

NEW MODEL WATER EFFICIENT LANDSCAPE ORDINANCE

Model Water Efficient Landscape Ordinance (MO) (First update since 1993)	AB 1881 directed DWR to: <ol style="list-style-type: none"> 1. Consider recommendations of the 2717 Landscape Task Force Report 2. Research and review the effectiveness local landscape ordinances 3. Gather and consider stakeholder input 4. Re-organize layout of the model ordinance to improve flow and readability
What is the purpose of the MO?	<ol style="list-style-type: none"> 1. Reduce water use to the lowest practical amount and to enforce an upper limit of use that shall not be exceeded 2. To establish a structure for designing, installing, maintaining and managing water efficient landscapes in new projects 3. To establish provisions for water management practices and water waste prevention for established landscapes 4. Promote the values and benefits of landscapes while recognizing the need to invest water, energy and other resources efficiently 5. Encourage neighboring local agencies to adopt consistent landscape ordinances to simplify Green Industry compliance with the new ordinance
When does the MO go into effect?	By January 1, 2010 cities and counties must: <ol style="list-style-type: none"> 1. Adopt the new MO or, 2. Adopt a different ordinance that is at least as effective in conserving water as the new MO 3. If a local agency does not take action, the new MO will go into effect as if it were adopted
What landscapes must comply with the MO?	<ol style="list-style-type: none"> 1. New and rehabilitated landscapes for public agency projects, private development, developer-installed single family and multi-family homes with a total landscape area over 2,500 s.f. 2. New single-family landscapes installed by homeowner or contractor hired by homeowner and multi-family projects with a landscape area over 5,000 s.f. <p><i>Note:</i> Special new and rehabilitated landscapes that have higher water requirements such as recreation areas, edible plants, cemeteries and landscapes watered with recycled water are allowed additional water but are still required to comply with the ordinance</p>
What landscapes are exempt from the MO?	<ol style="list-style-type: none"> 1. Registered local, state or federal historical sites 2. Ecological restoration and mined-land reclamation projects that do not require a permanent irrigation system 3. Botanical gardens and arboretums open to the public 4. Cemeteries are exempt but require hydrozone tables and must meet a water budget
Are existing landscapes required to comply with the MO?	<p>Yes, but only Sections 493, 493.1, and 493.2 apply to existing landscapes.</p> <p>These sections requires the local agency to administer audits for existing landscapes greater than 1 acre that provide recommendations to lower water use on these sites to a MAWA not to exceed 0.8 ETo</p>
What Projects will require Water Audits?	<p>Local agencies shall administer irrigation audits, irrigation surveys and irrigation water use analysis as necessary to maintain a water budget of:</p> <ol style="list-style-type: none"> 1. .7 ETo for projects installed after 01/01/10 except projects with recreational turf 2. .8 ETo for existing projects installed before 01/01/10, including single family homes, larger than one acre 3. 1.0 ETo for projects with recreational turf 4. The water budget is defined as the total annual applied water use and must be less than or equal to the MAWA
How will water waste be prohibited?	<ol style="list-style-type: none"> 1. Local agencies shall prevent water waste resulting from inefficient irrigation by prohibiting runoff, low head drainage and overspray 2. Penalties for violation of these prohibitions shall be established locally
What is the new ET Adjustment Factor (ETAF)?	<p>The new ETAF factor is 0.7 ETo. (The ETAF in the old ordinance was 0.8)</p> <p>The ETAF is applied to reference evapotranspiration to calculate the upper limit of water use allowed</p> <p>An ETAF of 0.7 was arrived at as follows: Plant factor = 0.5 (no change) Irrigation efficiency = 71% (formally 62.5%) which reflects improvements in irrigation equipment between 1992 and present $0.5 \div 71\% = 0.7$ ETAF (ET Adjustment Factor)</p> <p>This equation demonstrates that it is possible to install a landscape with an average plant factor of 0.5 (high enough to include some ornamental lawn). Recreational turf projects (park, golf course, playfield) are no longer exempt and must now be included in the MAWA. Recreational turf is designated as a special landscape area and allowed an ETAF of 1.0</p>
Are charter cities and counties required to implement the MO?	<p>The new MO requires all cities and counties, including charter cities and counties, to adopt and implement the MO. In the previous ordinance charter cities and counties were exempt</p>
Who is responsible for enforcing the MO?	<p>The local agency which may be a city or county (Not the local water agency) is responsible for enforcement of the MO including approval of permit, plan check, and processing the landscape document package. A local agency may establish and administer penalties to the project applicant for non-compliance with the MO. Reference Section 65596, Gov. Code</p>

