Community Development Department
Telephone (909) 931-4130
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February 1, 2010

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

SUBJECT: CITY OF UPLAND WATER EFFICIENT LANDSCAPE ORDINANCE

Mr. Eching,

In response to the Water Conservation in Landscaping Act of 2006 (Assembly Bill 1881), the Upland City Council adopted the attached water efficient landscape ordinance on January 25, 2010. A signed copy will be available on February 9, 2010, and will be forwarded to you at that time.

This ordinance closely follows the regional Chino Basin Water Efficient Landscape Ordinance, which was endorsed by the Landscape Alliance of the Inland Empire Utilities Agency (IEUA). In adopting the ordinance, the Upland City Council found that it is designed to be as effective as the State Model Water Efficient Ordinance.

If you have any questions, please call me at (909) 931-4112.

Sincerely,

Karen Peterson

for Aleksandra Janjic
Planning Intern

Enclosure: City of Upland Water Efficient Landscape Ordinance

cc: Jeffrey Bloom, Community Development Director
Karen Peterson, Planning Manager

RESOLUTION NO. 4735

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF UPLAND RECOMMENDING THAT THE CITY COUNCIL OF THE CITY OF UPLAND APPROVE CODE AMENDMENT NO. CA-09-01 PERTAINING TO CITY-WIDE DEVELOPMENT STANDARDS AND REGULATIONS FOR WATER EFFICIENT LANDSCAPING

THE PLANNING COMMISSION OF THE CITY OF UPLAND DOES HEREBY FIND, ORDER, AND RESOLVE AS FOLLOWS:

SECTION 1. RECITALS.

A. The City of Upland initiated Code Amendment No. (CA-09-01) for the adoption of regulations pertaining to water efficient landscaping to comply with the provisions of Assembly Bill (AB) 1881;

B. The City prepared an Initial Study/Draft Negative Declaration and circulated the document for public review from November 25, 2009, to December 15, 2009, and no public comments were received;

C. On December 15, 2009, at 7:00 p.m., the Planning Commission conducted a public hearing on Code Amendment CA-09-01 in the manner and for the time required by law; and,

D. At said time and place, said Planning Commission heard and considered both oral and written evidence.

SECTION 2. FINDINGS. The Planning Commission hereby makes the following findings and determinations in connection with the approval of the project:

A. Recitals A through D of Section 1, above, are true and correct.

B. Pursuant to the California Environmental Quality Act ("CEQA") and the City's CEQA Guidelines, and based on the conclusions of the Initial Study, which evaluates the potential impacts of the draft ordinance, the City of Upland property prepared a Negative Declaration. The Initial Study shows that there is no substantial evidence, in light of the whole record before the City, that the project may have a significant adverse effect on the environment. The Planning Commission reviewed and considered the Initial Study/Negative Declaration prior to making a recommendation to the City Council on the ordinance.

C. The Planning Commission hereby makes the following additional findings with regard to Code Amendment CA-09-01:

(1) The proposed ordinance is designed to be at least as effective in conserving water and minimizing water waste as the State of California model ordinance adopted pursuant to Government Code §65595 by assuring beneficial, efficient, and responsible use of water resources within the City of Upland;

(2) The proposed ordinance encourages the appropriate design, installation, maintenance, and management of landscaping to decrease landscape water demand, increase landscape water efficiency, and reduce runoff without a decline in the aesthetic quality or quantity of landscapes;

(3) The proposed ordinance promotes the preservation of existing natural vegetation and the incorporation of native plants, plant communities and ecosystems into landscape design while promoting and encouraging low water use plants;

(4) The proposed ordinance maintains land's natural hydrological role within the City of Upland and promotes the infiltration of surface water into the groundwater;

(5) The proposed ordinance encourages the use of recycled water, where available.

(6) The proposed ordinance is necessary and desirable for the orderly administration of the community, is not contrary to the objectives of the General Plan, and is necessary for reasons of public health, safety.

SECTION 3. DETERMINATION AND RECOMMENDATIONS TO THE CITY COUNCIL. In light of the evidence presented at the hearing on the proposed ordinance, and based on the findings set forth above, the Planning Commission of the City of Upland hereby recommends that the City Council of the City of Upland adopt the Negative Declaration and approve Code Amendment CA-09-01 amending the Upland Municipal Code as set forth in Exhibit A (Draft Water Efficient Landscape Ordinance), subject to review and approval as to form by the City Attorney.

SECTION 4. CERTIFICATION. The Secretary of the Planning Commission shall certify to the passage, approval, and adoption of this Resolution, and shall cause this Resolution and his certification to be entered in the Book of Resolutions of the Planning Commission of the City.

I HEREBY CERTIFY that the foregoing Resolution was duly and regularly passed and adopted by the Planning Commission of the City of Upland at a regular adjourned meeting thereof held on the 15th day of December, 2009, by the following roll call vote:

AYES: Commissioners, Cook, Morris, Schwary, Sheridan, Timm, Tundis

NAYS: None ABSENT: Commissioner Schauer

Mark Tundis, CHAIR

ATTEST:

Karen Peterson

Karen Peterson, ACTING SECRETARY

ORDINANCE NO.

