

TITLE 15: WATER AND SEWERS

Chapter

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CHAPTER 15.01: STORMWATER/URBAN RUNOFF

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15.01.010 Definitions.

The following words and phrases shall, for the purpose of this Chapter, be defined as follows:

(a) “Best Management Practices” (BMPs) means any activities, prohibitions, practices, procedures, programs, or other measures designed to prevent or reduce the discharge of pollutants directly or indirectly into waters of the United States. BMPs shall include, but are not limited to, those measures specified in the California Stormwater Best Management Practice Handbooks for Municipal, Industrial/Commercial and Construction Activity and those measures identified by the Director of Public Services.

(b) “City” means the City of Canyon Lake.

(c) “Clean Water Act” means the Federal Water Pollution Control Act, amended in 1977 as the Clean Water Act, and amended in 1987 to establish new controls on industrial and municipal stormwater discharges, and any and all subsequent amendments thereto.

(d) “Discharge” means any release, spill, leak, disposal, flow, escape, leaching (including subsurface migration or deposition to groundwater), dumping or discarding of any liquid, semi-solid or solid substance, or combination thereof.

(e) “Illegal Discharge” means any discharge to the storm drain system that is not composed entirely of stormwater runoff except discharges made pursuant to a National Pollutant Discharge Elimination System (NPDES) permit or as otherwise authorized by the Santa Ana Regional Water Quality Control Board.

(f) “Illegal Connection” means any physical connection to a storm drain system which has not been permitted by the City of Canyon Lake, the Riverside County Flood Control and Water Conservation District, or other appropriate public agency.

(g) “National Pollutant Discharge Elimination System” (NPDES) Permit means a stormwater Discharge permit issued by the Santa Ana Regional Water Quality Control Board or the State Water Resources Control Board in compliance with the Clean Water Act.

(h) “Municipal NPDES Permit” means an area-wide NPDES permit issued to a government agency or agencies for the discharge of stormwater from a stormwater system.

(i) “Non-Stormwater Discharge” means any discharge to the storm drain system that is not entirely composed of stormwater.

(j) “Person” means any natural person, firm, association, club, organization, corporation, partnership, business trust, company or other entity which is recognized by law as the subject of rights or duties.

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(k) "Pollutant" means the following liquid, solid or semi-solid substances, or combination thereof:

(1) Artificial materials, chips or pieces of natural or man-made materials (such as floatable plastics, wood or metal shavings),

(2) Household waste (such as trash, paper, plastics, lawn clippings and yard wastes; animal fecal materials; excessive pesticides, herbicides and fertilizers; used oil and fluids from vehicles, lawn mowers and other common household equipment),

(3) Metals, such as cadmium, lead, zinc, copper, silver, nickel, chromium, and non-metals, such as phosphorus and arsenic.

(4) Petroleum hydrocarbons (such as fuels, lubricants, surfactants, waste oils, solvents, coolants and grease),

(5) Excessive eroded soils, sediment and particulate materials,

(6) Animal wastes (such as discharge from confinement facilities, kennels, pens and recreational facilities, including, stables, show facilities, or polo fields),

(7) Substances having characteristics with a pH less than 6.5 or greater than 8.5, or unusual turbidity, or excessive levels of fecal coliform, fecal streptococcus or enterococcus,

(8) Waste materials and wastewater generated on construction sites and by construction activities (such as painting, staining; use of sealants, glues, limes; excessive pesticides, fertilizers or herbicides; use of wood preservatives and solvents; disturbance of asbestos fibers, paint flakes or stucco fragments; application of oils, lubricants, hydraulic, radiator or battery fluids; construction equipment washing, concrete pouring and cleanup wash water or use of concrete detergents; steam cleaning or sand blasting residues; use of chemical degreasing or diluting agents; and super chlorinated water generated by potable water line flushing),

(9) Materials causing an increase in biochemical oxygen demand, chemical oxygen demand or total organic carbon,

(10) Materials which contain base/neutral or acid extractable organic compounds,

(11) Those pollutants defined in Title 33 U.S.C. Section 1362(6) of the Federal Clean Water Act.

(12) Any other constituent or material that may adversely affect the beneficial uses of the receiving waters, flora or fauna of the State, as determined by the State Board or the Regional Board.

The term "pollutant" shall not include uncontaminated stormwater runoff, potable water or reclaimed water generated by a lawfully permitted water treatment facility.

(l) "Premises" means any building, lot, parcel of land, land or portion of land whether improved or unimproved.

(m) "Regional Board" means the California Regional Water Quality Control Board, Santa Ana Region.

(n) "State Board" means the State Water Resources Control Board.

(o) "Storm Drain System" means any facility within the incorporated areas of the City by which stormwater may be conveyed to waters of the United States. A storm drain system includes but is not limited to any roads with drainage systems, streets, curbs, gutters, catch basins, natural and artificial channels, ditches, aqueducts, storm drains, inlets, conduit or other drainage structure.

(p) "Stormwater" or "Stormwater Runoff" means surface runoff and drainage associated with rain storm or precipitation events.

15.01.020 Non-Stormwater Discharge Requirements.

No person shall discharge or cause or permit to be discharged any non-stormwater discharge to any storm drain system, except:

- (a) Discharges covered by an NPDES permit, or for which an approval has been issued by the, Regional Board or State Board;
- (b) Discharges from potable water line flushing and other potable water resources;
- (c) Discharges from fire fighting and fire hydrant testing and flushing;
- (d) Discharges from landscape irrigation, lawn watering and other irrigation activities;
- (e) Diverted stream flows;
- (f) Rising ground waters and natural springs;
- (g) Uncontaminated groundwater infiltration (as defined in 40 CFR 35.2005(20) and uncontaminated pumped groundwater;
- (h) Passive foundation drains;
- (i) Air conditioning condensate;
- (j) Water from crawl space pumps;
- (k) Passive footing drains
- (l) Discharges from individual residential vehicle washing (not including discharges from mobile sources such as automobile/equipment detailing or washing);
- (m) Flows from riparian habitats and wetlands;
- (n) Dechlorinated swimming pool discharges;
- (o) Street and sidewalk washing and runoff;

(p) Waters not otherwise containing wastes as wastes are defined in California Water Code Section 13050(d); and

(q) Other discharges specifically authorized and permitted by the City or the Regional Board, as described in a permit issued by either the City or the Regional Board.

15.01.030 Regulation of Illicit Connections.

No person shall construct, use, maintain, operate or permit the existence of any illegal connection to the storm drain system on any premises owned or operated by such person.

15.01.040 Prohibited Discharges.

Except as otherwise permitted under Section 15.01.020 of this Chapter, no person shall discharge any liquid, semi-solid or solid substance, or combination thereof, that is not composed entirely of stormwater, and which contains any pollutant, to:

- (a) The storm drain system;
- (b) Any upstream flow, which is tributary to the storm drain system;
- (c) Any groundwater, stream, creek, wash or dry weather arroyo, wetlands area, marsh, coastal sloth;
- (d) Any lake, harbor area, or bay.

15.01.041 Permit required.

(a) Any authorized representative of the property owner or entity which will be performing the work or carrying out the project, or the person who otherwise is responsible for a project or activity which may result in an illegal discharge or in a non-storm

water discharge not listed in Section 15.01.020 (as used herein, the "applicant") shall obtain a City permit at least 72 hours in advance of the commencement of any such project. It is the responsibility of such applicant to determine the applicability of this notice provision.

