

ORDINANCE NO. 1465

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF TUSTIN, CALIFORNIA, AMENDING CHAPTER 7 OF ARTICLE 9 OF THE TUSTIN CITY CODE REGARDING WATER EFFICIENT LANDSCAPES

The City Council of the City of Tustin does hereby ordain as follows:

Section 1. The City Council finds and determines as follows:

- A. That the proposed amendment to the Tustin City Code is necessary to comply with the requirements of Governor Brown's April 1, 2015, Drought Executive Order and the State Model Water Efficient Landscape Ordinance adopted by the State in 2015.
- B. That the Governor's Drought Executive Order required the California Department of Water Resources (DWR) to update the State Model Water Efficient Landscape Ordinance and requires cities and counties to update local landscape ordinances so that they are "at least as effective as" DWR's updated Model Ordinance by February 1, 2016, if adopting a model regional ordinance, or by December 1, 2015, if not adopting a model regional ordinance.
- C. That the Municipal Water District of Orange County and the Association of California Cities – Orange County formed a stakeholder working group that developed a locally crafted updated Orange County Model Efficient Landscape Ordinance (a model regional ordinance) that will meet the "at least as effective as" requirement of state law, minimize the complexity and cost of compliance, and provide consistency between local jurisdictions.
- D. That proposed Ordinance No. 1465 is consistent with the updated Orange County Model Water Efficient Landscape Ordinance developed under the guidance of the Association of California Cities – Orange County and the Municipal Water District of Orange County.
- E. That 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.
- F. That Orange County has an established, large reclaimed water infrastructure system.
 - G. That allocation-based and tiered water rate structures allow public agencies to document water use in landscapes.
 - H. That incentive-based water use efficiency programs have been actively implemented within Orange County since before 1991.
 - I. That current local design practices in new landscapes strive to achieve the intent of the State Model Water Efficient Landscape Ordinance water use goals.
 - J. That all water services within Tustin are metered and billed based on volume of use.
 - K. That Orange County is a leader in researching and promoting the use of smart irrigation controllers and the promotion of sustainable landscape transformation with more than thirty (30) million square feet of turf removal.
 - L. That all new irrigation controllers sold after 2012 within Orange County have been smart irrigation controllers.
 - M. That landscape plan submittal and review has been a long standing practice in Tustin.
 - N. That the average rainfall in Orange County is approximately twelve (12) inches per year.

- O. That the local water purveyors serving the City of Tustin are implementing tiered-rate billing, budget-based tiered-rate billing and/or enforcement of water waste prohibitions for all existing metered landscaped areas throughout their service areas, which include the City of Tustin in its entirety.
- P. That the purpose of the proposed Water Efficient Landscape Ordinance is to establish an alternative model acceptable under Governor Brown's April 1, 2015, Drought Executive Order (B-29-15) 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, and 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 practical 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.
- Q. That proposed Ordinance No. 1465 is exempt from environmental 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.

R. That the proposed code amendment is consistent with the Tustin General Plan in that it complies with the following goal and policy:

Goal 4: Protect water quality and conserve water supply.

Policy 5.3: Conserve imported water by requiring water conservation techniques, water conserving appliances, and drought-resistant landscaping.

Section 2. Chapter 7 of Article 9 of the Tustin City Code is hereby repealed in its entirety and amended to read as follows:

CHAPTER 7

WATER EFFICIENT LANDSCAPES

9701 - PURPOSE

9702 - APPLICABILITY

9703 - IMPLEMENTATION PROCEDURES

9704 - LANDSCAPE WATER USE STANDARDS

9705 - DELEGATION

9706 - DEFINITIONS

9701 - PURPOSE

The purpose and intent of this Chapter is to provide for water efficient landscapes in compliance with State law.

9702 - APPLICABILITY

- a. Beginning January 15, 2016, and consistent with Executive Order No. B-29-15, this Chapter shall apply to the following landscape projects:
 1. New construction landscape projects with an aggregate landscaped area equal to or greater than 500 square feet, which require 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, which require a building or landscape permit, plan check, or design review.
 3. New or rehabilitated landscape projects with an aggregate landscaped area of 2,500 square feet or less may comply with the performance requirements of this Chapter or conform to the prescriptive measures contained in Appendix A of the Guidelines.

