#### ORDINANCE NO.10032 (N.S.)

# AN ORDINANCE AMENDING THE SAN DIEGO COUNTY CODE TO ADD TITLE 8, DIVISION 6, CHAPTER 7, ADOPTING REGULATIONS RELATING TO WATER CONSERVATION IN LANDSCAPING

The Board of Supervisors of the County of San Diego ordains as follows:

Section 1. The Board of Supervisors finds and determines as follows:

- (a) The State of California adopted the Water Conservation in Landscaping Act, Government Code sections 65590 et seq. in 1990. The Act required the State Department of Water Resources to adopt a model water efficient landscape ordinance by January 1, 1992. The Act further provided that if a local agency had not by January 1, 1993 either: (1) adopted findings based on climatic, geological or topographical conditions or water availability stating a water efficient landscape ordinance is unnecessary or (2) adopted a water efficient landscape ordinance, then the model water efficient landscape ordinance adopted by the Department of Water Resources would take effect within the local jurisdiction and be enforced by the local agency. The County amended the County Zoning Ordinance adopting water efficient landscape regulations before the January 1, 1993 deadline.
- (b) In 2006 the State repealed the Water Conservation in Landscaping Act and adopted a new Water Conservation in Landscaping Act, Government Code sections 65591 et seq. The new Act requires the Department of Water Resources to update the previously adopted model water efficient landscape ordinance that provides for greater efforts at water conservation and more efficient use of water in landscaping. The model ordinance is required to include provisions for: (1) water conservation by the appropriate use and groupings of plants that are well adapted to particular sites and local conditions, (2) a landscape water budget that establishes the maximum amount of water to be applied through the irrigation system, (3) automatic irrigation systems and irrigation schedules based on climatic conditions, terrains and soil types and other environmental conditions, (4) onsite soil assessment and soil management plans that include grading and drainage to promote healthy plant growth and prevent excessive erosion and runoff and (5) promoting the use of recycled water for landscaping when it is available and the use is consistent with State law.
- (c) Government Code section 65595 requires that on or before January 1, 2010 a local agency shall adopt a water efficient landscape ordinance that is at least as effective in conserving water as the updated model ordinance or adopt the model ordinance. If a local agency does not adopt a water efficient landscape ordinance

by the deadline, the updated model ordinance shall apply within the local agency's jurisdiction and shall be enforced by the local agency.

- (d) The water efficient landscape regulations in the County Zoning Ordinance are not as effective in conserving water as the updated model ordinance and need to be replaced by more comprehensive regulations.
- (e) This ordinance adopts water efficient landscape regulations for the unincorporated area of the County that include provisions for: (1) water conservation by the appropriate use and groupings of plants that are well adapted to particular sites and local conditions, (2) a landscape water budget that establishes the maximum amount of water to be applied through the irrigation system, (3) automatic irrigation systems and irrigation schedules based on climatic conditions, terrains and soil types and other environmental conditions, (4) onsite soil assessment and soil management plans that include grading and drainage to promote healthy plant growth and prevent excessive erosion and runoff and (5) promoting the use of recycled water for landscaping when it is available and the use is consistent with State law.
- (f) This ordinance will: (1) increase water use efficiency by establishing and monitoring water budgets, promoting installation and maintenance of efficient irrigation systems and encouraging use of plants that use water efficiently based on climate, soil type and site features and (2) reduce water waste that occurs from irrigation runoff and overspray.
- (g) This ordinance is consistent with the findings and declarations the State Legislature made when adopting the new Water Conservation in Landscaping Act and is as effective as the State's updated model water efficient landscape ordinance.

Section 2. Title 8, Division 6, Chapter 7 is added to the San Diego County Code to read as follows:

#### CHAPTER 7. WATER CONSERVATION IN LANDSCAPING

#### **SEC. 86.701. PURPOSE.**

The State Legislature determined in the Water Conservation in Landscaping Act (the "Act"), Government Code sections 65591 et seq., that the State's water resources are in limited supply. The Legislature also recognized that while landscaping is essential to the quality of life in California, landscape design, installation, maintenance and management must be water efficient. The general purpose of this chapter is to establish water use standards for landscaping in the

unincorporated area of the County that implement the 2006 development landscape design requirements established by the Act. Consistent with the Legislature's findings the purpose of this chapter is to:

- (a) Promote the values and benefits of landscapes while recognizing the need to utilize water and other resources as efficiently as possible.
- (b) Establish a structure for planning, designing, installing, maintaining and managing water efficient landscapes in new construction.
- (c) Promote the use, when available, of tertiary treated recycled water, for irrigating landscaping.
- (d) Use water efficiently without waste by setting a Maximum Applied Water Allowance for new projects as an upper limit for water use and reduce water use to the lowest practical amount.
- (e) Encourage water users of existing landscapes to use water efficiently and without waste.

