

## CITY OF MURRIETA

January 29, 2010

California Department of Water Resource  
Water Use and Efficiency Branch  
Post Office box 942836  
Sacramento, CA 94236-0001  
Attn: Mr. Simon Eching

Re: Adoption of Updated Model Water Efficient Landscape Ordinance

Dear Mr. Eching:

The City of Murrieta is notifying you that the city has adopted an interim ordinance for water efficient landscaping. The interim ordinance is modeled using the Riverside Regional "Landscape Water Use Efficiency Ordinance" produced by the Riverside County Water Task Force. The city will be following up with a permanent ordinance that will be codified in its Municipal Code by March 2010. I have attached a copy of the interim ordinance for your reference along with the city's current water use efficiency ordinance.

If you have any questions, feel free to contact Dennis Watts at (951) 461-6037.

Sincerely,

Dennis Watts  
Senior Planner

enc.

INTERIM ORDINANCE NO. 431 - 10

AN INTERIM ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MURRIETA,  
CALIFORNIA, ESTABLISHING LANDSCAPE WATER USE EFFICIENCY REQUIREMENTS

WHEREAS, the State of California has enacted the Water Conservation in Landscaping Act of 1992 (Landscaping Act); and

WHEREAS, Assembly Bill 1881 ("AB 1881"), enacted in 2006, amends said Landscaping Act to require the Department of Water Resources to update the State's model water efficient landscape ordinance in accordance with certain specified requirements; and

WHEREAS, the Department of Water Resources has updated the State's model efficient landscape ordinance; and

WHEREAS, AB 1881 mandates local agencies to adopt the State's model ordinance or a water efficient landscape ordinance that is, at least, as effective in conserving water as the updated State model ordinance, no later than January 1, 2010; and

WHEREAS, the State's model water efficient landscape ordinance includes provisions regarding the efficiency and analysis of landscape irrigation water use, and it is the purpose of this Interim Ordinance to provide an equivalent mechanism; and

WHEREAS, this Interim Ordinance is based on the Riverside Regional "Landscape Water Use Efficiency Ordinance" produced by the Riverside County Water Task Force as a model ordinance for all agencies within Riverside County; and

WHEREAS, the Interim Ordinance is, at least, as effective in conserving water as the State's updated model ordinance; and

WHEREAS, the Interim Ordinance supplements Ordinance No. 403-07 adopted by City Council December 4, 2007; and

WHEREAS, a hearing on the matter was duly noticed as provided in Development Code section 16.78.040 for the City Council meeting of December 15, 2009; and

WHEREAS, the City Council has directed the City Attorney and City Manager to return to the City Council no later than March 1, 2010 with a permanent, codified ordinance, incorporating the sustainable provisions of this Interim Ordinance into the Murrieta Municipal Code; and

WHEREAS, this Interim Ordinance is exempt from the California Environmental Quality Act ("CEQA") pursuant to Guidelines section 15308, which provides actions taken by regulatory agencies, as authorized by state or local ordinance, to assure the maintenance, restoration, enhancement, or protection of the environment where the regulatory process involves procedures for protection of the environment are exempt from further review under CEQA; and

WHEREAS, the City Council has considered the facts presented,

NOW, THEREFORE, the City Council of the City of Murrieta, California, does ordain as follows:

SECTION 1. SHORT TITLE.

This Interim Ordinance shall be known as the "Landscape Water Use Efficiency Interim Ordinance".

SECTION 2. INTENT.

It is the intent of the City Council in adopting this Interim Ordinance to:

- A. Establish provisions for water management practices and water waste prevention;
- B. Establish a structure for planning, designing, installing, maintaining, and managing water efficient landscapes in new construction and rehabilitated projects;
- C. Reduce the water demands from landscapes without a decline in landscape quality or quantity;
- D. Retain flexibility and encourage creativity through appropriate design;
- E. Assure the attainment of water-efficient landscape goals by requiring that landscapes not exceed a maximum water demand of seventy percent (70%) of its reference evapotranspiration (ET) or any lower percentage as may be required by water purveyor policy or state legislation, whichever is stricter;
- F. Eliminate water waste from overspray and/or runoff;
- G. Achieve water conservation by raising the public awareness of the need to conserve water through education and motivation to embrace an effective water demand management program;
- H. Implement the requirements to meet the State of California Water Conservation in Landscaping Act 2006 and the California Code of Regulations Title 23, Division 2, Chapter 2.7.

SECTION 3. DEFINITIONS.

The terms used in this Interim Ordinance have the meaning set forth below:

- A. "backfilling" means to refill an excavation, usually with excavated material.
- B. "backflow prevention device" means a safety device used to prevent pollution or contamination of the water supply due to the reverse flow of water from the irrigation system.
- C. "check valve" or "anti-drain 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 the sprinkler heads when the system is off.
- D. "established landscape" means the point at which plants in the landscape have developed significant root growth into the site. Typically, most plants are established after one or two years of growth.

E. "Estimated Annual Water Use" or "EAWU" means estimated total water use per year as calculated by the formula contained in Section 5.B.12.n.

