



CITY OF CARSON

June 25, 2018

Zita Yu, Ph.D., P.E.
Project Manager
West Basin Municipal Water District
17140 South Avalon Boulevard, Suite 210
Carson, California 90746-1296

Sent via e-mail to: DesalEIR@WestBasin.org

RE: City of Carson Comments on West Basin Municipal Water District Ocean Desalination Draft Environmental Impact Report

Dear Dr. Yu:

City of Carson would like to thank you for this opportunity to comment on West Basin Municipal Water District's (West Basin) Draft Environmental Impact Report (DEIR) for the proposed Ocean Water Desalination Project (Project).

While we do not oppose ocean desalination all together, we strongly believe West Basin should only pursue this half-billion-dollar Project as an option of last resort. As such, in 2016, the California State Assembly Select Committee on Water Consumption and Alternative Sources held public hearings throughout California to study the effect of the drought and climate change on the State's water resources. The Select Committee recommended that the State pursue a diverse water portfolio to deal with these environmental issues. However, the committee recommended that "desalination should be used as an option of last resort." The Committee found that desalination should "only be considered after a region has been successful with conservation and has embarked on substantial water reclamation projects as well." We wholeheartedly agree.

West Basin's longstanding and seemingly steadfast commitment to ocean-water desalination at all cost and over less expensive and more energy friendly means of increasing our water supply—conservation, recycling, stormwater capture, and brackish groundwater desalination—will result in a significant and disproportionate impact on low income and minority populations.

The Project would produce *the* most expensive water¹ in an unnecessary amount² for a vast service area that encompasses widely disparate communities, the most disadvantaged of which, such as Carson, will bear the brunt of the Project's high costs, adverse environmental impacts and outsized energy use.

The disparity between West Basin's affluent communities and its low-income and minority neighborhoods such as Carson is evident in the differences in residential per capita water usage (R-GPCD). West Basin seeks to impose the steep costs of building and operating an ocean desalination plant across its entire service area, even though customers in affluent communities such as Palos Verdes use upwards of 200 R-GPCD, while customers in Hawthorne use only 62 R-GPCD, (DEIR, p. 7-13.).³ In this scenario, low income and minority communities such as Carson, whose water use is below the average for the South Coast region,⁴ are subsidizing wealthier communities' excessive, above average water consumption. Additionally, when water rates go up, as they inevitably will, a \$10 increase that seems modest in affluent Rolling Hills Estates has a significantly greater impact on a ratepayer living below the federal poverty line in disadvantaged communities. Desalination costs range in per acre foot from \$2,600.00 to \$4,500.00. The West Basin Report studied more cost-effective alternative water supplies, including conservation measures and stepped up use of reclaimed water. The costs of conserved water would range from \$580.00 to \$1,400.00 per acre foot. In addition, common-sense programs that detect water system leaks in the water distribution system can result in saving 260,000 gallons per mile of water mains annually at an estimated cost of \$400.00 per acre foot.

We applaud West Basin's significant conservation savings over the past 25 years, but challenge West Basin's assertion that demand has hardened to a point which makes it difficult to realize the additional savings West Basin claims is needed with anything less than an ocean desalination plant. In fact, when statewide conservation measures were in place, West Basin's own conservation efforts completely eliminated the need for a 20 MGD ocean desalination facility.⁵

West Basin's contention that its Project's impact on disadvantaged communities is less than significant does not tell the whole story. First, the DEIR leaves out multiple low-income or minority populations (such as Carson) by analyzing only tracts where aboveground infrastructure would be implemented (El Segundo and Hawthorne).⁶ (DEIR, 5-13.) Second, it compares the impacts on tracts in Hawthorne to those on the city of Hawthorne itself, rather than to the West

¹ Heather Cooley and Rapichan Phurisamban, *The Cost of Alternative Water Supply and Efficiency Options in California*, 13, PACIFIC INSTITUTE (June 6, 2018),

http://pacinst.org/wp-content/uploads/2016/10/PI_TheCostofAlternativeWaterSupplyEfficiencyOptionsinCA.pdf.