#### SEC. 86.702. DEFINITIONS.

The following definitions shall apply to this chapter:

- (a) "Automatic irrigation controller" means an automatic timing device used to remotely control valves that operate an irrigation system. Automatic irrigation controllers schedule irrigation events using either evapotranspiration (weather-based) or soil moisture sensor data.
- (b) "Building permit" means a permit issued by the County Building Department authorizing the permit holder to among other things, erect, construct, enlarge, alter, repair or improve a building or structure.
- (c) "Certified landscape irrigation auditor" means a person certified to perform landscape irrigation audits by an accredited academic institution, a professional trade organization or other accredited certification program.
- (d) "Cool season grass" means a type of grass that remains green in the winter months.
- (e) "Developer" includes a developer's partner, associate, employee, consultant, trustee or agent or any other person who has any other business or financial relationship with the developer.

- (f) "Director DPLU" means the means the Director of Planning and Land Use or anyone whom the Director has appointed or hired to administer or enforce this chapter.
- (g) "Discretionary permit" means any permit requiring a decision making body to exercise judgment prior to its approval, conditional approval or denial.
- (h) "Estimated total water use" (ETWU) means the estimated total water use in gallons per year for a landscaped area.
- (i) "ET adjustment factor" (ETAF) means a factor that when applied to reference evapotranspiration, adjusts for plant water requirements and irrigation efficiency, two major influences on the amount of water that is required for a healthy landscape.
- (j) "Evapotranspiration rate" means the quantity of water evaporated from adjacent soil and other surfaces and transpired by plants during a specified time period. "Reference evapotranspiration" (ETo) means a standard measurement of environmental parameters which affect the water use of plants. ETo is expressed in inches per day, month, or year and is an estimate of the evapotranspiration of a large field of four-inches to seven-inches tall, cool season grass that is well watered. Reference evapotranspiration is used as the basis of determining the MAWA so that regional differences in climate can be accommodated.
- (k) "Grading" means any importation, excavation, movement, loosening or compaction of soil or rock.
  - (1) "Hardscape" means any durable surface material, pervious or non-pervious.
- (m) "Hydrozone" means a portion of the landscape area having plants with similar water needs. A hydrozone may be irrigated or non-irrigated.
- (n) "Invasive plant species" means species of plants not historically found in California that spread outside cultivated areas and may damage environmental or economic resources.
- (o) "Irrigation audit" means an in depth evaluation of the performance of an irrigation system conducted by a certified landscape irrigation auditor. An irrigation audit includes, but is not limited to, inspection, system tune-up, system test with distribution uniformity or emission uniformity, reporting overspray or runoff that causes overland flow and preparation of an irrigation schedule.

- (p) "Irrigation efficiency" means the measurement of the amount of water beneficially used divided by the water applied. Irrigation efficiency is derived from measurements and estimates of irrigation system characteristics and management practices.
- (q) "Landscaped area" means an area with outdoor plants, turf and other vegetation. A landscaped area includes a water feature either in an area with vegetation or that stands alone. A landscaped area may also include design features adjacent to an area with vegetation when allowed under section 86.714. A landscaped area does not include the footprint of a building, decks, patio, sidewalk, driveway, parking lot or other hardscape that does not meet the criteria in section 86.714. A landscaped area also does not include an area without irrigation designated for non-development such as designated open space or area with existing native vegetation.
- (r) "Licensed landscape contractor" means a person licensed by the State of California as a specialty contractor in the C-27 category, to construct, maintain, repair, install or subcontract the development of a landscape system.
- (s) "Landscape design manual" means the manual, approved by the Director of Planning and Land Use that establishes specific design criteria and guidance to implement the requirements of this chapter.
- (t) "Low head drainage" means a sprinkler head or other irrigation device that continues to emit water after the water to the zone in which the device is located has shut off.
- (u) "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 lines or bubblers.
- (v) "Mass grading" means the movement of more than 5000 cubic yards of soil by mechanical means to alter the topographic features of a site.
- (w) "Maximum applied water allowance" (MAWA) means the maximum allowed annual water use for a specific landscaped area based on the square footage of the area, the ETAF and the ETo.
- (x) "Mulch" means an organic material such as leaves, bark, straw, compost or inorganic mineral materials such as rocks, gravel or decomposed granite left loose and applied to the soil surface to reduce evaporation, suppress weeds, moderate soil temperature or prevent soil erosion.