F. "hydrozone" means a portion of the landscaped area having plants with similar water needs. A hydrozone may be irrigated or non-irrigated.

G. "invasive species" are non-indigenous species (e.g., plants or animals) that adversely affect the habitats they invade economically, environmentally, or ecologically. Lists of invasive species are included within the Western Riverside County Multi-Species Habitat Conservation Plan and the Coachella Valley Multi-Species Habitat Conservation Plan (incorporated by reference). In addition, for the purposes of this Interim Ordinance, invasive species include other locally invasive species as further defined by a local lead agency.

H. "landscape architect" means a person who holds a license to practice landscape architecture in the State of California (Government Code section 5615).

I. "landscaped area" means all of the planting areas, turf areas, and water features in a landscape design plan subject to the Maximum Applied Water Allowance (MAWA) calculation. The Landscape Area does not include footprints of buildings or structures, sidewalks, driveways, parking lots, decks, patios, gravel or stone walks, other pervious or impervious hardscapes, and other non-irrigated areas designated for non-development (e.g., open spaces and existing native vegetation).

J. "local water purveyor" means any entity, including a public agency, city, county or private water company that provides retail water service to customers in Riverside County.

K. "low volume irrigation" means the application of irrigation water at low pressure through a system of tubing or lateral lines and low-volume emitters such as drip, drip lines, and bubblers. Low volume irrigation systems are specifically designed to apply small volumes of water slowly at or near the root zone of plants.

L. "Maximum Applied Water Allowance" or "MAWA" means the upper limit of annual applied water allowed for the established landscaped area.

M. "overhead sprinkler irrigation systems" means systems that deliver water through the air (e.g., pop ups, impulse sprinklers, spray heads and rotors, etc.).

N. "reference evapotranspiration" or "ET<sub>o</sub>" means a standard measurement of environmental parameters, which affect the water use of plants. ET<sub>o</sub> is given in inches per day, month, or year. Reference evapotranspiration is used as the basis of determining the Maximum Applied Water Allowances so that regional differences in climate can be accommodated. Reference evapotranspiration numbers shall be taken from the most current EvapoTranspiration Zones Map by the California Department of Water Resources. For geographic areas not covered by the EvapoTranspiration Zones Map, data from nearby areas shall be used.

O. "rehabilitated landscapes" means any re-landscaping project that requires a permit, plan check, or design review, and/or would meet the requirements of Section 4.

P. "special landscape area" means an area of the landscape dedicated to edible plants, areas irrigated with recycled water, and publicly accessible areas dedicated to active play such as parks,

sports fields, golf courses, where turf provides a playing field or where turf is needed for high traffic activities.

Q. "temporarily irrigated" means irrigation for the purposes of establishing plants, or irrigation which will not continue after plant establishment. Temporary irrigation is for a period of six months or less.

R. "water-intensive landscaping" means a landscape with a WUCOLS plant factor of 0.7 or greater.

S. "WUCOLS" means the publication entitled "Water Use Classification of Landscape Species" by the U.C. Cooperative Extension (1999 or most current version).

#### SECTION 4. APPLICABILITY.

A. The water-efficient landscape requirements contained in this Interim Ordinance shall be applicable to all new construction landscapes, which are homeowner-provided or homeowner-hired in single-family and multi-family projects with a total project landscape area equal to or greater than 5,000 square feet requiring a building or landscape permit, plan checks or design review and/or all other landscape projects with a landscape area equal to or greater than 2,500 square feet subject to discretionary permits, plan checks, design reviews, and/or approvals.

B. In the event Covenants, Conditions, and Restrictions are required by the City for any permit subject to this Interim Ordinance, a condition shall be incorporated into any project approval prohibiting the use of water-intensive landscaping and requiring the use of low water use landscaping pursuant to the provisions of this Interim Ordinance in connection with common area/open space landscaping. Additionally, such a condition shall also require the Covenants, Conditions, and Restrictions to incorporate provisions concerning landscape irrigation system management and maintenance. This Interim Ordinance shall not be construed as requiring landscaping of common areas or open space that is intended to remain natural. Covenants, Conditions, and Restrictions shall not prohibit use of low-water use plants. Covenants, Conditions, and Restrictions shall not prohibit the replacement of turf with less water-intensive plant species.

C. Section 8 of this Interim Ordinance applies to existing properties with landscape areas one acre or greater in size or properties served by a dedicated landscape irrigation meter.

D. Recognizing the special landscape needs of cemeteries, new, and rehabilitated cemeteries are limited to Sections 6.A, 6.B, and 6.C. Existing cemeteries are limited to Section 8.

E. The following are exempt from the provisions of this Interim Ordinance:

1. Any project with a total landscaped area less than 2,500 square feet;
2. Registered local, state or federal historical sites;
3. Ecological restoration projects that do not require a permanent irrigation system and have an establishment period of less than three (3) years;
4. Mined-land reclamation projects that do not require a permanent irrigation system; and
5. Botanical gardens and arboretums open to the public.