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF UPLAND AMENDING THE UPLAND MUNICIPAL CODE AND ADOPTING REQUIREMENTS FOR WATER EFFICIENT LANDSCAPING WITHIN THE CITY

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

SECTION 1. Findings

A. The City of Upland initiated Code Amendment No. (CA-09-01) for the adoption of regulations pertaining to water efficient landscaping to comply with the provisions of Assembly Bill (AB) 1881 and to ensure that the City's standards are as least as effective as those proffered by the State;

B. On December 15, 2009, at 7:00 p.m., the Planning Commission conducted a public hearing on Code Amendment CA-09-01 in the manner and for the time required by law. At said time and place, said Planning Commission heard and considered both oral and written evidence and moved to recommend that the City Council adopt the Negative Declaration prepared for the project and Code Amendment 09-011 amending the Upland Municipal Code to set forth regulations pertaining to water efficient landscaping;

C. Pursuant to the California Environmental Quality Act ("CEQA") and the City's CEQA Guidelines, and the conclusions of an Initial Study, which evaluates the potential impacts of the draft ordinance, the City of Upland property prepared a Negative Declaration. The Initial Study/Draft Negative Declaration was circulated for public review from November 25, 2009, to December 15, 2009, and no public comments were received. The Initial Study shows that there is no substantial evidence, in light of the whole record before the City, that the project may have a significant adverse effect on the environment. The City Council reviewed and considered the Initial Study/Negative Declaration prior to making a decision on the ordinance.

D. The proposed ordinance is designed to be as least as effective in conserving water and minimizing water waste as the State of California model ordinance adopted pursuant to Government Code §65595 by assuring beneficial, efficient, and responsible use of water resources within the City of Upland as follows:

(1) The ordinance applies to the same types and sizes of landscape projects as the State model ordinance;

(2) The ordinance sets forth the same water budget and formula requirements as the State model ordinance, which includes an evapotranspiration adjustment factor (ETAF) of 0.7 for new and rehabilitated landscapes and an ETAF of 0.8 for existing landscapes;

(3) The ordinance requires the use of the water efficient irrigation equipment and the use of improved technology, such as weather-based irrigation controllers, to improve water efficiency;

(4) The ordinance requires irrigation systems to be designed to prevent runoff, overspray, and similar conditions, and the City's existing regulations, which will remain unchanged, prohibit runoff;

(5) The ordinance requires the same types of plans and information as required by the State model ordinance to be submitted to demonstrate compliance with water budgeting and water efficiency requirements;

(6) The ordinance incorporates the same types of auditing and maintenance methods as the State model ordinance, including irrigation water use analysis, irrigation audits, and irrigation surveys.

E. The proposed ordinance encourages the appropriate design, installation, maintenance, and management of landscaping to decrease landscape water demand, increase landscape water efficiency, and reduce runoff without a decline in the aesthetic quality or quantity of landscapes;

F. The proposed ordinance promotes the preservation of existing natural vegetation and the incorporation of native plants, plant communities and ecosystems into landscape design while promoting and encouraging water efficient landscapes;

G. The proposed ordinance maintains land's natural hydrological role within the City of Upland and promotes the infiltration of surface water into the groundwater;

H. The proposed ordinance encourages the use of recycled water, where available.

I. The proposed ordinance is necessary and desirable for the orderly administration of the community, is not contrary to the objectives of the General Plan, and is necessary for reasons of public health, safety.

SECTION 2. Title of Section 13.20.070 (Landscape guidelines) of Chapter 13.20 (Water Conservation Retrofit) of Title 13 (Public Services) of the Upland Municipal Code shall read as follows:

"The provisions of Chapter 17.26, Landscaping, shall apply."

SECTION 3. Title of Section 17.06.030 (Jurisdiction of design review) of Chapter 17.06 (Design Review) of Title 17 (Planning and Zoning) of the Upland Municipal Code shall read as follows:

"The jurisdiction of design review shall extend to designated cultural resources, subject to the provisions of Chapter 17.150, all new development, and/or substantive remodeling or reconstruction of existing buildings, structures, (inclusive of signs), and landscaping subject to the provisions of Chapter 17.26; excepting review of the exterior appearance of any single-family dwelling in subdivisions located in any of the single-family residential zones, provided the dwelling is not subject to the provisions of Chapter 17.150."

SECTION 4. Section 17.06.050 (Design review procedures and requirements) of Chapter 17.06 (Design Review) of Title 17 (Planning and Zoning) of the Upland Municipal Code shall read as follows:

"Applications for approval of site structure and landscape concept plans shall be made pursuant to all provisions of Chapter 17.16, Development Application and Review Procedures, and Chapter 17.26, Landscaping, of this title."

SECTION 5. Chapter 17.14 (Definitions) of Title 17 (Planning and Zoning) of the Upland Municipal Code shall be amended to add and insert the following definitions in the proper alphabetical order:

"Amendments" means any material added to a soil to improve its physical properties, such as water retention, permeability, water infiltration, and drainage.

"Applied Water" means the portion of water supplied by the irrigation system to the landscape.

"Automatic rain shut-off feature" means a system with a component which automatically suspends the irrigation system even when it rains.

"Botanical gardens and arboretums" means gardens in which a variety of plants are grown for scientific and educational purposes.

"Community garden" means a piece of land in which a variety of edible plants are grown and cultivated by the members of the community.

"Certified landscape irrigation auditor" means a person certified to perform landscape irrigation audits by an accredited educational institution or a professional trade organization.

"Controller" means an automatic timing device used to remotely control valves or heads to set an irrigation schedule. A weather-based controller is a controller that uses evapotranspiration or weather data. A self-adjusting irrigation controller is a controller that uses sensor data (i.e. soil moisture sensor).

"Estimated total water use (ETWU)" means the estimated amount of water to be applied on an annual basis to maintain a healthy landscape, calculated as follows, unless revised by State law:

Estimated total water use (ETWU):

ETWU = (ETo)(0.62)[(PF x HA)/IE + SLA)]

Where:

ETWU = Estimated total water use per year in gallons
ETo = Local reference evapotranspiration in inches per the California Irrigation Management Information System
0.62 = Conversion factor to gallons per square foot
PF = Plant factor from the Department of Water Resources 2000 publication "Water Use Classification of Landscape Species (WUCOLS)" or the most recent update
HA = Hydrozone area (high, medium, and low water use areas) in square feet
IE = Irrigation efficiency (minimum of 0.71)
SLA = Special landscape area in square feet"

"Ecological restoration project" means a project where the site is intentionally altered to establish a defined, indigenous, historic ecosystem.

