

**City of Lake Forest
Water Efficient Landscape Regulations
Lake Forest Municipal Code Section 9.46.110
Ordinance 283- Adopted on 1/19/2016**

9.146.110 Water efficient landscape regulations.

All references to this section shall include Sections 9.146.110.1 through 9.146.110.9, as appropriate. The following special regulations and minimum requirements shall apply to landscape projects.

9.146.110.1 Definitions.

Except where the context of such words or phrases clearly indicates a different meaning or construction, the following words, terms, and phrases, when used in Section 9.146.110, shall have the meanings ascribed to them in this section.

“Aggregate landscape areas.” The areas undergoing development as one project or for production home neighborhoods or other situations where multiple parcels are undergoing development as one project, but will eventually be individually owned.

“Applied water.” The portion of water supplied by the irrigation system to the landscape.

“Budget-based tiered-rate structure.” The tiered or block rates for irrigation accounts charged by the retail water agency in which the block definition for each customer is derived from lot size or irrigated area and the evapotranspiration requirements of landscaping.

“Community Aesthetics Evaluation” – While not subject to a permit, plan check or design review, the Community Aesthetics Evaluation may be performed to ensure the aesthetic standards of the community and irrigation efficiency intent is maintained.

“Ecological restoration project.” A project where the site is intentionally altered to establish a defined, indigenous, historic ecosystem.

“Estimated applied water use.” The average annual total amount of water estimated to be necessary to keep plants in a healthy state, calculated as provided in the Guidelines. It is based on the reference evapotranspiration rate,

the size of the landscaped area, plant water use factors, and the relative irrigation efficiency of the irrigation system.

“ET adjustment factor” or “ETAF.” The factor that is equal to the plant factor divided by the irrigation efficiency factor for a landscape project, as described in the Guidelines. The ETAF is calculated in the context of local reference evapotranspiration, using site-specific plant factors and irrigation efficiency factors that influence the amount of water that needs to be applied to the specific landscaped area. ETAF means a factor of 0.55 for residential areas and 0.45 for non-residential areas, that, when applied to reference evapotranspiration, adjusts for plant factors and irrigation efficiency, two major influences upon the amount of water that needs to be applied to the landscape. The ETAF for new and existing (non-rehabilitated) special landscape areas shall not exceed 1.0. The ETAF for existing non-rehabilitated landscapes is 0.8.

“Guidelines.” The guidelines for implementation of the City of Lake Forest Water Efficient Landscape Regulations, which describe procedures, calculations, and requirements for landscape projects, as they may be amended from time to time, subject pursuant to Section 9.146.110.

“Hardscape.” Any durable material or feature (pervious and impervious) installed in or around a landscaped area, such as pavements or walls. Pools and other water features are considered part of the landscaped area and not considered hardscape for purposes of Section 9.146.110.

“Irrigation efficiency.” The measurement of the amount of water beneficially used divided by the amount of water applied. Irrigation efficiency is derived from measurements and estimates of irrigation system characteristics and management practices. The irrigation efficiency for purposes of Section 9.146.110 are 0.75 for overhead spray devices and 0.81 for drip systems.

“Landscaped area.” All the planting areas, turf areas, and water features in a landscape design plan subject to the maximum applied water allowance and estimated applied water use calculations. The landscaped area does not include footprints of buildings or structures, sidewalks, driveways, parking lots, decks, patios, gravel or stone walks, other pervious or impervious hardscape, and other non-irrigated areas designated for non-development (e.g., open spaces and existing native vegetation).

“Landscape contractor” means a person licensed by the State of California to construct, maintain, repair, install, or subcontract the development of landscape systems.

“Landscape documentation package.” The package of documents that a project applicant is required to submit to the City for review and approval of landscape design projects, as described in the Guidelines.

“Landscape project.” The total area of landscape in a project, as provided in the definition of “landscaped area,” meeting the requirements under Section 9.146.110.3(A).

“Local agency.” A city or county, including a charter city or charter county, that is authorized by the City to implement, administer, and/or enforce any of the provisions of Section 9.146.110 on behalf of the City. The local agency may be responsible for the enforcement or delegation of enforcement of Section 9.146.110, including, but not limited to, design review, plan check, issuance of permits, and inspection of a landscape project.

“Local water purveyor.” Any entity, including a public agency, City, County, or private water company that provides retail water service.

