

TRANSMITTAL

To:
THE COUNCIL

Date: **SEP 30 2015**

From:
THE MAYOR

TRANSMITTED FOR YOUR CONSIDERATION. PLEASE SEE ATTACHED.



Ana Guerrero

ERIC GARCETTI
Mayor

BOARD OF
BUILDING AND SAFETY
COMMISSIONERS

VAN AMBATIELOS
INTERIM PRESIDENT

E. FELICIA BRANNON
JOSELYN GEAGA-ROSENTHAL
GEORGE HOVAGUIMIAN
JAVIER NUNEZ

CITY OF LOS ANGELES

CALIFORNIA



ERIC GARCETTI
MAYOR

DEPARTMENT OF
BUILDING AND SAFETY
201 NORTH FIGUEROA STREET
LOS ANGELES, CA 90012

RAYMOND S. CHAN, C.E., S.E.
GENERAL MANAGER

FRANK BUSH
EXECUTIVE OFFICER

September 22, 2015

Honorable Eric Garcetti
Mayor, City of Los Angeles
Room 303, City Hall

Attention: Legislative Coordinator Room 301

PROPOSED WATER CONSERVATION ORDINANCE

The Department of Building and Safety, in collaboration with the Bureau of Sanitation, Department of Water and Power and other City Departments, has completed a Draft Ordinance in an effort to comply with the Mayor's Executive Directive No.5 and City Council motions pertaining to greywater systems and groundwater discharge.

The Ordinance amending Los Angeles Municipal Code (LAMC) Chapter 9, Articles 4 and 9, will add terms, definitions and code revisions to reduce the use of potable water related to building construction. The revisions amend the following:

1. Los Angeles Green Building Code, Chapter 4, Residential Mandatory Measures, Sections 4.303, 4.303.3, 4.303.4, 4.304, 4.304.1, 4.304.1.1, 4.304.2.1, 4.304.3, 4.304.4, 4.304.5 and 4.305.
2. Los Angeles Green Building Code, Chapter 5, Nonresidential Mandatory Measures, Sections 5.303, 5.303.1.1, 5.303.2, 5.303.2.1, 5.304.1, 5.304.2, 5.304.3, 5.304.3.1, 5.304.4, 5.304.5 and 5.305.
3. Los Angeles Plumbing Code Sections 210.0, 221.0, 600.0, 610.4.1 and 610.4.1.

The proposed code revisions have been heard by the Building and Safety Board of Commissioners on September 18, 2015 and recommended to be forwarded to City Council per Mayor's Directive.

We respectfully request that the proposed ordinance be reviewed and forwarded to City Council for its consideration at your earliest convenience.

Please direct any questions regarding the proposed ordinance to Mr. Osama Younan at (213) 482-7407. Should you need my assistance, please contact me at (213) 482-6800.

Raymond S. Chan, C.E., S.E.
General Manager

Attachments

ORDINANCE NO. _____

An ordinance amending certain provisions of Articles 4 and 9 of Chapter IX of the Los Angeles Municipal Code to establish citywide water efficiency standards and require water-saving systems and technologies in buildings and landscapes to conserve and reduce water usage.

WHEREAS, on January 17, 2014, under the provisions of section 8625 of the California Emergency Services Act (“CESA”), Governor Jerry Brown proclaimed a State of Emergency throughout the State of California (“California”) due to severe drought conditions and called upon local municipalities to implement local water shortage contingency plans immediately;

WHEREAS, on April 25, 2014, under the provisions of sections 8558(b), 8567, and 8571 of CESA, Governor Brown proclaimed a Continued State of Emergency to exist throughout California due to the ongoing drought;

WHEREAS, on October 14, 2014, Mayor Eric Garcetti issued Mayoral Executive Directive No. 5, which called upon the Department of Building and Safety, in collaboration with the Department of Water and Power and the Bureau of Sanitation, to propose building code changes to require water-saving technologies in buildings and landscapes;

WHEREAS, on April 1, 2015, under the provisions of sections 8558(b), 8567, and 8571 of CESA, Governor Brown issued Executive Order B-29-15, which directed the State Water Resources Control Board to implement mandatory water reductions to decrease water usage by 25 percent statewide;

WHEREAS, Executive Order B-29-15 also implemented new statewide initiatives to increase enforcement against wasteful water use, invest in new water-saving technologies, and streamline the response of governments;