## SECTION 5. LANDSCAPE DOCUMENTATION PACKAGE REQUIREMENTS.

An applicant proposing any new or rehabilitated landscape subject to this Interim Ordinance (Section 4) shall prepare and submit an application to the City for review and approval by the Community Development Director or designee. The "Landscape Document Package" consisting of the project information (Section 5.A), planting plan (Section 5.B), irrigation plan (Section 5.C), soils management plan (Section 5.D), and grading design plan (Section 5.E) shall be reviewed to ensure that all components of the plans adhere to the requirements of this Interim Ordinance. No Certificate of Occupancy or other final City approval shall be issued until the City reviews and approves the landscape and irrigation plans and the landscape and irrigation are installed in accordance with the approved plans.

An applicant proposing any new landscape that is subject to this Interim Ordinance (Section 4) and designated for recycled water use, is advised that recycled water irrigation systems will entail additional coordination with the local water purveyor, the land use agency and the maintenance entity's standards, approvals, and implementation requirements. Therefore, applicants shall consult with the appropriate water purveyor early in the development review process to ensure that future recycled water facilities meet the projected demand, and that subsequent landscape plans comply with the applicable standards, approvals, and implementation requirements of the local water purveyor, land use agency, and maintenance entity.

Water systems for common open space areas shall use non-potable water if approved facilities are made available by the water purveyor. Provisions for a non-potable water system shall be provided within the landscape plan. Water systems designed to utilize non-potable water shall be designed to meet all applicable standards of the California Regional Water Quality Control Board and the Riverside County Health Department, and water purveyor.

The required components of the Landscape Document Package are as follows:

### A. PROJECT INFORMATION

1. Date
2. Applicant and applicant contact information
3. Project owner and contact information
4. Project address including parcel and lot numbers
5. Total landscape area (sq. ft.)
6. Project type (e.g., new, rehabilitated, public, private)
7. Water supply (e.g., potable, well, recycled). Use of recycled water is encouraged.
8. Applicant signature and date with statement "I agree to comply with the requirements of Interim Ordinance \_\_\_ and submit a complete Landscape Documentation Package"

### B. PLANTING PLAN REQUIREMENTS

1. The "Riverside County Guide to California-Friendly Landscaping" (Landscaping Guide) is hereby incorporated by reference to assist with developing water efficient landscapes.
2. Plant types shall be grouped together in regards to their water, soil, sun and shade requirements and in relationship to the buildings. Plants with different water needs shall be irrigated separately. Plants with the following classifications shall be grouped accordingly: high and moderate, moderate and low, low and very low. Deviation from these groupings shall not be permitted.
3. Trees for shade shall be provided for residential, commercial and industrial buildings, parking lots and open space areas. These trees can be deciduous or evergreen, and are to

be incorporated to provide natural cooling opportunities for the purpose of energy and water conservation.

4. Plants shall be placed in a manner considerate of solar orientation to maximize summer shade and winter solar gain.
5. Plant selection for projects in fire-prone areas shall address fire safety and prevention. A defensible space or zone around a building or structure is required per Public Resources Code section 4291(a) and (b). Fire-prone plant materials and highly flammable mulches shall be avoided.
6. Invasive species of plants shall be avoided especially near parks, buffers, greenbelts, water bodies, and open spaces because of their potential to cause harm in to environmentally sensitive areas.
7. All exposed surfaces of non-turf areas within the developed landscape area shall be mulched with a minimum four-inch (4") layer of material, except in areas with groundcover planted from flats where mulch depth shall be two inches (2").
8. Stabilizing mulching products shall be used on slopes.
9. Turf areas shall be used in response to functional needs and in compliance with the water budget.
10. Decorative water features shall use recirculating water systems.
11. Where available, recycled water shall be used as the source for irrigation and decorative water features.
12. Planting Plans shall identify and site the following:
  - a. New and existing trees, shrubs, ground covers, and turf areas within the proposed landscape area;
  - b. A planting legend indicating all plant species by botanical name and common name, spacing, and quantities of each type of plant by container size, water use classification of each plant;
  - c. Designation of hydrozones;
  - d. Area, in square feet, devoted to landscaping and a breakdown of the total area by landscape hydrozones;
  - e. Property lines, streets, and street names;
  - f. Building locations, driveways, sidewalks, retaining walls, and other hardscape features;
  - g. Appropriate scale and north arrow;
  - h. Any special landscape areas;
  - i. Type of mulch and application depth;
  - j. Type and surface area of any water features;
  - k. Type and installation details of any applicable stormwater best management practices;
  - l. Planting specifications and details, including the recommendations from the soils analysis, if applicable;
  - m. Maximum Applied Water Allowance:
    - i. Planting Plans shall be prepared using the following water budget formula:
$$\text{MAWA (in gallons)} = (\text{ET}_o)(0.62)[(0.7 \times \text{LA}) + (0.3 \times \text{SLA})]$$

