

ORDINANCE NO. 2942

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF WHITTIER, CALIFORNIA, ADDING CHAPTER 13.43 TO TITLE 13 OF THE MUNICIPAL CODE ESTABLISHING REQUIREMENTS FOR WATER EFFICIENT LANDSCAPING

WHEREAS, the waters of the State are of limited supply and are subject to ever increasing demands;

WHEREAS, the continuation of California's economic prosperity is dependent on the availability of adequate supplies of water for future uses;

WHEREAS, 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;

WHEREAS, 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;

WHEREAS, landscape design, installation, maintenance, and management can and should be water efficient;

WHEREAS, 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

WHEREAS, all water services within the City are metered; and,

WHEREAS, the average rainfall in the City of Whittier is approximately 14.7 inches per year.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF WHITTIER, CALIFORNIA, DOES ORDAIN AS FOLLOWS:

SECTION 1. Chapter 13.43 is hereby added to Title 13 of the Whittier Municipal Code, to read:

Chapter 13.43  
WATER EFFICIENT LANDSCAPING

Section 13.43.010 Purpose

The purpose of this Ordinance is to establish an alternative model acceptable under AB 1881 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 values and benefits of landscapes while recognizing the need to invest water and other resources as efficiently as possible;
2. Establish a structure for planning, designing, installing, and maintaining and managing water efficient landscapes in new construction and rehabilitated projects;
3. Establish provisions for water management practices and water waste prevention for existing landscapes;
4. Use water efficiently without waste by setting a Maximum Applied Water Allowance (MAWA) as an upper limit for water use and reduce water use to the lowest practical amount; and
5. Encourage the use of economic incentives that promote the efficient use of water, such as implementing a budget-based tiered-rate structure.

[Note: Authority cited: Section 65593, Government Code. Reference: Sections 65591, 65593, 65596, Government Code.]

#### Section 13.43.020 Applicability

A. Beginning January 1, 2010, all planting, irrigation, and landscape-related improvements required by this Water Efficient Landscape Ordinance shall apply to the following landscape projects:

1. New landscape installations or landscape rehabilitation projects by public agencies or private non-residential developers, except for cemeteries, with a landscaped area, including pools or other water features but excluding hardscape, equal to or greater than 2,500 square feet, and which are otherwise subject to a discretionary approval of a landscape plan, or which otherwise require a ministerial permit for a landscape or water feature;
2. New landscape installations or landscape rehabilitation projects by developers or property managers of single-family and multi-family residential projects or complexes with a landscaped area, including pools or other water features but excluding hardscape, equal to or greater than 2,500 square feet, and which are otherwise subject to a discretionary approval of a landscape plan, or which otherwise require a ministerial permit for a landscape or water feature;

3. New landscape installation projects by individual homeowners on single-family or multi-family residential lots with a total project landscaped area, including pools or other water features but excluding hardscape, equal to or greater than 5,000 square feet, and which are otherwise subject to a discretionary approval of a landscape plan, or which otherwise require a ministerial permit for a landscape or water feature;

#### Section 13.42.030

B. Landscape Water Use Standards of this Water Efficient Landscaping Ordinance shall apply to:

1. All landscaped areas, whether installed prior to or after January 1, 2010; and
2. All landscaped areas installed after January 1, 2010 to which Section 1.2(a) is applicable.

C. This Water Efficient Landscaping Ordinance 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.

[Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.]

#### Section 13.43.040 Documentation

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 Water Efficient Landscaping Ordinance. Any Landscape Documentation Package submitted to the City shall comply with the provisions of the City of Whittier's Water Efficient Landscape Manual.

B. The Landscape Documentation Package shall include a certification by a professional appropriately certified 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 Water Efficient Landscaping Ordinance and the City of Whittier's Water Efficient Landscape Manual.

C. Landscape and irrigation plans shall be submitted to the City for review and approval with appropriate water use calculations.

D. 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 Final Permit process, as provided in the City of Whittier's Water Efficient Landscape Manual.

[Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.]

#### Section 13.43.050 Landscape Water Use Standards

A. For applicable landscape installation or rehabilitation projects subject to Section 1.2(a) of this Water Efficient Landscape Ordinance, 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 City of Whittier's Water Efficient Landscape Manual.

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.

#### Section 13.43.060 Delegation

The City may delegate to, or into a contract with, a local agency to implement, administer, and/or enforce any of the provisions of the Water Efficient Landscape Ordinance on behalf of the City.

#### Section 13.43.070 Definitions

Unless the context specifically indicates otherwise, the meaning of terms used in this Chapter shall be as defined in this section

- A. Applied Water - the portion of water supplied by the irrigation system to the landscape.
- B. Budget-based tiered-rate structure - 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.
- C. Ecological restoration project - a project where the site is intentionally altered to establish a defined, indigenous, historic ecosystem.
- D. 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 City of Whittier's Water Efficient Landscape Manual. 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.
- E. 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 City of Whittier's Water Efficient Landscape Manual. 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 Water Efficient Landscape Ordinance and the City of Whittier's Water Efficient Landscape Manual, except that the ETAF for a special landscape area shall not exceed 1.0.

