safe-to-Eat Fish Portal, even if those data are incomplete.</p>
<b>Decisions:</b>	The above discussion will be finalized at the May meeting.
<b>Action Items:</b>	Jon Marshack with work with Jonathan Bishop, Karen Gehrts, and Kris Jones to develop a straw-man concept paper including talking points for Monitoring Council Members to use in addressing the legislature externally, including legislative changes discussed above. The paper will be sent with Council Members via email.

<b>ITEM:</b>	<b>7</b>
<b>Title of Topic:</b>	<b>NEXT MEETING AGENDA</b>
<b>Purpose:</b>	<p>Plan agenda for May 24, 2016 Monitoring Council meeting in Costa Mesa. Potential items include:</p> <ul style="list-style-type: none"> <li>a) Assessing aquatic habitat connectivity and low-flow ecological thresholds (Robert Holmes, CDFW Water Branch)</li> <li>b) Data quality and data management standardization efforts of SWAMP (Melissa Morris, SWRCB)</li> <li>c) Healthy Watersheds Partnership – tool development for agency decision makers (Lori Webber [SWRCB], Jeanette Howard [The Nature Conservancy])</li> </ul>

	<p>and Kurt Fesenmyer [Trout Unlimited])</p> <p>d) State stewardship for the National Hydrography Dataset by the Department of Water Resources (Greg Smith, DWR)</p> <p>e) Possibility of holding a Monitoring Council annual conference</p> <p>f) Monitoring Council strategic planning</p>	
<b>Desired Outcome:</b>	Develop agenda ideas for the May 24 meeting.	
<b>Contact Person:</b>	Jon Marshack	<a href="mailto:jon.marshack@waterboards.ca.gov">jon.marshack@waterboards.ca.gov</a> ; (916) 341-5514
<b>Notes:</b>	<p>Time was not available to plan agenda items for the May meeting. During Item #4, Steve Weisberg suggested an item on marine HABs, with Meredith Howard from SCCWRP as the presenter. During Item #6, the Council agreed to finalize the strategic planning discussion at the May meeting.</p> <p>Jonathan Bishop indicated that there is a conflict between the May 24 Council meeting and a Management Coordinating Committee meeting of the Water Boards.</p>	
<b>Action Items:</b>	<ul style="list-style-type: none"> <li>• Jon Marshack will solicit agenda items for the May meeting via email, with emphasis on southern California topics and speakers.</li> <li>• Jon will conduct a poll to select a new date for the next Council meeting.</li> </ul>	

March 9, 2016  
Approved May 23, 2017