(b) The applicant shall complete a City application form identifying and describing the project, the property owner/project proponent/contractor, the type of discharge anticipated, and the proposed measures to prevent such discharge into the storm water system. The City may request additional information which the applicant will provide.

(c) The form shall be submitted to the City Manager or his or her designee along with the fee or deposit adopted by resolution of the City Council.

(d) It is the responsibility of the applicant to submit the form in a manner which will allow for provision of a permit at least 72 hours in advance of the commencement of such project.

(e) Notwithstanding, any applicant who must obtain a City encroachment permit is not required to obtain this permit as the requirements of this permit already are included within an encroachment permit. (Ord. 107, passed 7-16-2008)

15.01.042 Terms and conditions of permit; best management practices.

(a) The City shall review the completed application in a timely manner and determine if additional information is required. At such time as the application is complete, staff shall review the type of project proposed and possible discharges, along with proposed measures to prevent discharge, and shall either issue a permit with conditions or inform the applicant that the project as proposed cannot be conditioned in a manner which will prevent illegal discharges.

(b) The City may provide permit conditions confirming those proposed by the applicant and/or applying best management practices for control of non-storm water runoff. Copies of recommended best management practices are available from the City.

(c) In the event that the project is proposed in such a manner that conditions to prevent non-storm water runoff are not effective, the City representatives will work with the applicant to revise the project in a manner which allows for such conditions to be placed on the project and then carried out.

(d) No permit will be processed without payment of the applicable fee or deposit.

(e) No project which falls within the provisions of Section 15.01.060 shall proceed without compliance with these sections.

(f) In the event an applicant believes the project is exempt from these requirements, the applicant may request review of the project to confirm such exemption by submitting the same form and fee or deposit applicable to such review.

(g) An applicant may appeal the applicability of the permit requirement or of the conditions contained in the permit in the same manner as provided for administrative citations.

(h) The requirements of these sections are in addition to any other requirement of federal, state or local law or regulation or CC&R's. (Ord. 107, passed 7-16-2008)

15.01.050 Inspections.

The City Manager or City Engineer, or any designee thereof, may, on 24 hour oral or written notice, unless exigent circumstances justify a shorter time period, enter upon and inspect any private Premises for the purposes of verifying compliance with the terms and conditions of this Chapter. Such inspection may include, but is not limited to:

- (a) Identifying products produced, processes conducted, chemicals and materials used, stored or maintained on the subject premises;
- (b) Identifying points of discharge of all waste water, processed water systems and pollutants;
- (c) Investigating the natural slope of the premises, including drainage patterns and man-made conveyance systems;
- (d) Establishing location of all points of discharge from the premises, whether by surface runoff or through a storm drain system;
- (e) Locating any illegal connection or any discharge prohibited by this Chapter;
- (f) Evaluating compliance with any permit issued pursuant to this Chapter or the Clean Water Act.

15.01.060 Enforcement.

- (a) Any violation of this Chapter is a misdemeanor and shall be punishable by either a fine of up to \$1,000 or six months in the county jail, or both.
- (b) As a part of any sentence or other penalty imposed or the award of any damage, the Court may also order that restitution be paid to the City or any injured person by any person violating this Chapter, or, in the case of a violator who is a minor, by the minor's parent or lawfully designated guardian or custodian. Restitution may include the amount of any reward.
- (c) Any person violating the provisions of this Chapter shall reimburse the City for any and all costs incurred in responding to, investigating, assessing, monitoring, treating, removing, or remediating any pollutant to the storm drain system; rectifying any illegal connection; or remediating any violation of this Chapter. Such costs to be paid to the City include all administrative expenses and all legal expenses,

including costs and attorneys' fees. The costs to be recovered in this Section 15.01.050 shall be recoverable from any and all persons creating, causing or committing or maintaining the violation of this Chapter, or participating in the same.

(d) In the event any violation of this Chapter constitutes an imminent danger to public health, safety, or the environment, the City Manager or City Engineer, Building Official, or any authorized agent thereof, may enter upon the premises from which the violation emanates, abate the violation and danger created to the public safety or the environment, and restore any premises affected by the alleged violation, without notice to or consent from the owner or occupant of the premises. An imminent danger shall include but is not limited to exigent circumstances created by the discharge of pollutants, where such discharge presents significant and immediate threat to the public health or safety, or the environment.

(e) Violations of this Chapter may further be deemed to be a public nuisance which may be abated by administrative or civil or criminal action in accordance with the terms and provisions of this Code and State law.

(f) All costs and fees incurred by the City as a result of any violation of this Chapter which constitute a nuisance, including all administrative fees and expenses and legal fees and expenses, shall become a lien against the subject premises from which the nuisance emanated and a personal obligation against the owner, in accordance with Government Code Sections 38773.1 and 38773.5. The owner of record of the premises subject to any lien shall receive notice of the lien prior to recording, as required by Government Code Section 38773.1. The City Attorney is authorized to collect nuisance abatement costs or enforce a nuisance lien in an action brought for money judgment, or by delivery to the County Assessor of a special assessment against the premises in accordance with the conditions and requirements of Government Code Section 38773.5.

(g) Any person acting in violation of this Chapter may also be acting in violation of the Clean

Water Act or the California Porter-Cologne Act (California Water Code Sections 13000 *et seq.*) and the regulations thereunder, and other laws and regulations, and may be subject to damages, fines and penalties, including civil liability under such other laws. The City Attorney is authorized to file a citizen's suit pursuant to the Clean Water Act, seeking penalties, damages and orders compelling compliance and appropriate relief.

(h) The City Attorney is authorized to file in a court of competent jurisdiction a civil action seeking an injunction against any violation or threatened or continuing violation of this Chapter. Any temporary, preliminary or permanent injunction issued pursuant hereto may include an order for reimbursement to the City for all costs incurred in enforcing this Chapter, including costs of inspection, investigation, monitoring, treatment, abatement, removal or remediation undertaken by or at the expense of the City, and may include all legal expenses and fees and any and all costs incurred relating to the restoration or remediation of the environment.

(i) The City may utilize any and all other remedies as otherwise provided by law.

CHAPTER 15.02: REQUIREMENTS FOR PET WASTE DISPOSAL

Section

- 15.02.010 Definitions.
- 15.02.020 Requirement for disposal; exemption.
- 15.02.030 Enforcement.

Cross-reference:

Health and sanitation, see Title 6
Keeping of animals, see Title 10

15.02.010 Definitions.

For the purpose of this Chapter, the following terms, phrases, words and their derivations shall have the meanings stated herein unless otherwise their use in the text of Chapter 15.02 clearly demonstrates a different meaning.

(a) "Owner/keeper" means any person who possesses, maintains, houses or harbors any pet or otherwise has custody of any pet, whether or not the owner of such pet.

(b) "Pet" means domesticated and exotic animals kept for amusement, assistance or companionship, including dogs, cats, rabbits, horses, birds, reptiles, rodents and exotics.

(c) "Pet waste" means solid waste matter expelled from the bowels of the pet; excrement.

(d) "Proper disposal" means placement in a designated waste receptacle, or other suitable container, and discarded in a refuse container which is regularly emptied by the municipality or some other refuse collector.

(e) "Improper disposal" means hosing down, sweeping without removing, dumping anywhere within the City of Canyon Lake.

(f) "NPDES" means National Pollutant Discharge Elimination System.
(Ord. 138U, passed 10-5-2011)

15.02.020 Requirement for disposal; exemption.

(a) Removal from Owner's Property. The owner of any animal shall immediately and properly dispose animal waste from his or her property and properly dispose of it as it poses a threat to the health, safety or well-being of any animals or persons.

