

# INDIAN WELLS VALLEY WATER DISTRICT

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April 21, 2015

Felicia Marcus  
Chairperson, State Water Resources Control Board  
Attn: Jessica Bean  
1001 I Street, 24th Floor  
Sacramento, CA 95814

Subject: Indian Wells Valley Water District Comments on the Mandatory Conservation Proposed Regulatory Framework

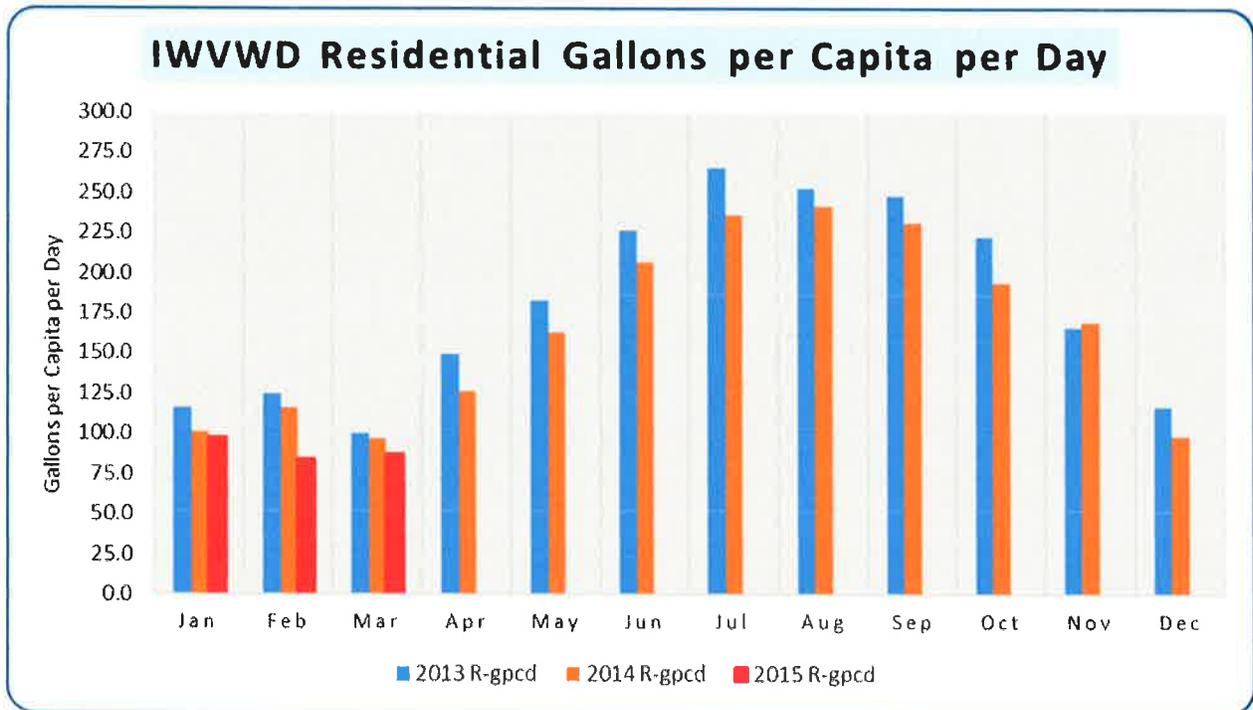
Dear Chairperson Marcus,

My purpose in writing is two-fold; first to correct the data on which the new proposed conservation target for the Indian Wells Valley Water District (IWWVD) is based and second to express concern for the basis on which this conservation standard was established.

