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Subject: Comments on proposed Model Water Efficient Landscape Ordinance Update

The City of Escondido would like to provide comments on the Department of Water Resource's (Department's) proposed Model Water Efficient Landscape Ordinance update per the requirements set forth by AB 1881—Chapter 559, Statutes of 2006, which was approved by Governor Arnold Schwarzenegger on September 28, 2006.

The City of Escondido realizes that water conservation is an important element in the efficient use of limited water resources. Local landscape ordinances that address irrigation efficiency and landscape design are only one tool available to cities. After reading through the Department's draft Model Water Efficient Landscape Ordinance, the City has many concerns that the document's prescriptive criteria makes it a burdensome regulation and unfunded mandate to the point that the City will not be able to implement and enforce it.

The City of Escondido is a member of the San Diego County Water Authority's Model Ordinance Work Group, which consists of a diverse section of stakeholders including, but not limited to, landscape contractors, engineers, water agency representatives, landscape architects, and city staff. The group has met several times since the draft document was made available for public comment and reviewed the State's draft ordinance update in detail. The work group has prepared a letter and detailed comments on specific sections of the model ordinance. The City of Escondido concurs with and supports this group's comments, which are attached to this letter.

In addition to the detailed comments provided by the workgroup, the City would like to emphasize some major concerns about the document including:

- Determination of a local ordinance being at least as effective
- Applicable project size
- Costs involved with its implementation
- Audits for existing landscapes
- Unenforceable mandate
- Prescriptive criteria and complexity of the Documentation Package
- Penalties

Criteria for Determining a Local Ordinance is At Least as Effective as State's Model Ordinance

490.1

Under the Scope, the Department mandates that the City's landscape ordinance be "at least as effective in conserving water." However, the Department's ordinance focuses on the prescriptive elements of implementation and does not provide simple and objective criteria for determining an ordinance "at least as effective." Each municipality has various tools available, such as public education programs, ordinances addressing waste water and water conservation, and incentive programs, which in combination with water efficient landscape requirements could achieve comparable results.

490.1.3

Although the Document states that the ordinance shouldn't duplicate or conflict with a water efficiency program, there are many elements in the document that does not take into account water conservation programs and incentives currently in place as prescribed in the Memorandum of Understanding Regarding Urban Water Conservation in California of which the City of Escondido has been a signatory since 1991. As a signatory the City committed to implementing best management practices (BMPs) in regards to water conservation, including large landscape audits and incentives, and providing water budgets.

The draft model ordinance confuses the roles of water suppliers and local agencies in implementing this ordinance. Although the City is unique in that it provides water to most of its residents, there are three other water agencies that sell water to areas of Escondido. The City recommends that the elements in this ordinance be limited to the areas of legal authority within the scope of the local agency, and allow consideration of water utility conservation programs as one of the components in a comprehensive approach to achieving the State's goals and determining that a city's landscape ordinance is "at least as effective."

Applicable Project Size

490.3

The ordinance should establish a higher threshold of landscape size, not less than 5,000 square feet, and should not apply to existing homeowner provided landscaping for individual single-family residences.

Costs

Under the Disclosures Regarding the Proposed Action, the Department determined that there are no costs imposed on the local agency or on private persons. The City feels that there are elements in the ordinance that will financially impact agencies and individuals, including the costs associated with training staff, the staff time necessary to review the complex technical information submitted by applicants, the hiring of consultants, and the sheer number of audits due to the low thresholds of project applicability.

492.1

The landscape documentation packet is very prescriptive and technical. It needs to be reduced and streamlined. The City will either have to hire a consultant to review the technical requirements or send staff to training.

492.2

This section requires that the local agency conduct a final field inspection of the project (1.b) and requires the project applicant to have a licensed landscape architect or licensed landscape contractor conduct a final field observation (2.b). This seems not only redundant but puts a financial burden on both the agency and applicant.

492.14

There are some elements in this section that are costly to both the local agency and the individual. Section 3.c requires individuals with landscapes equal to or greater than one acre to implement the recommendations from the audit report and section 3.d submit an audit every 5 years to the local agency. Implementing recommendations can be costly and burdensome to the individual to the point that the implementations are not carried out. The local agency does not have the staff to track who is implementing the recommendations or seeing that an audit is being conducted every five years.

