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ORANGE COUNTY WATER DISTRICT

ORANGE COUNTY'S GROUNDWATER AUTHORITY

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December 17, 2013

Mr. Eric Oppenheimer
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-0100

RE: Comments on Discussion Draft Groundwater Workplan Concept Paper

Dear Mr. Oppenheimer:

The Orange County Water District (OCWD) appreciates the opportunity to provide comments on the State Board's Draft Groundwater Workplan Concept Paper dated October 4, 2013. OCWD is a special district formed in 1933 by an act of the California Legislature to manage the groundwater basin that underlies north and central Orange County. Water produced from the basin is the primary water supply for approximately 2.3 million residents living within the District's boundaries.

OCWD manages the groundwater basin in a sustainable manner through a carefully developed set of management tools. These tools allow the District to manage pumping from the basin so that the basin storage level is maintained within a safe, sustainable operating range. Basin management and operations implemented by OCWD include:

- Water quality and groundwater level sampling at over 300 monitoring wells;
- Water quality sampling at over 200 production wells;
- An Advanced Water Quality Assurance Laboratory analyzing over 14,000 water samples annually;
- Preparation of groundwater elevation contour maps for three aquifer zones each year;
- Preparation of an annual report on groundwater basin conditions;
- Two seawater intrusion barriers with 79 injection wells to protect basin groundwater quality;
- 30 recharge facilities recharging approximately 250,000 acre-feet annually into the groundwater basin to sustain pumping from the basin;
- Construction and operation of the Groundwater Replenishment System that provides advanced treatment of wastewater to produce 70 mgd of purified water used for seawater barrier operations and groundwater recharge; and

- Operation of 400-acres of wetlands in Prado Basin to improve the quality of the Santa Ana River and provide waterfowl habitat.

These basin management and operations measures are funded by local groundwater users. The rate payers within OCWD's area support an annual General Fund budget of \$52,000,000 to implement these measures.

OCWD works closely with the nineteen large retail water agencies that rely on the groundwater basin for approximately 70 percent of their water supply. Monthly meetings are held with these agencies to coordinate management activities and programs. OCWD has adopted a Groundwater Management Plan (GWMP). The first GWMP was prepared in 1989. The District updates the GWMP every five years with the most recent update adopted in 2009. The retail water agencies participate in review and development of the updates to the GWMP.

These details are provided here to emphasize the extensive and successful local groundwater management that has been ongoing for decades. Many local groundwater management agencies have invested millions of dollars in facilities and programs to manage basins in order to protect and provide water supplies for millions of people. We urge the State Water Board to seriously consider these efforts as the Groundwater Workplan Concept Paper is further developed.

Please accept the following comments on the Draft Workplan and note that where changes in text are suggested, additional language is indicated by text that is underlined and suggested deletions are indicated by text with strikeouts.

GENERAL COMMENTS

The stated objective of the State Board's workplan is to ensure that Water Boards address the groundwater challenges that have the greatest potential to impact beneficial uses, focus limited resources on the most important problems, and facilitate efficient local and regional management. Focusing limited state resources on the most important problems is critical for accomplishing many of the recommendations proposed in the concept paper. Otherwise much time will be spent evaluating, collecting data, developing or expanding databases, and preparing reports for groundwater basins that are well managed as well as basins that are not managed at all. Duplication of effort would be a poor use of public resources and counter-productive. It is important that the State Board prioritizes actions for groundwater basins most in need of state assistance.

OCWD provides the following suggestions to focus the state's efforts:

- 1) Focus on groundwater basins that do not have effective management programs. Many areas of the state currently have successful groundwater management programs implemented by local agencies.

- 2) Future efforts by the state should not negatively impact or place new burdens on groundwater management agencies that are successfully managing groundwater basins in their respective areas.
- 3) An initial step to addressing challenges in managing groundwater in the state should be to identify and focus on areas with groundwater basins that do not have existing Groundwater Management Plans.
- 4) For basins without adopted Groundwater Management Plans, the state should consider creating incentives for local entities to develop and adopt such plans.
- 5) The state should consider developing new approaches to cause the formation of new local groundwater management agencies in areas without management agencies.

