



# city of **RANCHO CUCAMONGA**

## **AGENDA**

### **CITY COUNCIL**

### **SPECIAL MEETING**

**Wednesday, June 17, 2015 ✧ 3:00 p.m.**

**City Hall ✧ Tri-Communities Room  
10500 Civic Center Drive ✧ Rancho Cucamonga, CA 91730**

#### **A. CALL TO ORDER:**

- A1. Pledge of Allegiance**
- A2. Roll Call: Mayor Michael  
Mayor Pro Tem Spagnolo  
Council Members Alexander, Kennedy and Williams**

#### **B. COMMUNICATION FROM THE PUBLIC:**

This is the time and place for the general public to address the City Council on any item listed on the agenda. State law prohibits the City Council from addressing any issue not previously included on the Agenda. The City Council may receive testimony and set the matter for a subsequent meeting. Comments are to be limited to five minutes per individual or less, as deemed necessary by the Mayor, depending upon the number of individuals desiring to speak. All communications are to be addressed directly to the Mayor and not to the members of the audience. This is a professional business meeting and courtesy and decorum are expected. Please refrain from any debate between audience and speaker, making loud noises, or engaging in any activity which might be disruptive to the decorum of the meeting.

#### **C. ITEMS OF DISCUSSION:**

- C1. RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CUCAMONGA, STATE OF CALIFORNIA, PROCLAIMING EXISTENCE OF A LOCAL DROUGHT EMERGENCY.**

**RESOLUTION NO. 15-093**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF  
RANCHO CUCAMONGA, STATE OF CALIFORNIA,  
PROCLAIMING EXISTENCE OF A LOCAL EMERGENCY  
DUE TO DROUGHT.**

C2. PRESENTATION, DISCUSSION AND DIRECTION ON THE CITY'S RESPONSE AND EFFORTS TO CONSERVE WATER DURING THE STATE OF EMERGENCY AND EXECUTIVE ORDER ISSUED BY GOVERNOR BROWN ON THE ONGOING DROUGHT.

**D. ADJOURNMENT**

I, Linda A. Troyan, City Clerk Services Director, of the City of Rancho Cucamonga, hereby certify that a true, accurate copy of the foregoing agenda was posted on June 11, 2015, per Government Code 54954.2 at 10500 Civic Center Drive, Rancho Cucamonga, California, and on the City's website.



Linda A. Troyan, MMC  
City Clerk Services Director, City of Rancho Cucamonga

# MEMORANDUM

CITY MANAGER'S OFFICE



**Date:** June 17, 2015  
**To:** Mayor and Members of the City Council  
**From:** John R. Gillison, City Manager  
**By:** Breanna L. Medina, Emergency Management Coordinator  
**Subject:** **RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CUCAMONGA, STATE OF CALIFORNIA, PROCLAIMING EXISTENCE OF A LOCAL DROUGHT EMERGENCY**

## Recommendation

Approve the resolution of the City Council of the City of Rancho Cucamonga, State of California, proclaiming the existence of a local drought emergency.

## Background

On January 17, 2014, the Governor proclaimed a state of emergency due to current drought conditions. On April 1, 2015, the Governor also issued Executive Order B-29-15 which directed expedited actions to reduce the harmful impacts from water shortages and other impacts of the drought. The Governor's proclamation called upon local water suppliers and municipalities to implement water shortage contingency plans immediately in order to avoid or forestall outright restrictions that could become necessary later in the drought season. In response to these actions, on May 12, 2015 the Cucamonga Valley Water District declared a Stage 6 - Severe Water Emergency in Resolution No. 2015-5-3. Cucamonga Valley Water District has declared a Stage 6 - Severe Water Emergency in order to achieve a 35% reduction in potable water as part of the mandate for a total statewide reduction as outlined by the State Water Resources Control Board. As a customer of the Cucamonga Valley Water District, the City of Rancho Cucamonga will need to enact emergency measures through ordinance and other operational and administrative actions in order to meet these executive orders and mandated conservation numbers.

Additionally, the existing drought conditions exacerbate already perilous fire conditions in the northern portions of the wild land urban interface of the City of Rancho Cucamonga and increase the risk of flash floods due to soil conditions. These conditions are likely to be beyond the services, equipment, personnel and fiscal resources of the City of Rancho Cucamonga. Approval of this local drought emergency will allow the Director of Emergency Services (City Manager) to exercise the powers, functions, and duties of the emergency organization of the City prescribed by state law, ordinances, and resolutions existing and passed in conjunction with this emergency.

