



# City of Diamond Bar

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[www.CityofDiamondBar.com](http://www.CityofDiamondBar.com)

January 5, 2010

Mr. Simon Eching  
California Department of Water Resources  
Water Use and Efficiency Branch  
P.O. Box 942836  
Sacramento, CA 94236-0001

SUBJECT: Water Conservation Landscaping Ordinance

Dear Mr. Eching:

This letter serves as confirmation that the Diamond Bar City Council adopted Water Conservation Landscaping Ordinance No. 2(2009) at its meeting on December 1, 2009. The Ordinance took effect December 31, 2009, and is enclosed for the Department of Water Resources records.

The Diamond Bar City Council declares that the ordinance is at least as effective as the statewide model ordinance and submits the following findings:

- The ordinance is applicable to all new or altered development subject to discretionary review by the City;
- Landscaping shall be designed and irrigated so not to exceed 70% of the local evapotranspiration rate (ETo) established by the State for the City of Glendora and surrounding areas of Los Angeles County;
- Landscape areas for commercial and industrial projects must use 100% water wise plants without turf, with only minor exceptions;
- Landscape areas for residential, mixed use, and institutional type projects shall be designed with less than 40% turf and non-water wise plant materials;
- Automatic irrigation systems are required and shall be designed to avoid overspray and runoff with optimum distribution uniformity and setbacks from hardscape, and shall employ a weather-based irrigation controller with a rain shut off sensor and check valves at the end of each line to hold water in the system, preventing unwanted drainage from sprinkler heads;

**Carol Herrera**  
*Mayor*

**Steve Tye**  
*Mayor Pro Tem*

**Ling-Ling Chang**  
*Council Member*

**Ron Everett**  
*Council Member*

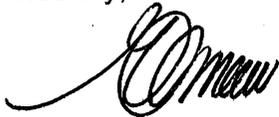
**Jack Tanaka**  
*Council Member*

Mr. Simon Eching  
California Department of Water Resources  
Water Use and Efficiency Branch  
January 5, 2010  
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- Exceptions to the ordinance standards are allowed only upon a finding that alternative design will promote equivalent or greater water conservation;
- Installation and compliance verifications are required of the landscape designer;
- The maximum annual applied water allowance calculation matches the California Department of Water Resources formula in its Model Water Efficient Landscape Ordinance; and
- The identification of water wise plants matches that used by the California Department of Water Resources in its Model Water Efficient Landscape Ordinance; namely, the "Water Use Classification of Landscape Species" prepared by the University of California Cooperative Extension.

Should your office have any questions, I can be reached at (909) 839-7030 or via email at [greg.gubman@ci.diamond-bar.ca.us](mailto:greg.gubman@ci.diamond-bar.ca.us).

Sincerely,



Greg Gubman, AICP  
Community Development Director

cc: James DeStefano, City Manager  
Bob Rose, Community Services Director  
Michael Jenkins, City Attorney

Enclosure

**ORDINANCE NO. 02(2009)**

**AN ORDINANCE OF THE CITY OF DIAMOND BAR  
AMENDING TITLE 8, BY ADDING CHAPTER 8.14  
WATER CONSERVATION LANDSCAPING  
TO THE DIAMOND BAR MUNICIPAL CODE**

**THE CITY COUNCIL OF THE CITY OF DIAMOND BAR, CALIFORNIA,  
DOES ORDAIN AS FOLLOWS:**

**SECTION 1:** ORDINANCE. Title 8, Chapter 8.14 of the Diamond Bar Municipal Code, commencing with Section 8.14.010 is hereby added to read as follows:

**“Chapter 8.14**

**WATER CONSERVATION LANDSCAPING**

**Sections:**

- 8.14.010 Purpose.**
- 8.14.020 Applicability.**
- 8.14.030 Definitions.**
- 8.14.040 Compliance Requirements.**
- 8.14.050 Exceptions.**
- 8.14.060 Submittals.**
- 8.14.070 Determination of Conforming Installation.**
- 8.14.080 Compliance Verification.**
- 8.14.090 Landscape and Irrigation Maintenance Schedule.**
- 8.14.100 Existing Landscapes.**

**8.14.010 Purpose.**

It is the policy of the City of Diamond Bar to promote water conservation. The Landscape Water Conservation Standards detailed in this Chapter are intended to promote water conservation while allowing the maximum possible flexibility in designing healthy, attractive, and cost-effective water efficient landscapes.