Section 4, which requires the cities to annually perform water budgets on all new construction and rehabilitated landscape projects with landscapes equal to or greater than 2500 square feet and annually conduct landscape audits on a minimum 20% of these landscapes installed after January 1, 2010, is costly and burdensome, and not feasible for a municipality. The City's zoning code allows forty percent (40%) lot coverage for structures. The rest is potential landscape. Under the specifications outlined in the Document, lots as small as 6,000 square feet would be subject to the ordinance. This means that ninety percent (90%) or more of the existing single-family residential lots in the city would fall under this section. Audits of these properties would require the city to use information it does not have regarding the size of each lot's landscape area and water use data for each customer. Determining this information is unfeasible for such a large number of sites.

Audits

493.1

Section 4 sets the threshold for existing landscapes at 2500 square feet. This entire section is burdensome, costly, and unfeasible for such a large number of sites. If the goal of the ordinance is to achieve water savings for existing landscapes, this can be achieved with section 493.2, Water Waste Prevention. The City is already incorporating water waste provisions in its proposed updated Water Conservation Ordinance which includes prohibiting watering between 7 a.m. and 4 p.m., eliminating runoff, and repairing leaking and broken valves and sprinkler heads. Penalties for not complying are built into the Water Drought Management/Conservation Ordinance.

Unenforceable Mandate

One of the problems of the Model Water Efficient Landscape Ordinance that was enacted in the early 1990s per AB 325 was that it was difficult to enforce. For a regulation to be enforceable, the requirements must be simple and easily understood and easily communicated. In addition violations must be readily identified by other members of the community. Cities do not have the resources to have a proactive enforcement of regulations to any degree. It is mainly complaint-driven. The enforcement that DWR proposed in the updated ordinance is a pro-active affirmative type of enforcement of highly technical standards that are difficult to understand.

Landscape Documentation Package

492.1

The scope of the required worksheets is highly technical and burdensome. The forms need to be easier to understand and streamlined. The implementation of this section is confusing. For example in 2.b.2 it states that prior to construction, the project applicant shall submit a copy of the approved landscape documentation package to the property owner or his/her designee. According to the definition set forth in the ordinance, a "project applicant" may be the property owner or his/her designee.

Penalties

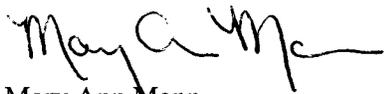
492.4

The penalties outlined in this section are either difficult to enforce or not under the purview of the cities. The ordinance is so prescriptive and difficult to understand that it would be unfeasible to issue letters or citations. Also since most code enforcement actions are complaint-driven; it would be difficult for the resident to know what part of the ordinance was in violation.

In regards to terminating water service, we note that Housing Codes require properties to have water, sewer and other services if they are to be safely occupied. Thus, terminating water service simply due to inefficient use of water in the landscape might create a circumstance where the property would be rendered uninhabitable by the requirements of Housing Codes. This will create additional and difficult legal and procedural hurdles for a local entity seeking to use this particular enforcement mechanism.

In summary, the ordinance should establish a higher threshold that triggers requirements for detailed landscape design and water budget submittals and reviews. Municipalities should be allowed to develop compliance methods which integrate with existing permitting processes, and emphasize the use of educational resources attuned to the needs and limitations of the average business owner, small developer and homeowner.

Sincerely,



Mary Ann Mann
Utilities Manager

Encl.

