

December 10, 2013

Mr. Eric Oppenheimer
Director, Office of Research, Planning & Performance
State Water Resources Control Board
1001 I Street, 16th Floor
Sacramento, CA 95814

Subject: State Water Resources Control Board Groundwater Workplan Concept Paper

Dear Mr. Oppenheimer:

Thank you for the opportunity to provide input on the State Water Resources Control Board (State Water Board) discussion draft Groundwater Workplan Concept Paper (Concept Paper) dated October 4, 2013.

The mission of the Santa Clara Valley Water District (District) is to provide Silicon Valley safe, clean water for a healthy life, environment, and economy. Critical to that mission is the effective management of groundwater, which provides nearly half the water used by the 1.8 million residents in Santa Clara County each year.

The District was formed in 1929 to address groundwater overdraft and land subsidence, which resulted in diminished water supply reliability and about 13 feet of permanent land subsidence in San Jose. For over 80 years, our water supply strategy has been to coordinate the use of surface water and groundwater. **The District's conjunctive water management programs have had a dramatic effect in restoring groundwater levels and preventing additional land subsidence, resulting in a reliable and sustainable water supply for Silicon Valley.**

District efforts to protect and augment groundwater include the managed recharge of imported and local surface water, in-lieu groundwater recharge through the provision of treated surface water, the acquisition of supplemental water supplies, and water conservation and recycling programs. These programs, along with efforts to protect groundwater quality, are described in the attached Groundwater Management Plan.

The Concept Paper identifies five key elements for effective groundwater management, which the District has effectively implemented for many years as described below.

- **Sustainable thresholds** – The District has established objectives for groundwater storage, groundwater levels/land subsidence, and groundwater quality. Our ongoing evaluation of groundwater conditions in relation to these objectives influences operational decisions, the modification or optimization of existing programs, and the identification of new initiatives.

- **Groundwater monitoring and assessment** – The District conducts extensive groundwater monitoring and is the designated monitoring entity for Santa Clara County under the state’s California Statewide Groundwater Elevation Monitoring (CASGEM) program. The District uses this data to evaluate and report on basin conditions. In 2012, the District:
 - Collected water level measurements from 219 wells,
 - Tested groundwater quality at 340 wells (including 239 domestic wells),
 - Measured land subsidence at 146 benchmarks and two extensometers,
 - Monitored recharge water quality at 24 locations, and
 - Monitored groundwater quality at 11 wells near recycled water irrigation sites.

Monitoring results are used to evaluate performance in meeting thresholds established for groundwater storage, groundwater levels, and groundwater quality. Our most recent Annual Groundwater Report is attached for your reference.

- **Governance structures and management mechanisms** – The District was formed by an act of the State legislature through the Santa Clara Valley Water District Act (District Act). The District’s objectives and authority related to groundwater management are to recharge groundwater basins, conserve, manage and store water for beneficial and useful purposes, increase water supply, protect surface water and groundwater from contamination, prevent waste or diminution of the District’s water supply, and do any and every lawful act necessary to ensure sufficient water is available for present and future beneficial uses.

The District’s commitment to protecting groundwater is reflected in our Board policy to “aggressively protect groundwater from the threat of contamination and maintain and develop groundwater to optimize reliability and to minimize land subsidence and salt water intrusion.”

- **Funding** – The District Act gives the District the authority to levy groundwater charges and to use those revenues to pay for the cost of constructing, maintaining and operating facilities that import water into the county, the costs of imported water, and the cost of constructing, maintaining and operating facilities which will conserve or distribute water within groundwater zones, including facilities for groundwater recharge, surface distribution, and the purification and treatment of such water. The District sets groundwater charges on an annual basis and notifies well owners in accordance with Proposition 218. A small amount of District funding for groundwater management activities comes from ad valorem property taxes.
- **Oversight and enforcement** – The District Act gives the District Board of Directors the authority to adopt ordinances to carry out the purposes of the District Act. For example, the District has adopted an ordinance to regulate the construction and destruction of wells and other deep excavations within Santa Clara County. The District also coordinates with land use and state and federal regulatory agencies on groundwater protection issues as they have additional authority and enforcement powers.