"Homeowner installed landscape" means any landscaping either installed by a private individual that owns a residence or installed by a licensed contractor hired by a homeowner.

"Hydrozone" means a section or zone of the landscaped area having plants with similar water needs that are served by a valve or set of valves with the same schedule. A hydrozone may be irrigated or non-irrigated.

"Invasive species" means non indigenous species that adversely affect the habitats they invade economically, environmentally, or ecologically.

"Irrigation efficiency" means the measurement of the amount of water beneficially used divided by the amount of water applied. Irrigation efficiency is derived from measurements and estimates of irrigation system characteristics and management practices. The minimum irrigation efficiency for purposes of this ordinance is 0.71.

"Landscaped area, net landscape area, or landscape project area" means all of the planting areas, turf areas, and water features in a landscape design plan. The landscape area does not include footprints of buildings or structures, sidewalks, driveways, parking lots, decks, patios, gravel or stone walks, other pervious or non-pervious hardscapes, and other non-irrigated areas designated for non-development (e.g., open spaces and existing native vegetation)."

"Landscape water audit or irrigation audit" means an in depth evaluation of the performance of an irrigation system conducted by a Certified Landscape Irrigation Auditor. Audits include, but are not limited to: inspection, system tune-up, system test with distribution uniformity and verification of minimal overspray or run off that causes overland flow, preparation of an irrigation schedule.

"Maximum annual applied water allowance (MAWA)" means the maximum amount of water to be used on an annual basis to maintain a healthy landscape, calculated as follows, unless revised by State law:

Maximum annual applied water allowance (MAWA):

MAWA = (ETo)(0.62)[(0.7 x LA) + (0.3 x SLA)]
MAWA for existing landscapes = (ETo)(0.62)[(0.8 x LA) + (0.3 x SLA)]

Where:

ETo = Local reference evapotranspiration in inches according to the California Irrigation Management Information System (CIMIS)
0.62 = Conversion factor to gallons per square foot

0.7 or 0.8= Evapotranspiration adjustment factors in accordance with Assembly Bill 1881
LA = Landscaped area, including special landscape area, in square feet
0.3 = Additional evapotranspiration adjustment factor for special landscape areas
SLA = Special landscape area in square feet

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

"New construction of landscapes" means installation of new landscaping improvements on an area where no landscaping improvements exist.

"Overspray" means the water that is delivered beyond the landscaped areas by the irrigation system onto pavements, walks, structures or other non-landscaped areas.

"Rehabilitation of landscapes" means a significant alteration or reconfiguration of existing landscape improvements to such an extent that the altered landscaped area would be comprised of new plants, materials, or improvements.

"Runoff" means water that is not absorbed by the soil or landscape to which it is applied and flows from the area.

"Soil test" means test done by a soil test lab that indicates at minimum soil texture, water holding capacity, pH, and soluble salts.

"Special landscape area" means 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."

"Turf" means a surface layer of earth containing mowed grass or grasslike sedge with its roots. Annual bluegrass, Kentucky bluegrass, Perennial ryegrass, Red fescue, and Tall fescue are common cool-season turf. Bermuda grass, Kikuyu grass, Seashore Paspalum, St. Augustine, Zoysia, Carex pansa, and Buffalo grass are common types of warm-season turf.

"Water feature" means a design element where open water performs an aesthetic or recreational function. Water feature includes 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 calculations of Chapter 17.26.

"Water purveyor" means any entity, including a public agency, city, county, or private water company that provides retail water service.

"Water schedules" means schedule of irrigation times throughout a given year.

"Weather-based irrigation controller or SMART irrigation controller" means a weather-based or soil moisture-based irrigation controller, or equivalent technology that monitors and uses information about the environmental conditions at a specific location and landscape to automatically adjust watering schedules."

SECTION 6. Section 17.18.090 (Development review and permits - General) of Title 17 (Planning and Zoning) of the Upland Municipal Code shall read as follows:

"Before commencing any work pertaining to the erection, construction, moving, conversion or alteration of any building, or any addition to any building, installation of new or rehabilitated landscaping in accordance with Chapter 17.26, a permit shall be secured from the building inspector by any owner or authorized agent thereof, and no person shall commence any such work until and unless such permit shall first have been obtained in compliance with all appropriate standards of the Upland Municipal Code and the procedures as specified hereinafter."

SECTION 7. Chapter 17.26 (Landscaping) of Title 17 (Planning and Zoning) of the Upland Municipal Code shall read as follows:

"Sections:
17.26.010 Purpose
17.26.020 Applicability
17.26.030 Water Efficient Projects Requirements
17.26.040 Water Efficient Design Standards
17.26.050 Water Efficient Design Criteria
17.26.060 Projects Not Subject to Water Efficient Requirements
17.26.070 General Design Criteria, Street Trees, and Plant Sizes
17.26.080 Parking Lot Landscape

17.26.090 Certificate of Completion
17.26.100 Water Audits
17.26.110 Monitoring and Enforcement

17.26.010 Purpose.

A. This Chapter is established to provide minimum standards for landscape and irrigation, within public and private developments, that serve to promote both efficient use of water in landscaping and water conservation.

B. The provisions of this Chapter are believed to be at least as effective in conserving water as the California State Department of Water Resources' model ordinance adopted pursuant to Government Code §65595.

C. This Chapter shall apply to each of the zones throughout the city and in public and private residential and non-residential projects, including single-family residences, single-family residential subdivisions, private and common areas of planned residential developments, multiple-family developments, commercial developments, industrial development, and institutional developments, and parks and open space, and other non-residential projects.

