CALIFORNIA WATER QUALITY MONITORING COUNCIL

Monitoring Council Meeting Notes

Wednesday, August 11, 2010 – 9:00 AM to 4:00 PM

Conference Room 550 – Fifth Floor
Joe Serna Jr. Cal/EPA Headquarters Building
1001 I Street, Sacramento

Monitoring Council Members and Alternates in attendance:

Jonathan Bishop	Sarge Green	Carl Lischeske	Linda Sheehan
Dave Bolland (phone)	Dale Hoffman-Floerke	Phil Markle	Stephen Weisberg
Val Connor	Parry Klassen	Armand Ruby	

Others in attendance or on the phone:

Jamie Adorhold, Aqualytical	S. Heminwey, Dept of Water Resources
Bruce Agee, Dept. of Water Resources	Reiner Hoenicke, SF Estuary Institute
Brock Bernstein, Consultant to SWRCB	Elizabeth Hubert (phone)
Dennis Bowker, Consensus Process Design	Gail Kuenster, Dept of Water Resources (phone)
Rich Breuer, Dept of Water Resources	Karen Larsen, State Water Board
Syd Brown, CA State Parks Dept (phone)	Brian Lewis, Dept of Toxic Substances Control
Pete Cafferata, Cal Fire	Tom Lupo, Dept of Fish & Game
Scott Clemons, Dept of Fish & Game	Jon Marshack, State Water Board
Carol DiGiorgio, Dept of Water Resources	Dean Messer, Dept of Water Resources
Mark Emmerson, CA Dept of Public Health	Anke Mueller-Solger, Delta Stewardship Council
Maurya Falkner, State Lands Commission	Eric Oppenheimer, Dept of Water Resources
Terry Fleming, USEPA	Bill Orme, State Water Board
Cindy Garcia, Dept of Water Resources	Greg Smith, Dept of Water Resources
Karen Gehrts, Dept of Water Resources	Eric Stein, SCCWRP
Jack Gregg, CA Coastal Commission	Meghan Sullivan, Central Valley RWQCB
B.G. Heiland, Dept of Water Resources	

ITEM:	1
Title of Topic:	**INTRODUCTIONS AND HOUSEKEEPING**
Purpose:	(a) Introductions (b) Review notes from June 9, 2010 Council meeting (c) Review agenda for today's meeting
Desired Outcome:	(a) Approve June 9, 2010 Monitoring Council meeting notes (b) Preview what will be presented today and overall meeting expectations (c) Adjust today's agenda, as needed
Attachments:	Notes from June 9, 2010 Council meeting
Contact Person:	Jon Marshack	jmarshack@waterboards.ca.gov, 916-341-5514
Decisions:	June 9, 2010 meeting notes approved without further edits

ITEM:	2
Title of Topic:	**ANNOUNCEMENTS AND UPDATES**
Purpose:	(a) ~~State budget update (Jonathan Bishop, Dale Hoffman-Floerke)~~ *no update*
	(b) Healthy Streams Partnership update (Val Connor)
	(c) Comprehensive Monitoring Program Strategy update (Brock Bernstein)
	(d) SWAMP Strategy and Assessment Framework update (Karen Larsen, Brock Bernstein)
	(e) Portal Development Update (Jon Marshack)
	(f) CEDEN update (Karen Larsen)
	(g) ~~Rapid bacterial indicator tools and Orange County test (Steve Weisberg)~~ *not discussed*
	(h) Riparian mapping for Central Valley Flood Protection Plan (Eric Stein)
Desired Outcome:	(a) Information
	(b) The Monitoring Council urges the Department of Water Resources (DWR) to use the WRAMP riparian area definition and mapping method/tool.
Background:	***Wetland and Riparian Mapping for the Central Valley Flood Protection Plan***
	Senate Bill 5 requires DWR and the Central Valley Flood Protection Board to prepare and adopt a Central Valley Flood Protection Plan (CVFPP) by 2012, and establishes flood protection requirements for local land-use decisions consistent with the Central Valley Protection Plan.
	CVFPP has two major components: public safety and ecological health. DWR has contracted with CSU Chico to map riparian habitat as part of this plan development. The approach proposed by CSU Chico is to base riparian maps on the presence of vegetation typically associated with streamside habitats.
	Riparian mapping associated with the CVFPP represents an opportunity to advance a key initiative of the California Water Quality Monitoring Council and promote interagency coordination on riparian protection in the Central Valley.
	The California Wetland Monitoring Workgroup (CWMW) recently developed a statewide Wetland and Riparian Area Monitoring Program (WRAMP). Implementation of this plan by all state agencies was [recently endorsed as a key initiative of the Water Quality Monitoring Council](#). WRAMP was designed to enhance coordination of wetland and riparian area monitoring, assessment and reporting through developing agreements between organizations on a number of key elements, including adopting the definition of "riparian area" developed by the National Research Council and using standardized mapping and assessment protocols. WRAMP was also designed to support the State Water Board's development of a new Wetland and Riparian Area Protection Policy.
	The riparian area definition in WRAMP and the associated mapping method/tool involves delineation of the "functional riparian zone," which includes ecological elements beyond existing riparian vegetation. This approach is based on the premise promoted by the National Research Council that vegetation alone is not a sufficient indicator of the area where critical riparian functions and processes occur. Protection, management, and (in some cases) restoration of riparian areas relies on an understanding of the area where critical processes can be