This strong framework established by the District has resulted in well-managed groundwater supplies that support a reliable water supply for Silicon Valley. We appreciate the efforts of the State Water Board, and other agencies with a role in protecting groundwater, to improve groundwater management. The District's general comments on the Concept Paper are below, and detailed comments on current and proposed actions are provided as an attachment.

- **Groundwater management is most effective at the local or regional level, and the State should ensure groundwater management agencies have adequate authority and funding to manage groundwater resources.**

The District strongly supports the Concept Paper goal of well-equipped local and regional groundwater management agencies sustainably managing groundwater with State support, if needed. Successful groundwater management requires adequate information to understand basin conditions and the ability to take action to protect groundwater resources from permanent damage, including land subsidence and groundwater quality impacts. To support the effective local management of groundwater, the State should strengthen the authorities, funding, and management tools available to groundwater management agencies.

The Concept Paper identifies the development of a standard set of groundwater management authorities as a potential action. The District supports the creation of standard authorities to: measure groundwater withdrawals, control groundwater exports, and to limit pumping if there is a risk of permanent damage to groundwater resources. Any standard authorities created should not replace or limit authorities previously granted by State statute or local ordinance.

Obtaining secure funding for groundwater management is an issue for some agencies due to legal challenges related to Proposition 218. Clarity related to the assessment of groundwater fees and Proposition 218 would allow groundwater management agencies to more effectively monitor and manage groundwater over the long term by reducing challenges to funding. Increased State funding for activities including monitoring, modeling, groundwater protection, and conjunctive use would also improve groundwater management.

- **State efforts related to groundwater management should focus on unmanaged basins.**

The Concept Paper states that the Water Boards will focus attention and assistance on high-use basins where objectives are being exceeded. Many high-use basins, such as those in Santa Clara County, are effectively managed by local groundwater management agencies who have developed basin objectives based on local conditions and needs, and regularly report on those objectives. Where objectives are being exceeded, an action plan may already be in place at the local or regional level. The State Water Board should empower local groundwater management agencies to meet locally-developed basin objectives through additional authorities or funding, if needed. This will allow the State Water Board to focus their limited resources on basins where there is no groundwater management agency.

State efforts should also focus on action to improve groundwater management, rather than reporting. Several of the potential actions identified in the Concept Paper relate to state-wide assessments and reporting. These types of large-scale efforts are very time consuming, and may result in work products that are outdated by the time they are completed. Agencies such as the District regularly conduct extensive groundwater monitoring and analysis and provide publicly-available reports on basin conditions. Reporting by local agencies allows for detailed data interpretation by local experts and avoids the data simplification and manipulation needed to summarize information on a state-wide basis. State-wide reporting places an additional burden on groundwater management agencies that already make comprehensive groundwater data publicly available and does not further the goal of improving groundwater management.

- **A “one size fits all” approach is not appropriate for groundwater management.**

The District concurs that the unique physical and management characteristics of each groundwater basin result in localized challenges that are not effectively addressed by a “one size fits all” approach. Some State Water Board policies, including the Low-Threat Underground Storage Tank Case Closure Policy and Recycled Water Policy, appear to be in conflict with this concept as they rely on fixed criteria that do not account for local conditions. The District supports the closure of low-threat UST cases and advocates for the expanded use of recycled water, but local conditions, stakeholder interests, and basin objectives must be taken into account.

Fixed state-wide policy criteria hamper the ability of local groundwater management agencies to sustainably manage groundwater, and the District believes these “one size fits all” policies do not effectively protect groundwater in some areas. The District and other local groundwater management agencies are most knowledgeable about local hydrogeologic conditions, institutional challenges, and stakeholder needs. This is evidenced by the District’s proven success in addressing groundwater issues. Any efforts to achieve state-wide consistency in managing groundwater should not impact the ability of groundwater management agencies to manage basins for local considerations.

- **Many of the key elements identified for effective groundwater management are addressed through Groundwater Management Plans.**


The District has been implementing programs related to groundwater levels, groundwater quality, and land subsidence for many decades. These are documented in the District’s Groundwater Management Plan, which also identifies basin management objectives, strategies, outcome measures (sustainable thresholds) and monitoring protocols.