This Chapter is to be used in conjunction with the water conservation requirements of the Municipal Code, commencing with Section 22.26.010. Where conflicts in language may exist between this Chapter and Chapter 22.26, the more restrictive water conserving language shall prevail.

This Chapter is adopted in accordance with AB 1881 (Laird, 2006), which mandates all local agencies to adopt the model ordinance water efficient landscape ordinance prepared by the California Department of Water Resources, or to adopt their own ordinance that is at least as effective in conserving water as the model ordinance, not later than January 2010.

#### **8.14.020                    Applicability.**

A.     This Chapter applies to all new development projects which are subject to discretionary review by the City and propose new or altered landscape area of 2,500 square feet or more. For homeowner-provided or homeowner-hired landscaping in single-family and multi-family residential projects, this Chapter applies to all such projects which are subject to discretionary review by the City and propose new or altered landscape area of 5,000 square feet or more.

B.     This Chapter applies to all existing landscapes installed before January 1, 2010 that are over one contiguous acre in size. Existing landscapes regulated by this Chapter must comply only with the provisions specified in Section 8.14.100, and are otherwise exempt from this Chapter.

C.     Cemeteries are exempt from compliance with all provisions of this Chapter, except Section 8.14.040.D.

#### **8.14.030                    Definitions.**

A.     Check Valve: means a valve located under a sprinkler head, or other location in the irrigation system, to hold water in the system to prevent drainage from sprinkler heads when the sprinkler is off.

B.     ET: Evapotranspiration, which is the approximate summation of water losses through evaporation from soil and transpiration from the plants during a specified period of time.

C.     ETo: Reference Evapotranspiration, which is the approximation of water loss expressed in inches per year from a field of 4-to-7-inch-tall cool season grass that is not water stressed.

D.     ET Adjustment Factor: A factor used to set an efficiency goal, that when applied to ETo adjusts for plant factor and irrigation efficiency, two of the major influences upon the amount of water that needs to be applied to a landscape.

E.     Landscape Area: All areas where new or altered landscaping is proposed as a part of a new development proposal.

F. Landscape Plan: Design plans with a planting plan, irrigation plan, and plans with supporting detail sheets to include notes and/or specifications.

G. New Development: Means a new building on a vacant site, an addition to an existing building on a site, a new building on a developed site, or a change in land use type any of which requires a discretionary permit from the City.

H. Plant Factor: A factor that when multiplied by the ETo, estimates the amount of water used by a given plant species.

I. Precipitation Rate: Means the rate of application of water measured in inches per hour.

J. Special Landscape Area (SLA): an area of the landscape dedicated solely to edible plants, 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.

K. Turf: A groundcover surface of mowed grass with an irrigation water need of greater than 30% of the ETo.

L. Water Wise Plants: Those plants that are evaluated as needing "moderate" (40-60% of ETo), "low" (10-30% of ETo) and "very low" (< 10% of ETo) amounts of water as defined and listed by Water Use Classifications of Landscape Species (WUCOLS) available at:

Department of Water Resources  
Bulletins and Reports  
P.O. Box 942836  
Sacramento, California 94236-0001

Other sources of water wise plant classifications may be used if approved by the City's Community Development Director.

M. Water Budget Calculation: The Maximum annual Applied Water Allowance shall be calculated using this formula:

$$\text{MAWA} = (\text{ETo}) (0.62) [(0.7 \times \text{LA}) + (0.3 \times \text{SLA})]$$

MAWA = Maximum Applied Water Allowance (maximum gallons per year available for the project).

Eto = Reference Evapotranspiration (53.1 inches per year for the City of Diamond Bar).

0.7 = ET Adjustment Factor (as designated by the state of California).

- LA = Landscape Area (square feet, including SLA)
- 0.62 = Conversion Factor (inches to gallons)
- SLA = Special Landscape Area (square feet)
- 0.3 = The additional ET Adjustment Factor for the Special Landscape Area

N. Weather Based Irrigation Controller: An irrigation controller that automatically adjusts the irrigation schedule based on changes in the weather.