- (y) "Overspray" means the water from irrigation that is delivered outside an area targeted for the irrigation and makes contact with a surface not intended to be irrigated.
- (z) "Pervious" means any surface or material that allows the passage of water through the material and into underlying soil.
- (aa) "Plant factor" means a factor that when multiplied by the ETo, estimates the amount of water a plant needs.
- (bb) "Public water purveyor" means a public utility, municipal water district, municipal irrigation district or municipality that delivers water to customers.
- (cc) "Recycled water" means waste water that has been treated at the highest level required by the California Department of Health Services for water not intended for human consumption. "Tertiary treated recycled water" means water that has been through three levels of treatment including filtration and disinfection.
- (dd) "Runoff" means water that is not absorbed by the soil or landscape to which it is applied and flows from the landscaped area.
- (ee) "Special landscaped area" means an area of the landscape dedicated to edible plants, an area irrigated with recycled water or an area dedicated to play such as a park, sports field or golf course where turf provides a playing surface.
- (ff) "Subsurface irrigation" means an irrigation device with a delivery line and water emitters installed below the soil surface that slowly and frequently emit small amounts of water into the soil to irrigate plant roots.
- (gg) "Transitional area" means a portion of a landscaped area that is adjacent to a natural or undisturbed area and is designated to insure that the natural area remains unaffected by plantings and irrigation installed on the property.
- (hh) "Turf" means a groundcover surface of cool season or warm season mowed grass. Annual bluegrass, Kentucky bluegrass, perennial ryegrass, red fescue and tall fescue are cool season grasses. Bermuda grass, kikuyu grass, seashore paspalum, St. Augustine grass, zoysias grass and buffalo grass are warm season grasses.
- (ii) "Water feature" means a design element where open water performs an aesthetic or recreational function. A water feature includes a pond, lake, waterfall, fountain, artificial streams, spa and swimming pool where a public water purveyor within the San Diego County Water Authority or the Borrego Water District

provides water for the feature. Constructed wetlands used for on-site wastewater treatment or stormwater best management practices are not water features.

(jj) "WUCOLS" means Water Use Classification of Landscape Species and refers to the most recent version of the Department of Water Resources publication authored by the University of California Cooperative Extension.

#### SEC. 86.703. APPLICABILITY.

- (a) The following projects in the unincorporated area of the County for which the County issues a building permit or a discretionary permit after the chapter's effective date shall be required to obtain an outdoor water use authorization as part of the permitting process:
- (1) A project for an industrial, commercial, civic or multi-family residential use where the landscaped area is 1000 square feet or more.
- (2) A single family residential development where the total landscaped common area of the project area is 1000 square feet or more or where the developer or the developer's agent installs landscaping on one or more lots in the development.
- (3) A new single family residence served by a public water purveyor within the San Diego County Water Authority or the Borrego Water District. As used in this subsection, a new single family residence does not include a single family residence that is being rebuilt after it was destroyed due to a natural disaster, such as a fire, earthquake, hurricane or tornado.
- (4) A model home that includes a landscaped area, where the home is served by a public water purveyor within the San Diego County Water Authority or by the Borrego Water District.
- (5) A public agency project that contains a landscaped area 1000 square feet or more.
- (6) A project not included in categories (a)(1) through (a)(5) that requires a new grading permit and contains an area served by temporary or permanent irrigation.
  - (7) A cemetery.
- (b) The following projects shall be exempt from the requirements of this chapter:

- (1) A registered local, State or federal historical site.
- (2) An ecological restoration project that does not require a permanent irrigation system.
- (3) A mined land reclamation project that does not require a permanent irrigation system.
  - (4) A botanical garden or arboretum that is open to the public.
- (c) Sections 86.725 and 86.726 shall apply to the owners and occupants of all property in the unincorporated area of the County, other than projects listed in subsection (b). Existing landscape projects that were installed before the effective date of this chapter where the landscape area is greater than one acre shall also be subject to section 86.727(b).

#### SEC. 86.704. OUTDOOR WATER USE AUTHORIZATION.

- (a) No person who constructs a project subject to section 86.703(a) shall use water for irrigation or a water feature without the authorization required by this chapter.
- (b) A person constructing a project subject to section 86.703(a) shall obtain a water use authorization to provide water to a landscaped area as follows:
- (1) A person applying for a building permit for a single family residence shall obtain a water use authorization from the County as part of the permitting process.
- (2) A person applying for a discretionary permit shall submit a landscape concept plan with the discretionary permit application. As used in this chapter, a landscape concept plan means a drawing of the site where the project will be located that includes a representation of the site features, proposed plantings areas and the proposed method and type of irrigation.
- (3) A person issued a discretionary permit shall obtain a water use authorization as part of the permitting process for each building permit for each project segment that requires installation of a water meter or connection to an existing water meter.
- (c) A water use authorization issued by the County shall establish the allowed MAWA for property on which a project that is subject to this chapter is located.

- (d) Once the County establishes the MAWA for a property, no person who obtains water for the property from a public water purveyor in the unincorporated area of the County shall exceed the MAWA on that property, unless the County agrees to modify the MAWA, as provided in section 86.721.
- (e) Any person may examine the water use authorization establishing the MAWA for a property at the Department of Planning and Land Use during normal business hours.

## SEC. 86.705. ADMINISTRATION, ENFORCEMENT AND LANDSCAPE MANUAL.

- (a) The Director DPLU shall administer and enforce this chapter, except that the Director DPLU may refer an application for a water use authorization to the Director of Public Works or the Director of General Services for processing.
- (b) The Director DPLU shall prepare a landscape design manual that provides guidance to applicants on how to comply with the requirements of this chapter. The manual shall also provide guidance for a person with an existing landscaped area on how to increase water use efficiency and avoid wasting water.

