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Attention: Judy Colvin

RE: Comments on the Draft Model Water Efficiency Landscape Ordinance

The Municipal Water District of Orange County appreciates the opportunity to provide the Department of Water Resources comments regarding the Draft Model Water Efficiency Landscape Ordinance. The following includes general comments for consideration and specific comments containing recommended language changes.

General Comments:

- Because of the significant volume and nature of comments being submitted to DWR, MWDOC requests that upon completion of the next draft of the Model Ordinance, DWR release it for another public comment period.
- Each water meter should have an assigned MAWA to facilitate monitoring of water use by the local agency and/or water purveyor. The ordinance should also require one water meter per irrigation controller. Matching the meter to the controller to the MAWA will also help to facilitate irrigation system surveys, audits, and water use monitoring by the site managers. Every effort should be made to avoid designing a looped irrigation system, a single irrigation system served by two water meters. If a looped system cannot be avoided due to unique site conditions, it should be clearly identified on the irrigation system design plan and throughout the documentation package.
- Stormwater permits for cities and counties already have, or will have soon, requirements for new and renovated sites that could be used to complement AB 1881 requirements. MWDOC suggests the Department of Water Resources, State Water Resources Control Board and Regional Water Quality Control Boards collaborate to make sure that the respective regulations complement one another and avoid duplication of requirements.
- Good irrigation system design, state of the art irrigation equipment, appropriate plant selection, soil preparation and quality installation are all important factors to develop and install urban landscapes.

These issues are the focus of the Model Ordinance. A more important factor to saving water in the landscape is the ongoing maintenance of the landscape, repair of the irrigation system and regular irrigation scheduling adjustments. The Draft Model Ordinance fails to address this area. Requirements for landscape maintenance contractors, responsible for maintaining and operating the irrigation system, should be incorporated into the ordinance. Suggestions for linking landscape maintenance contractors into the ordinance include but are not limited to:

- Require all maintenance contractors to be certified through the California Landscape Contractors Association Water Management Certification Program, a maintenance industry created water management program. More information can be accessed at: <http://www.clca.us/water/index.html>
- DWR, CLCA and water purveyors could collaborate to develop Landscape Maintenance Contract specifications that create performance based irrigation management. The intent is to reward contractors that irrigate efficiently and penalize those who do not.
- Section 65596 (l) of AB 1881 lists provisions for landscape maintenance that “may” include, but are not limited to, performing routine irrigation system repair and adjustment, conducting water audits, and prescribing the amount of water applied per landscaped acre. MWDOC suggests these items be listed as items that could be voluntarily implemented by a local agency or water purveyor.
- In order to maximize the benefits of the Ordinance, there needs to be a requirement for water purveyors to work with their local agencies (cities and county) to implement the ordinance together. Perhaps the requirement (493.1.4 (a)) for monitoring annual water use should be assigned to the water purveyor as they hold the water use data. Cities should be obligated to provide the water purveyors with area measurement information to coordinate this aspect of the ordinance.
- In-lieu-of requiring landscape irrigation audits every five years, compliance could be established by instituting budget based tiered water rate structures or MAWA reporting on the water bill as alternatives to the audits. This approach would essentially provide an audit every billing cycle, or 6 to 12 times per year, rather than once every five years. However, if an agency chooses to embark on either of these alternate compliance paths, sufficient time should be permitted for the agency to obtain landscape area measurements for each water meter; develop the new rate structure, and incorporate it into the billing system. The budget should be based on the Maximum Applied Water Allowance (MAWA) for each water meters.

- Because SmarTimers are proposed to be required, rather than requiring the irrigation schedules, the data needed to program a SmarTimers should be required:
  - For some SmarTimers, a table identifying, by valve, the plant material, soil type, sun exposure, slope, emission device, etc.
  - For other SmarTimers, the schedule to meet the maximum irrigation requirement in the summer.
  
- Some sites may choose not to install an irrigation system, the model ordinance should accommodate this choice as hand watering is the most efficient form of irrigating a landscape.
  
- AB 1881 identified water “agency” and water “purveyor” (on page 2, section 4). Neither AB 1881 nor the Draft Model Ordinance defines “agency” and water “purveyor”.
  
- Registered Historic Sites should be defined to include locally designated Historic Sites.
  
- While the updated ordinance lists penalties that can be imposed to maintain implementation of ordinance locally, there are no penalties identified should a local agency choose not to implement the requirements of AB 1881. What are the penalties that could be imposed on a local agency for not implementing a local ordinance?

Specific Comments:

- Section 490.3 Applicability
 

The threshold of 2,500 square feet or greater requiring detailed design submittals would include a large number of single-family homes in Orange County. This requirement would ultimately result in these homeowners having to hire a landscape architect to develop their documentation package for submittal to the local agency or find other ways to avoid having to comply with this requirement. The associated costs of the detailed documentation package (estimated at a minimum of \$1,000) would likely outweigh the resulting water savings benefits. The square-footage threshold should be increased to 5,000 square feet of irrigated area.
  
- Section 491. Definitions 10 and 10492.9.1(a)(2) MWDOC suggests the Irrigation Association definition of a SmarTimer be incorporated into the model ordinance language. The IA, through a stakeholder-based process including water purveyors, has developed and adopted Smart Water Application Technology (SWAT) testing protocols to verify that SmarTimers operate as claimed by the manufacturer. Many controllers have already completed this testing. This testing

is conducted at the Center for Irrigation Technology at Fresno State University. The SWAT testing protocol for soil moisture based technologies is near completion.