DETAILED COMMENTS TO THE DRAFT LANDSCAPE MODEL ORDINANCE

San Diego Region Conservation Action Committee

Section	Title	Comments
490	Purpose	<p>It is not clear if the legislative intent was to apply to all existing landscapes or just place ongoing requirements where a landscape permit has been issued.</p> <p>The proposed model ordinance expands the purpose of the ordinance to apply to both new and existing landscapes. This is a significant change from the existing model landscape ordinance which applied only to new landscapes. The scope proposed in the draft model ordinance represents a significant expansion of responsibility for local agencies which will pose a significant burden for applicants and local agencies.</p>
490.1	Scope	<p>DWR should define objective performance criteria for meeting the “at least as effective” standard for local ordinances with consideration of local water utility programs. While local agencies may comply with the regulation via a local ordinance, the Department has not provided an objective framework for determination of compliance with the “at least as effective” standard. Locally developed ordinances are a viable alternative approach, which must be addressed in DWR’s ongoing process. Although the statute states that “<i>Nothing in this ordinance shall be construed to require the local agency’s water efficient landscape ordinance to duplicate or conflict with a water efficiency program or measure implemented by a public water system</i>”, the draft ordinance compels duplication of water utility conservation programs. The scope of the ordinance clearly applies to all local agencies, including cities and counties and does not apply to water agencies. However, the ordinance lacks clarity in the role of water agencies and local agencies and includes prescriptive requirements that are unenforceable because they are not under the jurisdiction of the local agency.</p>
490.2	Intent	<p>1. The current draft is overly prescriptive in its enforcement provisions. DWR needs to provide a clear delineation of requirements on agencies that will develop a local ordinance. Procedures for compliance by applicants are best delegated to local agencies. The desire for “<i>consistent landscape ordinances with neighboring local and regional agencies</i>” is shared at the local level. The path to attaining such consistency is not for the State to unilaterally prescribe procedures for applicants in excessive detail. DWR’s focus should be on communicating simple and objective performance criteria for local agencies based on the mandatory elements of AB 1881. Many of DWR’s prescriptive requirements are perceived to be out of touch with the needs and limitations of local agencies, industry, and property owners. It’s improbable that the draft ordinance could be implemented successfully because it crosses over to address both requirements on agencies <u>and</u> on applicants. The State needs to emphasize in its ordinance items that can be controlled during the permit process (design), and delegate procedures for the compliance (enforcement) to local agencies.</p>
490.2	Intent (continued)	<p>2. The intent should recognize that water agencies provide direct economic incentives to customers for irrigation system and landscape improvements. The current stated intent of the ordinance only includes the coordination with the local retail agency to implement a tiered rate structure as an economic incentive for water use efficiency.</p>
490.3	Applicability	<p>1. The range of sites subject to the design criteria in the ordinance is too broad to be effectively implemented without a simplified approach for small sites. 2. The ordinance applies to new construction and rehabilitated landscapes for projects with a landscape area greater that 2,500 square feet requiring a permit, plan check or design review. It should be clarified that this provision will not trigger a new permit requirement where one does not already exist 3. The ordinance is also unclear in how it relates to the design review procedures for landscapes that are subject to review by the Design Review Board (DRB) at a homeowner’s association. 4. The proposed ordinance would apply ongoing audit requirements to existing landscapes with a landscape area greater that 2,500 square feet. This is a huge burden for local agencies which do not have landscape area information available for existing landscapes to determine which properties should be included under the ordinance.</p>