WHEREAS, on April 14, 2015, the Metropolitan Water District of Southern California—of which Los Angeles is a member agency—voted to reduce regional deliveries by 15%;

WHEREAS, on June 17, 2015, the City Council of the City of Los Angeles adopted a Resolution to establish the City’s support for Executive Order B-29-15, which will help Los Angeles and California endure historic drought conditions;

WHEREAS, California is currently experiencing historical and unprecedented drought conditions;

WHEREAS, California is presently in the fourth year of a drought, with rainfall significantly below normal, the Sierra snowpack at less than a quarter of its historic average, and all of California’s largest water reservoirs below their seasonal averages;

WHEREAS, a distinct possibility exists that the current drought will stretch into a fifth straight year in 2016 and beyond;

WHEREAS, the statewide drought has led the City of Los Angeles to increase its use of imported water to over 80% and its supply of imported water is at immediate and long-term risk, due to climate change, the high likelihood of damage to levees and aqueducts during a major earthquake, and state regulatory cuts in water allocation;

WHEREAS, outdoor water use accounts for more than half of all residential water use in Los Angeles;

WHEREAS, it is critical that California and Los Angeles ensure that enough water remains available for human health and safety, growing food, fighting wildfires, and protecting fish and wildlife; and

WHEREAS, Los Angeles has been a leader in reducing water consumption, consuming less water than it did in 1970, and will continue to lead California towards a more sustainable future;

NOW THEREFORE,

**THE PEOPLE OF THE CITY OF LOS ANGELES
DO ORDAIN AS FOLLOWS:**

Section 1. Section 94.210.0. H. of the Los Angeles Municipal Code is amended by adding new definitions in alphabetical order to read as follows:

Hot Water Recirculation System. A hot water system that uses the hot water return line and/or supply line connected to a water heater to enable continuous delivery of hot water to fixtures.

Hot Water System. A system that distributes hot water, consisting of a water heater, piping, and related equipment and devices.

Sec. 2. Section 94.221.0. S. of the Los Angeles Municipal Code is amended by adding a new definition in alphabetical order to read as follows:

Smart Hot Water Recirculation System. A hot water recirculation system that is capable of monitoring and recording hot water usage patterns for optimal pump activation.

Sec. 3. Section 94.600.0 of the Los Angeles Municipal Code is amended to read as follows:

SEC. 94.600.0. BASIC PROVISIONS.

Chapter 6 of the 2013 California Plumbing Code is adopted by reference except as amended herein.

Sec. 4. A new Subsection 94.610.4.1 is added to the Los Angeles Municipal Code to read as follows:

94.610.4.1. Hot Water Delivery. Hot water systems shall comply with Subsection 94.610.4.1.1, 94.610.4.1.2, or 94.610.4.1.3.

EXCEPTIONS:

1. Multi-family buildings where each unit is sub-metered and where the building has a central hot water heating system.
2. Additions that are supplied by any portion of the existing water heating system.
3. Alterations that do not include replacing all of the potable water piping.

94.610.4.1.1. The hot water system shall not allow more than 0.6 gallons of water to be delivered to any fixture before hot water arrives.

94.610.4.1.2. Where a hot water recirculation system is installed, the branch from the recirculating loop to the fixture shall contain a maximum of 0.6 gallons. Hot water recirculation systems may include, but are not limited to, the following:

- a. Timer-initiated systems
- b. Temperature sensor-initiated systems
- c. Occupancy sensor-initiated systems
- d. Smart hot water recirculation systems
- e. Systems using electric resistance heat trace wire
- f. Other systems acceptable to the Department

94.610.4.1.3. Residential units having individual water heaters shall have a compact hot water system that meets all of the following:

- a. The hot water supply piping from the water heater to the fixtures shall take the most direct path;
- b. The total developed length of pipe from the water heater to farthest fixture shall not exceed the distances specified in Table 3.6.5 of the 2013 California Energy Code Residential Appendix; and
- c. The hot water supply piping shall be installed and insulated in accordance with Section RA3.6.2 of the 2013 California Energy Code Residential Appendix.

