

CALIFORNIA WATER QUALITY MONITORING COUNCIL
Monitoring Council Meeting Notes
Wednesday, February 19, 2014 – 10:00 AM to 4:30 PM

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



Monitoring Council Members and (Alternates) in attendance:

(Sean Bothwell)	Paul Helliker	(Phil Markle)	(Stephani Spaar)
Beth Christman	Parry Klassen	Armand Ruby	
Sarge Green	(Karen Larsen)	(Ken Schiff)	

Others in attendance or (on the phone):

Dori Bellan, State Water Resources Control Board
 Christina Boggs, Department of Water Resources
 (Clay Brandow, Cal Fire)
 Rich Breuer, State Water Resources Control Board
 (Erick Burres, State Water Resources Control Board)
 Terry Fleming, US Environmental Protection Agency, Region 9
 David Harris, Department of Water Resources
 Cliff Harvey, State Water Resources Control Board
 Kris Jones, Department of Water Resources—Monitoring Council Coordinator
 Jon Marshack, State Water Resources Control Board—Monitoring Council Coordinator
 (Lisa McCann, Central Coast Regional Water Board)
 Peter Ode, Department of Fish and Wildlife
 (Jodi Pontureri, State Water Resources Control Board)
 (Laleh Rastegarzadeh, State Water Resources Control Board)
 Frasier Schilling, University of California at Davis
 (Steve Steinberg, Southern California Coastal Water Research Project)
 (Meghan Sullivan, Central Valley Regional Water Board)
 Lori Webber, State Water Resources Control Board
 (Grant Wilson, Earth Law)

ITEM:	1	
Title of Topic:	INTRODUCTIONS AND HOUSEKEEPING	
Purpose:	1) Introductions (in the room and on the phone) 2) Review draft notes from December 12, 2013 Monitoring Council meeting 3) Review agenda for today's meeting	
Desired Outcome:	a) Approve December 12, 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:	Draft notes from December 12, 2013 Council meeting	
Contact Persons:	Jon Marshack	jon.marshack@waterboards.ca.gov , (916) 341-5514

	Kris Jones	kristopher.jones@water.ca.gov , (916) 376-9756
Decisions:	Notes from the December 12, 2013 meeting of the Monitoring Council were approved with amendments provided by Karen Larsen on January 30, 2014.	
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) Potential state stewardship for California's portion of the National Hydrography Dataset (Kris Jones) b) Participation in the National Water Quality Monitoring Council's 2014 Conference, April 28 – May 2, Cincinnati, Ohio (Jon Marshack) c) Drinking Water Program Migration to the State Water Board (Karen Larsen) d) Delta Stewardship Council's Data Summit (Karen Larsen) e) Other announcements and updates related to the Monitoring Council's mission pursuant to Senate Bill 1070, Statutes of 2006 	
Desired Outcome:	Information and comment	
Background:	<ul style="list-style-type: none"> a) State Stewardship for NHD – At the Monitoring Council's December 12 meeting (see Item 2b), Stephani Spaar presented information regarding the ongoing efforts to establish a state steward for California's portion of the National Hydrography Dataset and the National Wetlands Inventory (for full background, see State Stewardship for NHD and NWI summary document). Over the past several years, multiple attempts have been made within the Department of Water Resources (DWR) to serve as the steward for the National Hydrography Dataset (NHD); however, all requests for funding have been unsuccessful. Due to the lack of success for stewardship within DWR, recent efforts have focused on a multi-agency approach for stewardship of NHD in California. A meeting was held in October 2013 to discuss joint stewardship of NHD, and the interagency group determined that it would be beneficial to develop a Memorandum of Understanding (MOU) for California NHD stewardship among interested state and federal agencies; the MOU would define and assign various roles and responsibilities among the signatories, thereby ensuring that the burdens of stewardship would not fall primarily on a single agency. On January 29th, the Monitoring Council Coordinator (Kris Jones) attended the second meeting to discuss joint stewardship of the National Hydrography Dataset (NHD) and to further develop the draft Memorandum of Understanding (MOU) to establish joint stewardship. b) National Monitoring Conference – The National Water Quality Monitoring Council, co-chaired by USEPA and USGS, holds a national monitoring conference every two years. California has participated in past conferences and made oral and poster presentations on the Monitoring Council, its workgroups, and the My Water Quality portals. The 9th National Monitoring Conference will be held April 28 to May 2, 2014 in Cincinnati, Ohio. A number of Monitoring Council-related abstracts have been accepted for 	

