



City of Arts & Innovation

Sent via email: Kathy.Frevert@waterboards.ca.gov

January 6, 2016

Kathy Frevert
State Water Resources Control Board
1001 I Street, 24th floor
Sacramento, CA 95814

Re: Comments on Proposed Regulatory Framework

The City of Riverside, through its Public Utilities Department, hereby submits the following comments in response to the State Water Resources Control Board's Proposed Regulatory Framework, dated December 21, 2015 on the potential extension and modification of the existing Emergency Regulation for Statewide Urban Water Conservation (Emergency Regulations) if drought conditions persist into 2016.

Since 2008, Riverside has met 100% of its annual water needs from local, well managed, adjudicated groundwater basins, and locally produced recycled water. Presently, Riverside produces water from three local groundwater basins that recharge naturally within the Santa Ana River watershed. The basins from which we produce groundwater all recharge from natural, local precipitation and in spite of the drought, the water table depth has been stable over the past several years. Our prior capital expenses along with ongoing investments in groundwater management and dry-year yield programs would become significant stranded investments under arbitrary regulations to reduce water use. Our well managed groundwater basins are capable of meeting current and future demands, for at least the next four years, because of these significant local investments.

The City of Riverside has legally challenged the State Water Board's adoption of the existing Emergency Regulation. Riverside does not dispute the existence of a drought in California or the need to conserve water. We do, however, object to the State Water Board's failure to specifically recognize water conservation by groundwater agencies with adequate supplies that are naturally recharged by sources other than imported water. Riverside is uniquely situated with a robust source of groundwater with many years' worth of reserves. The current Emergency Regulations have a separate conservation tier for surface water agencies with a minimum of four years of supply and no dependence on imported water. No separate conservation tier is established for groundwater agencies with a minimum of four years of supply and no dependence on imported water. Now that the State Water Board has had time to fully consider the Emergency Regulations, Riverside requests that these regulations be amended to remedy this discrepancy.

Riverside proactively took the steps to be imported water-independent since 2008. Riverside does not import or rely upon imported water and has a decades-long reserve of groundwater even at pre-conservation use rates (see attached Exhibit A, Riverside Public Utilities' June 18, 2015 "Rationale for the Petition for Writ of Mandate and Complaint for Relief," pp. 13, 17). The water levels in the area have remained stable since 1934 (Exh. A, p. 17), and are sufficiently

robust that purposeful dewatering by over-extraction took 24 years to lower the water table by 80 feet (Exh. A, p. 15).

Riverside's water resources are unique within the state;

- Riverside is solely dependent upon local groundwater basins that have a minimum of four years of supply.
- Riverside does not import any water from outside the hydrologic region in which it is located, including no imports from the State Water Project.
- Riverside's groundwater resources are naturally recharged.

The groundwater basins Riverside draws from were adjudicated in 1969, in *Western Municipal Water District of Riverside County et al., vs. East San Bernardino County Water District et al., Riverside County Superior Court Case No. 78426* (the "1969 Judgment" [available online at <http://www.sbvmmwd.com/Home/ShowDocument?id=1494>]). The 1969 Judgment was adopted after the 1950's drought to prevent overdrafts in this basin (Exh. A, p. 21). The 1969 Judgment establishes a safe yield, which is independent of imported water supplies. Riverside and the other parties have successfully cooperated in sustainably managing the groundwater through past droughts and can continue to do so through this drought. An additional benefit of the 1969 Judgment is the thorough, detailed data compiled by a court-appointed Watermaster, which allows a third party to evaluate annual as well as long-term conditions within the basins. (Exh. A, pp 19-22.)

Riverside offers the following response to the specific comments stated in the Proposed Regulatory Framework:

"Staff does not recommend providing credits for groundwater use or management since the effect of such credits are not well-defined and are generally inconsistent with goal of conserving the state's remaining surface and groundwater supplies during the drought."

Riverside's groundwater resources have been adjudicated and are subject to oversight by a Watermaster. For a groundwater basin to be adjudicated, it has to undergo a hydrological review and have a physical solution implemented wherein the groundwater extracted is equal to the natural recharge. The Watermaster has operated with the benefit of decades of data. The nature and operation of the Bunker Hill basins is well-defined as a matter of fact. Furthermore, by remaining within its extraction rights, Riverside is conserving the state's remaining groundwater supplies. The state has elsewhere provided credits for surface water sources with at least a four year supply.