² Comment Letter from Los Angeles Waterkeeper to West Basin Municipal Water District (explaining that the need for 21,500 acre-feet a year of new potable water supply is not supported in the DEIR).

³ *August Supplier Conservation*, 9, 10 (June 6, 2018),

https://www.waterboards.ca.gov/water_issues/programs/conservation_portal/docs/2017oct/supplierconservation_100317.pdf.

⁴ From July 2017 to August 2017 alone the average residential per capita water use for the South Coast region decreased from 69.63 R-GPCD to 65.87 R-GPCD. (89.3 KPCC, *Is California Water Use Increasing?*) <http://projects.scpr.org/applications/monthly-water-use/region/south-coast/>.

⁵ See Comment Letter from Los Angeles Waterkeeper to West Basin Municipal Water District.

⁶ Environmental Science Associates Et Al., *Ocean Water Desalination Project Draft Environmental Impact Report*, 6-13, SMARTER WATER LA (June 6, 2018),

http://westbasindesal.org/assets/Documents%20and%20Files/Project%20Materials/draft-eir/West_Basin_DEIR.pdf.

Basin service area as a whole, which is inappropriate and misleading.⁷ (DEIR, 6-11.) As the Project would provide a water supply for all customers in West Basin's service area, the relative impacts of the Project on disadvantaged communities should be compared to the service area as a whole. Third, West Basin misrepresents Hawthorne's demographics by averaging minority populations of three separate tracts before comparing them to Hawthorne as a whole, thus diluting the actual minority percentages of individual tracts.⁸ (DEIR, 6-11.) West Basin then misleadingly concludes that the impact on these areas is not disproportionate because they do not impact significantly greater minority populations. The criteria West Basin used to determine what constitutes significantly greater minority populations—"at least 10 percent greater on average than the overall city or census-designated place"—seems arbitrary, again minimizing both the existence of, and the Project's impact on, disadvantaged communities.⁹ (DEIR, 6-10.)

Many of West Basin's low-income and minority customers already suffer from poor air quality in communities identified as being among those most disproportionately burdened by multiple sources of pollution.¹⁰ The high energy intensity of desalination, at five times greater than that of purified recycled water, is of particular concern.¹¹ The continuous energy demand of the 20 MGD desalination plant will be as much as the equivalent energy demand of all of the 14,173 households in Manhattan Beach.¹² West Basin also reports "significant and unavoidable" construction-related impacts of NOx emissions will result from the Project, and such impacts will hit these already affected communities hardest.¹³ (DEIR, 5.2-59.) The immense energy demand of the proposed 20 MGD plant will result in the contribution of roughly 44,000 metric tons annually of CO_{2e}, undermining California's climate progress and fueling further warming and drought.¹⁴ Increasing our carbon footprint is certainly not the direction in which California ought to be headed.

In addition to CO_{2e} emissions greatly affecting air quality in the region, operation will be a major step backward from the progress West Basin has made to fight climate change. As West Basin self-reports, their Edward C. Little Water Recycling Facility has "reduced emissions of [CO_{2e}] by over 356 tons in one year's time."¹⁵

The Pacific Institute studied the energy and greenhouse gas emissions related to ocean desalination, as compared with other more costs effective sources of water. The Fact Sheet provided by West Basin indicates that ocean water desalination will use approximately 50% more energy than imported water from the Metropolitan Water District. The amount of electrical use needed to purify the seawater per acre foot is estimated at 4,200 kWh. The amount of

⁷ Id. at 6-11.

⁸ Id.

⁹ Id. at 6-10.

¹⁰ *CalEnvrioScreen 3.0 Results*, oehha.ca.gov (June 6, 2018),

<https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30>.