October 2014 was the first month IWWVD reported residential gallons per capita per day (R-gpcd). The number reported in October for the month of September was 232 R-gpcd. If you look at the table below taken from the DRINC portal reporting tool, you will note the "Percent Residential" reported during the months the State Water Resources Control Board (SWRCB) is using to determine the conservation standard was reported at 92%. The 92% represents the percentage of our accounts that are residential, not the percentage of actual metered residential use. Note there are no entries in the "Submitted R-gpcd" column for those months and that subsequent months have varying percentages in the "Percent Residential" column that reflect actual metered percentage of residential use. Therefore, it is evident the July-September 2014 R-gpcd listed for IWWVD is not correct.

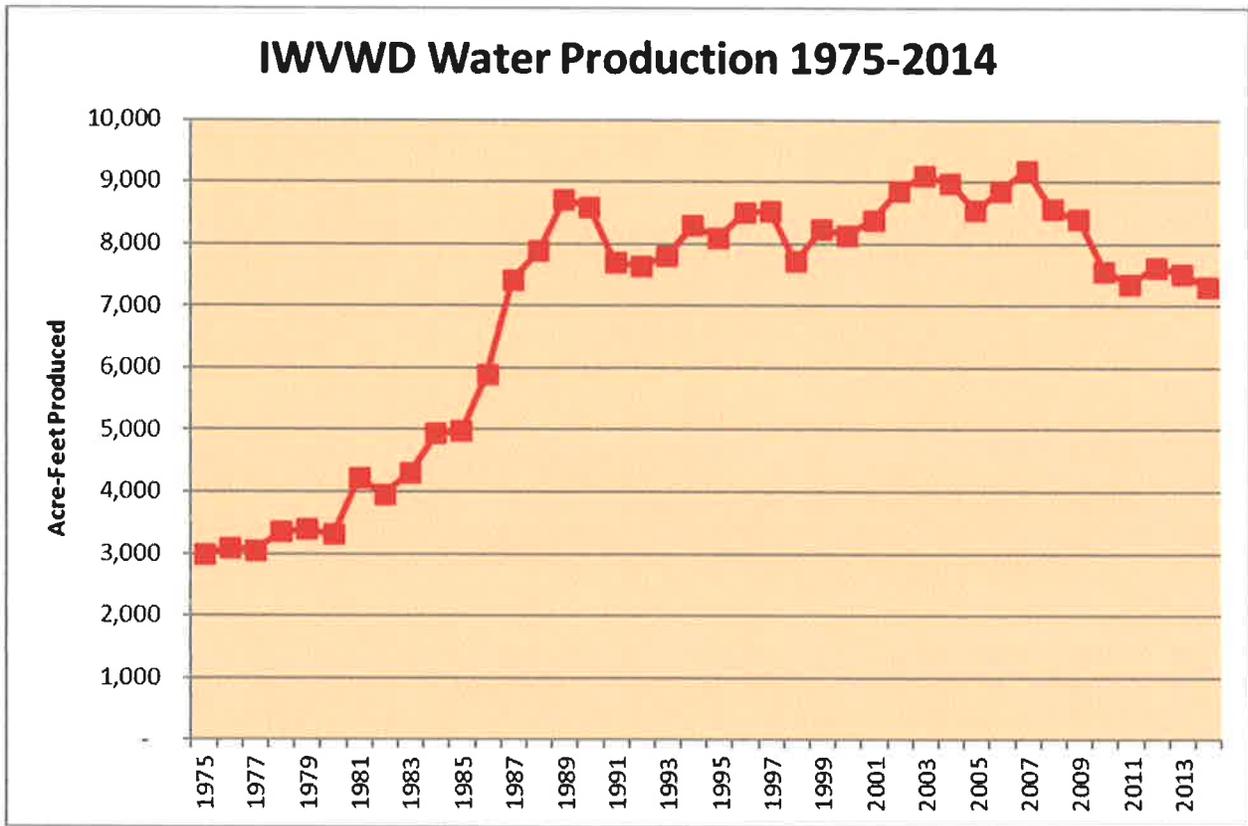
Report Date	Supplier Name	Reporting Month	Population	Percent Residential	Use Reduction	Submitted R-GPCD	Calculated Month R-GPCD
Jan 9 2015 3:48PM	Indian Wells Valley Water District	Dec-14	31120	78%	7%	109	99
Dec 8 2014 8:03AM	Indian Wells Valley Water District	Nov-14	31120	84%	0%	170	124
Nov 6 2014 8:26AM	Indian Wells Valley Water District	Oct-14	31120	83%	-2%	182	181
Nov 6 2014 8:33AM	Indian Wells Valley Water District	Sep-14	31120	85%	-1%	244	244
Sep 4 2014 4:09PM	Indian Wells Valley Water District	Aug-14	31120	92%	6%		255
Aug 25 2014 4:55PM	Indian Wells Valley Water District	Jul-14	31120	92%	7%		290
Aug 25 2014 4:27PM	Indian Wells Valley Water District	Jun-14	31120	92%	-2%		269
Apr 6 2015 8:37AM	Indian Wells Valley Water District	Mar-15	31120	85%	20%	97	97
Mar 6 2015 11:20AM	Indian Wells Valley Water District	Feb-15	31120	73%	12%	85	84
Feb 6 2015 9:23AM	Indian Wells Valley Water District	Jan-15	31120	87%	18%	98	92