*where:*  
*ET<sub>o</sub> is reference evapotranspiration*  
*SLA is the amount of special landscape area in square feet*  
*LA is total landscape area (including the SLA) in square feet*
    - ii. For the purposes of determining the MAWA, average irrigation efficiency is assumed to be 0.71. Irrigation systems shall be designed, maintained, and managed to meet or exceed an average irrigation efficiency of 0.71.
  - n. Estimated Annual Water Use (EAWU):
    - i. EAWU for a given hydrozone is calculated as follows:

$$EAWU \text{ (in gallons)} = (ET_o)(0.62)[((PF \times HA)/IE) + SLA]$$

where:

*ET<sub>o</sub>* is reference evapotranspiration

*PF* is Plant Factor

*HA* is hydrozone area in square feet

*IE* is irrigation efficiency (minimum 0.71)

*SLA* is the amount of special landscape area in square feet

- ii. Landscaping plans shall provide EAWU (in the same units as the MAWA) for each valve circuit in the irrigation hydrozone . The sum of all EAWU calculations shall not exceed the MAWA for the project.
  - iii. The plant factor used shall be from WUCOLS. The plant factor for very low water use plants are under 0.1, low water use plants range from 0 to 0.3, for moderate water use plants range from 0.4 to 0.6, and for high water use plants range from 0.7 to 0.9.
  - iv. The plant factor calculation is based on the proportions of the respective plant water uses and their plant factor, or the plant factor of the higher water using plant is used.
  - v. The surface area of a water features shall be included in the high water use hydrozone area of the water budget calculation and temporarily irrigated areas in the low water use hydrozone.
13. Planting Plans and Irrigation Plans (Section 5.C) shall be drawn at the same size and scale.
14. The Planting Plan shall be prepared and signed by a landscape architect licensed by the State of California.

### C. IRRIGATION DESIGN PLAN REQUIREMENTS.

1. The Landscaping Guide is hereby incorporated by reference to assist the applicant in designing, constructing, and maintaining an efficient irrigation system.
2. Irrigation systems shall be designed, maintained, and managed to meet or exceed an average irrigation efficiency of 0.71.
3. All irrigation systems shall be designed to prevent runoff, over-spray, low-head drainage and other similar conditions where water flows off-site on to adjacent property, non-irrigated areas, walk, roadways, or structures. Irrigation systems shall be designed, constructed, managed, and maintained to achieve as high an overall efficiency as possible. The irrigation system shall be designed to ensure that the dynamic pressure at each emission device is within the manufacturer's recommended pressure range for optimal performance.
4. Landscaped areas shall be provided with a smart irrigation controller, which automatically adjusts the frequency and/or duration of irrigation events in response to changing weather conditions unless the use of the property would otherwise prohibit use of a timer. The planting areas shall be grouped in relation to moisture-control zones based on similarity of water requirements (i.e., turf separate from shrub and groundcover, full sun exposure areas separate from shade areas, top of slope separate from toe of slope). Additional water conservation technology may be required, where necessary, at the discretion of the Community Development Director, or designee.
5. Water systems for common open space areas shall use non-potable water, if approved facilities are made available by the water purveyor. Provisions for the conversion to a non-potable water system shall be provided within the landscape plan. Water systems designed to utilize non-potable water shall be designed to meet all applicable standards of the California Regional Water Quality Control Board, the Riverside County Health Department, and the water purveyor.

6. Separate valves shall be provided for separate water use planting areas, so that plants with similar water needs are irrigated by the same irrigation valve. All installations shall rely on highly efficient state of the art irrigation systems to eliminate runoff, and maximize irrigation efficiency.
7. Static water pressure, dynamic or operating pressure and flow reading of the water supply shall be measured. These pressure and flow measurements shall be conducted at the design stage. If the measurements are not available at the design stage, the measurements shall be conducted at the installation.
8. The capacity of the irrigation system shall not exceed:
  - a. the capacity required for peak water demand based on water budget calculations;
  - b. meter capacity; or
  - c. backflow preventer type and device capacity.
9. Sprinkler heads and other emission devices shall have matched precipitation rates, unless otherwise directed by the manufacturer.
10. In mulched planting areas, the use of low volume irrigation is required to maximize water infiltration into the root zone.
11. Non-turf areas shall be irrigated with drip irrigation.
12. Long-narrow, or irregularly-shaped areas including turf less than eight (8) feet in width in any direction shall be irrigated with subsurface irrigation or low-volume irrigation technology.
13. Overhead irrigation shall not be permitted within 24 inches of any non-permeable surface, unless:
  - a. The landscape area is adjacent to permeable surfacing and no runoff to the public right of way or storm drain system occurs; or
  - b. The adjacent non-permeable surfaces are designed and constructed to drain entirely to landscaping area.
  - c. Allowable irrigation within the setback from non-permeable surfaces may include drip, drip line, or other low flow non-spray technology.
14. Overhead irrigation shall be limited to the hours of 8 p.m. to 9 a.m.
15. All irrigation systems shall be equipped with the following:
  - a. A smart irrigation controller as defined in Section 5.C.4 of this Interim Ordinance;
  - b. A rain sensing device to prevent irrigation during rainy weather;
  - c. Anti-drain check valves installed at strategic points to minimize or prevent low-head drainage;
  - d. A manual shut-off valve shall be required as close as possible to the point of connection of the water supply, to minimize water loss in case of an emergency or routine repair;
  - e. A pressure regulator when the static water pressure is above or below the recommended operating pressure of the irrigation system; and
  - f. Backflow prevention devices.
16. Dedicated landscape meters shall be required for all projects greater than 2,500 sq. ft., except single-family residences.
17. Irrigation Design Plans shall identify and site the following:
  - a. Hydrozones;
    - i. Each hydrozone shall be designated by number, letter, or other designation.
    - ii. A Hydrozone Information Table shall be prepared for each hydrozone.
  - b. The areas irrigated by each valve;
  - c. Irrigation point of connection (POC) to the water system;
  - d. Static water pressure at POC;
  - e. Location and size of water meter(s), service laterals, and backflow preventers;
  - f. Location, size, and type of all components of the irrigation system, including automatic controllers, main and lateral lines, valves, sprinkler heads and nozzles, pressure regulator, drip and low volume irrigation equipment;

