

## ORDINANCE NO. 1179

### AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF BREA, AMENDING CHAPTER 14.00 OF THE BREA MUNICIPAL CODE TO UPDATE WATER EFFICIENT LANDSCAPE REQUIREMENTS

THE CITY COUNCIL OF THE CITY OF BREA DOES ORDAIN AS  
FOLLOWS:

**Section 1.** Chapter 14.00 of the Brea Municipal code is hereby amended in its entirety, to read as follows:

**14.00.010 Title**

This Chapter shall be known as the Water Efficient Landscape Ordinance of the City of Brea.

**14.00.020 Purpose and Findings**

**A.** The State Legislature has found that:

- (1) The waters of the State are of limited supply and are subject to ever increasing demands;
- (2) The continuation of California's economic prosperity is dependent on the availability of adequate supplies of water for future uses;
- (3) It is the policy of the State to promote the conservation and efficient use of water and to prevent the waste of this valuable resource;
- (4) Landscapes are essential to the quality of life in California by providing areas for active and passive recreation and as an enhancement to the environment by cleaning air and water, preventing erosion, offering fire protection, and replacing ecosystems lost to development;
- (5) Landscape design, installation, maintenance, and management can and should be water efficient; and
- (6) Article X, Section 2 of the California Constitution specifies that the right to use water is limited to the amount reasonably required for the beneficial use to be served, and the right does not and shall not extend to waste or unreasonable method of use of water.

**B.** The City of Brea hereby finds that:

- (1) Orange County has an established, large *reclaimed water* infrastructure system;
- (2) Allocation-based and tiered water rate structures allow public agencies to document water use in landscapes;
- (3) Incentive-based water use efficiency programs have been actively implemented within Orange County since before 1991;
- (4) Current local design practices in new landscapes strive to achieve the intent of the State Model Water Efficient Landscape Ordinance water use goals;
- (5) All water services within the City are metered and billed based on volume of use;
- (6) Orange County is a leader in researching and promoting the use of *smart irrigation controllers* with more than 12,900 installations as of June 2009 and promotion of sustainable landscape transformation with more than 30 million square feet of turf removal;
- (7) All new *irrigation controllers* sold after 2012 within Orange County will be *smart irrigation controllers*;
- (8) Landscape plan submittal and review has been a long standing practice in Brea; and
- (9) The average rainfall in Orange County is approximately 12 inches per year.
- (10) The *local water purveyor* is implementing *budget-based tiered-rate* billing and/or enforcement of water waste prohibitions for all existing metered *landscaped areas* throughout its service area, which includes the City of Brea in its entirety.

**C.** Consistent with these findings, the purpose of the City's Water Efficient Landscape Ordinance is to establish an alternative model acceptable under Governor Brown's April 1, 2015 Drought Executive Order (B-19-25) as being at least as effective as the State Model Water Efficient Landscape Ordinance in the context of conditions in the City in order to:

- (1) Promote the benefits of consistent landscape ordinances with neighboring local and regional agencies;
- (2) Promote the values and benefits of landscapes while recognizing the need to invest water and other resources as efficiently as possible;
- (3) Establish a structure for planning, designing, installing, maintaining and managing water efficient landscapes in *new construction* and rehabilitated projects;
- (4) Establish provisions for water management practices and water waste prevention for existing landscapes;
- (5) Use water efficiently without waste by setting a *Maximum Applied Water Allowance* as an upper limit for water use and reduce water use to the lowest practicable amount; and
- (6) Encourage the use of economic incentives that promote the efficient use of water, such as implementing a *budget-based tiered-rate structure, providing rebate incentives and offering educational programs.*

**14.00.030      Applicability**

**A.** This Chapter shall apply to the following *landscape projects*:

- (1) New landscape 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) New or rehabilitated landscape projects with an aggregate landscape area of 2,500 square feet or less may comply with the performance requirements of this ordinance or conform to the prescriptive measures contained in Appendix A of the *Guidelines*;
- (4) New or rehabilitated 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) At 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.** This Chapter 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 arboreta open to the public.

