



IRVINE RANCH WATER DISTRICT

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March 2, 2016

Mr. Mike Markus, P.E.
General Manager
Orange County Water District
18700 Ward Street
Fountain Valley, CA 92708

Subject: Distribution Options for Water from Proposed Seawater Desalination Project

Dear Mike:

At tonight's OCWD Board meeting, staff will present additional information related to the five remaining options the OCWD Board is considering for distributing product water from the proposed seawater desalination project at Huntington Beach. The options still under discussion include alternatives for recharging desalinated water into the groundwater basin and alternatives for distributing the water directly to the Groundwater Producers, as well as water agencies in south Orange County.

In my letter dated February 3, 2016, I expressed Irvine Ranch Water District's (IRWD) concern about the significant impact that recharging desalinated water could have on the quality of groundwater within the Orange County basin, on potable water delivered to IRWD customers, and on recycled water produced by IRWD. On March 8, 2016, we are scheduled to meet with your staff to discuss IRWD's concerns in greater detail and to provide the results from IRWD's Recycled Water Salt Management Model. This model was developed by engineers at HDR and shows the significant environmental impacts that increased salt loads have on the IRWD system.

Of the five remaining distribution alternatives still under discussion, two would result in significant volumes of desalinated seawater being recharged in the groundwater basin. The other three alternatives rely primarily on selling the product water to Groundwater Producer agencies or other water agencies outside of the groundwater basin. Comments related to the five remaining alternatives are provided below:

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1) Options 1D and 2A should be eliminated from further consideration because they will degrade the quality of water within the Orange County Groundwater Basin affecting beneficial uses.

We understand that OCWD staff is recommending that your Board eliminate Option 1D, recharging all of the desalinated water into the Orange County Groundwater Basin.

- We support the elimination of Option 1D from further consideration as it would greatly increase the salt load within the Orange County basin, reducing the quality of water within the basin and unreasonably affecting beneficial uses by increasing salt concentrations, a nuisance and a pollutant, within the basin;
- Furthermore, Option 1D would substantially increase the cost of the final expansion of the Groundwater Replenishment System, which would provide higher quality water for the Orange County Groundwater Basin without degradation of basin. Agencies that have funded the Groundwater Replenishment System in the past, including the Groundwater Producers and the Orange County Sanitation District, have done so with the expectation of the facilities constructed to accommodate the ultimate capacity of 130 million gallons per day (MGD) and to re-purpose these facilities to a different project would be, at best, disingenuous; and
- While Option 2A would recharge 8 MGD less into the basin than Option 1D, it presents the same challenges as Option 1D and should be eliminated from further consideration.

2) Options 2A, 2B, 3 and 4 would increase the Replenishment Assessment (RA) to subsidize OCWD's surface delivery of the project water; these increases likely violate Proposition 218 and Proposition 26.

Options 2A, 2B, 3 and 4 propose selling the project water at the cost of Metropolitan Water District of Southern California's (Metropolitan) full service, Tier 1 treated water rate to agencies willing to take the desalinated water. The options then propose an increase in the RA paid by Groundwater Producers to cover the incremental cost impact for OCWD entering into a "take or pay" contract for the project water and selling it lower than the cost of the water.

- Options 2A, 2B, 3 and 4 propose having Groundwater Producers subsidize the cost of the project water received by others;
- An increase in the RA for this purpose without benefit to the basin violates cost of service, proportionality, and non-subsidization requirements. Irrespective of whether groundwater would still be affordable, these requirements must be met to comply with the law;

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- Such an allocation of costs, as proposed in Options 2A, 2B, 3 and 4, does not reasonably reflect OCWD's cost of service to manage the Orange County Groundwater Basin because the direct delivery of water to the Groundwater Producers does not relate to the management of the basin, and the proposed RA does not reflect the proportional cost of service attributable to Groundwater Producers not taking the project water;
- Such an allocation of costs does not bear a fair or reasonable relationship to the burden placed on or benefit received from OCWD's provision of desalinated water or the Orange County basin by Groundwater Producers not taking the desalination product water;
- The proposed approach to the RA will likely result in challenges that the increased RA violates Proposition 218's and Proposition 26's cost of service and proportionality requirements;
- Furthermore, if the RA is not a property-related fee subject to Article XIII D, there is an issue as to whether the seawater desalination product-water subsidy component of the RA is a tax, requiring voter approval, as a result of its inability to come within the Proposition 26 carve-outs. Under the proposed approach, the RA subsidy component would fund a service not provided directly to some of the producers, and provided to others – the purchasing producers and non-producers; and
- Finally, there may also be a gift of public funds issue associated with the inter-agency subsidization as suggested by the structure being proposed.