- g. Total flow rate (gallons per minute), and design operating pressure (psi) for each overhead spray and bubbler circuit, and total flow rate (gallons per hour) and design operating pressure (psi) for each drip and low volume irrigation circuit;
  - h. Precipitation rate (inches per hour) for each overhead spray circuit;
  - i. Irrigation legend with the manufacturer name, model number, and general description for all specified equipment, separate symbols for all irrigation equipment with different spray patterns, spray radius, and precipitation rate;
  - j. Irrigation system details for assembly and installation;
  - k. Recommended irrigation schedule for each month, including number of irrigation days per week, number of start times (cycles) per day, minutes of run time per cycle, and estimated amount of applied irrigation water, expressed in gallons per month and gallons per year, for the established landscape; and
  - l. Irrigation Design Plans shall contain the following statement, "I agree to comply with the criteria of the Interim Ordinance and to apply them for the efficient use of water in the Irrigation Design Plan".
18. For each valve, two (2) irrigation schedules shall be prepared, one for the initial establishment period of six (6) months and one for the established landscape, which incorporate the specific water needs of the plants and turf throughout the calendar year.
19. Irrigation Plans and Planting Plans (Section 5.B) shall be drawn at the same size and scale.

#### D. SOIL MANAGEMENT PLAN REQUIREMENTS.

- 1. After mass grading, the project applicant or his/her designee shall:
  - a. perform a preliminary site inspection;
  - b. determine the appropriate level of soil sampling and sampling method needed to obtain representative soil sample(s);
  - c. conduct a soil probe test to determine if the soil in the landscape area has sufficient depth to support the intended plants; and
  - d. obtain appropriate soil sample(s).
- 2. The project applicant, or his/her designee, shall submit soil sample(s) to a laboratory for analysis and recommendation. The soil analysis may include:
  - a. soil texture;
  - b. infiltration rate determined by laboratory test or soil texture infiltration rate tables;
  - c. pH;
  - d. total soluble salts;
  - e. sodium;
  - f. nutrients
    - i. major
    - ii. minor
    - iii. micro; and
  - g. soil preparation recommendations.
- 3. The project applicant or his/her designee shall prepare documentation describing the following:
  - a. soil type;
  - b. identification of limiting soil characteristics;
  - c. identification of planned soil management actions to remediate limiting soil characteristics; and
  - d. Submit the soil analysis report and documentation verifying implementation of soil analysis report recommendations to the City pursuant to the requirements of Section 7.C Certificate of Completion.

E. GRADING DESIGN PLAN REQUIREMENTS, if applicable

1. The Landscape Documentation Package shall include rough/precise grade elevations prepared in accordance with Chapter 15.52 of the Murrieta Municipal Code for the project by a licensed civil engineer.

SECTION 6. LANDSCAPE IRRIGATION AND MAINTENANCE.

This section applies to all landscape projects subject to this Interim Ordinance (Section 4).

A. The "Landscaping Guide is hereby incorporated by reference to assist the applicant in implementing landscape maintenance to ensure water use efficiency.

B. Two irrigation schedules shall be prepared, one for the initial establishment period of six months and one for the established landscape, which incorporate the specific water needs of the plants and turf throughout the calendar year. The irrigation schedule shall take into account the particular characteristics of the soil; shall be continuously available on-site to those responsible for the landscape maintenance; and shall contain specifics as to optimum run time and frequency of watering, and irrigation hours per day. The schedule currently in effect shall be posted at the controller.

C. A regular maintenance schedule and Certificate of Completion shall be submitted to the Community Development Director, property owner, and water purveyor (if applicable). A regular maintenance schedule shall include, but not be limited to, routine inspection, adjustments, 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 irrigation devices. Repair of all irrigation equipment shall be done with the originally installed components.

D. All model homes that are landscaped shall use signs and written information to demonstrate the principles of water efficient landscapes described in this Interim Ordinance.

E. Information shall be provided to owners of new, single-family residential homes regarding the design, installation, management, and maintenance of water efficient landscapes.

SECTION 7. COMPLIANCE/PLAN SUBMITTAL PROCESS.

The Community Development Director, or designee, shall have the duty and authority to administer and enforce this Interim Ordinance.