DETAILED COMMENTS TO THE DRAFT LANDSCAPE MODEL ORDINANCE

San Diego Region Conservation Action Committee

Section	Title	Comments
490.3	Applicability (continued)	DWR should raise the coverage area threshold from 2,500 to 5,000 sq. ft. for detailed design submittals, and delegate to local agencies the development of compliance protocols for applicants. The current draft would require local agencies to exercise the same level of control over individual homeowner projects that it does over master planned communities. This is unreasonable for local agencies and overly burdensome to the typical homeowner. Consistent with AB 1881, solutions for small-scale landscape projects (2,500 to 5,000 sq.ft.) should emphasize use of educational resources. The current draft's requirements are administratively infeasible for local agencies to implement based on the sheer volume of projected applicants. Moreover, the prescriptive nature of the draft ordinance would preclude the possibility of effectively employing educational resources and streamlined procedures as a means for achieving substantial compliance. For effective implementation, such matters must be delegated to local agencies.
491	Definitions	<p>Several definitions require further refinement. It's important that DWR's use of terms of art and other nomenclature be consistent with the established use in practice by industry.</p> <p>1. Landscape Area: The definition of landscaped area is ambiguous and will result in confusion on how to calculate the area subject to MAWA. By limiting the square footage of pervious non-irrigated planting areas, it is not clear if all areas that are not wetted areas should be excluded. Stakeholders suggest the definition is counterproductive to DWR's purpose, since it may lead designers to maximize the total irrigated area, in lieu of incorporating non-irrigated design elements. Conceivably, two otherwise identical sites could be subject to very different water budgets. The proposed definition may discourage the use of natural plants that do not require supplemental irrigation. It should be made clear that the calculated landscape area shall be used to determine both the the applicability of the site to the requirements of the ordinance and the MAWA .</p>
491	Definitions, cont.	<p>The following definition of Landscape areas should be used: <i>The entire parcel less the building footprint, driveways, non-irrigated portions of parking lots, hardscapes such as decks and patios, and other non-porous areas. Water features are included in the calculation of the landscaped area. Areas dedicated to edible plants such as orchards or vegetable gardens are not included .</i></p> <p>2. Check valve. Check valves can be located at various locations and are not necessarily on the sprinkler. Therefore the definition should be changed: "check valve" or "anti-drain valve" means a valve used to hold water in the system to prevent drainage from the sprinkler heads when the system is off.</p>
491	Definitions, cont.	<p>3. Recreational area: This should be further defined. Parks are often defined as "passive recreation or active recreation" While a passive area may not be a surface for high use recreation, they are intended to allow spontaneous play and informal activities (parties, carnivals, public events, etc) These areas will need to be turf and will most likely require the higher ET. Both passive and active recreation areas should be included in the definition.</p>
491	Definitions, cont.	<p>4. The following definitions should be added: contract documents, flow sensor, master control valve, sub-meter, operating pressure, control control system</p>
492.1	Compliance with landscape documentation package	<p>The required documentation needs to be reduced and streamlined. All that is needed is one worksheet demonstrating MAWA compliance, a landscape design plan, an irrigation design plan, a grading plan for reference, and a soil analysis report. 2. A copy of the Water Efficient Landscape Worksheet should be submitted to the local retail water purveyor by the local agency instead of the applicant to ensure that the retail water purveyor receives the final approved worksheet.</p>
492.2	Compliance with the Certificate of Completion	<p>1. Final sign-off of the project installation should be consistent with what is allowed by landscape architects and licensed contractors in the Business and Professions Code. See Chapter 3.5, commencing with Section 5615, of Division 3 for landscape architects. Section 7027.5 for landscape contractors. Auditors are not licensed professionals under the business and professions code and are not authorized with final sign off authority. 2. For a new irrigation system, where the installation has been approved by a licensed professional, an audit is not necessary. This will only increase costs to the applicant with no additional benefit. 3. The local agency should have the option of relying on the final sign-off of the project by a licensed landscape architect without an additional requirement to conduct a final agency inspection. 4. The certificate of completion section should separately address sign off procedures for homeowner designed and installed projects.</p>