# SEC. 86.706. NEW SINGLE FAMILY RESIDENTIAL PROJECTS WITH LIMITED LANDSCAPING.

An applicant for a building permit for a new single family residence subject to this chapter where the landscaped area of the project is less than 5,000 square feet shall, as a condition of obtaining a building permit, submit an application for an outdoor water use authorization on a form provided by the Director. The application process shall include establishing a MAWA for the project.

#### SEC. 86.707. LANDSCAPE DOCUMENTATION PACKAGE.

- (a) Except as provided in subsection (b) an applicant for a building permit for a project described in section 86.703(a) shall submit a landscape documentation package with the permit application.
- (b) An applicant for a building permit for a single family residence with a landscaped area less than 5,000 square feet is not required to submit a landscape documentation package with the permit application, but shall comply with section 86.706. This subsection does not apply to a person who is applying for one or more building permits for single family residences in a residential development where the person applying is the developer.

- (c) The landscape documentation package required by subsection (a) shall contain the following:
- (1) A soil management report that complies with section 86.708 that analyzes soil composition within each landscaped area of the project.
- (2) A landscaping and irrigation plan that complies with section 86.709 that describes the landscaping and irrigation for the project.
- (3) A water efficient landscape worksheet that complies with section 86.711 that calculates the MAWA and the ETWU for the project.
- (4) A grading design plan that complies with section 86.710 that describes the grading of the project.

#### SEC. 86.708. SOIL MANAGEMENT REPORT.

- (a) The soil management report required by section 86.707(c)(1) shall contain the following information:
- (1) An analysis of the soil for the proposed landscaped areas of the project that includes information about the soil texture, soil infiltration rate, pH, total soluble salts, sodium, percent organic matter.
- (2) Recommendations about soil amendments that may be necessary to foster plant growth and plant survival in the landscaped area using efficient irrigation techniques.
- (b) When a project involves mass grading of a site the applicant shall submit a soil management report that complies with subsection (a) above with the certificate of completion required by section 86.722.

#### SEC. 86.709. LANDSCAPING AND IRRIGATION PLAN.

(a) The landscaping and irrigation plan required by section 86.707(c)(2) shall be prepared by a landscape architect, civil engineer or architect licensed by the State of California. A homeowner of a single family residence required to submit a landscape and irrigation plan may have a licensed landscape contractor prepare the landscaping and irrigation plan if the homeowner has contracted with that contractor to install the landscaping and irrigation pursuant to the plan.

- (b) The landscaping and irrigation plan shall contain the following information:
- (1) A list of all vegetation by common and botanical plant name which exists in the proposed landscaped area. The plan shall state what vegetation will be retained and what will be removed.
- (2) A list of all vegetation by common and botanical plant name which will be added to each landscaped area. The plan shall include the total quantities by container size and species. If the applicant intends to plant seeds, the plan shall describe the seed mixes and applicable germination specifications.
- (3) A detailed description of each water feature that will be included in the landscaped area.
- (4) The plan shall be accompanied by a drawing showing on a page or pages, the specific location of all vegetation, retained or planted, the plant spacing and plant size, natural features, water features and hardscape areas. The drawing shall include a legend listing the common and botanical plant name of each plant shown on the drawing.
- (5) The location, type and size of all components of the irrigation system that will provide water to the landscaped area, including the controller, water lines, valves, sprinkler heads, moisture sensing devices, rain switches, quick couplers, pressure regulators and backflow prevention devices.
- (6) The static water pressure at the point of connection to the public water supply and the flow rate in gallons, the application rate in inches per hour and the design operating pressure in pressure per square inch for each station.
- (7) The MAWA for the plan, including the calculations used to determine the MAWA. The calculations shall be based on the formula in section 86.712.
- (8) The ETWU for the plan, including the calculations used to determine the ETWU. The calculations shall be based on the formula in section 86.713.
- (9) A statement signed under penalty of perjury by the person who prepared the plan that provides, "I am familiar with the requirements for landscape and irrigation plans contained in the County Landscape Water Conservation Regulations, in Title 8, Division 6, Chapter 7. I have prepared this plan in compliance with those regulations. I certify that the plan implements those regulations to provide efficient use of water."