Sec. 5. Subsection 99.02.201.4 of the Los Angeles Municipal Code is amended to read as follows:

99.02.201.4. Terms Not Defined. Where terms are not defined as prescribed in this section, such terms shall have ordinarily accepted meanings such as context applies. The definitions in Webster's Third New International Dictionary of the English Language, Unabridged shall be considered as providing ordinarily accepted meanings.

Sec. 6. A new Section 99.02.202 of the Los Angeles Municipal Code is added to read as follows:

SEC. 99.02.202. DEFINITIONS.

Section 202 of the CALGreen Code is adopted by reference with the following amendments:

The following CALGreen Code definitions are not adopted:

CALIFORNIA BUILDING CODE

CALIFORNIA ELECTRICAL CODE

CALIFORNIA MECHANICAL CODE

CALIFORNIA PLUMBING CODE

CALIFORNIA RESIDENTIAL CODE

The following definitions are added:

ACCESSIBLE. Having access thereto, but which first may require the removal of an access panel door or similar obstruction.

AUTHORITY HAVING JURISDICTION. The Department of Building and Safety of the City of Los Angeles.

DEPARTMENT. The Department of Building and Safety of the City of Los Angeles.

LOS ANGELES BUILDING CODE. The current version of the Los Angeles Building Code, Articles 1 and 8 of Chapter IX of the Los Angeles Municipal Code.

LOS ANGELES BUILDING STANDARDS CODE. Articles 1 thru 9 of Chapter IX of the Los Angeles Municipal Code.

LOS ANGELES ELECTRICAL CODE. The current version of the Los Angeles Electrical Code, Article 3 of Chapter IX of the Los Angeles Municipal Code.

LOS ANGELES MECHANICAL CODE. The current version of the Los Angeles Mechanical Code, Article 5 of Chapter IX of the Los Angeles Municipal Code.

LOS ANGELES PLUMBING CODE. The current version of the Los Angeles Plumbing Code, Article 4, Chapter IX of the Los Angeles Municipal Code.

LOS ANGELES RESIDENTIAL CODE. The current version of the Los Angeles Residential, Article 1.5, Chapter IX of the Los Angeles Municipal Code.

MICRO-IRRIGATION SYSTEM. The application of small quantities of water on or below the soil surface as drops, tiny streams, or miniature spray through emitters or applicators placed along a water delivery line. Micro-irrigation encompasses bubbler, drip, trickle, mist, and subsurface irrigation that have flow rates of less than 30 gallons per hour.

The following terms are modified as follows:

POTABLE WATER. Water that is drinkable and meets the U.S. Environmental Protection Agency (EPA) Drinking Water Standards. See definition in the Los Angeles Plumbing Code.

Sec. 7. A title for Section 99.04.303 of the Los Angeles Municipal Code is added to read as follows:

SEC. 99.04.303. INDOOR WATER USE.

Sec. 8. A new Subsection 99.04.303.3 is added to the Los Angeles Municipal Code to read as follows:

99.04.303.3. Water Submeters [N]. Multi-family dwellings not exceeding three stories and containing 50 units or less shall install a separate meter or sub-meter within each individual dwelling unit and within common areas, such as recreation and laundry rooms.

Sec. 9. A new Subsection 99.04.303.4 of the Los Angeles Municipal Code is added to read as follows:

99.04.303.4. Water Use Reduction. Construction projects shall demonstrate 20 percent overall water use reduction. A calculation demonstrating a 20 percent reduction in the building “water use baseline”, as established in Table 99.04.303.4.1, shall be provided.

EXCEPTIONS:

1. Construction projects with plumbing fixtures that comply with the maximum flow rate values in Table 99.04.303.4.2.
2. Additions and alterations to buildings where the new fixtures comply with the maximum flow rate values in Table 99.04.303.4.2.
3. Buildings utilizing recycled water in accordance with Section 99.04.305.3.2.