17.26.020 Applicability.

A. The provisions of this Chapter shall apply to all of the following landscape projects:

1. New construction and rehabilitation of landscapes for public agency projects and private development projects with a total project net landscape area:
   a. equal to or greater than 2,500 square feet shall comply with all sections of Chapter 17.26, except Section 17.26.060 and 17.26.100;
   b. less than 2,500 square feet shall comply with all sections of Chapter 17.26, except sections 17.26.030, 17.26.040, 17.26.50, 17.26.100 and 17.26.110.

2. New construction and rehabilitation of landscapes for developer-installed residential projects with a total project net landscape area:
   a. equal to or greater than 2,500 square feet shall comply to all sections of Chapter 17.26, except section 17.26.060 and 17.26.100;

b. less than 2,500 square feet shall comply with all sections of Chapter 17.26, except sections 17.26.030, 17.26.040, 17.26.50, 17.26.100 and 17.26.110.

c. New construction of landscapes which are homeowner-installed residential projects with a total project net landscape area equal to or greater than 5,000 square feet shall comply with all sections of Chapter 17.26, except section 17.26.060 and 17.26.100.

3. New construction or rehabilitation of landscapes at registered local, state or federal historical sites shall comply with all sections of Chapter 17.26, except sections 17.26.030, 17.26.40, 17.26.50, 17.26.100 and 17.26.110.

4. Botanical gardens and arboretums open to the public shall comply with all sections of chapter 17.26 except Sections 17.26.030, 17.26.040, 17.26.50, 17.26.100 and 17.26.110.

B. Existing residential and non-residential landscapes with a total net landscape area equal to or greater than one (1) acre with a dedicated or mixed water meter are limited to calculating the maximum annual applied water allowance in accordance with Section 17.26.100.

C. This Chapter shall not apply to:

1. New construction of landscapes which are homeowner-installed residential projects with a total project net landscape area less than 5,000 square feet;
2. Rehabilitation projects for homeowner-installed residential projects of any size.
3. Ecological restoration projects that do not require a permanent irrigation system;
4. Mined-land reclamation projects that do not require a permanent irrigation system;

17.26.030 Water Efficient Project Requirements.

A. General Submittal Requirements:

1. Applicants for projects that are subject to the water efficiency requirements of this chapter in accordance with Section 17.26.020 shall submit complete landscaping and irrigation plans prepared by a licensed landscape architect for review and approval prior to the issuance of construction permits.

2. Applicants for homeowner installed landscapes at single-family residences shall submit complete landscaping and irrigation plans, which may be prepared by a licensed landscape architect, landscape professional, or self-prepared, for review and approval prior to the issuance of construction permits.

3. Applicants for projects that require other discretionary approvals shall submit conceptual landscaping plans for design review in accordance with Chapter 17.06 and in conjunction with the other discretionary applications, and the submittal and approval of landscape and irrigation construction plans shall be required as a condition of approval.

4. Applicants for projects that do not require discretionary approvals, the applicant shall submit landscape and irrigation construction plans as a ministerial application that demonstrate conformance with the requirements set forth in this Chapter.

B. Conceptual Landscape Plan

Conceptual landscape plans shall be submitted in conjunction with other discretionary applications and shall include:

1. A design statement indicating that the annual applied water use will not exceed the maximum annual applied water allowance;
2. The estimated total annual applied water use (ETWU) and the maximum annual applied water allowance (MAWA) calculation for the project;
3. A description of any existing plant material to be retained or removed;
4. A plan showing the planting areas and hydrozones, plant species and spacing, natural features, water features and all paved areas;
5. A legend listing the plant name (botanical and common) and total quantities by container size and species;
6. Identification of amenities, boulders, pools, fountains, and other features;
7. Identification of headers and curbs;
8. Calculation of paved areas, including parking areas;
9. Calculation of required parking lot and site landscape areas;
10. Calculation of total on-site landscape in square feet and by percentage of lot;
11. If available or required for the project, an approved grading plan shall be submitted for reference.

C. Landscape and Irrigation Construction Plans

All landscape construction plan submittals shall include a planting and soils plan and irrigation and water management plan, including detailed project notes and legends necessary and sufficient for a complete landscape plan review by the City.

1. Planting and Soils Plan

   a. A description of any existing plant material to be retained or removed;
   b. A plan showing the planting areas and hydrozones, plant species and spacing, natural features, water features and all paved areas;
   c. A legend listing the plant name (botanical and common) and total quantities by container size and species;
   d. A description of the seed mixes with application rates;
   e. Identification of amenities, boulders, pools, fountains, and other features;
   f. Identification of headers and curbs;
   g. Calculation of paved areas, including parking areas;
   h. Calculation of required parking lot and site landscape areas;
   i. Calculation of total on-site landscape in square feet and by percentage of lot;
   j. Soil test results and recommendations;
   k. If available or required for the project, an approved grading plan shall be submitted for reference.

2. Irrigation and Water Management Plan

   a. A plan showing the location, installation details, specifications, and water efficiency status of all irrigation components, including, but not limited to, control valves, irrigation heads, irrigation head radius and gallons per minute (GPM), line sizes and pipe schedules, hose bibs or quick coupler valves, irrigation controllers, backflow devices, and power supply;
   b. Pressure calculations;
   c. The estimated total water use (ETWU) and the maximum annual applied water allowance (MAWA) calculation for the project;
   d. A design statement indicating that the estimated annual applied water use will not exceed the maximum annual applied water allowance;
   e. Water conservation methods to be applied;

f. Seasonal irrigation water schedules or procedures for programming of proposed controllers;
g. Identification of the party(ies) responsible for implementation of water management;
h. Maintenance schedule for the ongoing operation and maintenance of the irrigation system.