Since the passage of SB 1938 in 2002, Groundwater Management Plans must identify basin management objectives for groundwater levels, groundwater quality, land subsidence, and surface water/groundwater interaction to qualify for certain State funding. As many agencies have already identified sustainable thresholds and monitoring systems, State Water Board efforts should focus on basins where this information is lacking. These efforts should also be coordinated with other state agencies with a role in protecting groundwater (such as the Department of Water Resources) to avoid duplication of effort.

More detailed comments on the potential actions by the State Water Board and others identified in the Concept Paper are provided as an attachment to this letter. As an example of a successful and effective groundwater management agency, we look forward to working with State Water Board staff in the development of the Groundwater Workplan.

Please contact Joan Maher, Deputy Operating Officer of the Water Supply Division, at (408) 630-2073 to arrange a meeting to discuss our comments.

Sincerely,



Beau Goldie
Chief Executive Officer
Santa Clara Valley Water District

cc (w/o encl): Debbie Davis, Governor's Office of Planning and Research
J. Fiedler, J. Maher, R. Callender, B. Ahmadi, V. De La Piedra

Attachment: Detailed District Comments on the State Water Board Concept Paper

Enclosures: Groundwater Management Plan
Annual Groundwater Report for Calendar Year 2012

State Water Board Concept Paper Current and Proposed Actions Santa Clara Valley Water District Detailed Comments

Section 3.1 Sustainable Thresholds

3.1.1.1

It is unclear how the State Water Board's Antidegradation Policy, which relates to maintaining water quality, would apply to groundwater quantity.

3.1.1.2

We support the incorporation of Salt and Nutrient Management Plan thresholds into Basin Plans. The State Water Board and Regional Water Boards should also provide regulatory support to local groundwater management agencies, if needed, to ensure those thresholds are met.

3.1.2.1

The potential action for CDPH to finalize the rulemaking for groundwater recharge with recycled water could result in another state-wide "one size fits all" approach that does not account for local considerations or basin objectives.

3.1.2.2

It is unclear how this action differs from existing requirements as part of SB 1938, which requires agencies to establish basin management objectives in Groundwater Management Plans. The District's progress in meeting thresholds for sustainable groundwater management is summarized in our Annual Groundwater Report. Groundwater management agencies that regularly report on basin conditions and management objectives should not be burdened with additional **reporting** requirements.

Section 3.2 Monitoring and Assessment

This section states that groundwater monitoring is "inconsistent throughout the State, with significant regional variation in parameters monitored, monitoring frequency, and data availability." A "one size fits all" approach is not appropriate for groundwater monitoring, just as it does not promote effective groundwater management. The parameters monitored and monitoring frequency should be based on local hydrogeologic and land use issues, as well as stakeholder interests.

3.2.1.1

This potential action includes a basin assessment module in GeoTracker GAMA that provides publicly-accessible groundwater quality data and is capable of analyzing trends in high-use basins. It is unclear whether this would require the upload of raw data from groundwater management agencies or whether other data, such as GAMA data or compliance data from the California Department of Public Health would be used.

The District is concerned that this will pose an additional reporting burden for agencies that have their own reporting requirements and already report groundwater quality information and trends in a format that basin stakeholders accept and find useful. Also, the automated analysis of raw data is a significant concern. Local agencies are best-positioned to interpret local groundwater data and put it into historical, geographical, and land use context.

3.2.1.3

Currently, both GeoTracker and CASGEM require the submittal of water level information, although the data source is typically different entities. The District recommends that these databases be modified to accept the same input file or that an application be developed to transfer water level information from GeoTracker to CASGEM to avoid duplicate reporting efforts.

3.2.1.4

As described above, the State Water Board should make every effort to avoid duplicate reporting requirements. This may include developing an application to transfer the appropriate data from GeoTracker to GeoTracker GAMA.

3.2.2.1

Due to existing well log confidentiality laws, a searchable electronic database may require legislation, or be available only to regulatory agencies. Previous legislative efforts to make this information publicly available have been unsuccessful.

3.2.2.4

Updated assessments and projections on the condition of California's groundwater basins should be coordinated with local groundwater management agencies, who can provide the most current and comprehensive information. Due to the effort involved in compiling state-wide data, these assessments may be outdated by the time they are completed. For example, California's Groundwater (Bulletin 118) was last updated by the Department of Water Resources in 2003. Even five-year updates coincident with the California Water Plan will likely present out of date information by the time they are published.

