

DEPARTMENT OF WATER RESOURCES

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December 18, 2013

Mr. Eric Oppenheimer
State Water Resources Control Board
1001 I Street
Sacramento, California 95814

Dear Mr. Oppenheimer:

The Department of Water Resources (DWR) appreciates this opportunity to provide comments (Attachment 1) on the State Water Resources Control Board's (Water Board) *Discussion Draft – Groundwater Workplan Concept Paper* (Groundwater Concept Paper) dated October 4, 2013. DWR would also like to use this opportunity to inform the Water Board of our on-going efforts to help improve groundwater management in California (Attachment 2).

DWR has reviewed the Groundwater Concept Paper and agrees that groundwater in California needs to be more efficiently managed at a local and regional level to ensure its short- and long-term sustainability. With increasing population, competing water demands, and variable surface water supplies throughout California, reliance upon groundwater will continue to rise and to generate tension and debate.

DWR supports the establishment of an inter-agency task force, as proposed in the Groundwater Concept Paper, to collaboratively discuss the appropriate level of oversight that could be applied by water agencies in California to address not only groundwater overdraft, but all aspects of local groundwater management.

The groundwater recommendations developed for the *California Water Plan Update 2013* (Attachment 3) are conceptually similar to the strategies and proposed framework in the Groundwater Concept Paper. DWR agrees with the Water Board's determination that "an integrated approach to groundwater management is needed to ensure that appropriate action occurs at all levels of government." In addition, DWR supports the development and adoption of stronger standards for local and regional groundwater management plans for sustainable groundwater management and consideration of legislation to provide needed local and regional authority.

The Administration's draft California Water Action Plan, released on October 31, 2013, was prepared by the California Natural Resources Agency, the California Department of Food and Agriculture, and the California Environmental Protection Agency in response to a directive by Governor Brown to identify key actions to provide for the sustainable management of California's water resources. The groundwater-related actions recommended in this plan should be considered when making decisions about groundwater management and how groundwater and surface water resources are conjunctively managed.

DWR would like to work towards a joint framework on groundwater management to implement the Governor's California Water Action Plan and looks forward to working with the Water Board and other State agencies to ensure that groundwater management moves forward in a more aligned manner. I am available to meet with you and continue the dialogue on your proposed framework. I can be reached at (559) 230-3310 or at Paula.Landis@water.ca.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "Paula J. Landis".

Paula J. Landis, Chief
Division of Integrated Regional Water Management

Enclosure

Attachment 1

COMMENTS ON GROUNDWATER CONCEPT PAPER

The Water Board's Groundwater Concept Paper states that an effective groundwater management program generally requires five key elements to be in place: thresholds, monitoring and assessment, governance, funding, and oversight and enforcement. DWR observes that most of the five elements proposed by the Water Board already exist in some manner in the guidance provided in Water Code §10750 et seq. The five elements of the Groundwater Concept Paper are discussed below.

- 1) **Sustainable Thresholds** – From a quantity and quality perspective, sustainable thresholds or performance measures are necessary to determine the effectiveness of BMOs. There are many GWMPs in the State that are extremely effective in managing water resources through established BMOs, but there are also GWMPs that do not have a framework in place for identifying if those BMOs have been met or remain realistic. DWR agrees that BMOs should be established, and GWMPs be prepared, in groundwater basins where they do not exist. DWR recommends that all existing GWMPs be updated to include the required and recommended elements of the Water Code, and that BMOs should be strengthened in areas where local agencies have not been successful in managing groundwater resources.

DWR supports the potential action proposed in the Groundwater Concept Paper regarding clarification on how the Water Board's Anti-degradation Policy applies to groundwater, especially how the policy affects groundwater recharge efforts throughout the State. DWR recommends that groundwater recharge be identified as a beneficial use throughout California. This action is also related to the policies associated with recharging groundwater basins with recycled water for indirect potable reuse.

- 2) **Monitoring and Assessment** – DWR has been monitoring groundwater elevations and groundwater quality throughout California for many decades, and has also partnered with numerous local agencies to make that data publically available on DWR's Water Data Library and the CASGEM website. Data collection and the tracking of historical trends are extremely important in groundwater resource management and to identify the interaction between surface water and groundwater. BMOs and monitoring protocols related to groundwater elevations and quality were found to be addressed in more than 90 percent of the active GWMPs assessed by DWR staff.

The CASGEM Program requires that groundwater elevation data be made publically and readily available for all of California's 515 alluvial groundwater basins and subbasins. The Basin Prioritization component of the CASGEM Program has determined that there are 127 High and Medium Priority Basins that encompass 92 percent of the groundwater pumping in California and 89 percent of the population that overlie those 515 groundwater basins and subbasins. The groundwater basin prioritization process shows great promise as a tool to help focus limited resources and assistance provided to local agencies that are trying to implement best management practices for sustainably managing groundwater basins.

The RWQCBs and other State and federal agencies have collected water quality data through several regulatory programs for many decades. Continued monitoring of groundwater quality, as well as a risk assessment of California's high-use basins related to water quality, is necessary

to make informed management decisions and to prioritize regulatory efforts. Collection of groundwater data and the process of making that data publically available will ensure that science continues to play a role in guiding policy and management decisions.