17.26.040 Water Efficient Design Standards.

Conceptual and construction landscape and irrigation plans that are subject to the water efficiency requirements in this Chapter in accordance with Section 17.26.020 shall adhere to the following design standards:

A. Any plant may be used in the landscape, providing the estimated annual applied water use does not exceed the maximum annual applied water allowance (i.e., water budget) and the design of landscaped area meets the following requirements:

1. Plants having similar water needs shall be grouped together in distinct hydrozones;
2. Plants shall be selected appropriately based upon their adaptability to the climate, geologic, and topographical conditions of the site;
3. A combination of trees, shrubs, and groundcovers shall be used to create a varied and visually interesting landscape;
4. Large expanses of uninterrupted hardscape, such as decomposed granite, gravel, and similar materials, shall be avoided.

B. Re-circulating water features shall be used for decorative water features. Where available, recycled water shall be used as the source for water features, excluding swimming pools and spas.

C. The surface area of a water feature will be included in the maximum annual applied water allowance calculation with the evaporation rate equivalent to that of a high water use plant.

D. Automatic irrigation systems shall be used to provide adequate water coverage for all landscaped areas that are subject to this Chapter. All irrigation systems shall incorporate water efficient equipment and shall include:

1. A weather-based irrigation controller, or other equivalent technology, which automatically adjusts the frequency and/or duration of irrigation events in response to changing weather conditions shall be required.

2. A configuration that allows planting areas to be grouped and irrigated in relation to hydrozones 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, etc.);
3. Anti-drain check valves shall be installed to prevent low-head drainage in sprinkler heads;
4. A pressure regulator, if the static water pressure exceeds the maximum recommended operating pressure of the irrigation system;
5. A rain sensor with an automatic rain shut-off feature shall be required.

E. All irrigation systems shall be designed to prevent runoff, over-spray, low head drainage and other similar conditions. Soil types and infiltration rates shall be considered when designing irrigation systems. Irrigation systems shall be designed, constructed, managed, and maintained to achieve as high an overall efficiency as possible.

F. Dedicated (separate) landscape water meters shall be installed for all projects greater than 5,000 square feet, except for single family residential projects. Dedicated landscape water meters are encouraged on landscape areas less than 5,000 square feet to facilitate water management.

G. Irrigation systems shall make use of recycled water unless a written exemption has been granted by water purveyor stating that recycled water meeting all public health codes and standards is not available and will not be available in the foreseeable future. Any recycled water irrigation systems shall be designed and operated in accordance with all local agency and State codes.

H. Soil testing shall be performed after mass grading and prior to landscape installation to ensure the selection of appropriate soil amendments to support healthy plant materials and proper drainage. Soil testing shall include:

1. Determination of soil texture, indicating the available water holding capacity;
2. Determination of approximate soil infiltration rate (either) measured or derived from soil texture/infiltration rate tables. A range of infiltration rates shall be noted where appropriate;
3. Measurements of pH and total soluble salts;
4. A recommend action as to necessary amendments.

I. Grading on site shall be designed to minimize unnecessary soil compaction, erosion and water waste.

17.26.050 Water Efficient Design Criteria.

Conceptual and construction landscape and irrigation plans that are subject to the water efficiency requirements in this chapter shall be encouraged to incorporate the following design criteria:

A. In addition to the design standards contained Section 17.26.060, the following criteria should be incorporated into the landscape design:

1. Protection and preservation of existing native species and natural areas shall be encouraged;
2. The planting of lower water using trees, shrubs, and groundcover is encouraged;
3. The use of turf shall be minimized; turf areas shall be used wisely in response to functional needs and shall not exceed the maximum annual applied water allowance. Where turf is installed, the use of warm season turf is strongly encouraged.

B. The appropriate use of mulch within developed landscapes shall be encouraged to retain moisture.

C. Stormwater management practices to minimize runoff and water waste to recharge groundwater, and to improve water quality, are encouraged.

17.26.060 Projects Not Subject to Water Efficient Requirements.

A. General Submittal Requirements:

1. Applicants for projects that are not subject to the water efficient requirements of this chapter in accordance with Section 17.26.020 shall submit complete landscaping and irrigation plans for review and approval in accordance with Sections 17.26.070 and 17.26.080 prior to the issuance of construction permits.

2. For projects that require other discretionary approvals, the applicant shall submit conceptual landscaping and irrigations plans for design review such as in accordance with Chapter 17.06 and in conjunction with the discretionary applications, and the submittal of landscape and irrigation construction plans shall be required as a condition of approval.

3. For projects that do not require any discretionary approvals, the applicant shall submit landscape and irrigation construction plans as a ministerial application.

B. Conceptual Landscape Plan

1. A description of any existing plant material to be retained or removed;
2. A plan showing the planting areas and hydrozones, plant species and spacing, natural features, water features and all paved areas;
3. A legend listing the plant name (botanical and common) and total quantities by container size and species;
4. A description of the seed mixes with application rates;
5. Identification of amenities, boulders, pools, fountains, and other features;
6. Identification of headers and curbs;
7. Calculation of paved areas, including parking areas;
8. Calculation of required parking lot and site landscape areas;
9. Calculation of total on-site landscape in square feet and by percentage of lot;
10. If available or required for the project, an approved grading plan shall be submitted for reference.

C. Landscape and Irrigation Construction Plans

All landscape construction drawings shall include a planting plan and irrigation plan with detailed notes and legends necessary for a complete landscape plan review.

1. Planting and Irrigation Plans

    a. All items listed in Section 17.26.060(A) for conceptual landscape plans.
    b. If available or required for the project, an approved grading plan shall be submitted for reference.
    c. An irrigation plan showing the location, installation details, and specifications of all irrigation components, including, but not limited to, control valves, irrigation heads, irrigation head radius and gallons per minute (GPM), pressure calculations, line sizes and pipe schedules, hose bibs or quick coupler valves, irrigation controllers, backflow devices, and power supply;
    d. All irrigation systems are encouraged to be designed to prevent runoff, over-spray, low head drainage and other similar conditions.