SECTION 1 Managing California's Groundwater – Regional Leadership

This section emphasizes regional and local management yet many of the recommendations in the concept paper propose creation of additional statewide databases, regulations, plans, and programs that neither take into account local and regional conditions nor acknowledge existing sustainable management. The vision for management of groundwater basins must begin with an acknowledgment of the many groundwater basins in the state already being successfully and sustainably managed. Suggested language changes are as follows:

“Successful groundwater management requires prevention and cleanup of groundwater contamination, maximizing opportunities to recharge high-use basins, and ensuring that pumping occurs at sustainable levels over the long-term. In fact, this describes the type of successful management that has been achieved in many basins throughout the state. We envision a future for all groundwater basins in the state where well-equipped local and regional groundwater management entities use monitoring information and thresholds to manage and maintain groundwater of sufficient quality at sustainable levels over the long-term; and where local and regional management efforts are backed-up by State support and oversight, where needed.”

SECTION 2 Implementing the Vision

- 1) Page 2, 2nd paragraph – Suggest editing the following sentence for clarity: “Managing groundwater levels (quantity) and preventing overdraft largely depends on maintaining a balance between the amount of basin outflows, e.g., pumping, natural depletion from a basin, and the amount of basin inflows, e.g., natural and managed aquifer recharge.”
- 2) Page 2, key element #1 – At a minimum, suggest adding “storage depletion” to this bullet since this is the true management concern in some areas – not the

water level elevation. This qualifier is consistent with paragraph 2 above that associates water levels with quantity. “Sustainable thresholds for water level drawdown (storage or quantity depletion) and water quality for impacted, vulnerable, and high-use basins;”

Also, add an explanation or definition of “impacted,” “vulnerable,” and “high-use.” Does this refer to basins that have been “impacted” by water quality degradation and/or storage depletion and basins that are “vulnerable” to water quality degradation and/or storage depletion?

- 3) Page 2, key element #3 – Suggest editing as follows: “Governance structures with the management mechanisms needed to prevent impacts before they occur, clean up contamination where it has occurred, provide adequate treatment of contaminated drinking water sources, and ensure that groundwater level quantity and quality thresholds are managed not exceeded over the long term;”
- 4) Page 2, key element #5 – This element seems unnecessary, because if the proper governance structures are established (see key element #3), then oversight and enforcement are intrinsically covered. Given the importance of enforcement and oversight, these are necessary attributes of proper governance that should be included within key element #3. Otherwise, this implies that this concept paper envisions the need for additional layers of governance, an effort that is not likely to be successful and is not recommended.

SECTION 3 Management Elements and Potential Actions

3.1: Sustainable Thresholds

- 1) The term “threshold” is used in this document in a broad sense to refer to both regulatory requirements/limits (i.e., water quality standards) as well as non-regulatory objectives (i.e., regional basin management objectives). Use of this broad definition of the term causes confusion in the rest of the document. For clarity please refer to thresholds that are regulatory in nature to “regulatory thresholds” in order to distinguish them from basin management objectives or other non-regulatory actions that focus on monitoring, management, and assessing that have a different function than quantifiable triggers. For example, edit the third sentence as follows:

“Regulatory thresholds are an important component of groundwater management because they establish quantifiable triggers... Approaching or exceeding a regulatory threshold may trigger management actions...”

- 2) Page 3, last paragraph – Again, please clarify when use of the term “thresholds” is meant to establish triggers that should not be exceeded in order to protect

groundwater quality and quantity rather than for evaluating and assessing quality and quantity. Numeric limits in Basin Plans are quite different from local and regional basin management objectives, the latter of which are frequently not quantifiable. Edit as follows; *“The State Water Board is soliciting comment on whether the current and proposed actions will result in regulatory thresholds for groundwater quality and ~~elevation~~ quantity that support and protect beneficial uses and sustainable groundwater supplies as well as objectives for assessment of groundwater conditions, evaluation of groundwater quality and quantity trends, and informed management decisions.”*

- 3) Page 4, section 3.1.2. – Bullet #2 suggests that the Legislature should require local groundwater management entities to establish thresholds for sustainable groundwater management in their local groundwater management plans. As thresholds have previously been defined to include basin management objectives it is unclear what is being proposed here. Adoption of basin management objectives are already a mandatory requirement for an adopted GWMP (CA Water Code, Section 10753.7(a)(1)). If this is meant to propose a new regulatory program established by new legislation, a more effective alternative would be to improve the existing program that encourages/incentivizes the development of GWMPs and working to make this program more effective with guidance and requirements for periodic updating that includes reporting of progress. The state should develop incentives for groundwater management entities that have not established thresholds for sustainable groundwater management to develop a GWMP so that such thresholds can be established. Additional legislative and regulatory requirements should be directed at local and regional entities where there has been no progress in the development of a GWMP.