	supported and/or restored. Because the functional riparian zone is often wider than the vegetated area, using this broader definition allows managers to more easily balance support of both flood control and ecological goals. If DWR includes use of the WRAMP riparian mapping tool in its work for the CVFPP, the resulting riparian area data will be directly usable by other member organizations within the CWMW and will be consistent with the riparian definition in the Water Board's Wetland and Riparian Area Protection Policy. It will also support implementation of the WRAMP as directed by the Water Quality Monitoring Council. Inclusion of the WRAMP riparian mapping tool would be compatible with the approach currently proposed by CSU Chico in that it would overlay and be supported by the CSU Chico vegetation mapping. By using the new tool along with the vegetation mapping, DWR would be the first agency in the State to implement what is likely to become the new statewide riparian mapping standard. Eric Stein, Co-Chair of the Wetland Monitoring Workgroup will ask that the Monitoring Council urge DWR to use the WRAMP riparian area definition and mapping method/tool.
Attachments:	(a) June 22, 2010 Letter to California Wetland Monitoring Workgroup on WRAMP Implementation (b) Central Valley Flood Protection Riparian Mapping: Opportunities for Collaboration - presentation by Eric Stein
Contact Person:	Jon Marshack jmarshack@waterboards.ca.gov, 916-341-5514
Notes:	***Healthy Streams Partnership*** – This initiative is to include identification of clean streams and methods to protect them, identification and restoration of impaired streams. Dennis Bowker (consultant) is providing outreach. Report due at end of 2010. ***Comprehensive Monitoring Program Strategy*** – Brock Bernstein submitted edited version to Jon Marshack. Final draft to Monitoring Council for review in a few weeks. ***SWAMP Strategy and Assessment Framework*** – final draft due in August; complete in September; will be appended to Monitoring Council's strategy according to prior direction. ***Portal Development*** – Healthy Streams portal mockup approved at last Council meeting. Draft Safe-to-Drink groundwater portal due from consultant very soon; will be send to Monitoring Council for review as needed. Funding for initial Rocky Intertidal portal development obtained; scope of work sent to Cal State Fullerton; workgroup meeting being arranged to develop questions. Jonathan Bishop recommended that the monitoring enterprise for the Marine Life Protected Areas (part of Ocean Science Trust) be involved in Rocky Intertidal portal. New BeachWatch database nearing completion; will improve data flow from coastal county health agencies to Safe-to-Swim portal. Jon Marshack to make presentation on Monitoring Council and portals at California and World Ocean Conference in San Francisco in early September. Revised California Wetland Portal to be developed that more closely matches format of Safe-to-Swim and Safe-to-Eat portals. Discussions being conducted with Delta Regional Monitoring Program, SF Bay Regional Monitoring Program, and Interagency Ecological Program to form a new workgroup focusing on developing a California Estuaries portal that initially focuses on the SF Bay-Delta Estuary; presentation

| | to Delta RMP stakeholders tomorrow; formal proposal to be presented to Monitoring Council at future meeting.