17.26.070 General Design Criteria, Street Trees, and Plant Sizes.

Plans required by Section 17.26.030 and 17.26.060 shall incorporate the following

design standards:

A. A combination of trees, shrubs, and groundcovers shall be used to create a varied and visually interesting landscape. All trees shall be not less than a minimum 15-gallon size and a minimum of 25 percent of all shrubs shall be of a five-gallon size.

B. In areas that are three (3) feet to ten (10) feet wide, a minimum of one tree shall be provided for every 20 linear feet. A minimum of one tree shall be planted for every 500 square feet of landscaping in all other areas.

C. Street trees shall be planted along both sides of every private street, with a maximum spacing of 20 feet to 35 feet on center, depending on the tree type.

D. The use of boulders or similar hardscape for design enhancement is encouraged.

E. Large expanses of uninterrupted hardscape, such as decomposed granite, gravel, and similar materials, shall be avoided.

F. Fire prevention needs shall be addressed in areas that are fire prone and all landscape components shall be consistent with regulations of the Upland Fire Department in effect at the time of landscape installation.

G. 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 sensitive areas.

17.26.080 Parking Area Landscape.

Plans required by Section 17.26.030 and 17.26.060 shall incorporate the following design standards:

A. At least eight percent (8%) of a parking lot area on a site shall be landscaped. The areas dedicated to parking and the ingress and egress of vehicles and pedestrians shall be used in determining the amount of required parking lot landscaping.

B. Fifty percent (50%) of parking lot landscaping on a non-residential project site shall be distributed within the parking area and fifty percent (50%) shall be distributed around the perimeter of the site.

C. Landscaping in parking lot areas shall be surrounded by continuous concrete

curbing six inches (6") in height above grade.

D. To be counted as part of the eight percent (8%) requirement, the landscaped areas shall be located immediately adjacent to parking stalls and driveways, and shall exclude curbs, sidewalks, and landings.

E. A maximum of fifteen percent (15%) of the area within the two and one-half foot (2'-6") landscaped overhang adjacent to each parking space may be counted as part of the eight percent (8%) landscape requirement.

F. Landscape Islands. End parking spaces shall be provided with a minimum five feet (5') wide landscape island or planter.

G. Parking Areas Abutting a Residential Use or Zone. Where a parking lot abuts a residential use or zone they shall be separated by a solid masonry wall six feet (6') in height, provided the wall shall not exceed three feet (3') in height within the required front yard setback of an abutting residential zone. Where a parking lot abuts a property line which is the boundary for a residential use or zone, a minimum five-foot wide landscape area shall be provided between the parking lot and the property line.

H. For single-family residential projects, the front yard, and side yard fronting onto a street on corner lots, shall be landscaped, except for those areas occupied by driveways providing access to garages and walkways providing access to a residence. No more than forty (40) percent of a front or side yard shall be dedicated to driveways and walkways. For multiple-family residential projects, the provisions of Section 17.54.080 shall apply.

17.26.090 Certificate of Completion.

Prior to issuance of a certificate of occupancy or final inspection for a project subject to this Chapter, a Certificate of Completion shall be submitted to the Community Development Director certifying that the landscaping has been completed in accordance with the approved construction plans for the project. For water efficient projects, the Certificate of Completion shall be signed by a licensed landscape architect except for the owner installed landscapes at the single-family residence which may be signed by a licensed landscape architect or landscape professional or self-signed and shall indicate that:

A. The landscaping has been installed in conformance with the approved plans;

B. The smart irrigation controller has been set according to the irrigation schedule;

C. The irrigation system has been adjusted to maximize irrigation efficiency and eliminate overspray and runoff;

D. A copy of the irrigation schedule has been given to the property owner.

17.26.100 Water Audits.

For existing residential and non-residential landscapes with a total net landscape area equal to or greater than one (1) acre with a dedicated or mixed water meter, the City shall administer programs that may include, but not be limited to, irrigation water use analysis, irrigation audits, and irrigation surveys to determine whether the landscape meets or exceeds the maximum annual applied water allowance for the landscape and provide information to the property owner about methods to increase water efficiency in the landscape. Existing landscapes may use an evapotranspiration adjustment factor of 0.8 when calculating the maximum annual applied water allowance (MAWA).

17.26.110 Monitoring and Enforcement.

For projects that are subject to the water efficiency requirements of this chapter, the City shall administer programs that may include, but not be limited to, irrigation water use analysis, irrigation audits, and irrigation surveys to determine whether the new or rehabilitated landscape complies with the estimated applied annual water use and meets or exceeds the maximum annual applied water allowance. If the property is found to be in excess of the approved maximum annual applied water allowance, the property owner may be subject to the same administrative procedures and penalties as outlined in Municipal Code 13.16.020."

SECTION 8. Section 17.38.070 (Site development standards) of Title 17 (Planning and Zoning) of the Upland Municipal Code shall read as follows:

> "No building or structure shall be hereafter erected or located on a lot unless such building, structure or enlargement conforms with the provisions of Chapter 17.18, Site Development Standards—General, and the following additional provisions, excepting as may otherwise be provided in the standards of the specific zone in which such building or structure is to be located or as may otherwise be authorized as part of an approved residential planned unit development (RPUD) or planned residential development (PRD) in compliance with all provisions therefore. Landscaping improvements shall comply with the provisions of Chapter 17.26."

SECTION 9. Section 17.50.130.E (RS-(MH) Single-Family Mobilehome Zone) of Title 17 (Planning and Zoning) of the Upland Municipal Code shall read as follows:

"E. Landscaping. The landscape requirements of Chapter 17.26 shall apply."