- (c) The landscape and irrigation plan shall be designed as follows:
- (1) All plants shall be grouped in hydrozones and the irrigation system shall be designed to deliver water to hydrozones based on the moisture requirements of the plant grouping. A hydrozone may mix plants of moderate and low water use, and mix plants of high water use with plants of moderate water use, but no high water use plants shall be allowed in a low water use hydrozone. A high water use hydrozone may, however, provide for some low water use plants if the low water use plants are of a type that are likely to thrive and flourish with the additional water. The plan shall also demonstrate how the plant groupings accomplish the most efficient use of water.
- (2) The irrigation system shall be designed to prevent standing water and any condition such as runoff, overspray and low-head drainage where irrigation water flows or sprays onto areas not intended for irrigation. The plan shall also demonstrate how grading and drainage techniques promote healthy plant growth and prevent standing water, erosion and runoff.
  - (3) The plan shall provide for use of mulch as follows:
- (A) A minimum two inch layer of mulch shall be applied on all exposed soil surfaces in each landscaped area except in turf areas, creeping or rooting ground covers or direct seeding applications where mulch is contraindicated.
  - (B) Stabilizing mulch shall be applied on slopes.
- (C) The mulching portion of a seed/mulch slurry in hydro-seeded applications shall comply with subsection (B) above.
- (D) Highly flammable mulch material, such as straw or small or mini size wood chips, shall not be used in a "Hazardous Fire Area," as that term is defined in the County Fire Code.
- (4) The plan shall identify the type and amount of mulch for each area where mulch is applied.
- (5) On a project other than a single family residence, the plan shall identify recreational areas.
- (6) The plan shall identify areas permanently and solely dedicated to edible plants.

- (7) The plan shall identify each area irrigated with recycled water, gray water and other non-potable water.
- (8) The plan shall identify any soils amendments and their type and quantity.
- (9) The plan shall demonstrate that landscaping when installed and at maturity will be positioned to avoid obstructing motorists' views of pedestrian crossings, driveways, roadways and other vehicular travel ways. If the landscaping will require maintenance to avoid obstructing motorist's views, the plan shall describe the maintenance and the frequency of the proposed maintenance.
- (10) The plan shall avoid the use of landscaping with known surface root problems adjacent to a paved area, unless the plan provides for installation of root control barriers or other appropriate devices to control surface roots.
- (11) The plan shall provide that any slope greater than 25 percent will be irrigated with an irrigation system with a precipitation rate of .75 inches per hour or less to prevent runoff and erosion. As used in this chapter, 25 percent grade means one foot of vertical elevation change for every four feet of horizontal length. An applicant may employ an alternative design if the plan demonstrates that no runoff or erosion will occur.
- (12) The plan shall provide that all wiring and piping under a paved area that a vehicle may use, such as a parking area, driveway or roadway, will be installed inside a PVC conduit.
- (13) The plan shall provide that irrigation piping and irrigation devices that deliver water, such as sprinkler heads, shall be installed below grade if they are within 24 inches of a vehicle or pedestrian use area. The Director DPLU may allow on-grade piping where landform constraints make below grade piping infeasible.
- (14) That plan shall provide that only low volume or subsurface irrigation shall be use to irrigate any vegetation within 24 inches of an impermeable surface unless the adjacent impermeable surfaces are designed and constructed to cause water to drain entirely into a landscaped area.
- (15) The plan shall provide that plants in a transitional area consist of a combination of site adaptive and compatible native and non-native species. The plan shall also provide that no invasive plant species shall be introduced or tolerated in a transitional area. The irrigation in a transitional area shall be

designed so that no overspray or runoff shall enter an adjacent area that is not irrigated.

- (16) The plan shall demonstrate compliance with best management practices required by sections 67.801 et seq. (Watershed Protection, Stormwater Management and Discharge Control regulations).
- (17) The plan shall address fire safety issues and demonstrate compliance with State and County requirements for defensible space around buildings and structures and shall avoid the use of fire prone vegetation.
- (18) The irrigation system shall provide for the installation of an easily accessible manual shutoff valve as close as possible to the water supply. Additional manual shutoff valves shall be installed between each zone of the irrigation system and the water supply.
- (19) The irrigation system shall provide that irrigation for any landscaped area will be regulated by an automatic irrigation controller.
- (20) The irrigation system shall be designed to meet or exceed an average landscape irrigation efficiency of 0.71.
- (d) The landscaping and irrigation plan shall describe each automatic irrigation controller the system uses to regulate the irrigation schedule and whether it is a weather based system or moisture detection system. The plan shall depict the location of electrical service for the automatic irrigation controller or describe the use of batteries or solar power that will power valves or an automatic irrigation controller.

#### SEC. 86.710. GRADING DESIGN PLAN.

- (a) The grading design plan required by section 86.707(c)(4) shall be prepared by a landscape architect, civil engineer or architect licensed by the State of California. A homeowner of a single family residence required to submit a grading design plan may have a licensed landscape contractor prepare the grading design plan if the homeowner has contracted with that contractor to do the work covered by the plan. The grading design plan shall comply with following requirements:
- (1) The grading on the project site shall be designed for the efficient use of water by minimizing soil erosion, runoff and water waste, resulting from precipitation and irrigation.

- (2) The plan shall show the finished configurations and elevations of each landscaped area including the height of graded slopes, the drainage pattern, pad elevations, finish grade and any stormwater retention improvements.
- (b) If the project applicant has submitted a grading plan with the application for the project the Director DPLU may accept that grading plan in lieu of the grading design plan required by this section, if the grading plan complies with subsection (a) above.