“Maximum applied water allowance” or “MAWA.” The upper limit of annual applied water for the established landscaped area as specified in Section 2.2 of the Guidelines. It is based upon the area’s reference evapotranspiration, the ET adjustment factor, and the size of the landscaped area. The estimated applied water use shall not exceed the maximum applied water allowance.

“Mined-land reclamation projects.” Any surface mining operation with a reclamation plan approved in accordance with the Surface Mining and Reclamation Act of 1975.

“Model ordinance.” The Model Water Efficient Landscape Ordinance adopted by the California Department of Water Resources in accordance with California Government Code Section 65591 et seq.

“New construction.” A new building with landscaping or a landscape-dominated project, such as a park, playground, playing field, or greenbelt or other new landscape, which may or may not have an associated building or structure.

“Non-pervious” means any surface or natural material that does not allow for the passage of water through the material and into the underlying soil.

“Pervious.” Any surface or material that allows the passage of water through the material and into the underlying soil.

“Permit.” An authorizing document issued by local agencies for new construction or rehabilitated landscape.

“Plant factor” or “plant water use factor.” A factor, when multiplied by ET_o , that estimates the amount of water needed by plants. For purposes of Section 9.146.110, the plant factor range for very low water use plants is 0 to .1; the plant factor range for low water use plants is 0.2 to 0.3; the plant factor range for moderate water use plants is 0.4 to 0.6; and the plant factor range for high water use plants is 0.7 to 1.0. Plant factors cited in Section 9.146.110 are derived from the publication “Water Use Classification of Landscape Species.” Plant factors may also be obtained from horticultural researchers from academic institutions or professional associations as approved by the California Department of Water Resources (DWR).

“Recycled water” or “reclaimed water.” Treated or recycled waste water of a quality suitable for non-potable uses such as landscape irrigation and water features, and which is not intended for human consumption.

“Reference evapotranspiration” or “ ET_o ” A standard measurement of environmental parameters which affect the water use of plants. ET_o is given expressed in inches per day, month, or year as represented in Appendix D of the Guidelines, and is an estimate of the evapotranspiration of a large field of four (4) to seven (7) inch tall, cool-season grass that is well watered. Reference evapotranspiration is used as the basis of determining the maximum applied water allowances.

“Rehabilitation project.” Any re-landscaping project that meets the applicability criteria of Section 9.164.110.3, where the modified landscape area is equal to or greater than 2,500 square feet.

“Special landscaped area.” An area of landscape dedicated solely to edible plants such as orchards and vegetable gardens, areas irrigated with recycled water, water features using recycled water, and recreational areas.

“Turf.” A groundcover surface of mowed grass. Annual bluegrass, Kentucky bluegrass, Perennial ryegrass, Red fescue, and Tall fescue are cool-season grasses. Bermuda grass, Kikuyu grass, Seashore Paspalum, St. Augustine grass, Zoysia grass, and Buffalo grass are warm-season grasses.

“Valve.” A device used to control the flow of water in an irrigation system.

“Water feature.” A design element where open water performs an aesthetic or recreational function. Water features include ponds, lakes, waterfalls,

fountains, artificial streams, spas, and swimming pools (where water is artificially supplied). The surface area of water features is included in the high water use hydrozone of the landscaped area. Constructed wetlands used for on-site wastewater treatment or storm-water best management practices that are not irrigated and used solely for water treatment or storm water retention are not water features and, therefore, are not subject to the water budget calculation.

9.146.110.2 Purpose and intent.

- A. The purpose of Section 9.146.110 is to promote the conservation and efficient use of water and to prevent the waste of this valuable resource.
- B. The intent of Section 9.146.110 is to establish alternative regulations that are at least as effective as the model ordinance established by the State Department of Water Resources.

9.146.110.3 Applicability of water efficient landscape regulations.

- A. Beginning February 1, 2016, and consistent with Executive Order No. B-29-15, Section 9.146.110 shall apply to the following landscape projects:
 - 1. New development projects with an aggregate landscape area equal to or greater than 500 square feet, requiring a building or landscape permit, plan check or design review;
 - 2. Rehabilitated landscape projects with an aggregate landscaped area equal to or greater than 2,500 square feet, requiring a building or landscape permit, plan check or design review;
 - 3. Any project with an aggregate landscape area of 2,500 square feet or less may comply with the performance requirements of this Section or conform to the prescriptive measures contained in Appendix A of the Guidelines;
 - 4. Projects using treated or untreated graywater or rainwater capture on site, any lot or parcels within the project that has less than 2,500 square feet of landscape area and meets the lot or parcel's landscape water requirement (Estimated Total Water Use) entirely with the treated or untreated graywater or though stored rainwater capture on site is subject only to Appendix A of the Guidelines.
 - 5. Cemeteries, Sections 2.9, 2.10, and Appendix C of the *Guidelines* shall apply to new landscape installations and Sections 2.9, 2.10, and 3 of the *Guidelines* shall apply to landscape rehabilitation projects.
- B. Section 9.146.110.5 shall apply to:

1. All *landscaped areas*, whether installed prior to or after January 1, 2010; and
2. All *landscaped areas* installed after February 1, 2016 to which Section 9.146.110.3(A) is applicable.

C. Section 9.146.110 does not apply to:

1. Registered local, State, or Federal historical sites;
2. Ecological restoration projects that do not require a permanent irrigation system;
3. Mined-land reclamation projects that do not require a permanent irrigation system; or
4. Plant collections, as part of botanical gardens and arboretums open to the public;

9.146.110.4 Implementation procedures.

- A. Prior to installation, a landscape documentation package shall be submitted to the City for review and approval of all landscape projects subject to the provisions of Section 9.146.110. Any landscape documentation package submitted to the City shall comply with the provisions of the Guidelines.
- B. The landscape documentation package shall include a certification by a landscape professional appropriately licensed in the State of California stating that the landscape design and water use calculations have been prepared by or under the supervision of such licensed landscape professional and are certified to be in compliance with the provisions of Section 9.146.110 and the Guidelines.
 1. Landscape and irrigation plans shall be submitted to the City for review and approval with appropriate water use calculations. Water use calculations shall be consistent with calculations contained in the *Guidelines* and shall be provided to the *local water purveyor*, as appropriate, under procedures determined by the City.
 2. Verification of compliance of the landscape installation with the approved plans shall be obtained through a certificate of completion as provided in the Guidelines, and where applicable, in conjunction with a certificate of occupancy or permit final process, as provided in the Guidelines.

9.146.110.5 Landscape water use standards.

- A. For applicable landscape installation or rehabilitated landscape projects subject to Section 9.146.110.3(A), the estimated applied water use allowed

for the landscaped area shall not exceed the MAWA calculated using the appropriate ETAF, as defined in Section 9.146.110.1; or the design of the landscaped area shall otherwise be shown to be equivalently water-efficient in a manner acceptable to the City; as provided in the Guidelines.

- B. Irrigation of all landscaped areas shall be conducted in a manner conforming to the rules, and requirements, and shall be subject to the penalties and incentives for water conservation and water waste prevention as determined and implemented by the applicable local water purveyors or as mutually agreed by the local water purveyors and the City.

9.146.110.6 Delegation

- A. The City may delegate to, or enter into a contract with, a local agency to implement and administer and/or enforce any of the provisions of Section 9.146.110 on behalf of the City.

9.146.110.7 Guidelines for implementation of the water efficient landscape regulations.

The City shall adopt guidelines for the implementation of Section 9.146.110. Such guidelines may be amended from time to time by resolution of the City Council. Notwithstanding the forgoing, the City Manager may establish any forms or other related documents to administer compliance with the guidelines as he or she deems appropriate and in furtherance of Section 9.146.110.

9.146.110.8 Recovery of costs.

Without limiting the City's rights to take any enforcement action permitted under law, any violation of Section 9.146.110 shall be subject to Administrative Citation in accordance with Chapter 1.16 of this Code.

In addition to the costs which may be recovered pursuant to the Municipal Code, and in order to recover the costs of the water efficient landscape regulatory program set forth in Section 9.146.110, the City Council may, from time to time, fix and impose by resolution fees and charges. The fees and charges may include, but are not limited to, fees and charges for:

1. Any visits of an enforcement officer, or other city staff or authorized representative of the City for time incurred for inspections of property;
2. Any monitoring, inspection, and surveillance procedures pertaining to enforcement of Section 9.146.110;

3. Enforcing compliance with any term or provision of Section 9.146.110;
4. Any other necessary and appropriate fees and charges to recover the cost of providing the City's water efficient landscape regulatory program.

9.146.110.9 Conflicting provisions.

If provisions of Section 9.146.110 are in conflict with each other, other provisions of the Municipal Code, the City's general plan, any City adopted specific plan or master plan, any resolution or ordinance of the City, or any State law or regulation, the more restrictive provisions shall apply."