#### **8.14.040 Compliance Requirements.**

Applicants for New Development proposing new or altered landscaping shall comply with each of the following requirements in the design, installation, and maintenance of the landscaped area, unless an exception is granted pursuant to Section 8.14.050.

A. Landscape Plan: Applicants shall submit a Landscape Plan depicting the landscaped area and all existing landscaping to remain on the lot as determined by the Community Development Department. Landscaping shall be designed to be irrigated at no more than 0.7 of the reference evapotranspiration (ET<sub>o</sub>) and shall not exceed the MAWA. The City reserves the right to modify plans in quantity and quality of the landscape to meet the requirements of this Chapter.

#### **B. Use of Turf and Water Wise Plants:**

1. The landscape area of projects proposing exclusively commercial or industrial uses shall be designed without the use of turf and with 100% water wise plants. Notwithstanding that requirement, projects may use turf where a specific turf type is proposed for any required bio-swale or bio-filter systems, or areas adjacent to pedestrian traffic where walking travel or crossings are expected. These walking areas would include corner lot locations or linear areas located along pedestrian routes.

2. Turf is the appropriate choice in parkways where vehicle parking is permitted adjacent to the parkway curb. The parkway may include one (1) or a maximum of two (2) non-permanent hardscape areas where space permits. The non-permanent hardscape area can be pervious pavers, decomposed granite, brick on sand, concrete pavers, or other similar materials approved by the Community Development Director, and may serve as a pedestrian landing between the parkway curb and the sidewalk. Each non-permanent hardscape area may be no larger than four feet in width, and be installed and sized in such a manner that it can be easily removed should the City or its permittees conduct work in the parkway area. The pedestrian landing area must be a minimum of five feet away from any street tree and three feet away from any meter boxes,

cable boxes, transformers, street lights, or other objects lawfully permitted in the right-of-way.

3. Where parking is not permitted adjacent to the parkway curb, the parkway shall be designed using 100% water wise plants.

4. The landscape area of single family residential, multi-family residential, mixed use, and institutional use projects shall be designed with no more than 40% of the landscaped area in turf or plants that are not water wise plants. Approved turf parkways shall not be counted toward the 40% turf limitation.

5. Turf is not permitted in medians or parking lot landscape finger planters.

6. Turf shall not be used on slopes of 20% (5:1) or greater within the landscape area.

7. Notwithstanding subsections 1 and 2 above, additional turf areas may be approved by the City for areas designed and used for outdoor sporting and recreational activities, or for an approved functional use. Approved turf areas may be watered at 1.0 of the reference evapotranspiration (ET<sub>o</sub>).

C. Mulch: The landscape area, except those portions of the landscape area planted in turf, shall be covered with mulch material to an average thickness of at least 3 inches throughout. In areas with groundcovers planted from flats, mulch shall be installed to an average thickness of 1 ½ inches. Additional mulch material shall be added from time to time as necessary in order to maintain the required depth of mulch.

D. Irrigation: All new or altered irrigation systems proposed as part of a new development shall incorporate the following requirements in their design, installation and maintenance:

1. Irrigation systems shall be designed and installed to avoid overspray and runoff. Valves shall be separated for individual hydrozones based on plant water needs and sun or shade requirements.

2. Water Budget Calculations (Section 8.14.030.M. above) shall be shown on Irrigation Plans.

3. An automatic irrigation system is required and shall include a weather-based irrigation controller, including a rain shut-off sensor.

4. Areas less than eight feet wide shall be irrigated with appropriately selected equipment that provides the proper amount of water coverage without causing overspray onto adjacent surfaces.

5. All sprinklers shall have matched precipitation rates within each valve and circuit. All irrigation systems shall be designed to include optimum distribution uniformity, head to head spacing, and setbacks from walkways and pavement.

6. All irrigation systems shall provide check valves at the low end of irrigation lines to prevent unwanted draining of irrigation lines.

7. Pressure regulators may be required on the irrigation system as determined by the City.

#### **8.14.050 Exceptions.**

Exceptions to these Landscape Water Conservation Standards may be granted by the City's Community Development Director upon a finding, based on substantial evidence, that the exceptions will promote equivalent or greater water conservation than is provided for in these standards. Requests for exceptions shall be in writing and shall be submitted to the Community Development Director at the time the application is submitted to the City for review. Requests for exceptions must be accompanied by documentary evidence supporting the finding of equivalent or greater water conservation.