#### SEC. 86.711. WATER EFFICIENT LANDSCAPE WORKSHEET.

The water efficient landscape worksheet required by section 86.707(c)(3) shall be prepared by a landscape architect, civil engineer or architect licensed by the State of California. A homeowner of a single family residence required to submit a water efficient landscape worksheet may have a licensed landscape contractor prepare the water efficient worksheet if the homeowner has contracted with that landscape contractor to install the landscaping and irrigation covered by the plan for which the worksheet was prepared. The water efficient worksheet shall contain all of the following:

- (a) A hydrozone information table that contains a list of each hydrozone in the landscaped area of the project. For each hydrozone listed the applicant shall provide all of the following information:
- (1) The square footage of the hydrozone and the percentage of the total landscaped area of the project the hydrozone represents.
  - (2) The irrigation methods proposed to be used within the hydrozone.
- (3) The category of the hydrozone as high, moderate or low water use and the median plant factor for the hydrozone. The category of the hydrozone and median plant factor shall be determined as follows:
- (A) The plant factor used shall be from WUCOLS. The plant factor ranges from 0 to 0.3 for low water use plants, from 0.4 to 0.6 for moderate water use plants and from 0.7 to 1.0 for high water use plants. The median plant factor for low water use plants is 0.2, for moderate water use plants is 0.5 and for high water use plants is 0.8. If plants within a hydrozone have different water use requirements the hydrozone category shall be determined using the highest water using plant. The median plant factor shall be assigned based on the category determined.

- (B) Temporarily irrigated areas shall be included in the low water use hydrozone. Temporarily irrigated as used in this chapter means the period of time when plantings only receive water until they become established.
- (C) The surface area of a water feature shall be included in a high water use hydrozone unless the water feature is a pool or a spa with a durable cover. In that case, the water feature may be included in a moderate water use hydrozone.
- (4) Each special landscaped area and the area's water use calculated using an ETAF of 1.0.
- (b) Budget calculations for the MAWA and the ETWU. The calculations shall use the formula for the MAWA in section 86.712 and for the ETWU in section 86.713.

#### SEC. 86.712. MAXIMUM APPLIED WATER ALLOWANCE.

(a) A landscape project subject to this chapter shall not exceed the MAWA. The MAWA for a new landscape project shall be determined by the following calculation:

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

- (b) The abbreviations used in the equation have the following meanings:
  - (1) MAWA = Maximum Applied Water Allowance in gallons per year.
  - (2) ETo = Evapotranspiration in inches per year.
  - (3) 0.62 = Conversion factor to gallons per square foot.
  - (4) 0.7= ET adjustment factor for plant factors and irrigation efficiency.
  - (5) LA = Landscaped area includes special landscaped area in square feet.
- (6) 0.3 = the additional ET adjustment factor for a special landscaped area (1.0 0.7 = 0.3)
- (7) SLA = Portion of the landscaped area identified as a special landscaped area in square feet.
- (c) If a public water purveyor establishes a MAWA for a property that is lower than the MAWA established pursuant to this chapter nothing in this chapter shall

be construed to prevent the water purveyor from enforcing its rules, regulations or ordinances.

#### SEC. 86.713. ESTIMATED TOTAL WATER USE.

- (a) An applicant for a project subject to this chapter shall calculate the estimated water use for each hydrozone, except a special landscaped area, using the following equation:
  - (1) Estimated water use =  $(ETo)(0.62)(PF \times HA / IE)$

For special landscaped areas the applicant shall use the following equation:

(2) Estimated water use = (ETo)(0.62)(SLA)

The sum of all landscaped areas shall be the ETWU for the project.

- (b) The abbreviations used in the equation have the following meanings:
  - (1) ETWU = Estimated total water use in gallons per year.
  - (2) ETo = Evapotranspiration in inches per year.
  - (3) 0.62 = Conversion factor to gallons per square foot.
- (4) PF = Average plant factor for each hydrozone based on whether the hydrozone is classified as high, medium or low water use. The hydrozone classification shall be based on the data included in the landscape and irrigation plans.
  - (5) HA = Hydrozone Area in square feet.
- (6) IE = Irrigation Efficiency of the irrigation method used in the hydrozone.
  - (7) SLA = Special landscaped area in square feet.
  - (c) The ETWU for a proposed project shall not exceed the MAWA.

## SEC.86.714. ADJUSTMENT TO LANDSCAPED AREA FOR NON-VEGETATED AREA.

Rock and stone or pervious design features such as decomposing granite ground cover that are adjacent to a vegetated area may be included in the calculation of the MAWA and ETWU provided the features are integrated into the design of the landscape area and the primary purpose of the feature is decorative.

#### SEC. 86.715. LIMITATIONS ON USE OF WATER FEATURES.

The total of all water features for a project, except for a swimming pool or spa, shall be limited to 15 percent of the total landscaped area of the project.