	<p>presentation, including an oral presentation on the Triennial Audit and posters on three of the My Water Quality portals.</p> <p>c) Drinking Water Program Migration – The Administration has proposed to transfer the Drinking Water Program from the Department of Public Health to the State Water Board on July 1, 2014. The proposal is described in a White Paper circulated in the summer of 2013. Cal/EPA and the California Health and Human Services Agency held a public meeting in January and a Drinking Water Reorganization Task Force has met to provide input on the proposed transfer.</p> <p>d) Delta Stewardship Council’s Data Summit – The Delta Stewardship Council is planning to hold a Data Summit later this year with the objective of building on existing and emerging data management systems to enable the Bay-Delta region’s environmental and project-implementation data to be easily accessed, visualized, and processed from diverse data management systems by agencies, scientists, interested public, academia, and citizen scientists, resulting in enhanced discovery and accumulation of knowledge. There is an obvious nexus with the efforts of the Monitoring Council and its workgroups.</p>				
<p>Attachment Links</p>	<p>a) State Stewardship for NHD and NWI – Kris Jones updated summary</p> <p>b) Working Together for Clean Water, the 9th National Monitoring Conference</p> <p>c) Drinking Water Program Proposal – via the State Water Board website</p>				
<p>Contact Persons:</p>	<table border="0"> <tr> <td data-bbox="415 989 727 1045">Kris Jones</td> <td data-bbox="727 989 1494 1045">kristopher.jones@water.ca.gov, (916) 376-9756</td> </tr> <tr> <td data-bbox="415 1045 727 1104">Jon Marshack</td> <td data-bbox="727 1045 1494 1104">jon.marshack@waterboards.ca.gov, (916) 341-5514</td> </tr> </table>	Kris Jones	kristopher.jones@water.ca.gov , (916) 376-9756	Jon Marshack	jon.marshack@waterboards.ca.gov , (916) 341-5514
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<p>Notes:</p>	<p>a) State Stewardship for NHD –Monitoring Council Coordinator Kris Jones attended the second meeting to discuss joint stewardship of the National Hydrography Dataset (NHD) and to further develop the draft Memorandum of Understanding (MOU) that would establish joint stewardship; the potential signatory agencies of the MOU include the Department of Water Resources, Department of Fish and Wildlife, Cal Fire, Water Resources Control Board, U.S. Geological Survey, and U.S. Forest Service. Kris indicated that after briefly reviewing the draft MOU, the meeting attendees agreed that the MOU document needed further development outside of the meeting. An updated draft MOU will be distributed to the group for their review prior to the next meeting (scheduled for March 27th). Christina Boggs (DWR; Data Publication, Exchange and Management Division of Statewide Integrated Water) is leading the efforts for NHD stewardship at DWR. During the meeting, she provided an update from her briefing with DWR Chief Deputy Director Laura King Moon. Christina indicated that Laura was supportive of DWR’s involvement in the MOU and efforts to pursue joint stewardship of NHD. Following Laura’s urging, Christina plans to prepare another funding request for fiscal year 2016-2017. However, currently she is unsure what shape the request will take (e.g., level of funding or number of PYs). Following the meeting, it was noted that the current draft of the Water Action Plan (bottom of page 17) supports efforts to ‘Fund and revive the National Hydrological Dataset for California to improve high-quality framework geospatial data and the precision and accuracy of mapping and scientific studies.’ The group is hopeful that this recognition in the Water Action Plan will help further their efforts to acquire funding and support for NHD stewardship in California.</p>				

- b) **National Monitoring Conference** – The National Water Quality Monitoring Council holds a conference every two years, and the next conference is scheduled for May 2014. Monitoring Council Coordinator Jon Marshack has submitted abstracts for one oral presentation (to discuss the results from the triennial audit) and two posters (for the Estuary and Wetland Portals). All three requests were accepted. Jon indicated that he is awaiting approval for out-of-state travel.
- Terry Fleming announced that USEPA Region 9 has nominated Jon to represent the Pacific Southwest states (Arizona, California, Hawaii, and Nevada) on the National Water Quality Monitoring Council.
- c) **Drinking Water Program Migration** – Karen Larsen provided an update regarding the proposed transfer of the Drinking Water Program from the Department of Public Health to the State Water Board on July 1, 2014. Karen indicated that currently the transfer is still an administrative proposal. However, she informed the Monitoring Council that the State Water Resources Control Board (SWRCB) is moving forward as if the transfer will occur as planned. Karen mentioned that the two agencies are currently developing a transition plan, which will go public within the next month. There is also an [issue paper](#) regarding this topic, which is available through the SWRCB's website. Karen also described the efforts of sub-teams, which are composed of DPH and SWRCB staff to deal with issues regarding topics such as budgets and fees, state lab accreditation etc. These groups are meeting on a weekly basis to discuss the transition plan. Karen indicated that she will update the Monitoring Council as the move progresses. Parry Klassen asked what the public will see when the transition occurs. Karen indicated that the intention is to maintain the current level of customer service. She also indicated that the fee structure is going to be under discussion; however, she mentioned that at this stage there are no plans to change the fee structure. Karen mentioned that district staff will remain in their district offices, maintaining the same level of customer service and regulatory field presence. Staff from Operator Certification and Drinking Water State Revolving Fund will be merged into the State Water Board's Division of Financial Assistance). Karen indicated that she believed that there will be few observable differences and the program will retain its public health focus.
- d) **Delta Stewardship Council's Data Summit** – Karen Larsen provided an update regarding the Delta Stewardship Council's Data Summit, which is currently planned for June 5-6, 2014. Karen is on the planning committee for the Summit. She mentioned that the plenary session will include some heavy hitting discussions regarding data integration and display of these data. As part of the Summit, there will also be a review of existing data systems, including CEDEN, EcoAtlas, and the Estuary Portal, for example. Karen indicated that there will also be breakout sessions to discuss topics such as data integration, data inventory, business models and collaboration. Jon Marshack raised the issue of AB 378, which was intended to break down current silos of monitoring and research data collected in the Sacramento-San Joaquin Delta. He re-iterated some of the points he provided in his update at the December 12th Monitoring Council Meeting regarding his meeting with Shakoora Azimi-Gaylon and Tina Cannon Leahy (Principal Consultant to the Assembly Committee on Water, Parks and Wildlife)(see [Item 2e](#)); Jon mentioned that while Tina initially was focused on developing legislation that would have a Delta focus, that after he explained the