(b) Removal from Other Property. All pet owners and keepers are required immediately and properly dispose of their pet's solid waste deposited on any property, public or private, not owned or possessed by that person within the City of Canyon Lake.
(Ord. 138U, passed 10-5-2011)

15.02.030 Enforcement.

(a) The provisions of Section 15.02.020 of this Chapter may be enforced by any peace officer, special enforcement officer, or other officer designated by the City Manager.

(b) Such violations maybe enforced by any means legally available, including but not limited to administrative citations with corresponding fines. Any violation of this Chapter shall constitute a public nuisance. The violation of this Chapter may be treated as an infraction.

(c) The violation of this Chapter shall constitute a new and separate offense for each and every day or portion of a day during which the violation continues.
(Ord. 138U, passed 10-5-2011)

CHAPTER 15.04: LANDSCAPE WATER USE EFFICIENCY

Section

- 15.04.010 Title.
- 15.04.020 Intent.
- 15.04.030 Definitions.
- 15.04.040 Applicability.
- 15.04.050 General provisions.
- 15.04.060 Recycled water.
- 15.04.070 Landscape documentation package requirements.
- 15.04.080 Landscape maintenance schedule.
- 15.04.090 Compliance/plan submittal.
- 15.04.100 Enforcement.
- Appendix A: Invasive Species List.

15.04.010 Title.

This Chapter shall be known as "Landscape Water Use Efficiency."
(Ord. 126, passed 11-10-2009)

15.04.020 Intent.

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

(a) Promote high quality, water efficient landscaping, water use management and water conservation through the use of water efficient landscaping, wise use of turf areas and appropriate use of irrigation technology and management;

(b) Establish a structure for planning, designing, installing, maintaining, and managing water efficient landscapes in new construction and rehabilitated projects;

(c) Reduce the water demands from landscapes without a decline in landscape quality or quantity;

(d) Retain flexibility and encourage creativity through appropriate design;

(e) Assure the attainment of water-efficient landscape goals by requiring that landscapes not exceed a maximum water demand of 70% of its reference evapotranspiration (ET_o) or any lower percentage as may be required by Elsinore Valley Municipal Water District policy or State legislation, whichever is stricter;

(f) Eliminate water waste from overspray and/or runoff;

(g) Achieve water conservation by raising the public awareness of the need to conserve water through education and motivation to embrace an effective water demand management program;

(h) Implement the requirements to meet the State of California Water Conservation in Landscaping Act 2006 and the California Code of Regulations Title 23, Division 2, Chapter 2.7; and

(i) Coordinate landscape water use regulation with Elsinore Valley Municipal Water District, the primary water supplier for the City and its residents. Therefore, if any provision of this Chapter conflicts with associated regulations/requirements of water purveyor, the stricter requirements shall be applied.
(Ord. 126, passed 11-10-2009)

15.04.030 Definitions.

The terms used in this Chapter have the meanings set forth below:

(a) "Active recreational use" or "Recreational area" means areas of active play or recreation such as

sport fields, school yards, picnic grounds, or other areas of intense foot traffic that provide public benefit.

(b) "Allowable percentage" means allowable percentage for determining the maximum allowable water budget is 0.7. This represents a factor including consideration of average landscape coefficient and irrigation efficiency.

(c) "Amendment" means additions to the soil, such as compost, leaf mold, or ground bark, which improves aeration and drainage of clay soils and helps hold water in sandy soils.

(d) "Annual water use" means that the information on irrigated acreage and cultural water use by type of use, (agricultural, urban, and managed wetlands), water year, and study area, for all of California.

(e) "Application rate" means the depth of water applied to a given area in one hour, usually measured in inches per hour.

(f) "Applied irrigation water" means the portion of water supplied by the irrigation system to the landscape.

(g) "Anti-drain valve" or "Check valve" means a valve located below a sprinkler head to hold water in the system to prevent drainage from sprinkler heads when the system is off.

(h) "Automatic irrigation controller" means a device electrically connected to irrigation valve solenoids that allow the programming of watering days, start times, and cycles for each valve. Commonly called an irrigation timer.

(i) "Backflow prevention device" means a safety device used to prevent pollution or contamination of the water supply due to the reverse flow of water from the irrigation system.

(j) "Bubbler" means a water emission device that tends to bubble water directly to the ground or throw water a short distance before water contacts the ground surface.

(k) "California native" or "Native plant" means California's native plants endemic or indigenous to the local area in which they are found. California native plants are divided into plant communities and habitats (chaparral, woodland, sage scrub, riparian).

(l) "California Irrigation Management Information System" or "CIMIS" means that system which supplies computer-generated information from weather stations across the State that records and disseminates data to help determine a plant's water need.

(m) "Compost" means a mixture of decaying vegetation and/or manure used as a soil amendment.

(n) "Conversion factor (0.62)" means a number that converts the maximum water allowance from acres-inches per acre per year to gallon per square foot per year. The conversion factor is calculated as follows:

$$(325,829 \text{ gallons}/43,560 \text{ square feet})/12 \text{ inches} = (0.62)$$

325,829 gallons=one acre foot

43,560 square feet=one acre

12 inches=one foot

To convert gallons per year to 100 cubic feet per year, another common billing unit for water, divide gallons per year by 748. (Seven hundred forty-eight gallons=100 cubic feet.)

(o) "Covenants, conditions, and restrictions" or "CC&Rs" mean the governing documents of a private mutual benefit corporation that dictate how a homeowner's association operates and what rules the owners, and their tenants and guests, must obey; also called the bylaws, the deed restrictions, the house rules or another name. These documents and rules are legally enforceable by the homeowner's association or individual homeowners, unless a specific provision conflicts with Federal, State, or Local laws.

(p) "Cycle and soak" means a method of irrigating, which waters in a series of shorter increments with an hour or so in between the irrigation cycles to allow water to infiltrate into the soil and penetrate deeply without runoff.

(q) "Design operating pressure" means the total pressure available to operate the irrigation system. Other uses of the term vary, but usually refer to the operating pressure at which a specific piece of irrigation equipment is designed to operate.

(r) "Details" means a specific drawing showing how a particular irrigation, planting, or other item for landscape is to be installed.

(s) "Drip" means any type of irrigation system that is designed to apply water to the soil very slowly so as to avoid water overflow.

(t) "Distribution uniformity" means a measure of how evenly water is applied over an area.

(u) "Emitter" means drip irrigation emission device that delivers water slowly from the system to the plant measured as gallons per hour.

(v) "Established landscape" or "Mature landscape" means the point at which plants in the landscape have developed significant root growth into the site. Typically, most plants are established after one or two years of growth.

(w) "Establishment period" means for purposes of this Chapter, the first year after installing the plants in the landscape. The actual establishment period varies depending upon the plant species, the development of the plant's root system, soil conditions, and other environmental factors.

(x) "Estimated applied water use" means the portion of the estimated total water use that is derived from applied water.

(y) "Estimated total water use" means the annual total amount of water estimated to be needed to keep the plants in the landscaped area healthy based upon such factors as the local evapotranspiration rate, the size of the landscaped area, the types of plants, and the efficiency of the irrigation system.

(z) "ET adjustment factor" means a factor of 0.7 that, when applied to reference evapotranspiration, it adjusts for plant factors and irrigation efficiency.