#### SEC.86.716. LIMITATIONS ON USE OF TURF IN LANDSCAPED AREAS.

The following regulations shall apply to the use of turf on a project subject to this chapter:

- (a) Only low volume or subsurface irrigation shall be used for turf in a landscaped area:
- (1) On a slope greater than 25 percent grade where the toe of the slope is adjacent to an impermeable hardscape.
- (2) Where any dimension of the landscaped area is less than eight feet wide.
- (b) On a commercial, industrial or multi-family project, no turf shall be allowed:
- (1) On a center island median strip, on a parking lot island or in a public right of way.
- (2) On any portion of a site that is inaccessible to or unusable by a person who uses the site.
- (c) On a commercial or industrial project, decorative cool season turf shall not exceed 15 percent of the total landscaped area of a project unless the site is irrigated using recycled water.
- (d) A ball field, park, golf course, cemetery and other similar use shall be designed to limit turf in any portion of a landscaped area not essential for the operation of the facility.

(e) No turf shall be allowed in a landscaped area if the turf cannot be irrigated without causing runoff, overspray or other wasteful water uses.

#### SEC. 86.717. CEMETERIES.

A person submitting an application for a Major Use Permit for a cemetery shall also submit the following:

- (a) A concept plan, as described in section 86.704(b)(2).
- (b) A water efficient irrigation worksheet that calculates the MAWA for the project with the application that complies with section 86.711.
- (c) A landscape and irrigation maintenance schedule that complies with section 86.724.

#### SEC. 86.718. PROJECTS WITH MODEL HOMES.

A person who obtains a permit to construct a single family residential development that contains a model home shall provide a summary of this chapter prepared by the Director DPLU to each adult visitor that visits a model home. If an adult visitor is accompanied by one or more adults during the visit only one set of written materials is required to be provided. Each model home shall provide an educational sign in the front yard of the model home visible and readable from the roadway that the home faces that states in capital lettering at least two inches high, "THIS MODEL HOME USES WATER EFFICIENT LANDSCAPING AND IRRIGATION."

#### SEC.86.719. RECYCLED WATER.

- (a) A person who obtains a permit for a project that is subject to this chapter shall use recycled water for irrigation when tertiary treated recycled water is available from the water purveyor who supplies water to the property for which the County issues a permit.
- (b) A person using recycled water from a public water purveyor shall install a distribution system that separates recycled water from potable water. Pipes carrying recycled water shall be purple.
- (c) A person who uses recycled water under this section shall be entitled to an ETAF of 1.0.

(d) This section does not excuse a person using recycled water from complying with all State and local laws and regulations related to recycled water use.

#### SEC. 86.720. INSTALLATION BEFORE FINAL INSPECTION.

A person issued an outdoor water use authorization for a project, other than a single family residence where the landscaped area of the project is less than 5,000 square feet, shall install the approved landscaping and irrigation system before final inspection of the project.

# SEC. 86.721. MODIFICATION OF OUTDOOR WATER USE AUTHORIZATION.

- (a) A person may submit an application to modify the outdoor water use authorization required by this chapter on a form provided by the Director DPLU.
- (b) An applicant requesting modification of an authorization for a single family residence where the total landscaped area after modification is less than 5,000 square feet shall comply with section 86.706.
- (c) An applicant requesting modification of an authorization other than the type of project in subsection (b) above, shall comply with sections 86.707 86.711.

#### SEC. 86.722. CERTIFICATE OF COMPLETION.

Each person issued a water use authorization who has installed approved landscaping and irrigation, other than a single family residence with a total landscaped area less than 5,000 square feet shall submit:

(a) A certificate of completion on a form provided by the Director DPLU within 10 days after installation, verifying that the landscaping and irrigation were installed as allowed in the approved landscape and irrigation plan, that all approved soil amendments were implemented and the installed irrigation system is functioning as designed and approved. The certificate of completion shall be signed under penalty of perjury by the person to whom the water use authorization has been issued and by a California licensed, landscape architect, civil engineer or architect. Where the water use authorization has been issued to a single family homeowner with a landscaped area of 5,000 square feet or more who hired a licensed landscape contractor to install the landscaping and irrigation, the certificate shall be signed under penalty of perjury by the homeowner and the contractor.

- (b) An irrigation schedule that complies with section 86.723 that describes the irrigation times and water usage for the project
- (c) A landscape and irrigation system maintenance schedule that complies with section 86.724.
- (d) A soil management report that complies with section 86.708(b) if the applicant did not submit the report with the landscape documentation package.

#### SEC. 86.723. IRRIGATION SCHEDULE.

The irrigation schedule required by section 86.722 shall be prepared by a California licensed, landscape architect, civil engineer or architect and provide the following information:

- (a) A description of the automatic irrigation system that will be used for the project.
- (b) The time period when overhead irrigation will be scheduled and confirm that no overhead irrigation shall be used between the 10:00 a.m. and 8:00 p.m.
- (c) The parameters used for setting the irrigation system controller for watering times for:
  - (1) The plant establishment period.
  - (2) Established landscaping.
  - (3) Temporarily irrigated areas.
  - (4) Different seasons during the year.
  - (d) The parameters used for each station for the following factors:
    - (1) The days between irrigation.
- (2) Station run time in minutes for each irrigation event, designed to avoid runoff.
- (3) Number of cycle starts required for each irrigation event, designed to avoid runoff.
  - (4) Amount of water to be applied on a monthly basis.