	Monitoring Council's need for action on a statewide basis, she seemed convinced that a statewide focus on water resources data may be the appropriate course of action. Jon also indicated that Tina would like to wait for the Delta Stewardship Council's data summit (see 2c, above) before proposing any new proposed legislative language.	
ITEM:	3	
Title of Topic:	CALIFORNIA INTEGRATED ASSESSMENT OF WATERSHED HEALTH	
Purpose:	Lori Webber provided a summary of this report , prepared by Cadmus Group under contract from USEPA's Healthy Watersheds Initiative	
Desired Outcome:	Information and comment on how the Monitoring Council's Healthy Streams Partnership could build on this effort and augment the Healthy Streams Portal	
Background:	<p>In mid-2011, USEPA's Healthy Watersheds Initiative offered to provide USEPA-funded contractor support for a new project to identify healthy watersheds throughout California based on a systematic integration of a number of monitored and modeled parameters. The Monitoring Council's Healthy Streams Partnership guided the contractor, Cadmus Group, and the resulting report was published by USEPA in October, 2013. Results of the assessment are envisioned to be presented in the Healthy Streams Portal.</p> <p>At the November 2011 meeting, the Monitoring Council reviewed a Draft Technical Approach developed by Cadmus. At the February 2012 meeting, the Monitoring Council was given a presentation on a draft summary of proposed indicators for use in the assessment and provided feedback. Cadmus provided preliminary results of the project in March 2013 and the Monitoring Council responded that the final 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. Lori Webber provided a brief update at the Monitoring Council's May 2013 meeting.</p>	
Attachment Links:	<ul style="list-style-type: none"> • Summary of California Integrated Assessment of Watershed Health Report – presentation by Lori Webber • California Integrated Assessment of Watershed Health – report by Cadmus • Notes from the March 2013 Monitoring Council meeting (see Item 6) • Notes from the February 2012 Monitoring Council meeting (see Item 4) • Notes from the November 2011 Monitoring Council meeting (see Item 6) 	
Contact Person:	Lori Webber	lori.webber@waterboards.ca.gov , (916) 341-5556
Notes:	Lori Webber presented the Healthy Watersheds Initiative's California Integrated Assessment of Watershed Health report (released October 2013). She described how the USEPA had funded this effort to identify healthy watersheds throughout California based on a systematic integration of a number of monitored and modeled parameters. The Monitoring Council's Healthy Streams Partnership (HSP) has been guiding the contractor, Cadmus Group, and the results of the assessment are planned to be presented in the Healthy Streams Portal. Three sets of indicators were used in California's assessment: watershed	

condition indicators, stream health indicators, and watershed vulnerability indicators. Watershed condition Indicators were derived from geospatial datasets (based on remote sensing) and have complete coverage across the state. Stream Health Indicators were based on data from specific monitored sites, using statistical models to develop predicted values in unmonitored locations. Watershed Vulnerability Indicators characterize potential exposure to future risks such as climate change and fire, and were derived from modelled projected values.

The Condition Indicators and Stream Health Indicators were combined by first normalizing each indicator into a common range of values and then averaging indicators within each category to develop three indices – Watershed Condition Index, Stream Health Index and Watershed Vulnerability Index. Due to the general paucity of monitoring data to drive modeling in this area, the desert ecoregion was excluded from the Steam Health Index.

Looking to the future, Lori indicated that the Healthy Streams Partnership plans to display the assessment results on the Healthy Streams Portal as well as integrate these data into EcoAtlas. She also indicated that the group plans to build on the framework of this assessment, incorporating new indicators as well as defining thresholds. The Healthy Streams Partnership also plans to coordinate their efforts with other workgroups (e.g., California Wetland Monitoring Workgroup) and other government agencies (e.g., National Park Service and Department of Forestry).

Terry Fleming asked who the target audience is for this report. Terry indicated that the maps presented in the report provide valuable information regarding areas to target for improved monitoring. Sarge Green mentioned that this information could be very useful for planners (e.g., as it relates to zoning, land use, etc.). Beth Christman added that this information could also be useful for federal land management agencies, as they could be used to target areas for preservation.

Parry Klassen asked when these data are presented in the portal, will the user be able to visualize at a local level (e.g., near the user's place of residence). Jon Marshack responded that the Cadmus Group has indicated that the resolution is insufficient, and that there would be a great deal of error at that fine a scale. Peter Ode mentioned that at this stage, the group needs acceptance of this assessment framework (e.g., for broad scale land use). He added that the predicted model values could be tested against data collected in the field to add confidence to the models. Others should be invited to contribute data that would be used to refine and update the assessment framework. Sarge Green recommended that this remain a planning tool and should not be used for enforcement purposes. An improved framework could be used to help prioritize efforts in a more objective, rather than ad hoc, manner.

