City of


## BUILDING INDUSTRY BULLETIN

DATE: December 1, 2015
TO: ARCHITECTS, ENGINEERS, GENERAL CONTRACTORS, and ASSOCIATIONS
SUBJECT: MODEL WATER EFFICIENCY LANDSCAPE ORDINANCE (MWELO)

## BACKGROUND:

This Building Industry Bulletin is provided to clarify Fresno City's and County's policy with respect to enforcement of the Model Water Efficiency Landscape Ordinance (MWELO) which has an effective date of December 1, 2015. Governor Brown's Drought Executive Order of April 1, 2015 (EO B-29-15) directed the California Department of Water Resources (DWR) to update the State's MWELO which was approved on July 15, 2015.

## POLICY:

New development projects that include landscape areas of 500 square feet or more are subject to the Ordinance. This applies to residential, commercial, industrial and institutional projects that require a permit, plan check or land use application. All permit applications, plan check, and land use applications submittals on or after December 1, 2015 will be subject to these requirements if landscaping is proposed.

Attached is a handout that explains the MWELO Ordinance in more detail as well as link to the DWR website. In addition, a simplified path to comply with MWELO known as Appendix D is also attached for your use which requires the property owner to acknowledge and sign if landscaping is proposed as a part of the permit application and prior to permit issuance.

## STANDARD PLANS:

All lot specific plans where landscaping is proposed or is a part of the tract improvements as a condition of final, will require to comply with MWELO.

## LANDSCAPE WATER-EFFICIENCY (MWELO) APPENDIX -D CHECKLIST

## Applicant

Name: $\qquad$ Phone: $\qquad$
Address: $\qquad$
Email: $\qquad$

## Project

Site Address: $\qquad$

## Project Type (new dwelling, commercial, or rehab):

This project does not include landscaping but I am aware that prior to landscaping being installed, it shall comply with the MWELO requirements per 23 CCR, Division 2, Chapter 2.7 which will require a permit and inspections from the City of Fresno Building and Safety Services Division. (If you check this box, skip to page 2 and sign and date form.)
$\square$ This project does incorporate landscaping. (Complete pages $1 \& 2$ along with plans):

Total Landscape Area (sq. ft.): $\qquad$
Turf Area: $\qquad$
Non-Turf Plan Area: $\qquad$
Special Landscape Area: $\qquad$
Water Type (potable, recycled, well): $\qquad$
Name of water purveyor (If not served by City of Fresno): $\qquad$

| Landscape <br> Parameter | Design Measures | Project <br> Compliance <br> (state Yes or <br> No) |
| :--- | :--- | :--- |
| Plant Water Use | At least 50\% of the plants and at least 50\% of the trees <br> shall either be native or low water use. |  |
| Turf | Total turf area shall not exceed 25\% of the landscape area. <br> No turf allowed in commercial projects. |  |
|  | Turf (if utilized) is limited to slopes not exceeding 25\%. |  |
|  | Plants with similar water needs shall be grouped within hydrozones. <br> Irrigation for each hydrozone shall be controlled by a separate valve. |  |
| Irrigation System | System shall be designed and maintained to minimize water waste <br> (e.g. runoff, overspray, etc.). Low volume irrigation shall be utilized <br> in non-turf areas. Overhead (spray) irrigation shall only occur in <br> areas over 10 ft. wide. |  |
| Compost | Incorporate compost at a rate of at least four (4) cubic yards per <br> $1,000 ~ s q . ~ f t . ~ t o ~ a ~ d e p t h ~ o f ~ 6 ~ i n c h e s ~ i n t o ~ l a n d s c a p e ~ a r e a ~$ |  |
| (unless contra-indicated by a soil test). |  |  |$\quad$| Mulch | A minimum 3-inch layer of mulch should be applied on all exposed <br> soil surfaces of planting areas, except in areas of turf or creeping or <br> rooting groundcovers. |
| :--- | :--- |

## Signature

I agree to comply with the requirements of the prescriptive compliance option of the MWELO.

Signature of property owner or authorized representative

## Note:

A landscape and irrigation design plan (and supporting documents) shall be required if:
(a) landscape area exceeds 500 sq. ft.; (b) a majority (>50\%) of plants are medium or high water use; or (c) turf area exceeds $25 \%$ of total landscape area or $1,250 \mathrm{sq}$. ft .

All areas to be disturbed during construction shall be presumed to be landscaped area, except where structures or hardscape will be installed.

## Landscape Area:

The total horizontal surface area dedicated to plant installation (including adjacent ground that provides for the plant's establishment), plus the wet surface area of any water features. The landscape area does not include footprints of buildings or structures, sidewalks, driveways, parking lots, decks, patios, gravel or stone walks, or other pervious or non-pervious hardscapes outside of planted areas (planted areas containing gravel or inorganic mulch are included). Landscape area does not include undisturbed areas with established non-irrigated vegetation.

Governor Brown's Drought Executive Order of April 1, 2015 (EO B-29-15) directed DWR to update the State's Model Water Efficient Landscape Ordinance (Ordinance) through expedited regulation. The California Water Commission approved the revised Ordinance on July 15, 2015.