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Section	Title	Comments
492.3	Waivers and Variances	This section does not provide specific criteria for a waiver or variance. It should state: <i>"The local agency may establish criteria to administratively waive or modify one or more requirements of the ordinance when unusual difficulties make their strict application impossible and upon determination that the waiver is consistent with the purpose and intent of the ordinance"</i>
492.4	Penalties	"Terminate water service" should be deleted as a penalty. Local agencies that do not supply water lack authority to terminate water service. In addition, there are public health concerns and equity issues associated with termination of water service where termination would not be merited based on landscape water use.
492.5	Landscape Documentation Package	1. The landscape documentation package is overly burdensome. All that is needed for professionally designed landscapes is one worksheet demonstrating MAWA compliance, a landscape design plan, an irrigation design plan, a grading plan for reference, and a soil analysis report. The model ordinance should include (or allow for) a simplified approach for single family homeowners. 2. The ordinance (Sections 492.8, 492.9 and 492.10) states that a licensed landscape contractor may sign and stamp the landscape design plan, irrigation design plan and grading plan. Licensed contractors do not have a professional stamp under their license and are limited in what they can approve.
492.6	Water Efficient Landscape Worksheet	Section (b)(1) states "In areas where precipitation amount is not significant, applicants can skip this section." However, it provides no guidance on where precipitation would be significant. San Diego receives approximately 9-10 inches per year of precipitation, generally in a short period of time. The effective precipitation calculation should not apply to the San Diego region because it is not significant.
492.7	Soil Management Plan	1. The ordinance requires a statement of recommendations by a qualified soil specialist, but fails to define what constitutes a qualified soil specialist. 2. The proposed approach of requiring field testing by a "soil specialist" is not consistent with industry practice. The ordinance should be revised to better reflect industry practice. Normally a soil specialist would analyse soil samples submitted to a laboratory by a designer and the designer would use the results to determine what soil amendments are needed for the proposed plants.
492.8	Landscape Design Plan	1. The design criteria calls for no sprinklers within 24 inches of hardscape. This requirement creates a hardship for recreational areas where movement from hardscape to turf is natural and allows for freedom of play and access. While subsurface drip for turf is possible the technology/maintenance requirements have not been proven and could be costly. This requirement should be removed for recreational areas. The requirements should also be removed for shrub areas that can be irrigated without overspray. 2. The design criteria should require consideration of plant selection, location and mature size when selecting irrigation methods to avoid blocking irrigation spray and reducing uniformity.
492.9	Irrigation Design Plan	1. 1(a)(5) The requirement for rain sensors is ambiguous as to when this would be required "as appropriate to climatic conditions." 2. 1(b)(6) The requirement for check valves on sprinkler heads should be limited to sloped areas that are subject to low head drainage. 2. 1(b)(10) Low volume spray irrigation should be allowed on slopes of 4:1 for the purposes of irrigating hydroseed mix and to assure established plantings. 3. 2 (e)(4) The ordinance requires the application of best management practices for installation of irrigation systems, but fails to define what would constitute a best management practice.
492.10	Grading Design Plan	The ordinance requires a grading design plan to be submitted with the landscape design package. It should be clarified that a copy of the project's grading plan prepared by a civil engineer will meet the requirements and that a grading design plan is not required for projects where a grading permit would not normally be required. The grading plans are used by the designer for reference purposes only.
492.11	Certificate of Completion	1. The number of site visits required by the Certificate of Completion is onerous (see comments on Section 492.2). This will result in increased fees and expenses for local agencies that conduct the reviews. These costs should be addressed in the Statement of Reasons for the ordinance. 2. The irrigation audit report is an unnecessary requirement for a new landscape where plans that have been signed off by a licensed landscape architect and the system was installed per the plans. Auditors are not licensed professionals. The costs of implementing this added requirement should be include in the Statement of Reasons for this regulation.