A. As part of the land development process and prior to building permit issuance and construction, the City shall:

1. Provide the project applicant with the Interim Ordinance and procedures for permits, plan checks, or design reviews;
2. Review the Landscape Documentation Package (Section 5) submitted by the project applicant;
3. Approve or reject the Landscape Documentation Package; and
4. Issue a permit or approve the plan check or design review for the project applicant.

B. As part of the land development process and prior to building permit issuance and construction, the project applicant shall:

1. Submit a Landscape Documentation Package to the City for review and approval by the Community Development Director, or designee. The Planting Plan, Irrigation Plan, and Soils Management Plan shall be reviewed by an independent licensed landscape architect to ensure that all components of the Plans adhere to the requirements of this Interim Ordinance. The licensed landscape architect shall sign the Plans verifying that the Plans comply with this Interim Ordinance. Any Plans submitted without the signature of a licensed landscape architect shall not be accepted for review.

C. Prior to issuance of a Certificate of Occupancy or final inspection for a project subject to this Interim Ordinance, a regular maintenance schedule and a Certificate of Completion shall be submitted to the Community Development Director, or designee, certifying that the landscaping has been completed in accordance with the approved Planting, Irrigation, Soil Management, and Grading Design plans for the project. The Certificate of Completion shall be signed by a licensed landscape architect and shall indicate:

1. Date;
2. Project information;
  - a. Project name;
  - b. Project applicant name, telephone, mailing address;
  - c. Project address and location;
  - d. Property owner name and mailing address;
3. Prior to backfilling, evidence that the party responsible for irrigation installation conducted a preliminary field inspection of the irrigation system (evidence of field inspection shall be attached);
4. The landscaping has been installed in conformance with the approved Planting and Irrigation Plans;
5. Irrigation audit report performed by a certified irrigation auditor after project installation (audit report shall be attached);
6. The smart irrigation controller has been set according to the irrigation schedule;
7. The irrigation system has been adjusted to maximize irrigation efficiency and eliminate overspray and runoff;
8. A copy of the approved Landscape Documentation Package (Section 5), the irrigation schedule (Section 6.B), and the maintenance schedule (Section 6.C) has been given to the property owner and local water purveyor; and
9. Verification that the maintenance schedule has been provided to the Community Development Director, or designee.

D. At a minimum, all landscape irrigation audits shall comply with the "Irrigation Association Certified Landscape Irrigation Auditor Training Manual (2004 or most current), and shall be conducted by a certified landscape irrigation auditor.

E. The Community Development Director, or designee, shall have the right to enter upon the project site at any time before, during and after installation of the landscaping, to conduct inspections for the purpose of enforcing this Interim Ordinance.

SECTION 8. LANDSCAPE WATER USE EFFICIENCY ENFORCEMENT.

The City will rely on water purveyors to enforce landscape water use efficiency requirements. The City shall coordinate with local water purveyors and identify programs that enhance and encourage landscape water use efficiency such as:

1. tiered water rate structure;
2. allocation-based conservation water pricing structure;
3. a rate structure at least as effective as the above options;
4. irrigation audits and/or irrigation surveys; or
5. penalties for water waste.

SECTION 9. INTERIM ORDINANCE CONTROLS.

In the event of any inconsistency between this Interim Ordinance and codified landscape water use efficiency provisions, this Interim Ordinance shall take precedence.

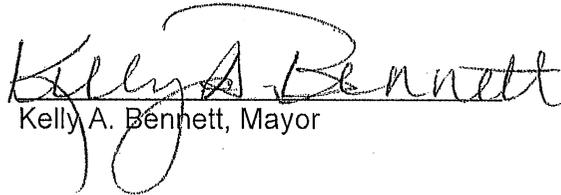
SECTION 10. PENDING PROJECT APPLICABILITY.

This Interim Ordinance shall apply, consistent with the provisions of Murrieta Development Code section 16.01.060.E, to any project submitted on or after the Effective Date and to any project not deemed complete as of the Effective Date.

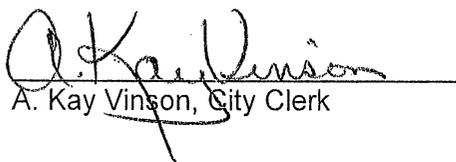
SECTION 11. EFFECTIVE DATE.

This Interim Ordinance shall take effect and be enforced thirty (30) days following its adoption ("Effective Date"). The City Clerk of the City of Murrieta shall cause this Interim Ordinance to be posted in at least three (3) public places in the City of Murrieta in accordance with Section 36933 of the Government Code of the State of California, and shall forward this Interim Ordinance to the State Department of Water Resources no later than January 31, 2010.

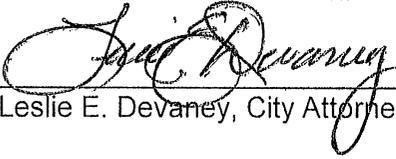
ADOPTED by the City Council of the City of Murrieta, California, on this 19<sup>th</sup> day of January, 2010.