The following graph is a plot of the actual R-gpcd for IWVWD from January 2013 to the last reported number in March 2015. Please note at no time in 2014 did the R-gpcd reach 263.5, the number appearing in the table published this weekend. The actual values for IWVWD for the months of July, August and September 2014 are 236.4, 242, and 232, respectively. The average for this period is 236.8 R-gpcd. I recognize this keeps IWVWD in Tier 9, but the number reflected in the table needs to be corrected.



My second concern is the method used to establish the conservation standard does not recognize previous conservation efforts by IWWWD and our customers nor does it appear to take into consideration the statement on the SWRCB website acknowledging, “It is not appropriate to use Residential Gallons Per Capita Day (R-GPCD) water use data for comparisons across water suppliers, unless all relevant factors are accounted for.” It goes on to recognize factors such as rainfall, temperature, and evaporation rates, population growth, population density, socio-economic measures such as lot size and income, and water prices have a direct impact on water use. The next graph illustrates IWWWD water production since 1975. The increase in the 1980’s resulted from the Navy installation at China Lake closing down residential housing on the base and integrating personnel and employees into the community as customers of IWWWD. Please note conservation efforts since 2007 have resulted in a 20% reduction in water produced by IWWWD. We have distributed hundreds of free low flow showerheads, low flow faucet aerators, hose nozzles, and moisture meters along with conservation literature to customers and other residents of the valley. We also offer free landscaping advice through our XERIC® Ambassador program encouraging residents to plant only desert appropriate plants that require very little water. IWWWD is also moving forward with a new Cash for Grass program

offering customers \$1.00 per square foot up to 2,000 square feet to remove living turf and replace it with desert appropriate landscaping.



The State is now proposing an additional 36% reduction that would reduce pumping from 7,532 acre-feet during the baseline year 2013 to 4,808 acre-feet in 2015. This target is not only unreasonable as I will explain, but puts the complete burden on the customers of IWVWD while other water producers in the basin have no responsibility to contribute to the conservation effort.

The Indian Wells Valley is an adjudicated basin located in the Upper Mojave Desert. The only source of water is groundwater and the basin has been classified as a Medium Priority basin by the State due to an existing overdraft condition. Being situated in the Upper Mojave Desert, summer weather conditions are quite extreme. Since 2000, the average high temperatures for July, August, and September are 104.9°, 102.6°, and 95.5°, respectively. Precipitation for those same months since 2000 has averaged .02, .14, and .12 inches, respectively. (Source: Weather Warehouse) Humidity is very low during the summer months. Under these conditions, it is difficult to maintain outdoor landscaping. These conditions, along

with conservation based water rates enacted by the Board of Directors of IWVWD have resulted in some of our customers letting their yards go brown, which evident as one drives throughout our community. We are also a rural community with some of our customers owning large parcels that require more water to irrigate the landscaping, but also enabling them to board horses and other animals that consume water. I question whether consideration was allowed for these factors.