**TABLE 99.04.303.4.1
WATER USE BASELINE³**

| FIXTURE TYPE | BASELINE FLOW RATE | DURATION | DAILY USES | OCCUPANTS ² |
|--------------------------------------|---------------------|----------|---------------------------------|------------------------|
| Showerheads | 2.0 gpm @ 80 psi | 8 min. | 1 | X ^{2a} |
| Lavatory Faucets, Residential | 1.5 gpm @ 60 psi | .25 min. | 3 | X |
| Lavatory Faucets, Common/Public Uses | 0.5 gpm @ 60 psi | .25 min. | 3 | X |
| Kitchen Faucets | 1.8 gpm @ 60psi | 4 min. | 1 | X ^{2b} |
| Metering Faucets | 0.25 gallons/cycle | | 3 | X |
| Water Closets | 1.28 gallons/flush | 1 flush | 1 male ¹ 3 female | X |
| Urinals | 0.125 gallons/flush | 1 flush | 2 male | X |

Fixture "Water Use" = Flow rate X Duration X Occupants X Daily uses

1. The daily use number shall be increased to three if urinals are not installed in the room.
2. Refer to Table A, Chapter 4 of the Los Angeles Plumbing Code, for occupant load factors.
 - a. Shower use by occupants depends on the type of use of a building or portion of a building. For example, the total occupant load for a health club, but only a fraction of the occupants in an office building as determined by the anticipated number of users.
 - b. Kitchen faucet use is determined by the occupant load of the area served by the fixture.
3. Use Worksheet WS-1 of the 2013 CALGreen Code to calculate baseline water

**TABLE 99.04.303.4.2
WATER REDUCTION FIXTURE FLOW RATES**

| FIXTURE TYPE | MAXIMUM ALLOWABLE FLOW RATE |
|-------------------------------|-----------------------------|
| Lavatory Faucets, Residential | 1.2 gpm @ 60 psi |
| Kitchen Faucets* | 1.5 gpm @ 60 psi |
| Metering Faucets | 0.2 gallons/cycle |
| Showerheads | 1.8 gpm @ 80 psi |
| Clothes Washers | ENERGY-STAR certified |
| Dishwashers | ENERGY-STAR certified |

* Kitchen faucets may temporarily increase the flow to 2.2 gpm at 60psi, and must default to 1.5gpm at 60psi.

Sec. 10. A title for Section 99.04.304 of the Los Angeles Municipal Code is added to read as follows:

SEC. 99.04.304. OUTDOOR WATER USE.

Sec. 11. Subsection 99.04.304.1 of the Los Angeles Municipal Code is amended to read as follows:

99.04.304.1. Outdoor Potable Water Use in Landscape Areas over 500 Square Feet. On or after June 1, 2015, a water budget shall be developed for landscape irrigation use that conforms to the local water efficient landscape ordinance or to the California Department of Water Resources Model Water Efficient Landscape Ordinance, whichever is more stringent.

The following values shall be effective until subsequent revisions of the MWELO by the California Department of Water Resources (DWR).

1. ET Adjustment Factor (ETAF) - 0.55
2. Special Landscape Area (SLA) – 0.45 (The resulting total ETAF for SLA shall be 1.0).

EXCEPTION:

1. Sites with less than 2,500 square feet of landscape area exclusively irrigated with a micro-irrigation system.

Note:

1. Prescriptive measures to assist in compliance with the water budget are available in the MWELO which may be found at:

<http://www.water.ca.gov/wateruseefficiency/docs/WaterOrdSec492.cfm>

Sec. 12. Subsection 99.04.304.1.1 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 13. A new Subsection 99.04.304.2.1 is added to the Los Angeles Municipal Code to read as follows:

99.04.304.2.1. Irrigation Design [N]. Buildings on sites with over 500 square feet of cumulative irrigated landscape areas shall have irrigation controllers, which meet the criteria in Section 99.04.304.2.

Sec. 14. A new Subsection 99.04.304.3 is added to the Los Angeles Municipal Code to read as follows:

99.04.304.3. Metering Outdoor Water Use. For sites with at least 500 square feet of cumulative landscaped area, a separate meter, provided by the City of Los Angeles Department of Water and Power, shall be installed to monitor landscape irrigation and outdoor water uses, including but not limited to ornamental fountains and other ornamental water features.

EXCEPTIONS:

1. Outdoor potable water uses such as drinking fountains and faucets.
2. Outdoor hose bibs.
3. Additions with a valuation not exceeding \$200,000.
4. Additions and alterations not replacing the entire potable water system, including all underground piping up to the existing meter.