CEDEN – Internal launch to Water Board staff occurred in June; public launch and webinar demonstration scheduled for August 24; all Regional Data Centers currently exchanging data with CEDEN.

Riparian mapping for Central Valley Flood Protection Plan – see Eric Stein's presentation. The goal is to map more than riparian vegetation, including habitat and other riparian functions. Use of common tools and approaches provides opportunities to partner with other existing programs, thereby adding value. Dave Boland asked whether the State Water Board needed to adopt a riparian definition to guide riparian mapping. Eric responded that the mapping of riparian functions is not dependent on any particular definition; maps would help to inform policy development. The same is true with respect to the definition used by the Army Corps of Engineers. Scott Clemons, CDFG, indicated that the Riparian Joint Venture is partnering with CDFG and Chico State for the mapping and the contract runs through March 2011; but an interim product may come out earlier. Central Valley maps being developed will be served up on the California Wetlands Portal. Dale Hoffman-Floerke indicated that DWR staff is interested in the WRAMP mapping tool and there appear to be no obstacles to using it. The report is due January 1, 2012. Longer-term, more fine-scale mapping may be a better place to incorporate the WRAMP mapping tool. Tom Lupo of CDFG indicated that while the WRAMP mapping tool is complementary with CDFG's current vegetation mapping program, questions still exist regarding methodology and classification, particularly with respect to habitat for sensitive species. |
| **Decisions:** | (a) Karen Larsen will become Jonathan Bishop's Alternate when Val Connor leaves the Water Boards.

(b) The Monitoring Council supports the use of the WRAMP riparian mapping tool by the Natural Resources Agency in development of the Central Valley Flood Protection Plan. |

ITEM:	3
Title of Topic:	**NATURAL RESOURCES AGENCY MONITORING, ASSESSMENT AND REPORTING PROGRAMS**
Purpose:	(a) Introductory presentations on the following existing water quality and aquatic ecosystem monitoring, assessment, and reporting programs of organizations within the California Natural Resources Agency:

• Introductory remarks - Dale K. Hoffman Floerke, Dept. of Water Resources

• California Coastal Commission – summary by Jack Gregg, California Coastal Commission

• Overview of Federal Programs – presentation by Dennis Bowker, Consensus Process Design

• Imperial Valley Spatial Data Infrastructure Site – presentation by Dennis Bowker, Consensus Process Design

• Monitoring Study Group – presentation by Pete Cafferata, Dept. of Forestry and Fire Protection |

- Biogeographic Information and Observation System (BIOS) – presentation by Tom Lupo, Dept. of Fish and Game
- Interagency Ecological Program for the San Francisco Estuary – presentation by Anke Mueller-Solger, Delta Stewardship Council
- Interagency Ecological Program Data Access – presentation by Rich Breuer, Dept. of Water Resources
- Environmental Monitoring Program: D-1641 Compliance – presentation by Karen Gehrts, Dept. of Water Resources
- Municipal Water Quality Investigations Program – presentation by Eric Oppenheimer, Dept. of Water Resources
- State Water Project Operations & Maintenance Water Quality Data & Where To Find It – presentation by Cindy Garcia, Dept. of Water Resources
- DWR Water Data Library – presentation by Bruce Agee and Greg Smith, Dept. of Water Resources
- Water Planning Information Exchange – presentation by Greg Smith, Dept. of Water Resources
- California's Marine Invasive Species Program – presentation by Maurya Falkner, State Lands Commission
- Bond Accountability Database – presentation by Dennis Bowker, Consensus Process Design
- Ocean Protection Council – presentation by Dennis Bowker, Consensus Process Design
- West Coast Governor's Agreement On Ocean Health – summary by Dennis Bowker, Consensus Process Design
- Bay Conservation and Development Commission – summary by Dennis Bowker, Consensus Process Design

(b) Discussion of which of the above programs could coordinate with the Monitoring Council and existing or new theme-specific workgroups to make data and information available through the My Water Quality portals. Questions for the Council to consider include:

- What themes and sub-themes should be addressed by Natural Resources Agency programs?
- How dependent or independent are these from other sub-themes?
- Who are the key players?
- Are there established work groups for these data?
- What are the low-hanging fruit?
- What kinds of data should be included (water quality, ecosystem)?
- How are monitoring data and assessment information managed and delivered to decision makers and the public?
- What are the benefits for the programs in the Natural Resources Agency to fully participate with the Monitoring Council and workgroups