With high temperatures and low humidity, evaporative cooling is the most energy efficient and thus the primary method for cooling residences and businesses. According to a study by the University of Arizona's Office of Arid Lands Studies, "the percentage of household water used by the coolers was 25.8% for households without air conditioning, and 15.8% for all houses."

[http://www.h2ouse.org/tour/details/element\\_action\\_contents.cfm?elementID=C762FE8A-38B4-4541-907E5203F113D180&actionID=11252FC5-E889-45A5-A088549C8CF50361](http://www.h2ouse.org/tour/details/element_action_contents.cfm?elementID=C762FE8A-38B4-4541-907E5203F113D180&actionID=11252FC5-E889-45A5-A088549C8CF50361)

Very few residences in this area have both evaporative cooling and air conditioning. This study also states, depending on size, air movement, and relative humidity, seasonal water use for evaporate coolers can range from 7,350 to 22,050 gallons per cooler, or 35 to 100 gallons per day assuming 212 days of use. Again, was this given consideration when the conservation standard was established?

In response to the SWRCB emergency regulations to achieve 25% conservation, the Board of Directors of IWVWD adopted an Emergency Water Conservation Ordinance April 13<sup>th</sup> establishing a limit of three days per week for irrigating outdoor landscape and only between the hours of 8:00 PM and 8:00 AM. I expect reducing the days allowed for irrigating landscaping from seven to three will bring us close to the 25% target, but getting to 36% may be a difficult reach.

My last point is, again, customers of IWVWD are being required to bear the burden of conservation while other water producers are not impacted. Although there are other small farms located within the basin, I especially highlight one alfalfa farm and one pistachio farm to show the impact of their pumping on the groundwater balance within the basin. The alfalfa farm has been in operation for several years and reports pumping of 7,524 acre-feet in 2014. The pistachio orchard is a recent venture with planting taking place in 2013. According to the Indian Wells Valley Water Supply Availability and Conservation Report published by Todd Engineers in January 2014, annual irrigation starts at around 0.25 ft/yr (averaged over the full area of the orchard) and is expected to reach 4 ft/yr when the trees reach full size. The report

estimates 2,050 acre-feet of groundwater used for pistachio irrigation for the new 1,600 acres planted in 2013. When the trees reach maturity, this single orchard will require upwards of 6,400 acre-feet of groundwater annually. Whereas farmers in the Central Valley and elsewhere have seen severe reductions in water allocations from State and Federal water projects, due to lack of a means of conveyance, agriculture in the Indian Wells Valley has never received any water from the State or federal water projects meaning local farmers have had no limit on the amount of groundwater they can pump during the four years of the current drought. So while 30,000 people in the community served by IWVWD are being targeted by State mandate to conserve another 36%, local agriculture continues to ramp up groundwater use in the valley for pistachios and pump 1.5 times urban use to grow alfalfa.

I understand the need to plan for extended drought conditions and customers of IWVWD have demonstrated by past results a willingness to change behaviors and contribute to a common goal. My objection is the conservation standard being assigned to IWVWD places the entire burden on our customers and others are allowed to pump groundwater unabated. There needs to be a more equitable system that shares the responsibility among all major water producers.

I sincerely appreciate the opportunity to respond and provide my input prior to implementation of the mandatory restrictions to achieve a 25% statewide reduction. I respectfully request that the SWRCB consider the information I have provided and modify the 36% conservation standard assigned to IWVWD for the aforementioned reasons.

With regards,

A handwritten signature in blue ink, appearing to read "Don Zdeba", with a long horizontal flourish extending to the right.

Don Zdeba  
General Manager