Respectfully submitted,

John R. Gillison  
 City Manager

attachment: Resolution Declaring Local Emergency

**Resolution No. 15-093****RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CUCAMONGA,  
STATE OF CALIFORNIA, PROCLAIMING EXISTENCE OF A LOCAL DROUGHT  
EMERGENCY**

**WHEREAS**, California Government Code section 8630 empowers the City Council to proclaim the existence of a local drought emergency when the City of Rancho Cucamonga is threatened or likely to be threatened by the conditions of extreme peril to the safety of persons and property that are or are likely to be beyond the control of the services, personnel, equipment, and facilities of this city; and

**WHEREAS**, California Government Code section 8558(c) states that a “local emergency” means the duly proclaimed existence of conditions of extreme peril to the safety of persons and property within the territorial limits of the city caused by the drought; and

**WHEREAS**, pursuant to the City of Rancho Cucamonga Emergency Services Ordinance No. 104, the Director of Emergency Services has requested the City Council to proclaim the existence of a local emergency; and

**WHEREAS**, on January 17, 2014, the Governor of the State of California proclaimed a state of emergency in the State of California due to current drought conditions in the state; and

**WHEREAS**, on April 1, 2015, the Governor of the State of California issued Executive Order B-29-15 and directed expedited actions to reduce the harmful impacts from water shortages and other impacts of the drought, and

**WHEREAS**, the Governor’s proclamation called upon local water suppliers and municipalities to implement water shortage contingency plans immediately in order to avoid or forestall outright restrictions that could become necessary later in the drought season; and

**WHEREAS**, the Cucamonga Valley Water District declared a Stage 6 severe water emergency in Resolution No. 2015-5-3 dated May 12, 2015 and,

**WHEREAS**, as a customer of Cucamonga Valley Water District the City now must decrease its potable water use by 35% from its 2013 level in order to meet the adopted Stage 6 requirements; and

**WHEREAS**, the City of Rancho Cucamonga will need to enact emergency measures through ordinance and other operational and administrative actions to support and meet the water reduction needs as part of the mandate for a total statewide reduction as outlined by the State Water Resources Board; and

**WHEREAS**, persistent drought conditions have negatively impacted and continue to threaten the city’s economy; and

**WHEREAS**, conditions of drought exacerbate already perilous fire conditions in the northern portions of the wild land urban interface of the City of Rancho Cucamonga and increase the risk of flash floods due to soil conditions; and

**WHEREAS**, these conditions are likely to be beyond the services, equipment, personnel and fiscal resources of the City of Rancho Cucamonga.

**NOW, THEREFORE, BE IT RESOLVED AND PROCLAIMED** by the City Council of the City of Rancho Cucamonga that for reasons set forth herein, a local drought emergency now exists; and

**BE IT FURTHER RESOLVED, PROCLAIMED AND ORDERED** that during the existence of this local drought emergency the powers, functions, and duties of the emergency organization of this City shall be those prescribed by state law, ordinances, and resolutions existing and passed in conjunction with this emergency, and that this emergency shall be deemed to continue to exist until the City Council of the City of Rancho Cucamonga, proclaims its termination. Further, it is directed that this emergency proclamation be forwarded to the San Bernardino County Fire Department, Office of Emergency Services, the Director of the Governor's Office of Emergency Services and the Governor of the State of California.

**BE IT FURTHER RESOLVED, PROCLAIMED AND ORDERED** that the City Council of the City of Rancho Cucamonga hereby authorizes the undertaking of all extraordinary police and planning powers in response to this local drought emergency including but not limited to the ability to modify, amend, or issue planning codes, building or safety codes, environmental health codes, and such other codes, orders, and regulations as determined necessary for the duration of the emergency.

**BE IT FURTHER RESOLVED, PROCLAIMED AND ORDERED** that public employees, officers, and governing bodies within the City are hereby granted full immunity to the extent allowed by law for actions undertaken in compliance with this proclamation.

**BE IT FURTHER RESOLVED, PROCLAIMED AND ORDERED** that during the existence of this local drought emergency, the Director of Emergency Services may request the City Council of the City of Rancho Cucamonga to amend this proclamation of a local drought emergency and, if this Council is not in session to amend this proclamation as necessary and, if this proclamation is amended by the Director of Emergency Services the Board shall take action to ratify the amendment within seven calendar (7) days thereafter or the amendment shall have no further force or effect.

**BE IT FURTHER RESOLVED, PROCLAIMED AND ORDERED** that the City Council of the City of Rancho Cucamonga will review the need for continuing the local drought emergency at least once every thirty (30) days until the City Council terminates the local drought emergency.



# STAFF REPORT

PLANNING DEPARTMENT

**Date:** June 17, 2015

**To:** Mayor and Members of the City Council  
John R. Gillison, City Manager

**From:** Candyce Burnett, Planning Director; Mark Steuer, Director of Engineering Services/City Engineer; Trang Huynh, Building & Safety Services Director; Bill Wittkopf, Public Works Services Director

**By:** Jennifer Nakamura, Associate Planner

**Subject:** Presentation, discussion and direction on the City's response and efforts to conserve water during the State of Emergency and Executive order issued by Governor Brown on the ongoing drought.

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## RECOMMENDED ACTION:

1. Receive staff's presentation on recommended direction for addressing water conservation; and
2. Provide comments and input on the actions being taken by the City to conserve water at all City parks and facilities, and the proposed changes and enforcement of the City's landscape regulations to provide options for property owners to conserve water; and
3. Direct staff to proceed with continuing water conservation actions outlined in the staff presentation.