(c) Next steps

Desired Outcome:	Direction on how these Natural Resources Agency programs could coordinate with the Monitoring Council and its workgroups.
Background:	Early Monitoring Council efforts have focused heavily on Water Board and SWAMP monitoring and assessment programs. Greater coordination with and participation of programs within the California Natural Resources Agency would further implement the mandates of SB 1070.
Attachments:	(a) See presentation links in *Purpose*, above. (b) Monitoring Study Group - handout by Pete Caffereta, Dept. of Forestry and Fire Protection (c) Summaries of other Natural Resources Agency projects (d) Sierra Nevada Adaptive Management Project - handout (e) Water Quality Protection and Nonpoint Source Pollution Control In San Francisco Bay - report by San Francisco Bay Conservation and Development Commission
Contact Person:	Dale Hoffman-Floerke	dalehf@water.ca.gov, 916-654-7180
Notes:	In her introductory remarks, Dale Hoffman-Floerke said that Natural Resources Agency Secretary Lester Snow was very impressed by the briefing provided to him on the work of the Monitoring Council and the My Water Quality portals. After the briefing, he asked what his agency could do to help this effort. The My Water Quality link button has been loaded on the Natural Resources Agency website and staff is working with individual departmental websites to get the button loaded. *(Update: Dept. of Water Resources website now has link.)* The presentations on Natural Resources Agency monitoring programs were summaries of each program and did not focus on how they would connect with Monitoring Council workgroups and portals. Dale indicated that more time and dedicated funds would be needed to make these connections. In addition to those programs being presented today (see links above under Purpose), additional programs are outlined in a set of written program summaries. Posted presentations (see links in *Purpose*, above) cover what was presented by each speaker. Key discussion points are included below: ***California Coastal Commission*** – Little specific monitoring conducted by Coastal Commission. Permitting database does not record monitoring information. 319 nonpoint source monitoring is SWAMP comparable. Information on trash TMDLs (Water Boards) could be linked with coastal cleanup day activities. ***Federal Programs*** – USGS is hub for monitoring efforts. National Water Quality Monitoring Council working to standardize methods and share data – SWAMP already coordinated. It would be beneficial for SWAMP to get involved in National Environmental Methods Index (NEMI). Federal agencies are looking for collaborative partners. ***Imperial Valley Spatial Data Infrastructure Site*** – ESRI donated ArcGIS licenses for this project. Connects to multiple data sets. Data are SWAMP comparable. Site could be model for state watershed website. ***CalFire Monitoring Study Group*** – Caspar data available on line. Most

monitoring information is in reports, not live data.

Biogeographic Information and Observation System (BIOS) – High emphasis on data management at Calif. Dept. of Fish & Game (CDFG). Data creator still owns data, determines who has access. BIOS = State's clearinghouse for biological data with species and habitat focus. Started for DFG, but other organizations (USGS, conservancies, counties) are players. System is open to collaboration. BIOS is permanently funded. Working toward shared map services.

CDFG Vegetation Mapping – Goal is multi-use authoritative datasets to serve everyone. Classification standard = Manual of California Vegetation, 2nd Ed. 1/3 of state currently mapped. Through Central Valley Flood Control Plan, Sacramento Valley to be mapped by Riparian Joint Venture through Chico State University with grant from Strategic Growth Council.

Interagency Ecological Program – Estuaries portal is where they fit, along with Delta Science Program, Delta Stewardship Council, and Independent Science Board. Drivers for IEP are water rights and endangered species. Focus is ecosystem. Have 40 years of data – heterogeneous (biota, water quality). Real time data in California Data Exchange Center (CDEC). Challenges are QA/QC and metadata. Data conversion project moving from Access to Oracle. Opportunity to link to CEDEN. Potential places to plug in are ecosystems and stressors; need to know what questions IEP is addressing.

Environmental Monitoring Program – 42 years of data (CDFG, USBR, DWR); 2 websites; metadata links. Need to move from ecosystem health status and trends to better collaborative analysis, data visualization, repot card. Mandate to conduct biological monitoring to support water pumping by DWR and USBR.