- 3) **Governance and Management** – Various local, regional, and State agencies, including DWR and the Water Board, have authority and responsibility for characterizing, managing, and regulating groundwater. DWR agrees that the ongoing actions of these agencies have proven effective in many areas, but additional strategies may be needed to address current and potential future challenges associated with groundwater quality and quantity.
- 4) **Funding** – DWR’s assessment of local groundwater management plans identified lack of funding as one of the major challenges impeding effective groundwater management. DWR agrees that successful groundwater management requires access to sufficient funding for development and implementation of GWMPs, as well as for monitoring, facilities construction, ongoing operation and maintenance of infrastructure, pollution prevention and cleanup measures, and necessary oversight. DWR has provided funding for groundwater planning and feasibility-implementation projects through Groundwater Recharge Construction Loans, Groundwater Storage Construction Grants, Local Groundwater Assistance Grants, and Integrated Regional Water Management Grants, but more efforts are needed to focus funding on the high-priority areas of California.
- 5) **Oversight and Enforcement** – Reliance upon groundwater by municipalities and agricultural interests will continue to rise due to pressures from increased population, drought, climate change, and the need for a reliable water supply. Without immediate action to better assess California’s groundwater resources and to strengthen BMOs, the sustainability of groundwater resources will continue to decline in many areas of the State.

Attachment 2

GROUNDWATER MANAGEMENT IN CALIFORNIA

DWR has been providing local agencies with financial and technical resources to develop and implement GWMPs since the Groundwater Management Act (AB 3030) was introduced in 1992. Since its passage, AB 3030 has been amended twice to include the components of SB 1938 (in 2002) and AB 359 (in 2011). The Groundwater Management Act (California Water Code §10750 et seq.) provides an established and locally-driven process for agencies to follow when preparing a GWMP. The required components of a GWMP include the following elements, as incorporated in Water Code §10753.7:

- 1) **Basin Management Objectives** – Prepare a GWMP that includes Basin Management Objectives (BMOs) relating to the monitoring and management of groundwater levels, groundwater quality degradation, inelastic land subsidence, changes in surface flow and surface water quality that directly affect groundwater levels or quality or are caused by groundwater pumping, and a description of how groundwater recharge areas contribute to the replenishment of the groundwater basin.
- 2) **Agency Cooperation** – Prepare a plan to involve other agencies that enables the local agency to work cooperatively with other public entities whose service area or boundary overlies the groundwater basin that will be managed under the GWMP.
- 3) **Map Preparation** – Prepare a map that details the area of the groundwater basin and identifies the agencies that overlie the basin.
- 4) **Groundwater Recharge Mapping** – Prepare a map that identifies the current groundwater recharge areas that substantially contribute to the replenishment of the groundwater basin.
- 5) **Monitoring Protocols** – Adopt monitoring protocols that are designed to detect changes in groundwater levels, groundwater quality, inelastic land subsidence, and flow and quality of surface water that directly affect groundwater levels or quality or are caused by groundwater pumping.

In addition to the required components identified above, the 12 recommended components in Water Code §10753.8 and the seven voluntary guidelines presented in DWR's Bulletin-118-2003 are all intended to provide guidance and information that encourages effective groundwater management. The most successful GWMPs are those that rely upon the opinions and support of local stakeholders during the planning and implementation process.

Water Code §10750 et seq. also allows for local agencies to adopt rules and regulations to implement a GWMP and to collect fees and assessments for groundwater management. The fees and assessments, however, are subject to local ballots, and in areas of California where landowners enjoy unrestricted pumping of groundwater, approval of any effort to reduce or monitor pumping amounts are generally met with local resistance.

Attachment 3

California Water Plan Update 2013 – Groundwater Recommendations

A substantial amount of new groundwater information has been compiled for the California Water Plan (CWP) Update 2013, which is available for public review at the following website:

<http://www.waterplan.water.ca.gov/cwpu2013/index.cfm>. The Water Board and the Regional Water Quality Control Boards (RWQCB) have been part of this process as members of the Groundwater Caucus and the State Agency Steering Committee. Development of the Groundwater Content Enhancement for the CWP Update 2013 helped DWR identify the existing technical, institutional, and fiscal challenges currently facing groundwater managers. The recommendations listed below were developed with extensive input from the CWP Update 2013 Groundwater Caucus to help address some of these challenges, while also supporting the principle of locally-driven groundwater management.

1. Improve coordination and alignment of federal, State, and local governments to assist in implementing sustainable groundwater management
2. Create a Statewide GWMP Advisory Committee to: 1) evaluate and approve the completeness of existing GWMPs; 2) develop a guidance document of groundwater best management practices; and 3) identify tools and data sharing needed to improve groundwater management
3. Develop a statewide groundwater management planning site for local agencies to post and download groundwater management documents and information
4. Improve standards for sustainable groundwater management, which should include:
 - a. GWMP verification and implementation;
 - b. Goals, objectives, performance measures, and a clear description of additional management steps to be taken if performance measures are not met;
 - c. Groundwater budgets to help understand the total inflow and outflow from the groundwater system;
 - d. Addition of ecosystem services into Basin Management Objectives;
 - e. Annual reporting of GWMP implementation activities and performance;
 - f. Reporting of groundwater quantity and quality sustainability under current and projected (10 & 20 year) groundwater budgets;
 - g. Identify impacts (economic and environmental) under current and projected groundwater budgets; and
 - h. Online posting of GWMPs and annual reports with groundwater budgets
5. Encourage Integrated Regional Water Management Plans to identify and include the goals and objectives of local GWMPs
6. Continue to implement and improve the California Statewide Groundwater Elevation Monitoring (CASGEM) Program
7. Utilize CASGEM Basin Prioritization to conduct assessments of groundwater basins per Water Code §10927 et seq.
8. Provide funding and technical assistance to improve local groundwater monitoring and management, and promote multi-benefit projects that improve groundwater sustainability