Colvin, Judith

From: Andy Smith [Andy@irrigation.org]

Sent: Thursday, March 27, 2008 5:33 AM

To: Frame, Kent; Saare-Edmonds, Julie Ann; mweo@water.ca.gov; Huff, Gwen

Cc: Deborah Hamlin; Doug York (dyork@ewing1.com); James Brown (james.brown@valmont.com); Robert Wade; Joel Lipsitch(LipsitchJoel@JohnDeere.com); David_Zoldoske@csufresno.edu; WarrenGorowitz (wgorowitz@yahoo.com); LARRY ROHLFES(larryrohlfes@clca.org)

Subject: MODEL WATER EFFICIENT LANDSCAPE ORDINANCE COMMENTS

Importance: High

Attachments: IAcommentsummary_final.pdf

Please find attached a summary of comments provided by the Irrigation Association. Below is the text from the document for your convenience.

March 27th, 2008

State of California
Department of Water Resources
Office of Water Use Efficiency and Transfers
Attention: Judy Colvin
901 P Street, Room 313A
Sacramento, CA 95814

Re: Revisions to Water Efficient Model Landscape Ordinance-Comment Summary

To All Interested Stakeholders:

The challenges facing California's water supply are significant. The State of California has historically taken a leadership role in developing policy which incorporates high water use efficiency standards. Water use in the landscape is no exception. Assembly Bill 1881 challenges regulatory authority once again to create and modify policy that will require the landscape and landscape irrigation industries to produce and maintain healthy landscapes with less water. The collective green industry applauds the effort to scientifically advance water use efficiency at all levels, bearing in mind the commitment we have to maintain the agreed upon plant palette. The Irrigation Association hereby submits the following comments on the proposed changes to California Code of Regulations, Title 23, Waters, Division 2, Department of Water Resources, Chapter 2.7, Model Water Efficient Landscape Ordinance, recognizing our duty to assist stakeholders in advancing water use efficiency in order to ensure water is available for irrigation for future generations.

§ 491. Definitions.

Issue 1: Items 7 and 8 reference certification programs without offering specific criteria for such programs.

Suggested revision: Consider the adoption of criteria similar or identical to that of the US EPA WaterSense certification program for irrigation professionals. Specifications can be found at: http://www.epa.gov/watersense/specs/cert.htm

Issue 2: Item 10, "controller" means an automatic timing device used to remotely control valves or

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Tel: (703) 536-7080 • Fax: (703) 536-7019

March 26th, 2008

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Issue 2: Item 10, "controller" means an automatic timing device used to remotely control valves or heads to set an irrigation schedule infers a single device. Some irrigation control technologies incorporate the use of multiple components.

Suggested revision: "controller" means an automatic timing device or assemblage of components used to remotely control valves or sprinklers to set an irrigation schedule.

Issue 3: Item 19 defines "ET adjustment factor" as a factor of 0.7. IA recognizes the need to improve irrigation water use efficiency and consequently dedicates many resources toward this effort. The mission of IA has evolved into three words, promote efficient irrigation. IA respects and appreciates all DWR has done to advance landscape irrigation efficiency, however IA is not in a position to support the proposed change in ETAF. This number has been arrived at through a series of theoretical suppositions and data mining without having scientific, corroborating field research to support a change that will effectively reduce water available to the landscape by 12.5%. A committee of stakeholders was assigned to vet the topic of ETAF, with the goal of attaining an agreed upon ETAF by stakeholders. That process was not fully completed. Additionally, AB 1881 mandates the Office of Water Use Efficiency and Transfers to conduct a survey of local agencies regarding their adoption and implementation of the 1990 model ordinance which utilized an ETAF of 0.8. That survey has not been completed for the required report to the legislature. Anecdotal evidence suggests that compliance with the 1990 ordinance, and therefore an ETAF of 0.8, has been limited on a statewide level. Achieving true compliance with an ETAF of 0.8 may result in significant water savings. Changing ETAF with the lack of supporting data is troubling.

Suggested revision: Retain the current ET adjustment factor of 0.8 and deploy field research to determine the validity of the suggested change and compliance with the existing model ordinance prior to implementing any further adjustment to ETAF.

Issue 4: Item 33 defines "low volume irrigation" as any irrigation system with a flow rate equal to or less than 0.75 inches per hour, including drip irrigation, subsurface drip, micro-sprinklers and similar irrigation type. Flow rate is traditionally referenced in unit volume over time such as gallon per minute or gallons per hour. Inches per hour generally references precipitation rate and 0.75 inches per hour is not reflective of a low volume system.

Suggested revision: Strike this definition and all reference to it or alter the terminology.

Issue 5: Items 46 and 53 define rain sensor and soil moisture sensor respectively and therefore create the possibility of discriminating between platforms of technology.

Suggested revision: Incorporate a definition of moisture sensing technology that suspends or limits irrigation application in periods of sufficient moisture or rainfall and replace ordinance text where appropriate.

§492.2. Compliance with the Certificate of Completion

Issue 1: Section 2. a. requires prior to backfilling, have a licensed landscape architect, certified irrigation auditor, or licensed landscape contractor conduct a preliminary field observation of the irrigation system. A certified irrigation auditor is not the appropriate person for such inspection and this step is not always practical.

Suggested revision: … ~~prior to backfilling~~ at appropriate project milestones, have a licensed landscape architect, certified irrigation ~~auditor~~ contractor, certified irrigation designer, or licensed landscape contractor conduct a preliminary field observation of the irrigation system for the purposes of preserving the integrity of the design intent.