(aa) "Evapotranspiration (ET_o)" means the quantity of water evaporated from adjacent soil and other surfaces, and transpired by plants during a specific time. The local ET_o factor used in Canyon Lake is: 55.45

(bb) "Flow rate" means the rate at which water flows through pipe fittings, valves and emission devices.

(cc) "Gallons per acre feet" means an acre-foot is a common unit to measure volumes of water, typically for use in irrigation. One acre-foot is the volume of water sufficient to cover an acre of land to a depth of one foot (43,560 cubic feet, approximately 325,851 U.S. gallons).

(dd) "Hardscape" means any durable surface material (pervious and impervious).

(ee) "Head" or "Sprinkler head" means devices which distribute water over a given area for irrigation.

(ff) "High flow check valve" means a valve that shuts off water flow to a broken sprinkler head thereby eliminating excess water flow onto streets and adjacent properties.

(gg) "Hydrozones" means a portion of the landscape area having plants with similar water needs that are served by a valve or set of valves with the same irrigation schedule. A hydrozone may also be non-irrigated, for example, a naturalized area.

(hh) "Infiltration rate" means the rate of water entry into the soil expressed as a depth of water per unit of time (inches per hour).

(ii) "Invasive species" means non-indigenous species that adversely affect the habitats they invade economically, environmentally, or ecologically, as set out in Addendum A. Aquatic invasive species are defined by the Canyon Lake Property Owners Association which maintains a current list thereof.

(jj) "Irrigation Association" means providing a voice for the industry on public policy issues related to standards, conservation, and water-use on local, national, and international levels.

(kk) "Irrigation schedules" means a schedule of when to water. It usually contains days of the week, time of day, and number of cycles per valve. Schedules differ season to season.

(ll) "Irrigation efficiency" means the measurement of the amount of water beneficially used divided by the amount of water applied.

(mm) "Landscape coefficient" means the functional equivalent of a crop coefficient in agriculture. When multiplied times E_{To} , it estimates the amount of water required to maintain landscape plants in good condition.

(nn) "Landscaped area" means the entire parcel less the building pad, driveways, and non-irrigated portions of parking lots, hardscapes - such as decks and patios, and other pervious or impervious areas.

(oo) "Landscape irrigation audit" means a process to perform site inspections, evaluate irrigation systems, and develop efficient irrigation schedules.

(pp) "Landscaping Guide "or "WUCOLS" means the most recent version of the Water Use Classification of Landscape Species (WUCOLS) published by the University of California Cooperative Extension, available from the Department of Water Resources, which is the guide to the water needs of landscape plants using estimates determined by the landscape coefficient method.

(qq) "Lateral line" means the water delivery pipeline that supplies water to the emitters or sprinklers from the main line.

(rr) "Low flow irrigation" means low precipitation rate water saving sprinkler nozzle, utilizing multi-stream spray to allow for even infiltration to reduce runoff.

(ss) "Low-head drainage" means a condition in which water drains partially or completely out of the lateral line through the sprinkler head after each irrigation cycle is completed. Low-head drainage, for the purposes of this Code, is in excess of 20 seconds.

(tt) "Low volume irrigation" means the use of equipment and devices specifically designed to both limit the volume of water being applied and efficiently deliver that water within the root zone of the plant. Besides hand watering, examples of low-volume irrigation include micro-irrigation (emitters and drip tubes).

(uu) "Main line" means the pressurized pipeline that delivers water from the water source to the lateral lines.

(vv) "Maximum allowable water budget" means for design purposes, the upper limit of annual water use for the established landscaped area. It is based upon the area's evapotranspiration, the ET adjustment factor, and the size of the landscaped area.

(ww) "Microclimate" means the climate of a small, specific area that may contrast with the climate of the overall landscape area due to wind, sun exposure, plant density, proximity to reflective surfaces, etc.

(xx) "Moisture-sensing device" means a device that measures the amount of moisture in the soil.

(yy) "Mulch" means any organic material such as leaves, crushed rock, rock cobble, or bark left loose and applied to the soil surface to reduce evaporation and to suppress weeds.

(zz) "Non-potable" means water that is not suitable for drinking because it has not been treated to drinking water standards.

(aaa) "Nozzle" means that part of a sprinkler that the water comes out of, usually a very carefully engineered part to assure a good spray pattern. In most cases, the nozzle is removable so that it can be easily cleaned or replaced.

(bbb) "Operating pressure" means the pressure at which an irrigation system is designed by the manufacturer to operate (static pressure minus pressure losses). This is usually indicated at the base or nozzle of a sprinkler.

(ccc) "Overspray" means when sprinklers deliver water beyond the landscaped area, wetting pavements, walks, structures, landscape areas served by a different valve, or other non-landscaped areas.

(ddd) "Percolation" means the movement of water through the soil.

(eee) "Plant factor" means a factor that, in combination with irrigation efficiency, when multiplied by reference evapotranspiration, estimates the amount of water used by plants.

(fff) "Plant lists" means The Canyon Lake Lists of California Native Plants; and Drought Tolerant and Low Water Use Plants maintained by the City and amended from time to time.

(ggg) "Potable water" means water which is meant for human consumption.

(hhh) "Point of connection (POC)" means location where City water supply is connected to a commercial or residential water system, usually via a water meter and backflow device (if potable water is utilized).

(iii) "Point to point drip irrigation" means an irrigation method that minimizes the use of water by allowing water to drip slowly to the roots of plants, either onto the soil surface or directly onto the root zone, through a network of valves, pipes and emitters.

(jjj) "Pound per square inch (PSI)" means the measure of pressure by a force exerted against one square inch by the confined water.

(kkk) "Precipitation rate" means the rate at which water is applied, usually expressed in inches per hour.

(1) "Pressure compensation bubbler" means a fixed flow emitting device in gallons per minute (non-adjustable) useful for watering trees in conjunction with permanent water basins; produces a reduced flow of water that bubbles on the soil.

(2) "Pressure regulator" means a fixed or adjustable device which regulates downstream static and operating pressures in a piping system.

(3) "Quick coupling system" means a sprinkler system located on the irrigation mainline, which uses permanently installed valves and sprinklers that can be moved from valve to valve.

(4) "Rain sensing device" means a circuit breaker that prevents an irrigation controller from sending a signal to operate irrigation valves when it gets wet.

(III) "Reclaimed water", "Recycled water," or "Treated sewage effluent" means treated or recycled water of a quality suitable for non-potable uses such as landscape irrigation and water features; not intended for human consumption.

(mmm) "Record drawing" or "As-builts" means a set of reproducible drawings, which show significant changes in the work made during construction and which are usually based on drawings marked up in the field and other data furnished by the contractor.

(nnn) "Reference evapotranspiration (ET_o)" means a standard measurement of environmental parameters which affect the water use of plants. ET_o is given in inches per day, month, or year and is an estimate of the evapotranspiration of a large field of four- to seven-inch tall, cool season turf that is well watered. Reference evapotranspiration is used as the basis of determining the maximum allowable water budget so that regional differences in climate can be accommodated.

(ooo) "Rehabilitated landscape" means a significant replacement of established landscaping and/or irrigation with a new landscaping and irrigation. For purposes of this Chapter, "significant" is defined as any replacement exceeding 50% of a landscaped area and is at the discretion of the Director of Planning. See City of Canyon Lake Rehabilitation Guidelines.

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

(qqq) "Sewage sludge" means an organic product resulting from the treatment of sewage. The

composition varies widely depending on the method of treatment.