Section 3.2: Monitoring and Assessment

- 1) Page 5, section 3.2.1 – The first step in working toward better integration and accessibility of data would be to determine how to present groundwater data in a meaningful way for public use. This will require coordination of data collection and database management. One example is that data collected for compliance with Title 22 overlaps with data being collected through the GAMA program. Managing the redundancies of and coordinating management of these two databases will be important before additional data collection efforts begin.
- 2) Page 5, section 3.2.2 – Bullet 1 suggests the creation of a searchable electronic database of well completion reports and associated data. While this idea has merit, under the California Water Code well completion reports are confidential.
- 3) Page 6, section 3.2.2. – Bullet 5 should be a task that is accomplished as part of the development of a GWMP for a basin. Estimating stormwater capture and

groundwater recharge potential is difficult, time consuming, and complex. Estimates of stormwater capture and groundwater recharge potential will be highly speculative as this will depend on frequency, duration, and intensity of storms as well as on projections of performance of recharge facilities and how well the recharge facilities are managed.

Section 3.3: Governance and Management

- 1) Page 8, section 3.3.2, Bullet 2 and 3 – Please define “high-use basins” and “Active Management Areas.” As already stated, limited state resources should be focused on evaluating those high-use basins that do not have an adopted Groundwater Management Plan. Conducting an evaluation of all local groundwater management programs will dilute efforts to assist ones in critical need.
- 2) Page 8, section 3.3.2, Bullet 2 – One important aspect in establishing Active Management Areas is to carefully assess the hydrologic system boundaries so as to allow for successful management. Boundaries that do not adequately define a hydrologic system may result in creating areas that are difficult to manage.
- 3) Page 8, section 3.3.2, Bullet 4 – Districts with groundwater management responsibilities have a governance structure in place. Creating a standardized set of authorities for groundwater basins that are already managed by local districts contradicts the workplan’s objective to focus limited resources on the most important groundwater problems and facilitate more efficient local and regional groundwater management.

Section 3.4: Funding

- 1) Page 9, section 3.4.2, Bullet 1 – Providing funding sources for local groundwater management agencies to remediate contaminated groundwater is very important. There are sites in Orange County where the responsible parties are unavailable, unable, or unwilling to pay for cleanup of contamination. In some cases, contaminated groundwater has migrated beyond the original site of the contamination and negatively impacted groundwater quality off-site. This is a common problem across the state. A source of state funding for cleaning up these sites is necessary. A potential source would be to expand access to State Revolving Fund (SRF) to allow funding for cleanup projects of pollutants by local and regional groundwater management agencies. Currently the SRF is only available for cleanup of contamination due to point source discharges. SRF funds should be made available for a broader set of pollutants, such as contamination in groundwater associated with past industrial activities.

- 2) Page 9, section 3.4.2, Bullet 5 – The GAMA program would provide greater value if data collection was focused on constituents with primary or secondary drinking water standards in groundwater basins where adequate water quality data collection is not being conducted.

Section 3.5: Oversight and Enforcement

- 1) This plan should advocate support for partnerships between state regulatory agencies, i.e., Regional Water Boards and Department of Toxic Substances Control, and local groundwater management agencies to develop groundwater pollution cleanup and containment projects and programs.
- 2) Page 10 section 3.5.1 Bullet #1 – Targeting regulatory program enforcement on legacy sites is valuable only if this will not draw resources away from existing regulatory programs.

CONCLUSION

In conclusion, the State Water Board's workplan should first and foremost acknowledge that groundwater in many regions of the state is being managed effectively, responsibly, and sustainably by local agencies. In these cases, additional requirements to collect data, complete assessments, develop plans, etc. will do little to improve the condition of groundwater in the state.

Although the stated objective of the draft workplan is to focus limited state resources on the most important groundwater problems, many of the potential actions listed in the paper would create intensive statewide actions such as large-scale data collection efforts and management of groundwater pumping.

The State Water Board would play a valuable role in improving the conditions of groundwater in the state by first focusing on and encouraging the development of local groundwater management where such management does not currently exist. Increasing the number of local districts to manage groundwater should be considered the first option. In areas where this proves to be unsuccessful, then more intensive efforts of the State Water Board could be needed to protect groundwater resources that are not being managed successfully.

Thank you for the opportunity to submit these comments.

Sincerely,



Michael Markus, P.E., D.WRE, BCEE, F.ASCE
General Manager