4. For new or rehabilitated projects using treated or untreated graywater or rainwater capture on site, any lot or parcel within a project that has less than 2,500 square feet of landscaped area and meets the lot or parcel's landscape water requirement (Estimated Total Water Use) entirely with the treated or untreated graywater or through stored rainwater capture on site is subject only to Appendix A of the Guidelines.
- b. Section 9704b of the Landscape Water Use Standards of this Chapter shall apply to:
 1. All landscaped areas, whether installed prior to or after January 1, 2010; and
 2. All landscaped areas installed after January 15, 2016 to which Section 9702a is applicable.
 - c. 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. Existing plant collections, as part of botanical gardens and arboretums open to the public.

9703 – IMPLEMENTATION PROCEDURES

- a. Prior to installation, a Landscape Documentation Package shall be submitted to the City's Community Development Department 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 landscape architect 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 landscape architect 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.
 2. 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.

3. 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.

9704 – LANDSCAPE WATER USE STANDARDS

- a. For applicable landscape installation or rehabilitation projects subject to Section 9702a of this Chapter, the Estimated Applied Water Use allowed for the landscaped area shall not exceed the MAWA calculated using an evapotranspiration adjustment factor (ETAF) of 0.7, except for special landscaped areas where the maximum applied water allowance (MAWA) is calculated using an ETAF 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 areas 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 local agency.

9705 - 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.

9706 - DEFINITIONS

The following terms as used in this Chapter shall have the respective meanings as set forth except when the context clearly indicates otherwise.

“Aggregate landscaped 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” means a process that is performed to ensure the aesthetic standards of the community and irrigation efficiency intent is maintained when a permit, plan check, or design review is not required.

“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 Chapter.

“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 9702 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 this Chapter. 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.
$$MAWA = (ET_o)(0.62)[(ETAF \times LA) + ((1 - ETAF) \times SLA)]$$

"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. The applicable threshold is 500 square feet for new landscapes which require a building or landscape permit, plan check, or design review.

"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 the City for new construction or rehabilitated landscape.

"Plant factor" or "plant water use factor" is a factor, when multiplied by ET_o , 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 "ET_o" means 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 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 9702a, where the modified landscape area is equal to or greater than 2,500 square feet.

"Smart irrigation controller" means an automatic irrigation controller utilizing either evapotranspiration or soil moisture sensor data with non-volatile memory that 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

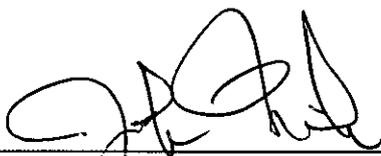
retention are not water features and, therefore, are not subject to the water budget calculation.

Section 3. The Guidelines for Implementation of the City of Tustin Water Efficient Landscape Ordinance is hereby incorporated by reference.

Section 4. Ordinance No. 1376 is hereby repealed in its entirety.

Section 5. If any section, subsection, sentence, clause, phrase or portion of this ordinance is for any reason held out to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance. The City Council of the City of Tustin hereby declares that it would have adopted this ordinance and each section, subsection, clause, phrase or portion thereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, phrases, or portions be declared invalid or unconstitutional.

PASSED AND ADOPTED, at a regular meeting of the City Council for the City of Tustin on this 15th day of December, 2015.

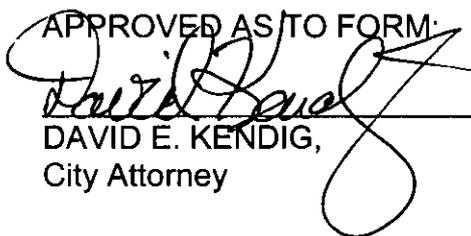


JOHN NIELSEN,
Mayor

ATTEST:



ERICA N. RABE,
City Clerk

APPROVED AS TO FORM:


DAVID E. KENDIG,
City Attorney

ORDINANCE CERTIFICATION

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF TUSTIN)

ORDINANCE NO. 1465

I, Erica N. Rabe, City Clerk and ex-officio Clerk of the City Council of the City of Tustin, California, do hereby certify that the whole number of the members of the City Council of the City of Tustin is five; that the above and foregoing Ordinance No. 1465 was duly passed and adopted at a regular meeting of the Tustin City Council, held on the 15th day of December 2015, by the following vote:

COUNCILPERSONS AYES:	<u>Bernstein, Gomez, Murray, Puckett</u>	(4)
COUNCILPERSONS NOES:	<u>Nielsen</u>	(1)
COUNCILPERSONS ABSTAINED:	<u>None</u>	(0)
COUNCILPERSONS ABSENT:	<u>None</u>	(0)



ERICA N. RABE,
City Clerk