§492.6. Water Efficient Landscape Worksheet

Issue 1: Section 3 stipulates a process for determining MAWA utilizing the formula presented. For reasons cited earlier in this document related to ETAF, IA objects to the use of 0.7 in the formula.

Issue 2: Section 3 provides an example of how to determine MAWA that is quite complex in nature due to the cross referencing required. Mathematical errors could be problematic for both regulated and regulator.

Suggestion revision: Reference tables could be altered to provide per square foot MAWA based upon local climatic conditions thereby simplifying the process. The example provided would then be altered as follows:
50,000 sq. ft. x 22.1774 gals. sq. ft. = 1,108,870 gals. yr.

§492.8. Landscape Design Plan

Issue 1: Section 1, b, 4 stipulates Irrigated areas (including turf) within 24 inches of non-permeable hardscape shall be irrigated with drip irrigation or subsurface irrigation technology. This suggests that no further innovation is possible in irrigation methodology and will stifle the ability to innovate. Also, in contained areas with small, meandering hardscape features, the ability to keep distribution uniformity high will be limited due to irregular areas created by such features.

Suggested revision: Remove reference to specific technology and project desired outcome in the language such as, no direct overspray of hardscape and consider the following:

- No water on hard surface that is part of a public road right of way. (ie, sidewalks)
- No direct distribution of water onto properties owned by others.
- No water on hard surface that results in runoff to other properties, public rights of way or municipal storm sewers.
- No water across hard surfaces wider than 3-4’
- No water across hard surfaces that provide direct pedestrian access to a commercial building.
- Any plans to distribute water across such hard surfaces should be clearly indicated on plans or submittals that are part of any review process.
- Specific exemptions for public parks, cemeteries, jogging paths or common areas should be considered, as long as alternate pedestrian routing is available.

Issue 2: Section 2, a, 9 requires plans to include the location of utilities. The responsibility of locating utilities rests with the utility provider. This requirement may create additional liability for applicants regardless of any disclaimer or exception.

Suggested revision: Remove this requirement wherever it appears in the ordinance or at the very least, an exemption for residential applications.

§492.9. Irrigation Design Plan

Issue 1: Section 1, a, 1 suggests the use of landscape water meters on all sites regardless of size. IA applauds this suggestion as measurement of water applied is the only way to determine the effectiveness of any water use efficiency measures.

Suggestion: Continue to advocate for separate landscape water use measurement on all projects, where practical.

Issue 2: Section 1, a, 5 mandates sensors (e.g., rain, freeze, wind, etc.), either integral or auxiliary, that suspend irrigation operation during unfavorable weather conditions shall be required on all irrigation systems, as appropriate for local climactic conditions.

Suggested revision: Sensors (e.g., rain, soil moisture, freeze, wind, etc.), either integral or auxiliary, that suspend or alter irrigation operation when adequate moisture is present or during unfavorable weather conditions shall be required on all irrigation systems, as deemed appropriate for local climactic conditions.
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Issue 3: Section 1, b, 3: Sprinklers shall have matched application rates for uniform coverage is not in line with industry terminology.

Suggested revision: Sprinklers shall have matched ~~application~~ precipitation rates for uniform coverage.

Issue 4: Section 1, b, 4: Head to head coverage shall be required when designing the sprinkler system should be revised.

Suggested revision: Sprinkler spacing and pattern shall be optimized for maximum distribution uniformity and shall be based upon nozzle performance at the site-specific operating pressure and flow.

Issue 5: Section 1, b, 9 and 10: See previous reference related to technology mandates. The ordinance should project outcome of limiting runoff and overspray without mandating specific technology.

Issue 6: Section 2, a, 8: This section needs to be removed or amended as referenced previously. Utility locations are not the responsibility of the landscape or irrigation contractor and this places liability on the project applicant for accuracy.

§492.12. Irrigation Scheduling

Suggestion: As an alternative to timing and calendar, applicants should be allowed to submit controller inputs, specific to applied technology and site characteristics, along with water window limitations programmed into such technology.

§492.14. Landscape Irrigation Audits and Audit Schedules

Suggestion: As an alternative, applicants should be allowed to submit proof of remaining within the previously determined MAWA for the site.

§492.16. Recycled Water

Comment: IA applauds the allowance for leaching as a salinity management strategy.

In closing, IA applauds California's efforts to promote water conservation in the landscape while recognizing the value a healthy landscape brings to California residents. Beyond the outward beauty of the landscape there is a multitude of beneficial processes taking place in the landscape. Cooling, remediation, stabilization and oxygen production are all serious benefits that can't be discounted, especially in highly urbanized areas with sprawling hard surfaces acting as heat sinks, roof and parking lot runoff making its way back as recharge and carbon dioxide being exhausted by many sources.

In Conclusion

Moving forward it is important to recognize some responsibilities pointed out earlier in this document:

1. Scientific field research is required to validate any modification of the ET adjustment factor to make sure citizens are capable of maintaining the agreed upon plant mix of 1/3 low water use, 1/3 medium water use and 1/3 high water use plants.

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The Irrigation Association appreciates DWR's efforts to incorporate stakeholder input throughout this process. Please do not hesitate to contact us if further assistance is needed with this process. Thank you for your consideration.

Sincerely,

Andrew K. Smith
External Affairs Director
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Irrigation Association External Affairs Director
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