  
Kelly A. Bennett, Mayor

ATTEST:

  
A. Kay Vinson, City Clerk

APPROVED AS TO FORM:

  
\_\_\_\_\_  
Leslie E. Devaney, City Attorney

I, A. Kay Vinson, City Clerk of the City of Murrieta, California, hereby certify under penalty of perjury that the foregoing ordinance was duly and regularly introduced at a meeting of the City Council on the 15<sup>th</sup> day of December, 2009, and that thereafter the said ordinance was duly and regularly adopted at a regular meeting of the City Council on the 19<sup>th</sup> day of January, 2010, by the following vote.

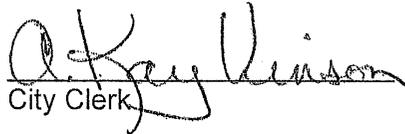
AYES: Bennett, Gibbs, Lane, McAllister, Thomasian

NOES: None

ABSENT: None

ABSTAIN: None

IN WITNESS WHEREOF, I have hereunto set my hand and official seal of the City of Murrieta, California this 19th day of January, 2010.

  
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City Clerk

## 16.27 Water Efficient Landscape

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### Sections:

16.27.010	Short Title.
16.27.020	Purpose and Intent.
16.27.030	Definitions.
16.27.040	Applicability.
16.27.050	Plant and Irrigation Requirements.
16.27.060	Implementation.
16.27.070	Compliance.

### 16.27.010 Short Title.

This chapter shall be known as the "Water Efficient Landscape Ordinance" and may be so cited. (Ord. 403 § 1 (part), 2007)

### 16.27.020 Purpose and Intent.

The purpose and intent of this chapter is to:

- A. Promote water efficient landscaping, water use management, and water conservation through the use of water efficient landscaping, wise use of turf areas and appropriate use of irrigation technology and management;
- B. Reduce the water demands from landscape while maintaining landscape quality and quantity;
- C. Retain flexibility and encourage creativity through appropriate design;
- D. Ensure the attainment of water efficient landscape goals by requiring that landscapes not exceed a maximum water demand of eighty percent (80%) of its reference evapotranspiration (ET<sub>o</sub>) or any lower percentage as may be required by State legislations;
- E. Eliminate water waste from overspray and/or runoff; and
- F. Achieve water conservation by raising the public awareness of the need for an effective management program through education and incentives. (Ord. 403 § 1 (part), 2007)

### 16.27.030 Definitions.

**Annual Water Use:** Contains information on irrigated acreage and cultural water use by type of use, (agricultural, urban, and managed wetlands), water year, and study area, for all of California.

**Anti-drain Check Valves:** Eliminates low head drainage and puddling and hold back up to 10' difference in elevation.

**Applied Irrigation Water:** The portion of water supplied by the irrigation system to the landscape.

**Automatic Irrigation Controller:** A device electrically connected to irrigation valve solenoids that allows the programming of watering days, start times, and cycles for each valve. Commonly called an Irrigation Timer.

**Bubbler:** Water emission device that tends to bubble water directly to the ground or throw water a short distance before water contacts the ground surface.

**California Native:** California's native plants evolved over a very long period, and are the plants, which the first Californians knew and depended on for their livelihood.

**CIMIS:** California Irrigation Management Information System supplies computer-generated information from weather stations across the state that records and disseminates data to help determine a plant's water need.

**Compost:** A mixture of decaying vegetation and manure used as a soil amendment.

**Overspray:** The water which is delivered beyond the landscaped area, wetting pavements, walks, structures, or other non-landscaped areas.

**Point of Connection (POC):** Location where city water supply is connected to a commercial or residential water system, usually via a water meter and backflow device.

**Point to Point Drip Irrigation:** An irrigation method that minimizes the use of water by allowing water to drip slowly to the roots of plants, either onto the soil surface or directly onto the root zone, through a network of valves, pipes and emitters.

**Pound per Square Inch (PSI):** The measure of pressure by a force exerted against one square inch by the confined water.

**Precipitation Rates:** The amount of water applied over a given area in a certain timeframe, usually expressed as inches per hour.

**Pressure Regulator:** A fixed or adjustable device which regulates downstream static and operating pressures in a piping system.

**Rain Sensing Device:** A circuit breaker that prevents an irrigation controller from sending a signal to operate irrigation valves when it gets wet.

**Runoff:** Water that is not absorbed by the soil or landscape to which it is applied and which flows from the area. Runoff may result from water that is applied at too great a rate (application rate exceeds infiltration rate) or when there is a severe slope.

**Sewage Sludge:** An organic product resulting from the treatment of sewage. The composition varies widely depending on the method of treatment.

**Smart Irrigation Controller:** A device used to estimate and measure depletion of available plant soil moisture in order to operate an irrigation system, replenishing water as needed while minimizing excess water use. A properly programmed smart controller requires initial site specific set-up and will make irrigation schedule adjustment, including run times and required cycles, throughout the irrigation season without human intervention.