- (5) The root depth setting.
- (6) The plant type setting.
- (7) The soil type.
- (8) The slope factor.
- (9) The shade factor.

#### SEC. 86.724. LANDSCAPING AND IRRIGATION MAINTENANCE.

- (a) A person using water under a water use authorization that the County issued pursuant to this chapter shall maintain the landscaping and irrigation on the property to ensure compliance with the MAWA.
- (b) A property owner using water on property subject to a water use authorization other than a single family residence with a total landscaped area less than 5,000 square feet, shall prepare a maintenance schedule for the landscaping and irrigation on the project. The schedule shall provide for: (1) inspections to guard against runoff and erosion and detect plant or irrigation system failure, (2) replacement of dead, dying and diseased vegetation, (3) eradication of invasive plant species in transitional areas, (4) repairing the irrigation system and its components when necessary, (5) replenishing mulch, (6) soil amendment when necessary to support and maintain healthy plant growth, (7) fertilizing, pruning, weeding and mowing and (8) maintenance to avoid obstruction of motorists' view. The schedule shall also identify who will be responsible for maintenance.
- (c) A person who uses water pursuant to a water use authorization shall maintain the irrigation system to meet or exceed an average irrigation efficiency of 0.71.
- (d) A person who replaces broken or malfunctioning irrigation system components shall replace the components with the same materials or their equivalent.
- (e) A person who replaces vegetation shall replace it with plantings that are representative of the hydrozone in which the plants were removed and shall be typical of the water use requirements of the plants removed provided that the replaced vegetation does not result in mixing plants contrary to the requirements of this chapter.

### SEC. 86.725. PROHIBITION ON WASTING WATER AND EXCEEDING THE MAXIMUM ALLOWED WATER ALLOWANCE

- (a) No person who owns or occupies property in the unincorporated area of the County shall use water for irrigation that due to runoff, low head drainage, overspray or other similar condition, results in water flowing onto adjacent property, non-irrigated areas, structures, walkways, roadways or other paved areas. This section is not intended to apply to circumstances beyond the control of the property owner or other person in possession of the property.
- (b) No person whose property is subject to an outdoor water use authorization pursuant to this chapter shall exceed the MAWA for the property.
- (c) A person who violates subsections (a) or (b) above shall be subject to the Administrative Citation Procedures in sections 18.101 et seq. of this code.
- (d) The County may also obtain an injunction against a person who continues to violate subsections (a) or (b) after receiving a warning of an Administrative Citation pursuant to section 18.103.

#### SEC. 86.726. COUNTY'S RIGHT TO INSPECT.

Whenever the County has reasonable grounds to believe that a person is violating section 86.725 the County may inspect the property and any irrigation system or water feature on the property. If a person refuses to consent to an inspection the County may obtain an inspection warrant pursuant to Code of Civil Procedure sections 1822.50 et seq. No person shall interfere with a County inspector conducting an inspection authorized by this chapter.

#### SEC. 86.727. OUTDOOR WATER USE AUDIT.

- (a) The County may randomly audit outdoor water use on any property for which it issued a water use authorization pursuant to this chapter to determine compliance with the authorization. A person who owns or occupies property subject to a water use authorization, shall be deemed to consent to the audit of outdoor water use if the person engages in outdoor water use on the property.
- (b) The County may also analyze, survey and audit outdoor water use using methods described in 23 California Code of Regulations sections 490 et seq., on an existing landscape project where the landscaped area exceeds one acre and the County has reasonable grounds to believe that due to irrigation runoff, low head drainage, overspray or other similar condition, water is flowing onto adjacent

property, non-irrigated areas, structures, walkways, roadways or other paved areas of the project.

#### SEC. 86.728. FEES.

An applicant for a project subject to this chapter shall include with the application, all fees established by the Board of Supervisors to cover the County's costs to review an application, any required landscape documentation package and any other documents the County reviews pursuant to the requirements of this chapter.

#### **SEC. 86.729. APPEAL**

A person whose application for a water use authorization or for modification of a water use authorization is denied may appeal the denial to the Planning Commission by making a written request for the appeal to the Director DPLU within 10 days of the denial. The Planning Commission shall consider the matter within 45 days after the appeal is file. The 45-day period may be extended upon written consent of the appellant. The Planning Commission's decision shall be final.

Section 3. This ordinance shall take effect and be in force thirty days after its passage, and before the expiration of fifteen days after its passage, a summary hereof shall be published once with the names of the members of this Board voting for and against it in the San Diego Commerce a newspaper of general circulation published in the County of San Diego.

PASSED, APPROVED AND ADOPTED by the Board of Supervisors of the County of San Diego this 13<sup>th</sup> day of January, 2010.