What is the Landscape Document Package (LDP)	The MO centers around the project applicant obtaining approval of the LDP from the local agency prior to construction. The local agency shall provide the project applicant with the ordinance and procedures for permits, plan checks, or design reviews. The project applicant assembles the LDP from documents that may be prepared by a landscape architect, irrigation designer, contractor or soil laboratory. The local agency approves or denies the LDP and issues a permit, approved plan check or approved design review. The LDP includes the following six elements:
1. Project Information:	<i>Project Information shall include:</i> 1. <i>Project type (new, rehabilitated, public, private, cemetery, homeowner-installed)</i> 2. <i>Total landscape area</i> 3. <i>Water supply (potable, recycled, well, and name of water purveyor)</i> 4. <i>Project applicant and contact information</i> 5. <i>Include the applicant signed statement: " I agree to comply with the requirements of the MO and submit a complete LDP"</i>
2. Water Efficient Landscape Worksheet	<i>Water Efficient Landscape Worksheet shall include:</i> 1. Hydro-zone information table, see Appendix B, Section A 2. Water budget calculations including Maximum Applied Water Allowance (MAWA), see Appendix B, Section B1, use ETo values in Appendix A 3. Estimated Total Water Use (ETWU), see Appendix B, Section B2. Identify all Special Landscape Areas (SLA)
3. Soil Management Report	<i>Soil Management Report shall be submitted to local agency and include:</i> 1. <i>Soil sample collected after rough grading shall be submitted to a laboratory for analysis and recommendations. The report shall include soil texture, infiltration rate, pH, total soluble salts, sodium, percent organic matter and recommendations</i> 2. <i>The soil management report may be submitted with the Landscape Documentation Package or the Certificate of Completion depending on the magnitude of grading for the project.</i>
4. Landscape Design Plan	<i>Landscape Design Plan shall:</i> 1. <i>Group plants in hydrozones based on similar water needs, micro climates and tolerance of geologic and local conditions</i> 2. <i>Not specify turf on slopes greater than 25% where the toe of the slope is adjacent to an impermeable hardscape</i> 3. <i>Incorporate recommendations from the soil management report</i> 4. <i>Install 2" of mulch in non-turf planting areas except where creeping or rooting groundcovers are planted</i> 5. <i>Identify hardscape as pervious and non-pervious</i> 6. <i>Include the signed statement : "I have complied with the criteria of the ordinance and to applied them accordingly for the efficient use of water in the landscape design plan"</i> <i>Note: Common interest developments may not prohibit use of low-water use plants</i> <input type="checkbox"/>
5. Irrigation Design Plan	<i>Irrigation Design Plan shall:</i> 1. <i>Use a separate valves to irrigate each hydrozone</i> 2. <i>Include controllers that utilize evapotranspiration or soil moisture sensor data for irrigation scheduling</i> 3. <i>Include a rain shut off or equivalent</i> 4. <i>Use relevant information for soil management report such as soil type and infiltration rate</i> 5. <i>Ensure the pressure at each emission device is at the manufacturer's recommended optimal pressure</i> 6. <i>Be designed to prevent runoff, low head drainage and overspray</i> 7. <i>Only use sub-surface or low volume irrigation in planting areas less than 8 feet</i> 8. <i>Overhead irrigation not permitted within 24 inches of any non-permeable surface</i> 9. <i>Include the signed statement: "I have complied with the criteria of the ordinance and applied them accordingly for the efficient use of water in the irrigation design plan"</i>
6. Grading Design Plan	<i>Grading Design Plan:</i> 1. <i>shall show height of graded slopes, drainage patterns, pad elevations, storm water retention improvements</i> 2. <i>Shall include the signed statement: "I have compiled with the criteria of the ordinance and to applied them accordingly for the efficient use of water in the grading design plan"</i> <i>Note: Grading plan should minimize runoff as well as increase on-site retention and infiltration</i>
What is a Certificate of Completion (COC):	The COC is a set of documents certified by one or more professionals that the project was installed according to the LDP. Local agency will approve or deny the COC and issue a Certificate of Occupancy or equivalent. After COC is approved by local agency, applicant shall submit copy of approved COC to the water purveyor and property owner. COC shall include the following: 1. Project sheet information 2. Certification that project has been installed in conformance with the approved LDP 3. Irrigation scheduling parameters used to set the controller(s) 4. An audit report based on a certified irrigation auditor's site evaluation including a system tune-up, test for distribution uniformity, verification of minimal overspray or runoff and preparation of irrigation schedules 5. Landscape and irrigation maintenance schedule
Recycled Water	All projects shall use recycled water for irrigation and water features unless a written exemption is provided by the local water agency stating that recycled water is not available
Stormwater Management Practices	Storm water management practices will minimize runoff and increase on-site infiltration
Public Education	Local agency shall provide information to owners of new single-family homes regarding the design, installation, management and maintenance of water efficient landscapes All model homes shall distribute information and use signs to communicate the principles of the water efficient landscapes describes in the MO