Phil Markle raised concerns regarding the level of certainty for some of the predictions, particularly with regards to fine scale predictions. In general he felt that the assessment could be used by comparing healthy areas to vulnerability scores, thereby prioritizing management actions. Peter Ode mentioned that the ideal version might have a lot of sophistication in how the data are derived and presented; however, he indicated that the tool can still be very useful even if there are still areas that need to be improved. Karen Larsen added that the intent of the project is to identify healthy watersheds, and to highlight areas on which we should focus for improvement. Jon Marshack mentioned that there is no weighting for these indicators (all are weighted the same). He suggested that this is an area with which the group should focus as they move forward. Armand

	<p>Ruby wanted the group to take a step back to think about what these data can be used for. He thinks that the impetus has been to identify and protect healthy watersheds. However, in stormwater and POTW work, he is concerned about the potential use of these data to identify low quality areas for potential improvement efforts. He wondered whether there was a need to put any more thought into the proposed use of the Integrated Assessment beyond those presented in the report.</p> <p>Stephani Spaar recommended that a roadmap of efforts in the report – next steps and expectations (i.e., Section IV on page 40 of the report) should be added to future presentations of this assessment.</p>
Action Items:	<p>The Healthy Streams Partnership should display the assessments on the Healthy Streams Portal. In future iterations of the project, the Monitoring Council recommended that the group should try and incorporate some assessment of error in their findings, as well as weighting of indicators in their models. The assessment framework should be verified and improved using additional data sets from other organizations.</p>

ITEM:	4	Approx. Time:
Title of Topic:	INDICATORS AND PERFORMANCE MEASURES	
Purpose:	<p>Fraser Shilling discussed how the use of indicators and performance measures has changed over the last decade and how different state and federal agencies are employing them at different scales to understand condition and to convey scientific information to broad audiences</p>	
Desired Outcome:	<p>Information and comment on how indicators can be used in the My Water Quality portals and to enhance the efforts of the Monitoring Council’s theme-specific workgroups to bring data and information together from multiple agencies and organizations, especially the California Water Plan Sustainability Indicators Framework and the California Integrated Assessment of Watershed Health</p>	
Background:	<p>In the August 2013 Monitoring Council meeting, Abdul Kahn of the Department of Water Resources (DWR) presented the Sustainability Indicators Framework, which is part of the California Water Plan 2013 Update. Fraser Shilling, who developed the Water Plan Sustainability Indicators for DWR, was originally scheduled to present that item. At the end of Abdul’s presentation, the Monitoring Council requested additional information regarding the nature of the report, including for whom it was intended, and asked that this topic be scheduled for a later Monitoring Council meeting.</p> <p>Dr. Shilling is a member of the Monitoring Council’s Healthy Streams Partnership which guided the USEPA’s California Integrated Assessment of Watershed Health (see Item 3, above). That effort brought together numerous indicators in a multimetric assessment. Dr. Fraser is also developing indicators for use in state forest and range assessments by the California Department of Forestry and Fire Protection (Cal Fire). The California Biodiversity Council has recently convened an Indicators Workgroup to help find common ground among various indicator projects, including those of DWR, Cal Fire, the State Wildlife Action Plan 2015 Update by the Department of Fish and Wildlife, and Forest Management Plans by Region 5 of the U.S. Forest Service. Dr. Shilling first described the use of indicators in the California Watershed Assessment Manual</p>	