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

(sss) "Soil analysis" means an agronomic report from a certified laboratory that provides recommendations for soil amendments and fertilization for planting and long-term landscape maintenance. The analysis utilizes specifically required data in the determination of its recommendation and will be followed during planting and maintenance.

(ttt) "Soil amendments" means a substance added to soil to alter one or more of its physical or chemical properties.

(uuu) "Soil moisture sensing device" means a device that measures the amount of water in the soil.

(vvv) "Soil texture" means the classification of soil based on its percentage of sand, silt and clay.

(www) "Solar controller" means an irrigation controller with a panel that collects energy from the sun, converts it, and uses it to power the irrigation controller. These are particularly useful in areas where there are no electrical power sources.

(xxx) "Sprinkler head" means a device which sprays water through a nozzle.

(yyy) "Square feet per acre" means a measure of area expressed as 43,560 square feet in one acre.

(zzz) "Start times (cycle and soak, cycles)" means an interval of time during which the irrigation system is operated for one sequence of a regularly recurring succession of watering events. Also referred to as "repeat cycles." Used to prevent runoff and provide soil infiltration.

(aaaa) "Static water pressure" means the water pressure as measured when the water is not flowing. Static water pressure is a measure of the water's energy potential.

(bbbb) "Station" means an area served by one valve or set of valves that operate simultaneously.

(cccc) "Total flow rate" means a measure of the volume of water moving past a given point in a given period of time.

(dddd) "Turf" means a groundcover of cool- or warm-season grass that is mowed.

(eeee) "Valve" means an irrigation control valve that is opened and closed from a distant point by transmission of power through wires.

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

(gggg) "Water budget formula" means the estimated applied water determined by calculating the landscape coefficient, the landscape evapotranspiration, and the total water applied. Refer to Appendix A for the needed formula and worksheet, which should be used as a guide.

(hhhh) "Water efficient landscaping" also called "water-wise landscaping" means quality landscaping that conserves water and protects the environment through proper planning and design, soil analysis and improvement, appropriate plant selection, practical turf areas, efficient irrigation, use of mulch, and appropriate maintenance.

(iiii) "Water purveyor" means Elsinore Valley Municipal Water District (EVMWD) and/or Eastern Municipal Water District.
(Ord. 126, passed 11-10-2009)

15.04.040 Applicability.

(a) Except as provided in Subsection (b) of this Section, the requirements of this Chapter shall apply to:

(1) All discretionary permits and/or approvals for single-family including individual/custom residential, multi-family residential, commercial, mixed-use, industrial, and public institutional uses, except for building and grading permits relating to said uses;

(2) All commercial rehabilitated development projects including those by public agencies;

(3) Developer-installed, common area landscaping for single-family and multi-family residential development projects;

(4) Rehabilitated landscape areas that cumulatively exceed 1,500 square feet in size, for residence lots/parcels, shall be subject to this Chapter; and

(5) In the event covenants, conditions and restrictions are required by the City for any permit subject to this Chapter, a condition shall be incorporated into any project approval prohibiting the use of water intensive landscaping and requiring the use of low water use landscaping pursuant to the provisions of this Chapter in conjunction with common area/open space landscaping. Additionally, such a condition shall also require the covenants, conditions and restrictions to incorporate provisions concerning landscape irrigation system management and maintenance. This Chapter shall not be construed as requiring landscaping on common areas or open space that is intended to remain natural.

(b) This Chapter shall not apply to:

(1) Areas remaining in undisturbed natural vegetation where no irrigation is proposed;

(2) Cemeteries;

(3) Registered Federal, State, and/or Local historical sites and/or structures;

(4) Ecological restoration projects that do not require a permanent irrigation system;

(5) Landscape projects that existed prior to the effective date of the ordinance codified in this Chapter, unless such landscaping is rehabilitated; and

(6) Final landscape plans which have been approved prior to the effective date of the ordinance codified in this Chapter, unless such landscaping is subsequently rehabilitated.

(Ord. 126, passed 11-10-2009)

15.04.050 General provisions.

All landscape plan approvals are subject to and dependent upon the applicant complying with all applicable City ordinances, codes, regulations and adopted policies.

(a) A landscape concept plan shall be submitted as part of an application for a discretionary land use approval, the concept plan shall show that the landscaping program meets the requirements of this Chapter in terms of layout, location, size/scale, function, theme, and similar attributes. The concept plan shall provide a clear understanding of the landscaping program prior to the preparation of detailed construction landscape and irrigation plans.

(b) If the water purveyor for a proposed project (i.e. Elsinore Valley Municipal Water District or Eastern Municipal Water District) has adopted more restrictive water efficient landscaping requirements, all landscaping and irrigation plans submitted shall comply with such requirements. In that case, the landscape plans shall be accompanied by a written document from the water purveyor delineating the more restrictive requirements.

(c) Landscape design shall facilitate the implementation of landscape maintenance practices which foster long-term water conservation and plant viability. Said practices may include, but not be limited to, scheduling irrigation based on established industry standards, conducting water audits and establishing a water budget to limit the amount of water applied per landscape acre.

(d) Landscaping for fuel modification zones shall be subject to standards required by the City's Fire Department, and shall include plant materials, plant spacing, and irrigation as directed by the City Planner, or as otherwise allowed by State or Federal law.

(e) Landscaping within the City should avoid invasive species. Landscaping adjacent to the lake and the Western Riverside County Multi-Species Habitat Conservation Plan (MSHCP) conservation areas MUST avoid invasive species as listed in the Invasive Species List.

(f) Existing mature trees and shrubs that represent the existing significant landscaping elements shall be preserved.

(g) If the area proposed for development has been disturbed (i.e. grade or partially improved) and is not scheduled for development within the next 12 months, it shall be temporarily landscaped and irrigated for dust and soil erosion control. Landscaping shall include approved hydro-seed or other plant materials if slopes below 15 feet in vertical height are proposed. Irrigation shall include sub-grade pipes. On-site grade pipes may be accepted by the City's Landscape Architect, if the site is fenced off and secured.

(Ord. 126, passed 11-10-2009)

15.04.060 Recycled water.

(a) An applicant proposing any new landscaping designated for recycled water use is advised that recycled water irrigation systems will entail additional coordination with the City and with the water purveyor (i.e. Elsinore Valley Municipal Water District or Eastern Municipal Water District) to determine the water purveyor's maintenance standards, approvals, and implementation requirements. Therefore, applicants shall consult with the water purveyor early in the development review process to ensure that future recycled water facilities meet the projected demand and that subsequent landscape plans comply with the applicable standards, approvals, and implementation requirements of the water purveyor and the City.

(b) Water systems for common open space areas shall use non-potable water if approved facilities are

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

(Ord. 126, passed 11-10-2009)

15.04.070 Landscape documentation package requirements.

(a) An applicant proposing any new or rehabilitated landscape shall prepare and submit to the City Planner documentation including the following. All submissions must be accompanied by a fee determined by resolution of the City Council or the submission shall not be deemed complete.

- (1) Project information;
- (2) Planting plan;
- (3) Irrigation design plan;
- (4) Soil Management Plan 090; and
- (5) Grading design plan.

(b) Project Information. The following information must be submitted by the applicant for a landscape plan approval:

- (1) Date;
- (2) Applicant and applicant contact information;
- (3) Project owner and contact information;
- (4) Project address including parcel and lot numbers;
- (5) Total landscape area (sq. ft.);
- (6) Project type (e.g., new, rehabilitated, public, private);

(7) Water supply (e.g., potable, well, recycled). Use of recycled water is encouraged; and

(8) Applicant signature and date with statement "I agree to comply with the requirements of Ordinance 126 and submit a complete Landscape Documentation Package."