Sec. 15. A new Subsection 99.04.304.4 is added to the Los Angeles Municipal Code to read as follows:

99.04.304.4. Exterior Faucets. Locks shall be installed on all publicly accessible exterior faucets and hose bibs.

Exception: Single family dwellings

Sec. 16. A new Subsection 99.04.304.5 is added to the Los Angeles Municipal Code to read as follows:

99.04.304.5. Swimming Pool Covers. For one- and two-family dwellings, any permanently installed outdoor in-ground swimming pool or spa shall be equipped with a cover having a manual or power-operated reel system. For irregular-shaped pools where it is infeasible to cover 100 percent of the pool due to its irregular shape, a minimum of 80 percent of the pool shall be covered.

EXCEPTION: Additions or alterations to existing swimming pools and spas with a building valuation not exceeding \$25,000.

Note: Safety pool covers installed pursuant to the exception to Section 91.3109.4 of the Los Angeles Building Code shall meet the requirements of ASTM F 1346.

Sec. 17. A new Section 99.04.305 is added to the Los Angeles Municipal Code to read as follows:

SEC. 99.04.305. WATER REUSE SYSTEMS.

99.04.305.1. Graywater Ready. Alternate waste piping shall be installed to permit the discharge from the clothes washer, bathtub, showers, and bathroom/restroom wash basins to be used for a future graywater irrigation system. The flow from the fixtures shall be piped separately and be sufficient to provide graywater to the entire landscape area. The point of connection between the graywater piping and other waste piping shall be accessible (as defined in Section 99.02.202) and provided with signage that is satisfactory to the Department.

EXCEPTIONS:

1. Buildings with a graywater system or water reuse system.
2. Buildings where the graywater produced is not sufficient to provide the required amount of water for the landscape area.
3. Sites with landscape areas not exceeding 500 square feet.
4. Projects where graywater systems are not permitted due to geological conditions.
5. Additions and alterations that use the existing building drain.

99.04.305.2. Recycled Water Supply to Fixtures. When City-recycled water is available for use within 200 feet of the property line, 100 percent of water for water closets, urinals, floor drains, and process cooling and heating in that building shall come from City-recycled water. Recycled water systems shall be designed and installed in accordance with the Los Angeles Plumbing Code.

EXCEPTIONS:

1. Additions that use any part of the existing plumbing piping system.
2. Alterations that do not include replacing all of the potable water piping.
3. Where City-recycled water quality has been deemed non-suitable for a particular fixture or equipment, connection to the city is not required. The fixture and/or equipment shall be dual-plumbed to allow for future connection.

99.04.305.3. Cooling Towers [N]. Cooling towers shall comply with Section 99.04.305.3.1 or 99.04.305.3.2.

99.04.305.3.1. Buildings 25 Stories or Less. Buildings of 25 stories or less shall comply with one of the following:

1. Cooling towers shall have a minimum of 6 cycles of concentration (blowdown);
or
2. A minimum of 50 percent of makeup water supply to cooling towers shall come from non-potable water sources, including treated backwash.

99.04.305.3.2. Buildings Over 25 Stories. Buildings over 25 stories shall comply with all of the following:

1. Cooling towers shall have a minimum of 6 cycles of concentration (blowdown); and
2. 100 percent of makeup water supply to cooling towers shall come from non-potable water sources, including treated backwash.

EXCEPTION: Where the amount of graywater produced by the plumbing system is insufficient to meet the total makeup water demand, as determined by the Department, potable water can be used to compensate for the deficiency.

99.04.305.4. Groundwater Discharge [N]. Where groundwater is being extracted and discharged, a system for onsite reuse of the groundwater shall be developed and constructed. Alternatively, the groundwater may be discharged to the sewer.

Sec. 18. A title for Section 99.05.303 of the Los Angeles Municipal Code is added to read as follows:

SEC. 99.05.303. INDOOR WATER USE.

Sec. 19. Subsection 99.05.303.1.1 of the Los Angeles Municipal Code is amended to read as follows:

99.05.303.1.1. New Buildings or Additions in Excess of 50,000 Square Feet.

Separate submeters or meters shall be installed as follows:

1. For each individual leased, rented, or other tenant space within the building projected to consume more than 100 gallons per day (380 L/day).
2. Where potable water is used for industrial/process uses, for water supplied to the following subsystems:
 - a. Makeup water for cooling towers where flow through is greater than 500 gpm (30 L/s).
 - b. Makeup water for evaporative coolers greater than 6 gpm (0.04 L/s).
 - c. Steam and hot-water boilers with energy input more than 500,000 Btu/h (147 kW).
3. For each building that uses more than 100 gallons per day on a parcel containing multiple buildings.