#### **14.00.040 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 this Chapter. 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 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 the licensed professional and are certified to be in compliance with the provisions of this Chapter 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 *Certification of Completion* in conjunction with a Certificate of Use and Occupancy or Permit Final process, as provided in the *Guidelines*.

#### **14.00.050 Landscape Water Use Standards**

- A. For applicable landscape installation or rehabilitation projects subject to Section 14.00.030(A), the *Estimated Applied Water Use* allowed for the *landscaped area* shall not exceed the *MAWA* calculated using an *ET adjustment factor* of 0.7, except for *special landscaped areas* where the *MAWA* is calculated using an *ET adjustment factor* of 1.0; 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 area*, notwithstanding the date of installation, shall be conducted in a manner conforming to the rules and requirements, and shall be subject to penalties and incentives for water conservation and water waste prevention as determined and implemented by the *local water purveyor* or as mutually agreed by *local water purveyor* and the City.

#### **14.00.060 Delegation.**

The City may delegate to, or enter into a contract with, a *local agency* to implement, administer, and/or enforce any of the provisions of this Chapter on behalf of the City.

#### **14.00.070 Definitions.**

The following definitions are applicable to this [chapter/division/title]:

*“Aggregate landscape areas”* pertains to 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”* means the portion of water supplied by the irrigation system to the landscape.

*“Budget-based tiered-rate structure”* means 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”* means a project where the site is intentionally altered to establish a defined, indigenous, historic ecosystem.

*“Estimated Applied Water Use”* means 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 landscape area, *plant water use factors*, and the relative *irrigation efficiency* of the irrigation system.

*“ET adjustment factor”* or *“ETAF”* 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*.

A combined plant mix with a site-wide average *plant factor* of 0.5 (indicating a moderate water need) and average *irrigation efficiency* of 0.71 produces an *ET adjustment factor* of  $(0.7) = (0.5/0.71)$ , which is the standard of water use efficiency generally required by this Chapter and the *Guidelines*, except that the *ETAF* for a *special landscape area* shall not exceed 1.0.

*“Guidelines”* refers to the Guidelines for Implementation of the Water Efficient Landscape Ordinance, as adopted by the City, which describes procedures, calculations, and requirements for *landscape projects* subject to this Water Efficient Landscape Ordinance.

*“Hardscapes”* means any durable material or feature (*pervious* and *non-pervious*) 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 *hardscapes* for purposes of this Chapter.

*“Irrigation efficiency”* means 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 this Chapter are 0.75 for overhead spray devices and 0.81 for drip systems.

*“Landscaped area”* means 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 *non-pervious hardscapes*, 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*” means the documents required to be provided to the City for review and approval of landscape design projects, as described in the *Guidelines*.

“*Landscape project*” means total area of landscape in a project, as provided in the definition of “*landscaped area*,” meeting the requirements under Section 14.00.030 of this Chapter.

“*Local agency*” means a city or county, including a charter city or charter county, that is authorized to implement, administer, and/or enforce any of the provisions of the Water Efficient Landscape Ordinance. The *local agency* may be responsible for the enforcement or delegation of enforcement of this Chapter including, but not limited to, design review, plan check, issuance of *permits*, and inspection of a *landscape project*.

“*Local water purveyor*” means any entity, including a public agency, city, county, or private water company that provides retail water service.

“*Maximum Applied Water Allowance*” or “*MAWA*” means 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*.  $MAWA = (ETo) (0.62) [(ETAF \times LA) + ((1-ETAF) \times SLA)]$

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

“*New construction*” means, for the purposes of this Chapter, a new building with a landscape or other new landscape such as a park, playground, or greenbelt without an associated building.

“*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*” means any surface or material that allows the passage of water through the material and into the underlying soil.

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

“*Plant factor*” or “*plant water use factor*” is a factor, when multiplied by *ETo*, that estimates the amount of water needed by plants. For purposes of this Chapter, the *plant factor* range for very low water use plants is 0 to 0.1; the *plant factor* range for low water use plants is 0 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 this Chapter 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*” means treated or recycled waste water of a quality suitable for non-potable uses such as landscape irrigation and *water features*. This water is not intended for human consumption.