	<p>(2007) and since then has used them in five regional-scale projects and in the state's Water Plan Update 2013.</p>	
<p>Attachment Links:</p>	<ul style="list-style-type: none"> • Managing for Water Sustainability in an Uncertain Future – presentation by Fraser Shilling • California Water Plan Sustainability Indicators Framework, Exec. Summary • Notes from the August 2013 Monitoring Council meeting (see Item 3) • California Watershed Assessment Manual (2007) 	
<p>Contact Person:</p>	<p>Fraser Shilling</p>	<p>fmshilling@ucdavis.edu, (530) 752-7859</p>
<p>Notes:</p>	<p>Fraser Shilling of UC Davis presented the California Sustainability Indicators Framework, which is part of the California Water Plan 2013 Update. Their ongoing work, a joint effort of DWR, UC Davis, USEPA, and the Pacific Institute, was developed to provide a multi-metric (economic, environmental, social) analysis to gauge the health of California watersheds; specifically, their analyses aimed to identify healthy watersheds and watersheds that are vulnerable to environmental and human induced factors. Fraser's presentation closed with several key opportunities for the Monitoring Council:</p> <ul style="list-style-type: none"> • Support integrated, federated water information system for California (e.g., My Water Quality, water PIE, and DRINC). Fraser indicated that this could be potentially useful in times of drought. • Support development of real-time/automated indicators, integrated with information systems. • Support annual water sustainability report cards for water flows, supplies, replenishment, quality, biota, cycling, use etc. • Support agency/academy collaboration to report on sustainability in general. <p>After presenting their work to the Monitoring Council, Jon Marshack thought it might be useful to discuss how this work tied in with the efforts of the Healthy Watersheds Initiative (HWI)(as presented in Item 3, above). Fraser mentioned that there are a number of similarities in terms of the look; however, he indicated that much of their methods are different. During the development of the Water Plan, Fraser and his collaborators did not have access to the Cadmus Group's work, as they were still developing the HWI's report. Fraser indicated that he thought the HWI efforts would greatly benefit from the 'scorecard' approach he presented, evaluating indicators against relevant thresholds of reference (good) and poor conditions with distance-to-target normalization. Fraser also favored a technical advisory process to obtain input from stakeholder organizations and agencies, building transparency and trust. Relative confidence in the data should also be highlighted. Jon also asked whether there are any up and coming efforts that could benefit from the work Fraser presented. Fraser indicated that there are some relevant efforts; however, most of those of which he was aware do no relate to water quality (so he thought it might be difficult to make that connection).</p> <p>Sarge Green mentioned Fraser's comment regarding the funding opportunities between watershed related work and water supply issues. Sarge asked whether Fraser had any thoughts regarding what can be done to give watershed related research greater funding opportunities. Fraser did not have any suggestions; however, he indicated that using one term over the other (e.g., watershed versus water supply) can be of critical importance when applying for funding; Fraser indicated that projects relating to water supply are more likely to be favored with</p>	

	<p>grants.</p> <p>Karen Larsen asked how Fraser's efforts could be better coordinated with those of the HWI. Fraser indicated that the HWI could try and coordinate with the development of the next Water Plan Update, scheduled for 2017. Coordination with Cal Fire's Fire and Resource Assessment Program (FRAP) may also be beneficial. See where agency mandates overlap.</p>
Action Items:	The Monitoring Council and its Coordinators should try and coordinate with the development of the next Water Plan Update (scheduled for 2017).

ITEM:	5
Title of Topic:	TRIENNIAL AUDIT OF THE MONITORING COUNCIL'S STRATEGY
Purpose:	<p>Representatives of the following workgroups of the Monitoring Council presented brief summaries of their triennial progress reports, for which there was insufficient time during the December 12, 2013 meeting:</p> <ul style="list-style-type: none"> • Data Management Workgroup (Steve Steinberg and David Harris) • Water Quality Monitoring Collaboration Network (Erick Burres) <p>Jon Marshack and Kris Jones presented a draft outline of the First Triennial Audit Report, followed by discussion among the Monitoring Council Members, Alternates, and EPA Liaison.</p>
Desired Outcome:	Guidance on the development of the first Triennial Self-Audit of implementation of the Monitoring Council's comprehensive monitoring program strategy
Background:	<p>This is a continuation of Item 6 from the December 12, 2013 Monitoring Council meeting. At that meeting, the Monitoring Council heard presentations and reviewed progress reports from the seven theme-specific workgroups, followed by a discussion of common themes, concerns and recommendations. There was insufficient time to hear reports from two additional workgroups, the Data Management Workgroup and the Water Quality Monitoring Collaboration Network. Their presentations were postponed until this meeting.</p> <p>Monitoring Council Coordinators Jon Marshack and Kris Jones outlined the workgroup progress reports in a summary table that ranks each of six performance measures against rating benchmarks from the Monitoring Council's Comprehensive Monitoring Program Strategy and 2008 Initial Recommendations reports. Also in the summary table, explicit needs and additional necessary collaborators were identified by each workgroup. The summary table and individual workgroup progress reports are proposed to be appended to the Monitoring Council's Triennial Audit Report.</p> <p>A draft outline of the First Triennial Audit Report has also been prepared by the Coordinators, based on input from all nine workgroups and discussions with the Monitoring Council Co-Chair Alternates, Karen Larsen and Stephani Spaar. The outline identifies goals, accomplishments, challenges, unaddressed mandates of SB 1070 and the implementing MOU, sustainability, and, finally, next steps and recommendations. The Coordinators propose that the next steps and recommendations be highlighted in the cover letter to the Triennial Audit Report. The proposed recipients of the report include the Secretaries of Cal/EPA and the Natural Resources Agency and key legislators.</p>