Sec. 20. A new Subsection 99.05.303.2 is amended to the Los Angeles Municipal Code to read as follows:

99.05.303.2. Water Reduction. Construction projects shall demonstrate a 20 percent overall water use reduction. A calculation demonstrating a 20 percent reduction in the “water use baseline,” as established in Table 99.05.303.2.2, shall be provided.

EXCEPTIONS:

1. New buildings having a 2” or less water supply and having fixtures that comply with the maximum flow rate values shown in Table 99.05.303.2.3.
2. Additions and alterations to buildings with fixtures complying with the maximum flow rate values shown in Table 99.05.303.2.3. This provision shall apply only to new fixtures.
3. Buildings utilizing recycled water in accordance with Section 99.05.305.2.

**TABLE 99.05.303.2.2
WATER USE BASELINE³**

| FIXTURE TYPE | BASELINE FLOW RATE | DURATION | DAILY USES | OCCUPANTS ² |
|-----------------------------------|---------------------|----------|---------------------------------|------------------------|
| Showerheads | 2.0 gpm @ 80 psi | 5 min. | 1 | X ^{2a} |
| Lavatory Faucets, Non-Residential | 0.5 gpm @ 60 psi | .25 min. | 3 | X |
| Kitchen Faucets | 1.8 gpm @ 60psi | 4 min. | 1 | X ^{2b} |
| Metering Faucets | 0.25 gallons/cycle | | 3 | X |
| Water Closets | 1.28 gallons/flush | 1 flush | 1 male ¹ 3 female | X |
| Urinals | 0.125 gallons/flush | 1 flush | 2 male | X |

Fixture “Water Use” = Flow rate X Duration X Occupants X Daily uses

1. The daily use number shall be increased to three if urinals are not installed in the room.
2. Refer to Table A, Chapter 4 of the Los Angeles Plumbing Code, for occupant load factors.
 - a. Shower use by occupants depends on the type of use of a building or portion of a building. For example, the total occupant load for a health club, but only a fraction of the occupants in an office building as determined by the anticipated number of users.
 - b. Kitchen faucet use is determined by the occupant load of the area served by the fixture.
3. Use Worksheet WS-1 of the 2013 CALGreen Code to calculate baseline water use.

**TABLE 99.05.303.2.3
WATER REDUCTION FIXTURE FLOW RATES**

| FIXTURE TYPE | MAXIMUM ALLOWABLE FLOW RATE |
|-----------------------------------|-----------------------------|
| Lavatory Faucets, Non-Residential | 0.4 gpm @ 60 psi |
| Kitchen Faucets* | 1.50 gpm @ 60 psi |

| | |
|------------------|-----------------------|
| Metering Faucets | 0.20 gallons/cycle |
| Showerheads | 1.8 gpm @ 80 psi |
| Dishwashers | ENERGY-STAR certified |
| Clothes Washers | ENERGY-STAR certified |

* Kitchen faucets may temporarily increase the flow to 2.2 gpm at 60psi, and must default to 1.5gpm at 60psi.

Sec. 21. Subsection 99.05.303.2.1 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 22. A new Subsection 99.05.304.1 is amended to the Los Angeles Municipal Code to read as follows:

99.05.304.1. Outdoor Water Use in Landscape Areas over 500 Square Feet . When water is used for outdoor irrigation for landscape projects 500 square feet or greater, one of the following shall apply:

1. A local water efficient landscape ordinance that is, based on evidence in the record, at least as effective in conserving water as the updated model ordinance adopted by the Department of Water Resources per Government Code Section 65595(c) including an evapotranspiration adjustment factor (ETAF) of 0.55 and an additional water allowance for special landscape areas (SLA) of 0.45.
2. The California Department of Water Resources Model Water Efficient Landscape Ordinance (MWELO) commencing with Section 490 of Chapter 2.7, Division 2, Title 23, California Code of Regulations including an evapotranspiration adjustment factor (ETAF) of 0.55 and an additional water allowance for special landscape areas (SLA) of 0.45.

EXCEPTION: Sites with less than 2,500 square feet of landscape area exclusively irrigated with a micro-irrigation system.