- F. City of Whittier's Water Efficient Landscape Manual - refers to the City of Whittier's Water Efficient Landscape Manual for Implementation of the Water Efficient Landscape Ordinance, as approved by the by the City Manager, which describes procedures, calculations, and requirements for landscape projects subject to this Water Efficient Landscape Ordinance.
- G. Hardscapes - any horizontal surface constructed of durable material or feature (non-pervious) installed in or around a landscaped area, such as asphalt or concrete pavements. Pools and other water features are considered part of the landscaped area and not considered hardscapes for purposes of this Water Efficient Landscape Ordinance.

- H. Homeowner installed landscape - any landscaping either installed by a private individual for a single family residence or installed by a licensed contractor hired by a homeowner. A homeowner, for purposes of this ordinance, is a person who occupies the dwelling he or she owns. This definition excludes speculative homes, which are not owner-occupied dwellings and which are subject under this ordinance to the requirements applicable to developer-installed residential landscape projects.
- I. 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 minimum average irrigation efficiency for purposes of this Water Efficient Landscape Ordinance is 0.71. Greater irrigation efficiency can be expected from well designed and maintained systems.
- J. 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 non-pervious hardscapes, and other non-irrigated areas designated for non-development (e.g., open spaces and existing native vegetation).
- K. Landscape contractor - a person licensed by the State of California to construct, maintain, repair, install, or subcontract the development of landscape systems.
- L. Landscape Documentation Package - the documents required to be provided to the City for review and approval of landscape design projects, as described in the City of Whittier's Water Efficient Landscape Manual.
- M. Landscape project - total area of landscape in a project, as provided in the definition of "landscaped area," meeting the requirements under Section 1.1 of this Water Efficient Landscape Ordinance.
- N. 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 the Water Efficient Landscape Ordinance on behalf of the City. The local agency may be responsible for the enforcement or delegation of enforcement of this Water Efficient Landscape Ordinance including, but not limited to, design review, plan check, issuance of permits, and inspection of a landscape project.

- O. Local water purveyor - any entity, including a public agency, city, county, or private water company that provides retail water service.
- P. 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 City of Whittier's Water Efficient Landscape Manual. 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.
- Q. Mined-land reclamation projects - any surface mining operation with a reclamation plan approved in accordance with the Surface Mining and Reclamation Act of 1975.
- R. New construction - for the purposes of this Water Efficient Landscaping Ordinance, a new building with a landscape or other new landscape such as a park, playground, or greenbelt without an associated building.
- S. Non-pervious - any surface or natural material that does not allow for the passage of water through the material and into the underlying soil.
- T. Pervious - any surface or material that allows the passage of water through the material and into the underlying soil.
- U. Permit - an authorizing document issued by local agencies for new construction or rehabilitated landscape.
- V. Plant factor or plant water use factor - a factor, when multiplied by ETo, that estimates the amount of water needed by plants. For purposes of this Water Efficient Landscape Ordinance, 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 Water Efficient Landscape Ordinance are derived from the Department of Water Resources 2000 publication "Water Use Classification of Landscape Species."
- W. Reference evapotranspiration or ETo - 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 City of Whittier's Water Efficient Landscape Manual, 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.

- X. Rehabilitated landscape - any re-landscaping project that meets the applicability criteria of Section 1.2(a), where the modified landscape area is greater than 2,500 square feet, is 50% of the total landscape area, and the modifications are planned to occur within one year.
- Y. Special landscape area - 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 areas dedicated to active play such as parks, sports fields, golf courses, and where turf provides a playing surface.
- Z. Turf - a ground cover 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.
- AA. Valve means a device used to control the flow of water in an irrigation system.
- AB. 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.

[Note: Authority Cited: Section 65595, Government Code. Reference: Sections 65592, 65596, Government Code.]

SECTION 2. Any provision of the Whittier Municipal Code or appendices thereto inconsistent with the provisions of the Ordinance, to the extent of such inconsistencies and no further, are repealed or modified to that extent necessary to affect the provisions of this Ordinance.

SECTION 3. If any section, subsection, sentence, clause, phrase, or portion of this Ordinance is for any reason held 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 Whittier hereby declares that it would have adopted this Ordinance and each section, subsection, sentence, 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.

SECTION 4. The Mayor shall sign and the City Clerk shall attest to the passage of this Ordinance. The City Clerk shall cause the same to be published once in the official newspaper within 15 days after its adoption. This Ordinance shall become effective 30 days from its adoption.

APPROVED AND ADOPTED this 8<sup>th</sup> day of December 2009.

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BOB HENDERSON, Mayor

ATTEST:

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KATHRYN A. MARSHALL  
City Clerk-Treasurer

CITY OF WHITTIER            )  
  ) SS  
STATE OF CALIFORNIA        )

I, Kathryn A. Marshall, City Clerk-Treasurer in and for the City of Whittier, California, hereby certify that the foregoing ordinance was duly introduced at a regular meeting of the City Council of the City of Whittier on the 10<sup>th</sup> day of November 2009, and adopted at a regular meeting of the City Council of the City of Whittier on the 8<sup>th</sup> day of December 2009 by the following roll call vote:

AYES:           O. Newcomer           J. G. Nordbak           R. L. Henderson

NOES:           None

ABSENT:       J. A. Vinatieri           C. Warner

WITNESS my hand and the official seal of the City of Whittier, California, this  
\_\_\_\_\_ day of \_\_\_\_\_ 2009.

\_\_\_\_\_  
KATHRYN A. MARSHALL  
City Clerk-Treasurer

Published as required by law: December 22, 2009