OCWD needs to examine the constitutional issues raised by increasing the RA to subsidize the water costs of the project. Given these issues, IRWD supports staff's recommendation to eliminate Option 4 from further consideration.

3) Participation in the seawater desalination project should be voluntary with no subsidization of the cost of water by non-participating agencies in order to meet Proposition 218's and Proposition 26's cost of service and proportionality.

As IRWD has stated in previous communications, ocean desalination projects should be funded exclusively by the retail water agencies that voluntarily choose to participate in a project depending on each agency's water supply reliability needs. Based on our analysis, participating agencies would likely need to determine that they do not consider supplies from Metropolitan to be fully reliable; this determination and any subsequent participation needs to be an agency-by-agency decision.

- Retail agencies that elect to participate in an ocean desalination project should form an acceptable financial participation mechanism, such as a voluntary joint powers authority,

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to appropriately recover and allocate past and future costs associated with an ocean desalination project; and

- Participation in the project via such a mechanism would eliminate the subsidization proposed in Options 2A, 2B, 3 and 4, and would allow OCWD to avoid violating Proposition 218's and Proposition 26's cost of service and proportionality requirements through an increase in the RA, as proposed, to pay for the project.

4) The proposed project's impacts on the Groundwater Producers should not be underestimated. Any increase in the RA needs to result in an equal value of tangible benefits to Producers and those benefits should be gained at the lowest cost.

Each of the five alternatives still being considered would result in an increase in the RA between \$85 per acre-foot (AF) to \$191 per AF. Producers will need to raise rates as a result. With a mid-level RA increase of \$135 per AF, the Groundwater Producers will have to increase their commodity charges to their customers from 4% to 27% depending on the Producer's situation. Irrespective of which distribution alternative is selected by OCWD, the desalinated water will offset supplies that are already available or will be available from Metropolitan at a fraction of the cost of desalinated water.

- Implementing an effective groundwater management plan that optimizes the use of supplies already available from Metropolitan in combination with managing the groundwater basin with OCWD's existing management tools, such as the Basin Pumping Percentage and the RA, would result in maintaining higher groundwater levels, storing water that could then be used to benefit the Producers during water shortage conditions, and lower RA costs for Groundwater Producers as compared to any of the options under consideration;
- As reported in my letter to you of September 2, 2015, OCWD's 19 Groundwater Producers and the citizens they serve would save more than \$200 million in the first 10 years by optimizing water storage in the Orange County Basin with untreated water from Metropolitan versus purchases of desalinated seawater;
- Additionally, Metropolitan is considering numerous actions that would bring cheaper water to the Orange County Basin including the construction of an indirect potable reuse project in Carson that would provide up to 65,000 AF of high quality water for recharge into the Orange County Groundwater Basin;
- Optimizing the use of current and future water supplies from Metropolitan would provide improvements in water supply reliability at the lowest cost and should be an alternative considered by the OCWD Board.

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Along with OCWD's Board of Directors, IRWD believes that the development of a secure and reliable water supply for the residents of Orange County is essential. Investments in water supply reliability must be cost-effective and should consider all of the factors addressed above related to environmental impacts, beneficiary pay principles, and alternatives.

Since the OCWD Board is conducting a special meeting tonight to discuss this topic, I am requesting that you provide a copy of this letter to each of your board members to consider IRWD's comments. I look forward to discussing these concerns in greater detail with you and your staff. Please contact me at (949) 453-5590 so that we can schedule a meeting to discuss our comments.

Sincerely,

A handwritten signature in blue ink, appearing to read "Paul A. Cook". The signature is stylized and cursive.

Paul A. Cook, P.E.
General Manager