Wherever possible, these State groundwater assessments should rely on publicly-available reports from groundwater management agencies, rather than requiring the submission of separate data to the State. This should be simplified to reduce the reporting burden to agencies like the District that already make comprehensive groundwater information publicly available.

3.2.2.5

The District supports efforts to increase the capture and recharge storm water provided that the storm water quality does not cause groundwater degradation that impacts the current or potential beneficial uses of groundwater. Estimates of storm water capture and recharge are best performed at the local level.

3.2.2.6

State Water Board statutory authority to improve the coordination and cost effectiveness of groundwater quality monitoring and assessment and increase public access to data should be limited to areas where there is no regular monitoring, evaluation, and reporting of groundwater data.

3.2.2.7

For many years, the District has used postcards and web information to encourage domestic well owners to regularly test their drinking water. The District now offers a unique and proactive program to provide free basic water quality testing for domestic well owners in Santa Clara County. Within the next few months, we will also begin offering rebates for nitrate treatment systems installed by domestic well users exposed to high nitrate.

Local groundwater management agencies are best-positioned to identify domestic wells in nitrate high-risk areas, so any potential related efforts should include coordination with these agencies. The District recommends that any new programs mandated for local agencies include a funding source.

Section 3.3 Governance and Management

3.3.1.2

The District supports the prioritization of cleanup cases based on the risk to current and potential drinking water sources. However, groundwater management agencies should have input on the prioritization (based on local considerations) or, at a minimum, should be involved in developing the prioritization criteria.

3.3.1.3

The District supports the idea of prioritizing regulatory control of discharges in hydrogeologically vulnerable areas over high-use basins, and recommends that the State Water Board consider delegating the related regulatory authority to local agencies in areas where groundwater is actively managed.

3.3.1.5

Efforts to promote storm water infiltration and preserve infiltrative capacity of hydrogeologically vulnerable areas are best accomplished at the local level by groundwater management agencies and land use agencies. The potential impacts of storm water quality on groundwater must be considered.

3.3.2.1

It is unclear what is meant by “assess legal obstacles for associated liability for groundwater recharge with sources that contain low level contaminants” or how “low level contaminants” are defined. This recommendation should be clarified. The District supports the removal of legal obstacles to groundwater recharge provided it does not cause water degradation that interferes with the current or potential beneficial uses of that water.

3.3.3.2

Rather than assisting DWR in evaluating groundwater management programs in high-use basins, the District recommends that the State work directly with local groundwater management agencies to identify where gaps in control exist, and how best to address those gaps.

3.3.2.3

The concept of creating Active Management Areas should apply only to basins (subbasins or areas) where there is no groundwater management agency actively managing the basin.

3.3.2.4

The District supports efforts to improve the ability of groundwater management agencies to effectively manage their basins. As described previously, these standard authorities could include measuring groundwater withdrawals, controlling groundwater exports, and regulating pumping, if needed to avoid permanent damage to groundwater resources. However, these authorities should not replace authorities previously granted by State statute or local ordinance.

3.3.2.5

This potential recommendation would not address private domestic wells impacted by nitrate. Also, the responsibility for developing and operating treatment systems for small disadvantaged communities impacted by nitrate should not be shifted to local agencies unless a funding source is identified.

Section 3.4 Funding

3.4.2.1

As the State Water Board is the primary regulatory agency responsible for overseeing the cleanup of contaminated groundwater, the potential action to identify funding sources for cleanup where responsible parties are unavailable, unable, or unwilling to pay should also be included under potential State Water Board actions (3.4.1).

3.4.2.2

As described previously, the assessment of groundwater management fees by various agencies has been challenged. Clarity regarding the implementation of groundwater management fees or charges in the context of Proposition 218 would help to provide secure, long-term funding for local agencies to effectively manage groundwater resources.

Section 3.5 Oversight and Enforcement

The District recommends that the State consider granting regulatory enforcement authority to local agencies in areas where groundwater is actively and effectively managed. This approach would allow the agencies most knowledgeable of local conditions and objectives to address local issues, and would allow the State to focus limited resources on unmanaged basins.