<p>Attachment Links:</p>	<ul style="list-style-type: none"> • Draft Outline of the First Triennial Audit Report <ul style="list-style-type: none"> ○ Audit Outline Presentation – by Jon Marshack • Workgroup Presentations <ul style="list-style-type: none"> ○ Data Management Workgroup – by David Harris ○ Water Quality Monitoring Collaboration Network – by Erick Burres • Workgroup Progress Reports – Summary Table – updated <ul style="list-style-type: none"> ○ Data Management Workgroup – updated ○ Water Quality Monitoring Collaboration Network • Performance Measures and Rating Benchmarks • Notes from the December 12, 2013 Monitoring Council meeting (see Item 6) • Notes from November 28, 2012 Council Monitoring meeting (see Item 7) • CA Senate Bill 1070 (Statutes of 2006, specifically Water Code §13181(h)) • Memorandum of Understanding (MOU) establishing the Monitoring Council (see section IV, 4 on page 4) • Comprehensive Monitoring Program Strategy (see page 22) • Monitoring Council’s 2008 Initial Recommendations report (see page 11 and Appendix 3) 	
<p>Contact Persons:</p>	<p>Jon Marshack Kris Jones</p>	<p>jon.marshack@waterboards.ca.gov, (916) 341-5514 kristopher.jones@water.ca.gov, (916) 376-9756</p>
<p>Notes:</p>	<p>Jon Marshack provided a brief introduction regarding the Triennial Audit, and the workgroup self-evaluations. In their self-evaluations, he indicated that the workgroups were to address the six performance measures and rating benchmarks outlined in Tables 1 and 2 of the Comprehensive Monitoring Program Strategy. A summary table of the workgroup progress reports was distributed. Due to a lack of time at the December 12th Monitoring Council Meeting, presentations for the Data Management Workgroup and the Water Quality Monitoring Collaboration Network were rescheduled for today’s meeting.</p> <p>The Data Management Workgroup (DMW) was presented by David Harris (DWR). David discussed how the workgroup purpose is to provide expertise to help establish an overall approach to make use of existing data management systems including databases, data indexes, and analytical tools. In support of the Council’s Comprehensive Strategy, key responsibilities of the DMW include.</p> <ul style="list-style-type: none"> • Assist Monitoring Council workgroups identifying methodologies for assessing data management and quality needs. • Assess and recommend best practices for development of structured data formats and data management strategies complying with appropriate national and state guidelines. • Identify methods to increase accessibility of water quality and related ecosystem data and opportunities to coordinate and share these data among workgroups, governmental agencies, and non-governmental organizations. • Assess and recommend IT tools and standards facilitating development of 	

portals meeting Monitoring Council web development guidelines.

- Serve as a resource to assist other workgroups to evaluate technologies in the areas of data management, web applications and geospatial information management.
- Serve as a resource to workgroups for communicating, and where necessary, translating into clear, non-technical language recommendations regarding data management in support of individual workgroup's efforts.

Some of the key accomplishments of the DMW include: developed and adopted a workgroup charter; established two subcommittees (Portals/Tools and Data Standards); through the subcommittees, inventoried and assessed data and technologies in use by existing and forthcoming theme specific workgroups; held a joint meeting between the DMW and the three Ecosystem Health workgroups; developed issue paper for which web mapping framework to utilize as a replacement for the Google Maps API v.2 framework used on a number of My Water Quality portal pages.

David finished by presenting the group's recommendations, which included: improve portal workgroup representation in the Data Workgroup or find an equivalent mechanism to increase information exchange; complete the data management practices guide and determine which practices should be formalized by the WQMC; enhance the inventory of data and technologies used by the portals; develop interoperability standards; and develop an approach to dedicating a portion of technical staff time to this effort.

Paul Helliker asked about David's comment that the group needed top down support for departmental staff participation in the workgroup and for the workgroup to make recommendations—he thought that they were already in a position to make recommendations. David mentioned that the group does have the ability, to a certain extent. Jon Marshack pointed out that the worker bees did not feel like they had the internal support to be able to come up with broader based recommendations; David Harris indicated that some in the group have still encountered obstacles, despite recent progress. Paul indicated that he would support the involvement of DWR staff and their recommendations.

Fraser Shilling asked how the workgroup assesses their effectiveness. Despite a lack of staff support, David indicated that he envisions that this would be based on whether the group reaches certain goals. For example, whether the portals have incorporated their recommendations. Jon Marshack mentioned that the workgroups are trying to address the low hanging fruit (which differs portal to portal), so many have not had the luxury to identify the best tools to use for their needs. Fraser pointed out that by taking this approach, the various workgroups might not be keeping up with new technological developments.

Jon Marshack pointed out that one issue that the group will face moving forward is that they need to be better at translating these information technology subjects to a non-technical (mainly scientist) audience. Karen Larsen mentioned that the data summit (see Item 2d, above) would be a good opportunity to discuss these issues and the resources needed to address the data accessibility needs.

The [Water Quality Monitoring Collaboration Network](#) was presented by Erick Burres (State Water Resources Control Board). Erick indicated that the California Water Quality Monitoring Collaboration Network (CWQMCN) is a voluntary monthly Webinar series that allows members of the monitoring community to network and exchange information and ideas on topics of interest. The Network helps support a state framework to coordinate consistent and

scientifically defensible methods and strategies for improving water quality monitoring, assessment, and reporting.

The webinars have consisted of several types of forums and a variety of topics.

Forums-

- 1) Providing information to the Group (e.g., State Program Overviews, technical and support tools, information in various water quality indicators, assessment methods).
- 2) Providing an expertise dialogue (e.g., Bioassessment, monitoring design, blue-green algae phenomenon).
- 3) Providing a forum for networking (e.g., recent developments in regional monitoring or citizen monitoring groups), problem solving, and feedback on program and tools.