**Soil Amendments:** A substance added to soil to alter one or more of it's physical or chemical properties.

**Square Feet per Acre:** A measure of area expressed as 43,560 square feet in one acre.

**Start Times (Cycles):** An interval of time during which the irrigation system is operated for one sequence of a regularly recurring succession of watering events. Also referred to as "repeat cycles." Used to prevent runoff.

**Static Water Pressure:** The water pressure as measured when the water is not moving. Static water pressure is a measure of the water's energy potential.

**Total Flow Rate:** A measure of the volume of water moving past a given point in a given period of time.

**Valve:** A control valve that is opened and closed from a distant point by transmission of power through wires.

**Water Budget:** A summation of inputs, outputs, and net changes to a particular water resource system over a fixed period. Water budgeting reflects a balance between the inputs and outputs of water to and from the plant root zone. The method is similar to balancing a checkbook. Water budgeting inputs include precipitation, irrigation, dew, and capillary rise from ground water. The outputs include evapotranspiration, runoff, and deep percolation

**Water Budget Formula:** The estimated applied water determined by calculating the landscape coefficient, the landscape evapotranspiration, and the total water applied. Refer to WUCOLS III, Chapter 6 for the needed formula and worksheet, which should be used as a guide.

**Water Efficient Landscaping:** A measure of the portion of the total applied irrigation water beneficially used (primarily to satisfy plant water needs). Losses (non-beneficial water use) include unused runoff and evaporation from wet soil surfaces.

**WUCOLS III:** Water Use Classification of Landscape Species is a guide to the water needs of landscape plants published by the Department of Water Resources for the State. (Ord. 403 § 1 (part), 2007)

2. Landscaped areas shall be provided with a smart irrigation controller, which automatically adjusts the frequency and/or duration of irrigation events in response to changing weather conditions unless the use of the property would otherwise prohibit use of a timer. The planting areas shall be grouped in relation to moisture control zones based on similarity of water requirements (e.g. turf separate from shrub and groundcover, full sun exposure areas separate from shade areas, top of slope separate from toe of slope). Additional water conservation technology may be required, where necessary, at the discretion of the Planning Director.
3. Water systems for common open space areas shall use non-potable water, if approved facilities are made available by the water purveyor. Provisions for the conversion to a non-potable water system shall be provided within the landscape plan. Water systems designed to utilize non-potable water shall be designed to meet all applicable standards of the California Department of Public Health.
4. Separate valves shall be provided for separate water use planting areas, so that plants with similar water needs are irrigated by the same irrigation valve. All installations shall rely on highly efficient state of the art irrigation systems to eliminate runoff and maximize irrigation efficiency as required by the Landscaping Guide.
5. All irrigation systems shall be equipped with the following:
  - a. A smart irrigation controller as defined by the irrigation association;
  - b. A rain sensing device to prevent irrigation during rainy weather;
  - c. Anti-drain check valves installed at strategic points to minimize or prevent low-head drainage; and
  - d. A pressure regulator when the static water pressure exceeds the maximum recommended operating pressure of the irrigation system.
6. All shrub, groundcover, and vines shall be installed with point-to-point drip irrigation or low precipitation rate heads/nozzles. (Ord. 403 § 1 (part), 2007)

#### 16.27.060 Implementation.

All landscaping and irrigation plans submitted shall comply with the following requirements and be drawn at the same size and scale (20 scale):

- A. Landscaping and irrigation plans shall be prepared using the Water Budget Formula contained in the Landscaping Guide. In addition, landscaping plans shall provide a water budget (which includes estimated annual water use in gallons per acre feet and the area in square feet per acre to be irrigated), precipitation rates for each valve circuit, and the irrigation schedules required pursuant to A Guide to Estimating the Irrigation Water Needs of Landscape Plantings in California: The Landscape Coefficient Method & WUCOLS III by California Department of Water Resources. Separate valves shall be provided for separate water-use planting areas so that plant materials with similar water needs are irrigated by the same irrigation valve. The estimated annual water use, calculated by adding the amount of water recommended in the irrigation schedule, shall not exceed the allowable water budget.
  1. The submission of a planting plan shall identify and site the following:
    - a. All new and existing trees, shrubs, groundcovers, and turf areas within the developed landscape area;
    - b. A planting legend indicating all plant species by botanical name and common name, spacing and quantities of each type of plant by container size;
    - c. The designation of hydrozones;
    - d. The area, in square feet, devoted to landscaping and a breakdown of the total area by landscape hydrozones;
    - e. The property lines, streets, and street names;
    - f. The building locations, driveways, sidewalks, retaining walls, and other hardscape features;
    - g. The appropriate scale and north arrow; and
    - h. The planting specifications and details, including the recommendations from the soils analysis, if applicable.

3. That the irrigation system has been adjusted to maximize irrigation efficiency and eliminate overspray and runoff; and
  4. That a copy of the irrigation schedule has been given to the property owner.
- C. The Planning Director or his/her designee shall have the right to enter upon the project site at any time before, during and after installation of the landscaping to conduct inspections for the purpose of enforcing this chapter.
- D. Any person or entity that violates any portion of this Chapter shall be subject to enforcement under Chapter 1.32. (Ord. 403 § 1 (part), 2007)