SECTION 10. Section 17.56.230.B(7) (RM-CO Multiple Family Residential Condominium Zone - Development review and permits) of Title 17 (Planning and Zoning) of the Upland Municipal Code shall read as follows:

"7. A conceptual landscaping plan submitted in accordance with the policies of the design review board and Chapter 17.26, and drawn to scale, indicating:

a. All mature trees, indicating those to be retained, removed, or relocated,
b. Special landscape features to be retained or created, such as rocks, walls, fences, etc., and all other landscaping to be provided,
c. Irrigation facilities, and
d. Recreation areas and facilities to be provided."

SECTION 11. Section 17.60.070 (Site development standards) of Title 17 (Planning and Zoning) of the Upland Municipal Code shall read as follows:

"No building or structure shall be hereafter erected, located, or enlarged on a lot unless such building, structure or enlargement conforms with the provisions of Chapter 17.18, Site Development Standards—General, and the following additional provisions, excepting as may otherwise be provided in the standards of the specific zone in which such building or structure is to be located. Landscaping improvements shall comply with the provisions of Chapter 17.26."

SECTION 12. Section 17.66.070 (Site development standards.) of Title 17 (Planning and Zoning) of the Upland Municipal Code shall read as follows:

"The provisions of Section 17.60.070 and Chapter 17.26 shall apply, excepting as otherwise specified herein."

SECTION 13. Section 17.68.070 (Site development standards.) of Title 17 (Planning and Zoning) of the Upland Municipal Code shall read as follows:

"The provisions of Section 17.60.070 and Chapter 17.26 shall apply, excepting as otherwise specified herein."

SECTION 14. Section 17.70.160.E (CC Community Commercial Zone - Landscape Requirements) of Title 17 (Planning and Zoning) of the Upland Municipal Code shall read as follows:

"E. Landscape Irrigation System Required. An adequate irrigation system shall be installed to ensure a continuous maintenance of the landscaping and planting required in accordance with the provisions of Chapter 17.26."

SECTION 15. Section 17.72.070 (Site development standards.) of Title 17 (Planning and Zoning) of the Upland Municipal Code shall read as follows:

"The provisions of Section 17.60.070 and Chapter 17.26 shall apply, excepting as otherwise specified herein."

SECTION 16. Section 17.74.070 (Site development standards.) of Title 17 (Planning and Zoning) of the Upland Municipal Code shall read as follows:

"The provisions of Section 17.60.070 and Chapter 17.26 shall apply, excepting as otherwise specified herein."

SECTION 17. Section 17.76.140 (AC Airport Commercial Zone – Vehicle parking and loading requirements) of Title 17 (Planning and Zoning) of the Upland Municipal Code shall read as follows:

"The provisions of Section 17.60.150 and the following shall apply:

Landscaping Required. All open parking areas shall have a minimum of ten (10) percent of its area devoted to permanently maintained landscape materials consisting of ground cover, shrubs, trees and other plant materials and shall comply with Chapter 17.26."

SECTION 18. Section 17.82.070 (Site development standards) of Title 17 (Planning and Zoning) of the Upland Municipal Code shall read as follows:

"No building or structure shall be hereafter erected or located on a lot unless such building, structure or enlargement conforms with the provisions of Chapter 17.18, Site Development Standards—General, and the following additional provisions, excepting as may otherwise be provided in the standards of the specific zone in which such building or structure is to be located. Landscaping improvements shall comply with the provisions of Chapter 17.26."

SECTION 19. Section 17.84.120.E (Site development standards) of Title 17 (Planning and Zoning) of the Upland Municipal Code shall read as follows:

"E. Landscaping Required. All open areas, parking and drive areas, shall be landscaped with a combination of trees, shrubs, and groundcover in accordance

with Chapter 17.26 and the following:

1. All open areas not paved or covered shall be landscaped and maintained; provided, however, that a minimum total area equal to twenty-five (25) percent of the total parcel to be developed shall be devoted to landscaped open space. All land areas devoted to the propagation of plant materials, including landscaped portions of parking areas, planting beds, tree wells, and the like, may be included in calculating required open space.
2. Parking and drive areas shall be landscaped in conformity with the provisions of Section 17.22.060, Design and improvement of parking areas-General."

SECTION 20. Section 17.86.120.F (IN Neighborhood Industrial – Landscape Irrigation System Requirements) of Title 17 (Planning and Zoning) of the Upland Municipal Code shall read as follows:

"F. Landscape Irrigation System Required. An adequate irrigation system shall be installed to insure a continuous maintenance of the landscaping and planting required in accordance with the provisions of Chapter 17.26."

SECTION 21. Section 17.94.110.D (MAV Industrial, Airport Zone – Required fences, walls and landscaping) of Title 17 (Planning and Zoning) of the Upland Municipal Code shall read as follows:

"D. Landscaping Required. Landscape plans shall be prepared in accordance with the provisions of Chapter 17.26. All open areas, parking and drive areas shall be landscaped and maintained with turfing or groundcover, trees and/or shrubs as follows:

3. All open areas not paved or covered shall be landscaped and maintained; provided, however, that a minimum total area equal to 25 percent of the total parcel to be developed shall be devoted to landscaped open space. All land area devoted to the propagation of plant materials, including landscaped portions of parking area, planting beds, tree wells, and the like, may be included in calculating required open space.

2. Parking and drive areas shall be landscaped in conformity with the provisions of Section 17.22.060, Design and improvement of parking areas—General."

SECTION 22. Section 17.94.110.E (MAV Industrial, Airport Zone – Required fences, walls and landscaping) of Title 17 (Planning and Zoning) of the Upland Municipal Code shall read as follows:

"E. Landscape Irrigation System Required. An adequate irrigation system shall be installed to ensure a continuous maintenance of the landscaping and planting required (Prior code § 9475.106) in accordance with the provisions of Chapter 17.26."