(c) Planting Plan Requirements. Refer also to the City of Canyon Lake Plant Lists (California Native Plants and Drought Tolerant and Low Water Use Plants). New plans shall be prepared by a landscape architect. Rehabilitation plans may be prepared by the homeowner, a landscape designer, or a licensed landscape contractor holding a C-27 license.

(1) Plant types shall be grouped together in regard to their water, soil, sun and shade requirements and in relationship to the buildings. Plants with different water needs shall be irrigated separately. Plants with the following classifications shall be grouped accordingly: high and moderate, moderate and low, low and very low. Deviation from these groupings shall not be permitted.

(2) Trees for shade shall be provided for residential, commercial and industrial buildings, parking lots and open space areas. These trees can be deciduous or evergreen and are to be incorporated to provide natural cooling opportunities for the purpose of energy and water conservation.

(3) Plants shall be placed in a manner considerate of solar orientation to maximize summer shade and winter solar gain.

(4) Plant selection for projects in fire-prone areas shall address fire safety and prevention. A defensible space or zone around a building or structure is required per Public Resources Code Section 4291(a) and (b). Fire-prone plant materials and highly flammable mulches shall be avoided.

(5) Invasive species of plants shall be avoided especially near parks, buffers, greenbelts, water bodies, and open spaces because of their potential to cause harm in to environmentally sensitive areas.

(6) All exposed surfaces of non-turf areas within the developed landscape shall be mulched with a minimum three inch layer of material, except in areas with groundcover planted from flats where mulch depth shall be one and one-half inches.

(7) Stabilizing mulching products shall be used on slopes.

(8) Turf areas shall be used in response to functional needs and in compliance with the water budget.

(9) Decorative water features shall use recirculating water systems.

(10) Where available, recycled water shall be used as the source for irrigation and decorative water features.

(11) Planting plans shall identify and site the following:

(A) New and existing trees, shrubs, ground covers, and turf areas within the proposed landscape area;

(B) Planting legend indicating all plant species by botanical name and common name, spacing, and quantities of each type of plant by container size;

(C) Designation of hydrozones;

(D) Area, in square feet, devoted to landscaping and a breakdown of the total area by landscape hydrozones;

(E) Property lines, streets, and street names;

(F) Building locations, driveways, sidewalks, retaining walls, and other hardscape features;

(G) Appropriate scale and north arrow;

(H) Any special landscape areas;

(I) Type of mulch and application depth;

(J) Type and surface area of any water features;

(K) Type and installation details of any applicable storm water best management practices;

(L) Planting specifications and details, including the recommendations from the soils analysis, if applicable;

(M) Maximum applied water allowance:

1. Planting plans shall be prepared using the following Water Budget Formula:

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

Where:

- Eto is reference evapotranspiration
- SLA is the amount of special landscape area in square feet
- LA is total landscape area (including the SLA) in square feet

2. For the purposes of determining the Maximum Applied Water Allowance, average irrigation efficiency is assumed to be 0.71. Irrigation systems shall be designed, maintained, and managed to meet or exceed an average irrigation efficiency of 0.71;

(N) Estimated Annual Water Use (EAWU):

1. EAWU for a given hydrozone is calculated as follows:

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

Where:

- Eto is reference evapotranspiration
- PF is Plant Factor
- HA is hydrozone area in square feet
- IE is irrigation efficiency (minimum 0.71)

SLA is the amount of special landscape area in square feet

2. Landscaping plans shall provide EAWU (in the same units as the MAWA) for each valve circuit in the irrigation hydrozone. The sum of all EAWU calculations shall not exceed the MAWA for the project;

3. The plant factor used shall be from WUCOLS. The plant factor for low water use plants range from 0 to 0.3, for moderate water use plants range from 0.4 to 0.6, and for high water use plants range from 0.7 to 1.0;

4. The plant factor calculation is based on the proportions of the respective plant water uses and their plant factor, or the plant factor of the higher water using plant is used; and

5. The surface area of water features shall be included in the high water use hydrozone area of the water budget calculation and temporarily irrigated areas in the low water use hydrozone.

(12) Planting plans and irrigation plans shall be drawn at the same size and scale.

(d) Irrigation Design Plan Requirements.

(1) Dedicated landscape meters may be required by water purveyor. The applicant should contact water purveyor prior to preparing irrigation plans to identify such requirements.

(2) Separate landscape water meters shall be installed for non single-family residential landscaping with a landscaped area greater than 5,000 square feet.

(3) All landscaped areas must be serviced by a "smart irrigation controller" which automatically adjusts to the frequency and/or duration of irrigation events in response to changing weather conditions. Smart irrigation controllers shall have the following attributes:

(A) Real-time or historical, weather based program adjustment capability;

(B) Project must have an on-site weather station, external ETo input, or historical data capability;

(C) Rain sensors shall be placed within an unobstructed natural rainfall area and shall be located above the irrigation spray pattern;

(D) Master valve (or simultaneous operations) for landscaped areas greater than 12,000 square feet;

(E) Flow sensor; except for rehabilitated landscapes or residences with less than 5,000 square feet of landscaping;

(F) Multiple start times; and

(G) Multiple programs.

(4) Residential front yard typical irrigation plans must demonstrate that sufficient capacity exists on the specified irrigation controller to supply adequate additional zones for future side and backyard landscaping. More than one controller per residential unit shall be avoided.

(5) With the exception of single-family residential units, all irrigation plans shall be designed for use of non-potable water in all areas scheduled for non-potable water in the future. Provisions for the conversion to a non-potable water system shall be provided within the landscape plan should there be the possibility for future non-potable water availability. Water systems designed to utilize non-potable water shall be designed to meet all applicable standards of the City of Canyon Lake, the California Regional Water Quality Control Board, State Department of Health Services, the Riverside County Health Department and the local reclaimed water purveyor.

(6) Non single-family residential landscaping greater than one acre in size shall include a central controller programmed to distinguish irregular flows (e.g., broken valve, line, spray head, low or high flow, etc.). The central controller shall temporarily shut off the affected branch or the entire system, and send an immediate electronic message to the maintenance entity.

(7) Separate valves shall be provided for separate water use planting areas, so that plants with similar water needs are irrigated by the same irrigation valve.

(8) Irrigation systems shall be zoned according to plant water use, soil conditions, slope aspect, and sun/shade microclimate. If low water use plants (that can also survive/flourish with medium water application) are used within a medium water use hydrozone, they must be counted as medium water use in the irrigation calculations.

(9) The use of head check valves shall be included in irrigation systems as applicable, and if head drainage exceeds 20 seconds.

(10) Pressure regulation shall be incorporated into all irrigation systems to prevent excessive pressure at sprinkler heads.

(11) Low head drainage is not permitted.

(12) All irrigation products specified shall achieve an irrigation operational distribution uniformity of 70% or greater in all landscaped areas. The Planning Director reserves the right to require greater efficiency of up to 50% if necessary to conserve water.

(13) Bermed soil areas shall be irrigated with drip line irrigation. No spray irrigation is allowed without written permission of the Planning Director in specifically extenuating circumstances.

(14) Overhead spray systems for turf or other specific extenuation circumstances shall not be used in landscape areas narrower than eight feet in width.