#### **8.14.060 Submittals.**

A. Applicants shall provide all relevant information on the landscape plan including botanical names for plants and turf species; container sizes; percentage calculations of allowable areas of turf; low, medium or high water use plants and water-wise plants; water budget calculations; monthly irrigation schedule; and specific requests for any exceptions to the requirements of this Chapter. Areas of existing landscaping to remain unaltered shall be indicated on the landscape plan.

B. The landscape plan shall be prepared in accordance with the provisions of the California Business and Professions Code relating to the practice of landscape architecture (Business and Professional Code Section 5641 et seq.).

C. The landscape plan shall include a "Statement of Compliance" in a form approved by the Community Development Director certifying that the landscape design complies with the mandatory elements of this Chapter. The Statement of Compliance shall be signed by the person who prepared the landscape plan.

**8.14.070****Determination of Conforming Installation.**

The person who prepared the landscape plan shall inspect the installation of the landscaping and any irrigation system included in the plan and shall certify in writing to the Community Development Department that the installation substantially conforms to the approved landscape plan prior to a final City landscape inspection or occupancy being requested.

**8.14.080****Compliance Verification.**

Verification of compliance with this Chapter, as applicable, shall be made by the Community Development Department in accordance with the following requirements:

A. No building permit shall be issued unless the following requirements have been satisfied:

1. The Statement of compliance required by Section 8.14.060.C. above has been included on the final landscape plan submitted for plan check approval.
2. A maintenance schedule as required by Section 8.14.090 has been submitted for plan check approval.

B. No building permit shall be given a final landscape inspection or issued a permanent certificate of occupancy until the Community Development Department receives a written determination of conforming installation as required by Section 8.14.070 and a written statement as required by Section 8.14.090 affirming that the maintenance schedule will be adhered to by those person(s) responsible for landscape maintenance.

**8.14.090****Landscape and Irrigation Maintenance Schedule.**

A. Landscapes shall be maintained to ensure water use efficiency. A regular maintenance schedule shall be submitted with the Statement of Compliance.

B. A regular maintenance schedule shall include, but not be limited to, routine inspection; adjustment and repair of the irrigation system and its components; aerating and dethatching turf areas; replenishing mulch; fertilizing; pruning; weeding in all landscape areas, and removing any obstruction to emission devices. Operation of the irrigation system outside the normal watering window is allowed for auditing and system maintenance.

C. Repair of all irrigation equipment shall be done with the originally installed components or their equivalents.

D. A project applicant is encouraged to implement sustainable or environmentally-friendly practices for overall landscape maintenance.

#### **8.14.100 Existing Landscapes.**

The following provisions apply to existing landscapes, as defined in Section 8.14.020.B of this Chapter:

A. For landscapes served by a single water meter, the City may require the following, including but not limited to: irrigation water use analyses, irrigation surveys, and irrigation audits to evaluate water use, and to provide recommendations as necessary to reduce landscape water use to a level that does not exceed the Maximum Applied Water Allowance for existing landscapes. The Maximum Applied Water Allowance for existing landscapes shall be calculated as:  $MAWA = (.80) (ET_o) (LA) (0.62)$ . All landscape irrigation audits shall be conducted by a certified landscape irrigation auditor.

B. For landscapes that do not have a meter, the City may require the following, including but not limited to: irrigation surveys and irrigation audits to evaluate water use, and to provide recommendations as necessary to prevent water waste. All landscape irrigation audits shall be conducted by a certified landscape irrigation auditor.

C. The City may collaborate with the local water purveyor(s) to define each entity's specific responsibilities relating to this ordinance."

**SECTION 2:** CEQA. The City Council determines that this ordinance is exempt from review under the California Environmental Quality Act (California Public Resources Code §§ 21000, et seq., "CEQA") and the regulations promulgated thereunder (14 California Code of Regulations §§ 15000, et seq., the "CEQA Guidelines") because it enacts regulations that are applicable to new or altered landscape projects subject to project specific discretionary review. Therefore, it can be seen with certainty that there is no possibility that this ordinance will cause a direct physical change in the environment, and therefore the adoption of this ordinance is not considered a project per section 21065 of CEQA. In addition, this ordinance is an action being taken for enhanced protection of the environment that does not have the potential to cause significant effects on the environment. Consequently, it is categorically exempt in accordance with CEQA Guidelines §§ 15305 as a minor alteration in land use limitations which do not result in any changes in land use or density; and 15308 as an action taken by a regulatory agency as authorized by California law to assure maintenance or protection of the environment.