SECTION 23. Section 17.94.140.D (MAV Industrial, Airport Zone – Vehicle parking and loading requirements) of Title 17 (Planning and Zoning) of the Upland Municipal Code shall read as follows:

"D. Landscaping Required. All open parking areas shall have a minimum of ten (10) percent of its area devoted to permanently maintained landscape materials consisting of ground cover, shrubs, trees and other plant materials in accordance with the provisions of Chapter 17.26."

SECTION 24. Section 17.96.170.E (IC Community Industrial Zone – Landscape Requirements) of Title 17 (Planning and Zoning) of the Upland Municipal Code shall read as follows:

"E. Landscape Irrigation System Required. An adequate irrigation system shall be installed to ensure a continuous maintenance of the landscaping and planting required in accordance with the provisions of Chapter 17.26."

SECTION 25. Section 17.98.070 (Site development standards) of Title 17 (Planning and Zoning) of the Upland Municipal Code shall read as follows:

"No building or structure shall be hereafter erected or located on a lot unless such building, structure or enlargement conforms with the provisions of Chapter 17.18, Site Development Standards—General, and the following additional provisions, excepting as may otherwise be provided in the standards of the specific zone in which such building or structure is to be located or as may otherwise be authorized as part of an approved residential planned unit development (RPUD) or planned residential development (PRD) in compliance with all provisions therefore. Landscaping improvements shall comply with the provisions of Chapter 17.26."

SECTION 26. Section 17.112.130.E (TC Town Center Zone – Vehicle parking and loading requirements) of Title 17 (Planning and Zoning) of the Upland Municipal Code shall read as follows:

"E. Required Landscaping of Parking Area. Where the parking requirements set forth herein are met by the development or expansion of a parking lot, the provisions of Section 17.26 shall be met. (Prior code § 9488.109)"

SECTION 27. Section 17.118.140.C (MU Mixed Use Zone – Required Landscaping of Parking Area) of Title 17 (Planning and Zoning) of the Upland Municipal Code shall read as follows:

"C. Required Landscaping. Landscaping shall be in accordance with the provisions of Chapter 17.26."

SECTION 28. Section 17.126.090.B(7) (Residential Planned Unit Development – Development review and permits) of Title 17 (Planning and Zoning) of the Upland Municipal Code shall read as follows:

"7. Landscaping plan in accordance with the provisions of Chapter 17.26 and indicating:

a. All existing mature trees, indicating those to be retained, removed, or relocated,
b. Special landscape features to be retained or created, such as rocks, walls, fences, etc.,
c. Recreation areas and facilities to be provided,
d. Proposed grading in contour intervals of not less than two feet,
e. Other landscaping;"

SECTION 29. Section 17.128.130.B(6) (Planned Residential Development – Development review and permits) of Title 17 (Planning and Zoning) of the Upland Municipal Code shall read as follows:

"6. Landscaping plan (a conceptual plan, drawn to a scale of not less than 60 feet or less to the inch), in accordance with the provisions of Chapter 17.26 and indicating:

a. All mature trees, indicating those to be retained, removed, or relocated,
b. Special landscape features to be retained or created, such as rocks, walls, fences, etc. and all other landscaping to be provided and irrigation facilities therefore,
c. Recreation areas and facilities to be provided,
d. Proposed grading in contour intervals of not less than two feet;"

SECTION 30. Section 17.142.340 (Mobilehome Parks - Landscaping) of Title 17 (Planning and Zoning) of the Upland Municipal Code shall read as follows:

"A landscape plan shall be submitted in accordance with Chapter 17.26. The landscaping plan should consist of the size, type and location of all trees, shrubs and ground cover areas in the mobilehome park site and shall include at least two trees per mobilehome site. At least one tree shall be located in the area adjacent to the roadway. A system of irrigation of sprinkling of landscaping shall be indicated on the plan. All landscaping shall be permanently maintained."

SECTION 31. Section 18.56.160.B(6) (Planned Residential Development – Condominium conversions) of Title 18 (Specific Plans) of the Upland Municipal Code shall read as follows:

"6. Landscaping plan shall be in accordance with the provisions of Chapter 17.26 and indicating:

a. All mature trees, indicating those to be retained, removed, or relocated,
b. Special landscape features to be retained or created, such as rocks, walls, fences, etc. and all other landscaping to be provided and irrigation facilities, therefore,
c. Recreation areas and facilities to be provided,
d. Proposed grading in contour intervals of not less than two feet;"

SECTION 32. Determination

Based on the substantial evidence presented to the City Council, both oral and written, and the findings set forth above, the City Council hereby amends portions of Title 13 (Water Conservation), Title 17 (Zoning Code) and Title 18 (Specific Plans) of the Upland Municipal Code in accordance with this ordinance.

SECTION 33. Severability

If any section, subsection, sentence, clause, phrase, or portion of this ordinance is for any reason held to be invalid or unenforceable by a court of competent jurisdiction, the remaining portions of this Ordinance shall nonetheless remain in full force and effect. The people of the City of Upland hereby declare that they would have adopted each section, subsection, sentence, clause, phrase, or portion of this Ordinance, irrespective of the fact that any one or more sections, subsections, sentences, clauses, phrases, or portions of this Ordinance be declared invalid or unenforceable.

The foregoing ordinance was PASSED, APPROVED AND ADOPTED by the City Council of the City of Upland on the _____ day of _____, 2009.

_____
John V. Pomierski, Mayor

ATTEST:

_____
Stephanie A. Mendenhall, City Clerk

I, Stephanie A. Mendenhall, City Clerk of the City of Upland, California, do hereby certify that the foregoing Ordinance was introduced at a regular meeting of the City Council of the City of Upland held on the _____ day of _____, 2009, and was adopted at a regular meeting of the City Council of the City of Upland on the ___ day of _____, 2009, by the following roll call vote:

AYES:

NOES: ABSENT: ABSTAINED:

_____
Stephanie A. Mendenhall, City Clerk