(15) Rotors and spray heads shall be designed and installed with no overspray onto paved surfaces, structures, other irrigation valve landscapes, and non-vegetated areas. The design shall be head-to-head coverage with matched precipitation heads. Rotors and spray heads shall be zoned separately. Half rotors and full rotors shall be zoned separately unless matched precipitation nozzles are used. Overlap of spray heads shall be at 85% as specified by the product manufacturer.

(16) High efficiency irrigation methods, such as low flow and low volume irrigation and microspray nozzles are required for appropriate applications.

(17) For drip line installations, in-line pressure regulators shall be used per factory recommendations for the specific irrigation products being used. If drip line is being installed, it must be filtered at the valve along with any other necessary equipment.

(18) The delivery tubing for point-to-point irrigation systems shall be no longer than three feet and attached to grade at minimum two-foot intervals.

(19) The finish grade for all on-grade drip systems shall be a minimum of three inches below adjacent curbs or walks. All drip systems shall receive a minimum of three inches of medium grind bark.

(20) All drip systems shall utilize the mature canopy size of the plant in determining the number of emitters to be placed at each plant. A schedule showing the varying amount of emitters shall be placed on the plans. The run-times shall be shown in the irrigation schedules.

(21) Systems shall be scheduled so that the irrigation precipitation rate does not exceed the infiltration rate of the soil.

(22) A baseline irrigation schedule shall be provided on the plans for the six-month initial plant establishment period. The contractor shall adjust the schedule to meet site specific requirements and use the baseline schedule to set the weather-based controller. The schedule currently in effect shall be posted in the controller.

(23) A second baseline irrigation schedule shall be provided on the plans which incorporate the specific water needs of the plants throughout the post-establishment calendar year. The contractor shall adjust the schedule to meet site specific requirements and use the baseline schedule to set the weather-based controller. The schedule currently in effect shall be posted in the controller.

(24) The irrigation schedules shall include the recommended irrigation days per week, number of cycles per day, minutes of run times per cycle, and estimated amount of applied irrigation water, expressed in gallons per month and gallons per year.

(25) The controller shall be operational and set to real-time or available historical weather prior to the completion of the 90-day maintenance period of the installing contractor.

(26) After establishment of the plant materials, the irrigation of landscaped areas shall be limited to the hours between dusk and early morning in order to provide maximum benefit to the plant material and to reduce unnecessary water loss through wind drift and evaporation. Drip irrigation systems are exempt from this provision.

(27) Residual pressure for the worst case valve calculation shall be no less than 15 psi.

(28) Water quality management plan best management practices (as designated by Elsinore Valley Municipal Water District, if applicable) that affect the landscaping shall be identified on the detailed construction landscape plans (i.e. swales, permeable paving, sub-grade tanks).

(e) Soil Management Plan Requirements.

(1) After mass grading, the project applicant or his/her designee shall:

(A) Perform a preliminary site inspection;

(B) Determine the appropriate level of soil sampling and sampling method needed to obtain representative soil sample(s);

(C) Conduct a soil probe test to determine if the soil in the landscape area has sufficient depth to support the intended plants; and

(D) Obtain appropriate soil sample(s).

(2) The project applicant or his/her designee shall submit soil sample(s) to laboratory for analysis and recommendation. The soil analysis may include:

- (A) Soil texture;
- (B) Infiltration rate determined by laboratory test or soil texture infiltration rate tables;
- (C) pH;
- (D) Total soluble salts;
- (E) Known chemical or elemental toxicities;
- (F) Micro-nutrient analysis;
- (G) Macro-nutrient analysis; and
- (H) Recommendations.

(3) The project applicant or his/her designee shall prepare documentation describing the following:

- (A) Soil type;
- (B) Identification of limiting soil characteristics;
- (C) Identification of planned soil management actions to remediate limiting soil characteristics; and
- (D) Submit the soil analysis report and documentation verifying implementation of soil analysis report recommendations to the City of Canyon Lake pursuant to the requirements of Section 7.C Certificate of Completion.

(f) Grading Design Plan Requirements. If applicable, the Landscape Documentation Package shall include rough/precise grade elevations prepared for the project by a licensed civil engineer.

(g) Procedures.

(1) Enhanced hardscape features that include public art, sculpture and/or water features may

be counted as part of the required landscaping as long as they are designed and integrated in a manner that accentuates the landscaping and are approved as such by the City Planner.

(2) Permeable surfaces shall be used wherever permissible in place of impervious paving, to encourage on-site water infiltration and support water conservation measures. Permeable surfaces shall be identified on plans.

(3) Soil analyses are required on all projects for appropriate specifications of soil amendments, and to facilitate selection of water efficient plant species suitable for the site. Soil amendments such as compost shall be provided to improve water holding capacity of soil, where soil conditions warrant. No sewage sludge shall be allowed. All fertilizers and soil amendments shall consist of organic materials.

(4) Landscape maintenance schedule is required with all landscape plans. Landscape maintenance practices shall be implemented to promote and foster long term conservation, sustainability and plant viability. Landscape maintenance shall be performed by companies with professional experience in said field.

(5) The submittal review, revision and approval of all required landscape and irrigation plans shall be in compliance with already established City procedures for land use entitlements. The requirements of this Chapter shall be submitted jointly along with the required applications, plans and fees required for land use entitlement as required by the City Planner and on file in the Planning Department.

(h) Landscaping plans shall be prepared using the water budget formula described in Appendix A at the end of this Chapter. In addition, landscaping plans shall provide a water budget which includes estimated annual water use (in 100 cubic feet per year (ccf/yr)) and the area (in square feet) to be irrigated; and precipitation rates for each valve circuit. The City shall approve all landscaping plans.

(i) Prior to the issuance of a building permit for a project, subject to this Chapter, or as otherwise specified in the conditions of approval for a project,

planting and irrigation plans prepared for the project shall be submitted for review and approved by the City.

(j) Prior to the issuance of a certificate of use and/or occupancy, an applicant shall submit a letter of substantial conformance, subject to field verification by the City Landscape Architect.
(Ord. 126, passed 11-10-2009)

15.04.080 Landscape maintenance schedule.

(a) Landscape maintenance practices shall be implemented to promote and foster long term conservation, sustainability and plant viability.

(b) The landscape plan preparer shall provide the landscape maintenance schedule on the plan. The schedule shall include, but not be limited to the following requirements:

(1) Amount of time required by installer to complete the maintenance period;

(2) Requirements for acceptance by owner;

(3) Materials warranted and amount of warranty time for each;

(4) Maximum amount of time allowable to replace dead or dying plant materials and improperly functioning equipment;

(5) Complete and specified duties required for long term landscape maintenance (fertilization product and frequency; shrub trimming and pruning heights, pruning styles, frequency of duties, etc.; lawn mowing height; weed control method, pest and disease control, etc.);

(6) Landscape maintenance practices specifically designed to ensure water efficiency;

(7) Check, adjust, and repair irrigation equipment on a specified frequency;

(8) Repair irrigation equipment with originally specified equipment;

(9) Adjust the automatic controller seasonally (if required);

(10) Aerate and de-thatch turf areas;

(11) Replenish mulch once a year to maintain it at two inches deep until plant materials provide 70% ground coverage as required;

(12) Fertilization using organic fertilizer or slow-release fertilizer as calculated at a rate required for the plant species, or as specified in the agronomic soil report for long term maintenance. Provide the frequency of fertilization;

(13) Shrub pruning frequency and style (informal or formal);

(14) Ground cover installation location and trimming to keep away from hardscape areas or areas where it is not desired;