Notes:

1. MWELO prescriptive measures are listed in Section 492.4 through 492.8, 492.10 and 492.11 of Chapter 2.7, Division 2, Title 23, available at the following link:
<http://www.water.ca.gov/wateruseefficiency/docs/WaterOrdSec492.cfm>
2. The Department of Water Resources (DWR) landscape ordinance webpage is available at the following link:
<http://water.ca.gov/wateruseefficiency/landscapeordinance/>

Sec. 23. Subsection 99.05.304.2 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 24. Subsection 99.05.304.3 of the Los Angeles Municipal Code is amended to read as follows:

99.05.304.3. Outdoor Water Use in Landscape Areas over 500 Square Feet. When water is used for outdoor irrigation for landscape projects over 500 square feet, the following shall apply:

Sec. 25. Subsection 99.05.304.3.1 of the Los Angeles Municipal Code is amended to read as follows:

99.05.304.3.1. Irrigation Controller and Sensor Application. In new nonresidential construction or building addition or alteration with over 500 square feet of cumulative landscaped area, install irrigation controllers and sensors which include the following criteria, and meet manufacturer's recommendations.

Sec. 26. A new Subsection 99.05.304.4 is added to the Los Angeles Municipal Code to read as follows:

99.05.304.4. Outdoor Water Use Meters. For any site with a cumulative landscaped area over 500 square feet, a separate meter provided by the City of Los Angeles Department of Water and Power shall be installed for landscape irrigation and other outdoor water uses, including ornamental fountains and other ornamental water features.

EXCEPTIONS:

1. Outdoor potable water uses such as drinking fountains and faucets.
2. Outdoor hose bibs.
3. Commercial nurseries.
4. Vehicle washing facilities.
5. Additions with a valuation not exceeding \$200,000.
6. Additions and alterations not replacing the entire potable water system, including all underground piping up to the existing meter.

Sec. 27. A new Subsection 99.05.304.5 is added to the Los Angeles Municipal Code to read as follows:

99.05.304.5. Exterior Faucets. Locks shall be installed on all publicly accessible exterior faucets and hose bibs.

Sec. 28. A new Section 99.05.305 is added to the Los Angeles Municipal Code to read as follows:

SEC. 99.05.305. WATER REUSE SYSTEMS.

99.05.305.1. Graywater Ready. Alternate waste piping shall be installed to permit the discharge from the clothes washer, bathtub, showers, and bathroom/restroom wash basins to be used for a future graywater irrigation system. The flow from the fixtures shall be piped separately and be sufficient to provide graywater to the entire landscape area. The point of connection between the graywater piping and other waste piping shall be accessible (as defined in Section 99.02.202) and provided with signage that is satisfactory to the Department.

EXCEPTIONS:

1. Buildings with a graywater system or water reuse system.
2. Buildings where the graywater produced is not sufficient to provide the required amount of water for the landscape area or process cooling or heating as determined by the Department.
3. Sites with landscape areas not exceeding 500 square feet.
4. Projects where graywater systems are not permitted due to geological conditions.
5. Additions and alterations that use the existing building drain.

99.05.305.2. Recycled Water Supply to Fixtures. When City-recycled water is available within 200 feet of the property line, 100 percent of water for water closets, urinals, floor drains, and process cooling and heating in that building shall come from City-recycled water. Recycled water systems shall be designed and installed in accordance with the Los Angeles Plumbing Code.

EXCEPTIONS:

1. Additions that use any part of the existing plumbing piping system.
2. Alterations that do not include replacing all of the potable water piping.
3. Where City-recycled water quality has been deemed non-suitable for a particular fixture or equipment, the fixture and/or equipment shall be dual-plumbed for future connection.

99.05.305.3. Cooling Towers [N]. Cooling towers shall comply with one of the following:

1. Cooling towers shall have a minimum of 6 cycles of concentration (blowdown);
or

2. A minimum of 50 percent of makeup water supply shall come from non-potable water sources, including treated backwash.

99.05.305.4. Groundwater Discharge [N]. Where groundwater is being extracted and discharged, a system for onsite reuse of the groundwater, shall be developed and constructed. Alternatively, the groundwater may be discharged to the sewer.

Sec. 29. Subsection A4.305.2 of Section 99.11.102 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 30. Subsection A5.303.5 of Section 99.12.102. of the Los Angeles Municipal Code is deleted in its entirety.

DRAFT