## Which Projects are Subject to the Ordinance?

New development projects that include landscape areas of 500 sq . ft. or more are subject to the Ordinance. This applies to residential, commercial, industrial and institutional projects that require a permit, plan check or design review. The previous landscape size threshold for new development projects ranged from 2500 sq . ft. to 5000 sq . ft.

The size threshold for existing landscapes that are being rehabilitated has not changed, remaining at 2500 sq . ft. Only rehabilitated landscapes that are associated with a building or landscape permit, plan check, or design review are subject to the Ordinance.

## When Does the Ordinance Go into Effect?

Local agencies (cities and counties) have until December 1, 2015 to adopt the Ordinance or adopt their own ordinance, which must be at least as effective in conserving water as the State's Ordinance. Local agencies working together to develop a regional ordinance have until February 1, 2016 to adopt, but they are still subject to the December 2015 reporting requirements (see Reporting Requirements below). If a local agency does not take action on a water efficient landscape ordinance by the specified dates, the State's Ordinance becomes effective by default.

## What are the Significant Revisions?

## More Efficient Irrigation Systems

- Dedicated landscape water meters or submeters are required for residential landscapes over $5000 \mathrm{sq} . \mathrm{ft}$. and non-residential landscapes over 1000 sq. ft.
- Irrigation systems are required to have pressure regulators and master shut-off valves.
- All irrigation emission devices must meet the national standard stated in the Ordinance to ensure that only high efficiency sprinklers are installed.
- Flow sensors that detect and report high flow conditions due to broken pipes and/or popped sprinkler heads are required for landscape areas greater than 5000 sq . ft.
- The minimum width of areas that can be overhead irrigated was changed from 8 feet to 10 feet; areas less than 10 feet wide must be irrigated with subsurface drip or other technology that produces no over spray or runoff.


## Incentives for Graywater Usage

Landscapes under 2500 sq. ft. that are irrigated entirely with graywater or captured rainwater are subject only to the irrigation system requirements of Appendix D, Prescriptive Compliance Option.

## Improvements in Onsite Stormwater Capture

Friable soil is required in planted areas to maximize water retention and infiltration. Four yards of compost per 1000 sq. ft . of area must be incorporated. Other recommended measures for increasing onsite stormwater retention are listed in the Ordinance.

## Limiting the Portion of Landscapes that can be Planted with High Water Use Plants

The maximum amount of water that can be applied to a landscape is reduced from $70 \%$ of the reference evapotranspiration (ETo) to $55 \%$ for residential landscape projects, and to $45 \%$ of ETo for non-residential projects. This water allowance reduces the landscape area that can be planted with high water use plants such as cool season turf. For residential projects, the coverage of high water use plants is reduced from $33 \%$ to $25 \%$ of the landscaped area. In nonresidential landscapes, planting with high water use plants is not feasible. However, unchanged in the Ordinance is the extra water allowance made for non-residential areas when used for specific functional areas, such as recreation and edible gardens. Extra water allowance is also made for landscapes irrigated with recycled water, as was the case in the previous ordinance.

The irrigation efficiency of devices used to irrigate landscapes is one of the factors that goes into determining the maximum amount of water allowed. Rather than having one default irrigation efficiency for the entire site, the revised Ordinance allows the irrigation efficiency to be entered for each area of the landscape. The site-wide irrigation efficiency of the previous ordinance was 0.71 ; the revised Ordinance defines the irrigation efficiency of drip as 0.81 and that of overhead spray as 0.75 .
Median strips cannot be landscaped with high water use plants, precluding the use of cool season turf. Also because of the requirement to irrigate areas less than ten feet wide with subsurface irrigation or other means that produces no runoff or overspray, the use of cool season turf in parkways is limited.

## Reporting Requirements

All local agencies will report on the implementation and enforcement of their ordinances to DWR by December 31, 2015. Local agencies developing a regional ordinance will report on their adopted regional ordinance by March 1, 2016. Reporting for all agencies will be due by January $31^{\text {st }}$ of each year thereafter.

## Prescriptive Checklist Option for Landscapes under 2500 sq. ft.

Projects with landscape areas under 2500 sq. feet may comply with the performance requirements of the Ordinance or conform to the prescriptive measures contained in Appendix D. Many will find that the Appendix D checklist simplifies compliance.

## How Much Water Will Be Saved?

DWR estimates that a typical California landscape will use 12,000 gallons less a year, or 20 percent less than allowed by the 2009 ordinance. Commercial landscapes will cut water use by $35 \%$. Over the next three years, it is predicted that 472,000 new homes associated with 20,000 acres of landscape will be built in California. With proper implementation and enforcement by local agencies, the Ordinance will lead to substantial water savings.

## How Can I Get Additional Assistance?

In Fall 2015, DWR will release a guidance document to accompany the Ordinance. Training workshops for local agency staff and landscape professionals will be held throughout the State.

## Contact Information:

Julie Saare-Edmonds, DWR Senior Environmental Scientist at Julie.Saare-Edmonds@water.ca.gov or (916) 651-9676