**SECTION 3:** FINDINGS. The City's findings and evidence in the record that its water efficient landscape ordinance is at least as effective in conserving

water as the California Department of Water Resource's updated Model Water Efficient Landscape Ordinance is as follows:

- A. The ordinance is applicable to all new or altered development subject to discretionary review by the City.
- B. Under the ordinance, landscaping shall be designed and irrigated so not to exceed 70% of the local evapotranspiration rate (ET<sub>o</sub>) established by the State for the City of Glendora and surrounding areas of Los Angeles County.
- C. Under the ordinance, landscape areas for commercial and industrial projects must use 100% water wise plants without turf, with only minor exceptions.
- D. Under the ordinance, landscape areas for residential, mixed use, and institutional type projects shall be designed with less than 40% turf and non-water wise plant materials.
- E. Under the ordinance, automatic irrigation systems are required and shall be designed to avoid overspray and runoff with optimum distribution uniformity and setbacks from hardscape, and shall employ a weather-based irrigation controller with a rain shut off sensor and check valves at the end of each line to hold water in the system, preventing unwanted drainage from sprinkler heads.
- F. Exceptions to the ordinance standards are allowed only upon a finding that alternative design will promote equivalent or greater water conservation.
- G. Under the ordinance, installation and compliance verifications are required of the landscape designer.
- H. Under the ordinance, the maximum annual applied water allowance calculation matches the California Department of Water Resource's formula in its Model Water Efficient Landscape Ordinance.
- I. Under the ordinance, the identification of water wise plants matches that used by the California Department of Water Resource's in its Model Water Efficient Landscape Ordinance; namely, the "Water Use Classification of Landscape Species" prepared by the University of California Cooperative Extension.

**SECTION 4:** SEVERABILITY. If any section, subsection, subdivision, 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 hereby declares that it would have adopted this ordinance, and each section, subsection, subdivision, sentence, clause, phrase, or portion thereof, irrespective of the fact that any one or more sections subsections, subdivisions, sentences, clauses, phrases, or portion thereof be declared invalid or unconstitutional.

**SECTION 5:** SUMMARY. Pursuant to Government Code Section 36933(c)(1), the City Clerk was designated to prepare and has published a summary of this ordinance, and a certified copy of it was posted in the Office of the City Clerk a minimum of five days before the City Council's public hearing to consider adoption of the ordinance.

**SECTION 6:** PUBLICATION. The City Clerk shall certify as to the adoption of this ordinance and shall cause the summary thereof to be published within fifteen calendar (15) days of the adoption and shall post a certified copy of this ordinance, including the vote for and against the same, in the office of the City Clerk, in accordance with Government Code Section 36993, for the City of Diamond Bar.

**SECTION 8:** EFFECTIVE DATE. This ordinance shall go into effect and be in full force and operation from and after thirty (30) days after its final passage and adoption.

**PASSED, APPROVED, AND ADOPTED this 1st day of December, 2009.**



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Mayor

I, Lynda Burgess, the City Clerk of the City of Diamond Bar, do hereby certify that the foregoing Ordinance was introduced at a regular meeting of the City Council of the City of Diamond Bar, California, held on the 17<sup>th</sup> day of November, 2009, and was finally passed at a regular meeting of the City Council of the City of Diamond Bar, held on the 1st day of December, 2009, by the following vote:

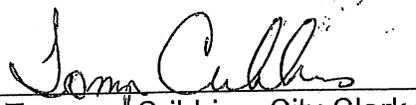
AYES: COUNCIL MEMBERS: Chang, Everett, Tanaka,  
MPT/Tye, M/Herrera

NOES: COUNCIL MEMBERS: None

ABSENT: COUNCIL MEMBERS: None

ABSTAINED: COUNCIL MEMBERS: None

ATTEST:

  
\_\_\_\_\_  
Tommye Cribbins, City Clerk  
City of Diamond Bar