Topic Categories-

- 1) Water Quality Monitoring Programs
- 2) Water Quality Monitoring Projects
- 3) Monitoring Tools
- 4) Quality Assurance
- 5) Management and Administrative Tools
- 6) Data Sharing
- 7) Reporting

Erick indicated a number of explicit workgroup needs, which included: additional webinar facilitator(s), greater coordination with other workgroups, additional software for video conversion of recorded webinars, and methods to gauge whether webinars result in improvements to monitoring, assessment and reporting programs.

Jon Marshack mentioned that the workgroups that presented today (DMW and CWQMCN) are a bit different from the other theme based workgroups; the performance measure benchmarks used for the self-assessments do not really apply very well to these groups. Sarge Green indicated that he thought that the CWQMCN could actually add content to the theme based portals. He thinks that their information could make the portals more inviting. Terry Fleming mentioned that he thought that Erick and the group were doing a great job. Phil Markle mentioned that the group's survey after each webinar could include questions which ask the user whether their methods or program might change as a result of the information presented in the webinar. Other members of the Monitoring Council agreed with this suggestion.

Following the presentations of the Data Management Workgroup and the Water Quality Monitoring Collaboration Network, Jon Marshack [presented the draft outline](#) prepared by the Coordinators for the First Triennial Audit Report. After his presentation, Jon asked the Monitoring Council Members whether they agree with the general approach and structure outlined in his presentation. Terry Fleming mentioned that he thought the approach sounded too whiny. Stephani Spaar asked where the goals come from, as she could not find them in the Strategy document. Jon said he gleaned those details from the Strategy document and the 2008 Initial Recommendations report. Stephani indicated that she thought that these points need to be better referenced in the Triennial Audit

document. Karen Larsen agreed with this point and thought that the Monitoring Council needs to also better address the topic of ‘what is in it for you’ (e.g., when dealing with agency staff and management), which could be addressed better through outreach. Karen added that she felt that this might be part of the issue with how the Monitoring Council has communicated this message to the Agency Secretaries—she thought that we sell it better.

Ken Schiff asked whether this was the first triennial audit. Jon indicated that it was, and that the workgroups have only prepared annual reports, thus far. Ken indicated that he was less enamored with the structure of the document. He mentioned that we state several goals, but nothing that follows sticks to those goals. He suggested that under each of the goals, we should start off with the things the Monitoring Council and its workgroups do well. He continued to say that we should emphasize that these have been the relatively easy things to accomplish—it is now getting more difficult to make progress given the current level of support and resources. Moving forward, certain things will limit our progress (e.g., the next set of difficult tasks include...). He indicated that this approach would sound less whiny to the Agency Secretaries. Terry Fleming mentioned that the portals are a success, but he raised the question whether the existence of the portal has changed the behavior of any particular government agency or program? After struggling with that question, he could not think of one. Jon Marshack mentioned that the portals have addressed the low hanging fruit, which makes it difficult to encourage big change. However, Jon did add that the portals and workgroups have been good at building collaborations and getting organizations who monitor to interact. Phil Markle also indicated that he often uses and frequently refers his constituents to the Safe to Eat portal, for example.

Jon Marshack asked whether the members of the Monitoring Council had any further suggestions for next steps in developing the Triennial Audit document--were there any other specific modifications to the current approach?

It occurred to Karen Larsen that the workgroups need to revisit their charters. She felt that the next steps should come from the agency worker bees who can better communicate the importance of the Monitoring Council Workgroups to their managers. The worker bees have the vision and need to communicate that to their management (Karen highlighted the work of the Wetlands Workgroup).

Ken Schiff added that he did not care for the list of recommendations used in the current outline. He felt that they were just a list of things, and would likely not attract the attention of the Agency Secretaries (he felt that these points will continue to be ignored). He thought that the recommendations should include potential solutions rather than just a list of issues. He suggested that we should shift the focus to be solution oriented (i.e., in order to achieve goal x we need to do y).

Sean Bothwell asked whether we have approached the legislature for support. Jon Marshack mentioned that he had communicated with Tina Cannon Leahy (Principal Consultant to the Assembly Committee on Water, Parks and Wildlife) regarding additional legislative support. Karen Larsen asked whether we should consider revisiting SB 1070 in order to determine whether it adequately addresses our needs. Stephani Spaar raised the point that SB 1070 certainly did not provide the resources needed to carry out the legislation.

Armand Ruby reiterated that if our goal is to seek out executive level support (e.g., the Agency Secretaries and department directors), that we should consider revising our approach to come across as less whiny. He mentioned that this has been the approach that has previously been taken, and that taking a new

approach might be more fruitful. Jon Marshack indicated that the Monitoring Council's Memorandum of Understanding (MOU) was negotiated with the previous Agency Secretaries. He added that the current Secretaries may feel very different than their predecessors.

Sarge Green suggested that we might consider highlighting the consequences if we do not get the needed support from the Agency Secretaries--a warning. Ken Schiff thinks that the Triennial Audit should mention that the portals will become stale and out of date (e.g., Safe to Swim), and that without the needed support this is the direction the other portals and workgroups will likely take.

Armand asked whether a follow up is necessary for the Monitoring Council's MOU. Specifically, he asked whether we might want to approach the current Agency Secretaries to review the MOU so they can provide feedback to the document. Karen Larsen indicated that she felt the MOU discussion should follow the submission of the Triennial Audit.