DETAILED COMMENTS TO THE DRAFT LANDSCAPE MODEL ORDINANCE

San Diego Region Conservation Action Committee

Section	Title	Comments
492.12	Irrigation Scheduling	The ordinance should recognize that irrigation schedules will change over time as plants, water pressure, and irrigation system components are changed and that the ultimate goal is to meet the MAWA. Because the regulation requires smart controllers, in lieu of conventional scheduling requirements, a full set of the data used for the initial programming should be documented.
492.13	Landscape and Irrigation Maintenance Schedule	The ordinance requires a "regular" maintenance schedule to be submitted with the certificate of completion. It should be clear that "regular" is determined on a case by case basis for each site. The following wording is recommended, <i>"A regular maintenance schedule, consistent with the specific site needs, shall be submitted with the Certificate of Completion."</i>
492.14	Landscape Irrigation Audits and Audit Schedules	1. All audits must be performed by a certified landscape irrigation auditor in accordance with the Irrigation Association Certified Landscape Irrigation Auditor Training Manual. Full irrigation audits can be expected to cost between approximately \$500 and \$1500 depending on the landscaped area. The Department in their Statement of Reasons failed to estimate the number of audits that would be required under the ordinance and the cost impact to local agencies and property owners for conducting, reviewing and tracking the audits. 2. For new construction, an audit upon completion of construction is not necessary where the plans were certified by a landscape architect or irrigation designer, where a complete irrigation schedule has been submitted and approved, and where the installation has been fully inspected. This is a redundant requirement and would be costly to implement. This requirement should be deleted from the ordinance.
492.14	Landscape Irrigation Audits and Audit Schedules, Cont.	4. A full audit requirement is expensive and onerous. The Statement of Reasons failed to consider less expensive alternatives that could be implemented including implementation of an aggressive water waste ordinance and homeowner education and technical assistance. 5. The ordinance includes a requirement to compare water use to the MAWA to the extent that customer water use data is available. This makes the requirements dependent on local water agencies. For lots less than one acre and more than 2,500 square feet, audits are required for 20% of the landscapes that are over the MAWA. 6. The audit requirement in Sections 492.14 and 493.1 are a significant mandate on local agencies to track and implement this program that is unprecedented. In addition, some local agencies may not be able to provide "for payment" services based on their city charter.
492.14	Landscape Irrigation Audits and Audit Schedules, Cont.	7. Actual landscape water use data is only available for sites with dedicated irrigation meters. These would include existing sites with dedicated meters and new sites over 5,000 square feet. Water use data for other sites includes other non irrigation uses. The audit requirement should be removed from the ordinance and should be replaced with strong water waste provisions. Audits should only be required for those sites where there has been a violation of a water waste ordinance.
492.16	Recycled Water	1. Use of recycled water on sites less than one acre may not be practical. The wording should be changed to say <i>"Irrigation systems shall make use of recycled water unless a written exemption has been granted by the local water agency."</i> 2. Consumers using recycled water should be exempt from the restrictive provisions of the model landscape ordinance. Recycled water is already subject to significant regulatory requirements by the Regional Water Quality Control Board and Department of Public Health and a MAWA requirement is not necessary where ample recycled water capacity exists. 3. The 2,000 mg/L TDS exception is irrelevant since irrigation with water at 2,000 TDS is not practical. Any adjustment for TDS should apply equally to all sources high in TDS.
492.18	Public Education	It is not clear in the ordinance if the public education requirement applies only to homeowners of new homes with over 2,500 square feet of landscape area or to all new homeowners. It should be revised to state <i>"A local agency shall provide information to all new owners of new, single family residential homes regarding the design, installation, management and maintenance of water efficient landscapes."</i> It should also include a provision allowing the local agency to require the developer to provide the mandatory educational materials to the homeowner.
493.1	Landscape Irrigation Audits (existing landscapes)	1. Please see comments on landscape irrigation audits for new and rehabilitated landscapes. 2. For existing landscapes there are inadequate bases to require a property owner to grant permission to to the local agency to enter their site for the purpose of conducting a landscape irrigation audit. Therefore, this is not a practical requirement to include in the ordinance and should be removed. The audit requirement should be replaced by more stringent water waste prohibition requirements.

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Section	Title	Comments
493.2	Water Waste Prohibition	The ordinance should include strong water waste prohibitions in lieu of the audit requirement: <i>Water waste resulting from inefficient landscape irrigation, such as runoff, low head drainage, overspray, over-irrigation above a maximum applied water allowance, etc. is prohibited. Conditions where water flows onto non-targeted areas, such as adjacent property, non-irrigated areas, hardscapes, roadways, or structures are also prohibited. Penalties for violations may include warning letters, citations, monetary penalties, fines. First time violators may receive an audit and technical assistance. Persistent violators shall be mandated to obtain an audit to assess irrigation efficiency and make recommendations for improvements.</i>
494	Effective Precipitation	Effective precipitation appears to be optional, but this is not clearly stated in the ordinance. Effective precipitation does not need to be considered for the San Diego region.
495	Appendix A, Reference Evapotranspiration Table	The data in the reference tables reportedly does not correspond to the data from the CIMIS system. These values are derived from CIMIS, Reference Evapotranspiration Zones Map 1999, UC Dept. of Ag. and Nat. Resources Bulliten 1997 and Determining Daily Reference Evapotranspiration, Coop. Extension of UC Division of Ag. Publication 1997. It should be made clear in the model ordinance that the table in Appendix A should be used for design purposes only. Actual CIMIS data should be used for irrigation purposes.
495.2	Appendix C, Certificate of Completion	Section B, the Landscape Architect of Record should make the field observations instead of the applicant. If the landscape architect could not make the observations because trenching was covered, they should make this statement and disclaimer as part of the inspection signoff. Landscape contractors should be required to sign a statement that they have installed the landscaping according to plans. A disclaimer should be included for local agency landscape architects stating that they are reviewing the project for compliance with the ordinance and are not liable for any errors in design.