“*Reference evapotranspiration*” or “*ETo*” means a standard measurement of environmental parameters which affect the water use of plants. *ETo* is given expressed in inches per day, month, or year as represented in Appendix A of the *Guidelines*, and is an estimate of the evapotranspiration of a large field of four-to seven-inch tall, cool-season grass that is well watered. *Reference evapotranspiration* is used as the basis of determining the *Maximum Applied Water Allowances*.

“*Rehabilitated landscape*” means any re-landscaping project that meets the applicability criteria of Section 1.1(a), where the modified landscape area is greater than 2,500 square feet.

“*Smart irrigation controller*” means an automatic irrigation controllers utilizing either evapotranspiration or soil moisture sensor data with non-volatile memory shall be required for irrigation scheduling in all irrigation systems, recommending U.S. EPA WaterSense labeled devices as applicable.

“*Special landscape area*” means an area of the 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 dedicated to active play such as parks, sports fields, golf courses, and where *turf* provides a playing surface.

“*Turf*” means a ground cover surface of mowed grass. Annual bluegrass, Kentucky bluegrass, Perennial ryegrass, Red fescue, and Tall fescue are cool-season grasses. Bermudagrass, Kikuyugrass, Seashore Paspalum, St. Augustinegrass, Zoysiagrass, and Buffalo grass are warm-season grasses.

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

“*Water feature*” means 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, habitat protection 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.



**Section 2.** The City Council hereby adopts by reference and incorporates into this Ordinance the “Guidelines for Implementation of the Water Efficient Landscape Ordinance,” as revised from time to time.

**Section 3. Exemption from California Environmental Quality Act.**

The City Council hereby determines that this Ordinance is exempt from review under the California Environmental Quality Act (“CEQA”) (California Public Resources Code Section 21000 *et seq.*), because pursuant to State CEQA Regulation 15307 (14 Cal. Code Regs., § 15307), this Ordinance is covered by the CEQA Categorical Exemption for actions taken to assure the maintenance, restoration, enhancement, or protection of a natural resource where the regulatory process involves procedures for protection of the environment. The adoption of this Ordinance will result in the enhancement and protection of water resources in the City, and will not result in cumulative adverse environment impacts. It is therefore exempt from the provisions of CEQA. The City Council hereby directs the City Manager or designee to prepare and file a Notice of Exemption as soon as possible following adoption of this Ordinance.

**Section 4. Severability.**

The provisions of this Ordinance are severable, and the invalidity of any section, paragraph, phrase, clause, or part of this Ordinance shall not affect the validity or effectiveness of the remainder of this Ordinance.

**Section 5. Effective Date.**

This Ordinance shall become effective thirty (30) days after its adoption in accordance with California law.

**Section 6. City Clerk Certification.**

The City Clerk shall certify to the passage of this Ordinance and cause the same or a summary thereof to be published within fifteen (15) days after adoption in a newspaper of general circulation, printed and published in Brea Star Progress Brea, California.

**APPROVED, AND ADOPTED**, this                      day of                      , 2015.

\_\_\_\_\_  
Mayor

ATTEST: \_\_\_\_\_  
City Clerk

STATE OF CALIFORNIA )  
COUNTY OF ORANGE ) ss.  
CITY OF BREA )

I, Lillian Harris-Neal, City Clerk to the City Council of the City of Brea, do hereby certify that the foregoing Ordinance was introduced at a regular meeting of the City Council of the City of Brea held on the                      day of November, 2015, and was finally passed at a regular meeting of the City Council of the City of Brea, held on the                      day of                      , 2015, by the following vote:

AYES:                      COUNCILMEMBER:

NOES:                      COUNCILMEMBER:

ABSENT:                      COUNCILMEMBER:

ABSTAIN:                      COUNCILMEMBER:

DATED: \_\_\_\_\_

\_\_\_\_\_  
City Clerk