Jon asked whether it would be fruitful to have the Monitoring Council members address the secretaries and outline how the CWQMC is important for them and their constituents. Those in attendance felt that this would be a good thing to include in the Triennial Audit (e.g., in the cover letter). There is a role for Monitoring Council Members to engage the Agency Secretaries, outlining that their constituencies have a stake in the success of the Monitoring Council and its workgroups and portals.

Stephani Spaar added that we should take the approach that the current accomplishments of the Monitoring Council are what have been possible with zero resources and limited top-down support. She added that the more we can link with other efforts (e.g., delta science plan etc.), the better we can accomplish our goals. Armand Ruby mentioned that there is a requirement in SB 1070 for standardized methods, but this was not addressed in the Audit outline. Jon mentioned some relevant efforts (e.g., CRAM, EcoAtlas etc.), but emphasized that the Strategy does make the point that our goal should not be to standardize for the sake of standardization.

Ken Schiff added that he thinks that the Monitoring Council has been wildly successful, but that we do not give ourselves enough credit. He added that there are very few examples in other states of portals that are as developed as those developed by the CWQMC. Jon mentioned that the National Council previously had not included the MyWaterQuality portals in their links to other national efforts. After reviewing our portals, Jon indicated that they were very impressed with our portals, specifically with the question driven approach. We need to maintain momentum.

Looking forward during the next three years, Stephani Spaar asked what we foresee happening with the various workgroups given the current level of resources? Jon Marshack thought that the Wetlands Workgroup will continue, as they are very self-reliant and driven. He also felt that Bioaccumulation Oversight (Safe to Eat) and Healthy Streams will continue, as they are integral to the Water Board's Surface Water Ambient Monitoring Program (SWAMP). However, Safe to Swim lacks leadership and has an out of date portal. The Estuaries Workgroup has had good initial momentum, but there is little ongoing financial commitment; linkage to the Delta Science Plan could change that picture. Beth Christman and others agreed that they like the approach of laying out these types of predictions.

It was suggested that to improve inter-workgroup coordination, a Coordinators

	Team could be formed with a representative from each workgroup.
Decisions:	The Monitoring Council members agreed that the Coordinators (Jon Marshack and Kris Jones) should continue to develop the Triennial Audit Report; however, they recommended that they should revisit their approach, given the comments provided (see above).
Action Items:	<ul style="list-style-type: none"> • The Coordinators (Jon Marshack and Kris Jones) will develop a draft Triennial Audit Report for distribution to the Monitoring Council Members prior to the May 28th meeting. • Signature blocks for all Monitoring Council Members should be included. • Each workgroup Co-Chair should outline the future of their workgroup given the current level of resources.

ITEM:	6	
Title of Topic:	MEETING WRAP-UP	
Purpose:	<p>Plan agenda for May 28, 2014 Monitoring Council meeting in Costa Mesa. Potential items include:</p> <ol style="list-style-type: none"> 1) Triennial audit of the Monitoring Council's strategy implementation – report approval (Jon Marshack and Kris Jones) 2) Development of Monitoring Council recommendations to improve grant project monitoring, data management, assessment, and reporting 3) Ocean Ecosystem Health (Liz Whiteman) <ol style="list-style-type: none"> a) Plans for Ocean Ecosystem Workgroup and new Ocean Health Portal b) Marine Protected Area (MPA) Monitoring Enterprise and coordination with ASBS monitoring 4) Department of Fish & Wildlife monitoring (Adam Ballard, Robert Holmes, Josh Grover, Chad Dibble, Peter Ode, Tom Lupo) <ol style="list-style-type: none"> a) Coordination b) Financial support c) Flow d) Data Management – CEDEN for water quality data? e) Monitoring Council endorsement of collaboration? 5) Data quality standardization efforts of SWAMP – “Data Comparability” 6) New Water Board QA website 7) 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 May 28, 2014 meeting	
Contact Persons:	Kris Jones Jon Marshack	kristopher.jones@water.ca.gov , (916) 376-9756 jon.marshack@waterboards.ca.gov , (916) 341-5514
Notes:	<ul style="list-style-type: none"> • The Monitoring Council expressed interest in hearing items all of the above items in May. Karen Larsen suggested that Items (5) and (6) be combined, 	

	<p>but this will depend on discussions with Rich Breuer (see Action Item below).</p> <ul style="list-style-type: none">• The Monitoring Council members approved the new meeting start time (10am).• Karen Larsen announced that Jon Marshack has been promoted in place to Environmental Program Manager I (non-supervisory). Karen indicated that she is currently exploring how Jon's roles and responsibilities will be changed by his promotion.
Action Items:	<ul style="list-style-type: none">• Karen Larsen will discuss item (2) above with Jon Marshack, specifically the lessons learned from CEDEN and any other relevant background for discussion of this item at the next Monitoring Council meeting.• Karen Larsen will discuss the possibility of combining items (5) and (6) above with Rich Breuer.

April 2, 2014
Amended April 18, 2014
Approved May 28, 2014