"Moreover, the proposed groundwater management credits do not adequately demonstrate how other users of a groundwater basin, whether adjudicated or not, would be impacted from pumping by the supplier receiving a credit."

The judicial decree that governs the adjudicated basins from which Riverside extracts its water considers all groundwater users. In other words, no users will be harmed if Riverside remains within its extraction rights. To put this into perspective, the largest groundwater basin that Riverside uses, the Bunker Hill or San Bernardino Basin, has a capacity of about 6 million acre feet. Riverside is only entitled to extract about 1% of that capacity in any given year. All users, including Riverside, are entitled to extract about 4% of the basin's capacity in any given year. Riverside's reduction from 1% to 0.75% (assuming a 25% conservation mandate applied

equally to each of Riverside's groundwater sources) cannot benefit any other user when the other users' extraction rights have already been established by a judgement and a Watermaster.

Also consider the groundwater levels within the Bunker Hill Basin. The groundwater levels were lowered by 80 feet from the time period of 1981 to 2004. This was done to minimize the impacts caused by high groundwater levels, such as flooding basements and liquefaction. Since 2008, the groundwater levels near Riverside's well fields have remained within 2% or better, which includes the present drought. This indicates that the 1969 adjudication is working as expected and the basin is in balance. Credits to Riverside will not affect other users.

“Suppliers whose basins fill without imports may impact others by increasing pumping under a credit system.”

See the response in the previous section.

“Even self-sufficient, adjudicated basins are not guaranteed to maintain all uses during an extended severe drought, where the next opportunity for recharge is unknown.”

There are no guarantees concerning water supplies, even in times of non-drought. There is also no requirement for guarantees. Since Riverside began extracting groundwater in the late 1800s, the region has experienced several long sustained droughts. The adjudication established in 1969 considered these droughts and the judgment has succeeded in spite of subsequent droughts. Notable local droughts of record are shown in Exhibit B and include the periods of: 1896-1904, 1946-1977, 1983-1990, and 1998-Ongoing. Exhibit C shows the Palmer Drought Severity Index (PDSI) data for the California Division 6 region (South Coast Area). The two data sets show similar patterns related to dry periods. As noted above, groundwater levels near Riverside's well fields have remained fairly stable during the past several years even as the PDSI shows that the region is experiencing the most severe drought on record since 1895.

Furthermore, the agencies that rely on the Bunker Hill Basin and surrounding groundwater basins have taken several measures to ensure that the basins are sustained in the face of severe droughts and climate change. First, the two agencies that serve as Watermaster for the basins, Western Municipal Water District (Western) and San Bernardino Valley Municipal Water District (Valley) monitor groundwater production and groundwater levels.

Second, Western, Valley and other agencies have combined with multiple agencies to capture storm water and store it in the groundwater basins. Our best understanding of climate change is that the overall amount of precipitation will not change, but that the size and frequency of storms will vary. These storm water capture projects will enable the agencies to protect the viability of the groundwater basins for the foreseeable future.

In conclusion, the State has seen fit to treat some surface water users differently than others; there is no reason that the same level of analysis could not be applied to groundwater users. In fact, legally, groundwater users must be treated as fairly as surface water users are.

As demonstrated by the evidence submitted, Riverside has an adjudicated groundwater supply that is sustainable even in the face of multiple severe droughts. And if Riverside remains within its extraction rights it will not impact other basin users. There is no practical difference between Riverside's sources of water and a surface water supply that has a demonstrated four year supply of water. Therefore, Riverside requests that the state implement the language that was

submitted in its response dated December 2, 2015, which is attached as Exhibit D. If you should have any further questions, please contact Todd Jorgenson, Assistant General Manager at tjorgenson@riversideca.gov.

Sincerely,

A handwritten signature in blue ink that reads "Todd Jorgenson for". The signature is fluid and cursive, with the word "for" written in a smaller, simpler font to the right of the main signature.

Girish Balachandran
General Manager
Riverside Public Utilities

Attachments:

- Exhibit A, Riverside Public Utilities' June 18, 2015 "Rationale for the Petition for Writ of Mandate and Complaint for Relief"
- Exhibit B, Annual Precipitation in the San Bernardino Hospital Gauge for the period 1892-2014
- Exhibit C, Palmer Drought Severity Index (PDSI) in California Division 6 (South Coast Drainage Area)
- Exhibit D, Riverside Public Utilities' December 2, 2015 "Emergency Regulation for Statewide Urban Water Conservation – Workshop Comments"