Water purveyors throughout the state, including MWDOC, currently rely on SWAT testing as the basis of our approved list of products eligible for rebates. In addition, EPA also intends to rely on existing testing protocols to develop their WaterSense list of SmarTimers. The model ordinance should reference the WaterSense list of SmarTimers so that as the SWAT testing protocols advance, the language in the Model Ordinance will not need to change over time.

- 492.1.2(b)(3) – Water purveyors can benefit from receiving the full Landscape documentation package as it contains important information, including irrigated area measurements and plant palettes, the can be used to implement the model ordinance and future water conservation programs. MWDOC suggests the following edit to the proposed language:

(3) submit a copy of the ~~Water Efficient Landscape Worksheet~~ *Landscape Documentation Package* to the local retail water purveyor.

- 492.8.1 (a) – Management or removal of invasive species is very costly. Further, the use of modern synthetic turf is exploding in popularity. To help avoid costs associated with management and removal of invasive species, and to promote use of plant material alternatives in the future, MWDOC suggests the following edits to the proposed language:

492.8.1 (a) (1) Any plant may be selected for the landscape, *including synthetic turf, and providing the Estimated Applied Water Use recommendation for the project site does not exceed the Maximum Applied Water Allowance. To encourage.....*

492.8.1 (a) (4) ~~Invasive species of plant shall be avoided especially prohibited~~ near parks, buffers, greenbelts, water bodies and open spaces because of their potential to cause harm in sensitive areas.

Local watershed plans generally contain lists of invasive species that are present in that area. The model ordinance should reference these lists to identify specific invasive species that should be prohibited. Other sources that can be used to identify invasive species include the SWRCB, Regional Boards, Department of Fish and Game, and Army Corp of Engineers.

492.8.1 (a) (5) The architectural guidelines of common interest development, which include community apartment projects, condominium projects, planned developments, and stock cooperatives, shall not prohibit or include conditions that have the effect of prohibiting the use of low-water using plants as a group

*including synthetic or artificial turf.*

- 492.8.2 Specifications – the location of the water meter AND the associated MAWA is important to all parties involved with the ongoing management of the landscape. MWDOC suggests the following addition to the proposed language:

492.8.2 (a) (9) Location of all utilities, (e.g. *water meter*, telephone, electric, gas, sewer, drainage, etc). The use of this information is limited to the landscape design and installation.

- A significant disconnect exists in the Model Ordinance between cities (that do not provide water service) and water districts. Cities are required to comply with AB1881 but do not have access to water use data from the Water District. Some water purveyors treat water use information for their customers as confidential information and do not release this information without approval of the customer. For new or rehabilitated sites, the documentation package should include a “Release of Information”, signed by the property owner, of water use data from the water purveyor to the city to facilitate compliance with 492.14.4(a)
- Section 490.3.1 (d) requires *existing landscapes with a landscaped area equal to or greater than 2,500 square feet are limited to 493.1.*

This section applies to existing landscapes installed before January 1, 2010 and appears to go beyond what is specified in AB 1881.

In order for local agencies to fulfill this requirement they would need to know the irrigated area by water meter for existing landscapes. This is a tall order even for water purveyors working in good faith to implement BMP No. 5 – Large Landscape Conservation Programs.

Compliance with this component would be problematic for many reasons including, but not limited to:

- The establishment of a water budget requires irrigated area measurements that currently do not exist in the vast majority of the state. In Orange County alone there are more than 750,000 connections<sup>1</sup>. Conservatively, the cost to obtain accurate area measurements would exceed \$18 million (\$24 X 750,000). This represents the cost just to be able to monitor annual water use, which doesn't yet save water.
- The time required to obtain area measurements to begin complying with this component would be significant and is not accounted for in the ordinance language.
- Developing irrigation budgets for mixed-use meters, meters serving water for both indoor and outdoor needs, creates a much higher level of complexity for monitoring. Assumptions for indoor water use would need

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<sup>1</sup> OC Water Agencies Water Rates, Water System Operations and Financial Information, 2006

to be established and deducted from the total use to estimate irrigation water use.

- Several Cities in Orange County do not provide water service; therefore they do not have water use records to monitor annual water use.
- Assuming ten percent of the connections exceed 80% of the Reference Evapotranspiration and 20% of those would be audited annually; cities would be required to audit more than 15,000 connections per year. Staffing to oversee this level of activity generally does not exist at local agencies and would represent an additional cost burden.

Including an irrigated area measurement by water meter requirement for the first Landscape Irrigation Audit could help to establish this critically needed data. While the Irrigation Association Certified Landscape Irrigation Auditor Training Manual and methodology does not include irrigated area measurements, Landscape Irrigation Auditors are capable of measuring irrigated area by water meter.

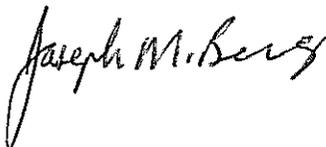
Also, the Irrigation Association Certified Landscape Irrigation Auditor Training Manual (2004) is currently being updated. The language in the Model Ordinance referring to the Manual should identify the "most current" version of the Manual, not the 2004 version.

This section should be limited to dedicated landscape water meters and the 2,500 square foot threshold should be increased to 1 acre (or 43,560 square feet).

As a regional wholesaler of imported water to 29 retail water purveyors in Orange County, MWDOC looks forward to assisting DWR in finalizing a Model Ordinance that is feasible to implement, broadly supported and will result in saving valuable water resources.

Should you have any questions regarding these comments, please call me at (714) 593-5008.

Sincerely,



Joseph M. Berg  
Water Use Efficiency Programs Manager