(15) Tree pruning in accordance with ISA (International Society of Arboriculture) specifications and ANSI standards. Topping of trees is never allowed. All topped trees shall be replaced as directed by the Planning Director or City Landscape Architect with a tree of equal size or value;

(16) Weeding through mechanical or chemical application in accordance with the product manufacturer's specifications, laws, and safe accepted industry practices;

(17) Disease and pest control;

(18) Dead plant removal when the plant exhibits diminished growth of 30% loss or greater, as directed by the City Landscape Architect. Replacement of dead plants shall utilize originally specified materials unless express, written direction is received in advance from the Planning Director or City Landscape Architect;

(19) Site debris and trash shall be removed on a regular basis. Site debris include: garbage, dead foliage, branches, twigs, extraneous materials which are not located as originally designed or intended, etc;

(20) The landscape may require special landscape maintenance unique to its design, such as formally pruned hedges, specially shaped plant materials, seasonal mowing, etc.; and/or

(21) Landscape plants shall not be pruned with mechanical equipment into non-natural shapes that would be detrimental to their health.
(Ord. 126, passed 11-10-2009)

15.04.090 Compliance/plan submittal.

(a) After submission of a complete Landscape Documentation Package for New Projects, the City Planner shall review it and shall cause the:

(1) Planting plan, irrigation plan, and soils management plan shall be reviewed by an independent licensed landscape architect to ensure that all components of the plans adhere to the requirements of this Chapter. The person preparing the plan shall sign the plans verifying that the plans comply with this Chapter. Any plans submitted without the signature of the preparer shall not be accepted for review.

(b) Prior to final inspection for a project a regular maintenance schedule and a Certificate of Completion shall be submitted to the City Planner certifying that the landscaping has been completed in accordance with the approved planting, irrigation, soil management, and grading design plans for the project. The Certificate of Completion shall be signed by the preparer and shall indicate:

- (1) Date;
- (2) Project information;
 - (A) Project name;
 - (B) Project applicant name, telephone, mailing address;
 - (C) Project address and location; and
 - (D) Property owner name and mailing address;

(3) Prior to backfilling, evidence that the party responsible for irrigation installation conducted a preliminary field inspection of the irrigation system (evidence of field inspection shall be attached);

(4) The landscaping has been installed in conformance with the approved planting and irrigation plans;

(5) The smart irrigation controller has been set according to the irrigation schedule;

(6) The irrigation system has been adjusted to maximize irrigation efficiency and eliminate overspray and runoff;

(7) A copy of the approved Landscape Documentation Package, the irrigation schedule, and the maintenance schedule has been given to the property owner and Elsinore Valley Municipal Water District; and

(8) Verification that the maintenance schedule has been provided to the City Planner.

(c) City representatives shall have the right to enter upon the project site at any time before, during and after installation of the landscaping, to conduct inspections for the purpose of enforcing this Chapter.
(Ord. 126, passed 11-10-2009)

15.04.100 Enforcement.

Once landscaping improvements have been completed, applicants shall operate the irrigation system in a responsible manner that minimizes waste of water. Water purveyor has developed water budget based water rates that encourage wise water use and discourage water waste. Water purveyor also has an approved water waste ordinance that establishes penalties for water waste by its customers. The City of Canyon Lake will coordinate its activities with water purveyor to assist in ensuring that water is used wisely for landscape within the City.

- (a) Tiered water rate structure;

(b) Allocation-based conservation water pricing structure;

(c) A rate structure at least as effective as the above options;

(d) Irrigation audits and/or irrigation surveys; or

(e) Penalties for water waste.
(Ord. 126, passed 11-10-2009)

Appendix A: Invasive Species List

Acacia baileyana Bmainly near habitations
Acacia dealbata BNorthern coastal to southern inland regions
Acacia decurrens BNorthern coastal
Acacia longifolia BMinor threat along coast
Acacia melanoxyton BNorthern coastal and inland to southern coastal
Achillea millefolium BCoastal and inland areas in moist places
Ailanthus altissima BUrban and natural areas around the world
Albizia julibrissin BCoastal areas
Aptenia cordifolia 'Red Apple' BCoastal zones, mainly southern
Arctotheca calendula BNorthern and southern coastal bluffs, foothills
Arundo donax BAll regions in moist areas, seasonal water courses
Atriplex glauca BSouthern coastal foothills
Altriplex semibaccata BCoastal to inland areas
Briza media BGrasslands
Carpobrotus edulis BCoastal and inland regional throughout California
Carpobrotus chilensis BCoastal and inland regional throughout California
Centranthus ruber BCoastal, inland and foothill regions throughout California
Cistus ladanifer BCoastal sage scrub and chaparral
Coprosma repens BOnly coastal
Cortaderia sellowana BCoastal regions, dunes, scrub and Monterey pine forest
Cotoneaster pannosus BDisturbed sites, many communities, central and northern coast
Cytisus canariensis BFoothill regions, northern California and Central Valley
Cytisus racemosus BFoothill regions, northern California and Central Valley
Cytisus scoparius BCoastal scrub, oak woodland
Cytisus striatus BCoastal scrub, oak woodland
Delosperma spp. BPotential threat on coast
Duchesnia indica BPotential threat on coast
Elaeagnus angustifolia BInterior riparian areas
Erica lusitanica BPossible threat to wildlands
Eucalyptus camaldulensis BSouthern coastal canyons and foothills
Eucalyptus globulus BCoastal canyons and foothills, riparian areas
Eucalyptus pulverulenta BSouthern coastal
Ficus carica BCentral Valley, south coastal and Channel Islands riparian woodlands
Genista monspessulanus BCoastal scrub, oak woodland
Hedera canariensis BCoastal and inland regions in moist and shady places
Hedera helix BCoastal and inland regions in moist and shady places
Helichrysum petiolare BNorth coastal scrub
Ilex aquifolium BCoastal forests
Imperata cylindrical and I. brasiliensis BOn Federal noxious weed list
Juncus spp. BPotential to naturalize moist areas
Lonicera japonica 'Halliana' BCoastal and inland regions; moist, shady places
Lotus corniculatus BRoadside weed
Lupinus arboreus BNorth coast dunes
Lysimachia nummularia BWidely naturalized in other states, not in CA to date

Malephora crocea B South coast bluffs, margins of wetlands
Melaleuca viridifolia (quinqueneria) B Severe problem in Florida wetlands, not in CA to date
Mentha pulegium B Invades Santa Rosa Plain (Sonoma County)
Myosotis spp. B Coastal forests
Oenothera berlandieri B Extremely invasive, difficult to eradicate
Olea europaea B Southern coastal and inland foothills
Pennisetum setaceum B All dry climate regions, grasslands, desert canyons
Phalaris aquatica B Coastal sites with moist soil
Phyla nodiflora B Wet places, vernal pools
Pinus pinea B Sparingly, naturalized central coast
Pyracantha spp. B Central coastal
Robinia pseudoacacia B Northern valleys and foothills to southern mountains and foothills
Sapium sebiferum B Severe problem in Gulf coast wetlands, bottomland forests, beginning to appear in CA in wetlands in Yolo County and along the American River near Sacramento
Spartium junceum B Coastal scrub, oak woodlands
Tamarix chinensis, T gallica, T parviflora, T ramosissima (pendantra) B Coastal through desert riparian areas
Tropaeolum majus B Moist coastal regions
Vinca major B Riparian areas, oak woodland, mostly coastal
Watsonia bulbifera B North coast
Watsonia marginata B North coast
Zantedeschia aethiopica B Coastal streams