From:	Brent Mecham
To:	<u>commentletters</u>
Subject:	Comment Letter - Revised Regulation on Prohibiting Wasteful Water Use Practices
Date:	Tuesday, February 6, 2018 2:06:51 PM
Attachments:	ET & Rainfall for Large California Metro Areas.xlsx



This comment is specifically regarding Irrigating landscapes after rainfall in the Proposed Text of Regulation, Title 23. Waters, Chapter 3.5 Conservation and the Prevention of Water and Unreasonable Use.

Article 2. Wasteful and Unreasonable Water Uses Lines 317-323.

The regulation to prohibit irrigation 48 hours after measureable rainfall makes sense, but the definition of "measureable" needed a practical and defensible definition.

We support the proposed language that defines measureable rainfall as "at least one-fourth of an inch (0.25 inches)" and seems reasonable for California.

Our justification for supporting this language is based on a quick observation that in the most populous parts of California, the rainy season is generally November through March of each year. A quick analysis of several large metropolitan areas in the state shows that many locations receive about 80% of their annual precipitation during this period of time. This period of time coincides with the period of least evapotranspiration demand.

Using weather data from the Appendix in the MWELO-2015 document and precipitation data from U.S. Climate Data a quick comparison of ET and Rainfall during the rainy season demonstrates that a 48 hour period of suspended irrigation should not harm the typical landscape. While during the active growing season of April-October, the adjusted reference ET for landscape plants would indicate that two days of crop ET is about 0.25 inches and if by chance it should rain, the suspension of 48 hours is defensible.

Obviously in desert climates the daily ET is higher, but when adjusted for the types of plants that should be used in that type of climate, the proposed language should not cause harm to the landscape.

Periods of highest ET demand are also the periods of time least likely to rain, so it seems unlikely that any landscape would be harmed or damaged by this regulation and proposed definition of "measureable." Enforcement based on weather data from the National Weather Service, a nearby CIMIS weather station or other reliable source of rainfall data allows latitude for the enforcement agency to determine the best source of data for their particular situation. The same public data sources are available to the irrigation/property manager.

Thank you for the opportunity to make comment.

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City			ET								Rainfall
								% of ET			
	ET in Rain during										
	Nov	Dec	Jan	Feb	Mar	Season	Annual ET	Rain	Nov	Dec	Jan
San Diego	2.4	2	2.1	2.4	3.4	12.3	46.6	26%	1.02	1.54	1.97
Irvine	2.6	2.3	2.2	2.5	3.7	13.3	49.6	27%	1.14	2.28	2.72
Los Angeles	2.6	1.9	2.2	2.7	3.7	13.1	50.1	26%	1.38	2.76	3.98
Riverside	2.9	2.6	2.5	2.9	4.2	15.1	56.4	27%	0.83	1.38	2.32
San Luis Obispo	2.4	1.7	2	2.2	3.2	11.5	43.8	26%	1.73	4.06	3.66
Fresno	1.4	0.6	0.9	1.7	3.3	7.9	51.1	15%	1.18	2.01	2.28
Oakland	1.4	0.9	1.5	1.5	2.8	8.1	41.8	19%	2.87	4.49	4.72
San Franciso	1.3	0.7	1.5	1.3	2.4	7.2	35.1	21%	3.15	4.57	4.49
Sacramento	1.7	0.9	1	1.8	3.2	8.6	51.9	17%	2.09	3.27	3.62
	Average 10.79 47					47.38	23%				
	Avearage Daily Eto 0.13						0.13				
	Rainy Season Average ETo						0.07				
	Growing season average ETo					0.17	in. / day				
	Plant factor of .80 = Daily ETc 0.136 in.						in. / day				

Suspend irrigation for 48 hours after 0.25 inches of rain seems realistic, especially since most rain occurs during a perod of time of lowest plant v

Resources for data

<u>http://www.water.ca.gov/wateruseefficiency/landscapeordinance/docs/Title%2023%20extract%20-%20Official%20CCR%20pages.pdf</u> https://www.usclimatedata.com/climate/california/united-states/3174

				% of
		Rain	Annual	annual
Feb	Mar	Season	Precipitation	Rain
2.28	1.81	8.62	10.4	83%
3.62	2.44	12.2	14.42	85%
5.08	2.83	16.03	18.67	86%
2.4	1.69	8.62	10.32	84%
3.66	3.19	16.3	19.02	86%
2.01	2.48	9.96	12.83	78%
4.49	3.39	19.96	23.99	83%
4.45	3.27	19.93	23.64	84%
3.46	2.76	15.2	18.51	82%
Average		14.09	16.87	83%

vater demand.