Municipal Water Quality Investigations Program – Over 20 years of delta and tributaries monitoring data in support of State Water Project and water utility customers; drinking water focus. Developing real-time network and ability to forecast. Data to CDEC. Website updated daily. Could fit with Safe-to-Drink portal – source water; also in estuary workgroup.

State Water Project Operation & Maintenance – Water contractor needs drive system – daily dispatchers report. Data to CDEC and Water Data Library. Project to convert old paper data to electronic format in Water Data Library – trend analysis value.

Water Data Library – Oracle-based. QA/QC and metadata not available through public side of system. May not be SWAMP comparable.

Water Planning Information Exchange (Water PIE) – Driver is California Water Plan. Integrated Water Resource Information System (IWRIS) in beta prototype; currently being re-built with web services.

Marine Invasive species Program – Stressors, vectors, vessel tracking, ballast water management. Data in on-line reports. Raw data available through staff contact.

Bond Accountability Database – Tracks all projects that are funded by bonds through the Resources Agency. Contract determines how data managed and weather monitoring is done. Bond Management System being tested at DWR.

Ocean Protection Council – Do not collect data directly. Fund monitoring programs of others through USC Sea Grant Office.

Bay Conservation and Development Commission – Do not collect data.

	Have need for data through partnerships with others.
	OPC, BCDC, and Coastal Commission involved in low-impact development (LID), stormwater management, and sustainable development.
	General Discussion –
	Funding and statutory mandates drive current efforts. Can we improve monitoring programs through collaboration? Workgroup participation is key. A pilot project on data management could help move things forward.
	Data from Natural Resources Agency sources are not necessarily used in current 303(d) listing process by Water Boards; Natural Resources Agency data would make listings more robust; may be better to focus such an effort on 305(b) assessments.
	Three levels of difficulty integrating new data into portals: (1) easiest = data that fits existing portal but unrelated to currently displayed information and would not be hard to integrate – add links to questions about the new data; (2) coordinating data from other agencies to create new portals; (3) hardest = adding data not directly related to water quality (e.g., biota or stressors)
	Value of data should also be a driver on which data sets to integrate first.
	Workgroups should be tasked with prioritizing which data to integrate.
	Need service oriented structure to data management.
	Some indicators transcend water body types – salmonids, wetlands – and could act as linkages.
Decisions:	(a) Need linkage between BIOS and CEDEN.
	(b) Need consistency in approach between ecosystem health workgroups regarding how chemistry, biota, and habitat information are presented – minimum data needed for "healthy" determination.
Action Items:	(a) Additional presentations on Natural Resources Agency monitoring programs to be included in future Monitoring Council meetings in Sacramento.
	(b) Create linkage between the Safe-to-Swim portal and coastal trash cleanup activities of the Coastal Commission.
	(c) Dennis Bowker will attend next meeting of CalFire Monitoring Study Group on September 21 in Willits.
	(d) Jon Marshack to work with Tom Lupo to explore coordination between workgroups, portals and BIOS. Include Tom in Healthy Streams Partnership workgroup.
	(e) Add State Water Project (quality of source water) and groundwater elevation data to Safe-to-Drink portal. Invite DWR and others to come to GAMA portal presentation.
	(f) Conceptualize ecosystem health theme for next meeting – how do they all fit? Outline strategy/approaches to integrate biological monitoring components into ecosystem health workgroups. Portal navigation and workgroup interaction.
	(g) Don't stop work on Healthy Streams and estuaries workgroups.

	(h) Have Water Board Assessment Unit make presentation on integrated report and process at future Monitoring Council meeting.

ITEM:	**4**
Title of Topic:	**MEETING WRAP-UP**
Purpose:	(a) Summarize meeting (b) Plan agenda for next Monitoring Council meeting on October 13, 2010 in Costa Mesa
Desired Outcome:	Develop agenda items for October 13 meeting
Contact Person:	Jon Marshack	jmarshack@waterboards.ca.gov, 916-341-5514
Notes:	Monitoring Council members pleased with meeting. Cross agency integration is beginning.
Decisions:	Future Monitoring Council meeting topics identified: • Additional Natural Resources Agency presentations • Strategy for ecosystem health workgroup and portal integration • 303(d)/305(b) integrated assessment – process and data use

August 30, 2010
Approved October 13, 2010