¹¹ Powers Engineering, *Assessment of Energy Intensity and Greenhouse Emissions of Proposed West Basin Desalination Plant and Water Supply Alternatives*, 1, Smarter Water LA (June 6, 2018),

https://www.smarterwaterla.org/wp-content/uploads/2018/01/Powers_Engineering_2018_WB_Desal.pdf.

¹² Powers Engineering, *supra* note 11, at 1.

¹³ Environmental Science Associates et al., *supra* note 5, at 5.2-59.

¹⁴ Powers Engineering, *supra* note 11, at 1.

¹⁵ *Edward C. Little Water Recycling Facility*, westbasin.org (June 6, 2018),

<http://www.westbasin.org/water-supplies-recycled-water/facilities>.

electricity consumed in the State Water Project energy is 3,500 kWh and the Colorado River Aqueduct is 2,500 kWh per acre foot.

The bottom line is that ocean desalination is not the answer, and we call on West Basin to take a step back and see that the Project's costs overwhelmingly outweigh any benefit, particularly in light of the more cost-effective, environmentally sound options available for meeting our water supply needs. Operation of an ocean desalination plant will have the perverse result of low-income communities subsidizing West Basin's most affluent communities' excessive water consumption. In addition, the Project will adversely impact air quality and contribute to climate change impacts on communities that already bear a disproportionate pollution burden.¹⁶ West Basin should be exploring opportunities for expanding its successful conservation and recycling programs and other water supply options that do not compromise the health and economic well-being of communities. Ocean desalination should be considered an option of last resort and one that West Basin should not be pursuing at this time.

Other More Cost-Effective Options than Ocean Desalination

In June of 2016 the Water Replenishment District of Southern California (WRD) awarded a \$110 million contract to construct a state of art water treatment plant to enable WRD to develop the first locally sustainable groundwater basins in California. Known as the Groundwater Reliability Improvement Project (GRIP), when completed it will allow WRD to replenish both the Central and West groundwater basins. Carson is located above the West Basin groundwater basin. The GRIP project will replace the annual need for 21,000 acre feet of water imported from Northern California and from the Colorado River. The project will purify treated tertiary water for infiltration into the groundwater basins.

Carson is the host city for the Joint Water Pollution Plant (JWPP) operated by the Los Angeles County Sanitation Districts, which treats sanitary sewer discharges from dozens of cities surrounding the city. The City of Carson is a member agency of the LACSD, along with 76 other cities in Los Angeles County. The JWPP currently treats and cleans wastewater discharged from homes and businesses. In September of 2017 the LACSD entered into an agreement with the Metropolitan Water District to construct a \$17 million demonstration facility to purify water for recharging into four groundwater basins. When completed next year the plant will process 500,000 gallons-per-day. Under a full-scale program, the purified water would be pumped from Carson through a new pipeline network to four groundwater basins, allowing for additional groundwater storage. The full-scale program would supply 150 million gallons-per-day of purified water, sufficient to supply 350,000 homes. The cost per acre foot is estimated at 1,600 an acre-foot, which is comparable to other new local water supplies.

In addition, the City of Carson is concerned with the unnecessary expenditure of public funds for such a facility that will not increase the supply of water at a cost efficient method consistent with existing water conservation and reclamation projects serving the City of Carson. The City of Carson supports environmentally sensitive and sustainable methods and projects as alternatives as described in the body of our comments to the proposed project in the Draft Environmental Impact Report.

¹⁶ *CalEnviroScreen 3.0 Results*, oehha.ca.gov (June 6, 2018), <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30>.

The City of Carson appreciates the opportunity to provide our comments regarding the West Basin Ocean Water Desalination Project. If you have any questions, I may be reached at (310) 952-1728.

Sincerely,



Kenneth C. Farfsing
City Manager

cc: Carson City Council
John Raymond, Assistant City Manager
Saied Naaseh, Community Development Director
Sunny Soltani, City Attorney