## BACKGROUND:

At the direction of the City Manager, a team of staff has been studying and evaluating measures necessary to address new regulations and mandates from the Governor and other State agencies to conserve water. Staff is providing a background summary of the State mandates and requirements. Staff is also presenting a series of recommended City actions to meet these mandates and assist the community in complying with these new regulations. Included are recommendations for City conservation measures as a water consumer, as well as measures to allow for various private activities to be properly designed and regulated.

In January and April 2014 the Governor issued a series of proclamations declaring a drought State of Emergency. Due to continuing drought conditions, the Governor issued Executive Order B-29-15 on April 1, 2015, which required a mandatory 25% statewide reduction in urban water use through February 2016; required commercial, industrial, and institutional users to implement water efficiency measures; prohibited irrigation with potable water of ornamental turf in public street medians; and placed additional restrictions on irrigation systems outside newly constructed homes and buildings (Exhibit A).

The State Water Resources Control Board (SWRCB) published a regulatory framework on April 7<sup>th</sup> and issued draft regulations on April 17, 2015 to meet the requirements of the Governor's April 1,

2015 Executive Order. The SWRCB adopted the emergency regulation on May 6, 2015. The final regulation requires Cucamonga Valley Water District (CVWD) to reduce urban water use from June 2015 through February 2016 by 32% compared to the same months in 2013.

On May 12, 2015, the CVWD Board of Directors adopted Resolution No. 2015-5-3 which declared a Stage 6 Severe Water Emergency. This resolution prohibits landscape watering within 48 hours of a rain event and limits landscape watering to Tuesday, Thursday and Saturday for odd numbered addresses and Wednesday, Friday and Sunday for even numbered addresses. In addition, a Stage 6 shortage prohibits the irrigation of turf with potable water on public street medians consistent with the Governor's proclamation (Exhibit B & C).

On May 29, 2015, the California Building Standards Commission approved emergency building standards, effective June 1, 2015, to address exterior landscape irrigation systems applicable to **new** development to reduce outdoor water use through more efficient landscape and irrigation design. These standards impact the Water Efficient Landscape Ordinance, which created a landscape "water budget" for specific development. At its core, these standards revise the calculations in the water budget to reduce the amount of water that can be used for landscaping (Exhibit D).

#### PURPOSE OF THE STUDY SESSION:

The purpose of the study session is to present information on actions proposed by the City to respond to the drought and water conservation mandates. Staff will present specific information on City efforts to reduce water consumption at City sites and potential revisions to the City's landscaping regulations to encourage water conservation. City staff is analyzing all facilities and parks owned and controlled by the City to identify potential water saving improvements.

#### Existing Parks and Facilities

The City efforts to conserve water have been ongoing for many years. Ninety eight (98%) percent of the City's water use is for outdoor irrigation so water conservation efforts are focused primarily on irrigation and planted area management. The City's weather based Calsense central irrigation system was launched in 1987 and has been continuously upgraded to the latest technology. In addition, the City's landscape design standards have been updated over the years to minimize the water required by City maintained landscapes. Recycled water is used for landscape irrigation where it is available saving approximately 210 million gallons (280,000 hcf) of potable water per year. A staff analysis of the City's water bills shows that over 20% of the City's total water use is recycled water.

In addition to these efforts, which pre-date the new State mandates, the City now must decrease its potable water use from its 2013 level to meet the CVWD Stage 6 reduction target of 35%. As noted already, because the majority of the City's water use is for outdoor irrigation our efforts have been primarily focused in this area. Public Works has taken a measured approach in trying to achieve the required water reduction mandates. Part of this process was to develop a set of foundational principles or guidelines that were used in evaluating the current outdoor water use in the parks and landscaped areas to determine where changes could be made. The following is the list of these principles:

- Preservation of Turf in the **active** areas of the parks including
  - Playing Fields

- Around Playgrounds and Safety Zones
- Picnic Areas
- Shade structures
- Preservation of the overarching landscape design, features and aesthetics
- Preservation of property values
- Avoiding changes that are irreversible or permanent wherever possible
- Preserve as many trees as possible
- Use the existing mature landscape material as an anchor element for any changes

Staff will use these principles as the guiding philosophy to try and achieve the CVWD Stage 6 reduction target of 35% in water usage.

#### Private Landscape Design and Enforcement

City staff has received numerous calls from residential, commercial and industrial property owners inquiring about modifying their existing landscape to reduce water consumption. According to the Metropolitan Water District, up to 70% of residential water use is used for landscaping. The Development Code regulates landscape within publicly visible areas such as the front yard and corner side yard and has standards for the minimum amount of landscaping required within these areas. These standards are intended to create open space in developed areas, promote groundwater recharge, create shade areas for passive cooling of structures and maintain a pleasing aesthetic within the City. While these standards have continued importance, the traditional use of turf and other high water use trees and shrubs to meet these standards needs to be reconsidered. It is also important to develop standards that will be compatible with landscaping needs in the high fire hazard area. Staff has developed potential revisions to the Code that would apply to residential properties that will continue to require some landscaping but allow for water conserving designs (Exhibit F). Staff is using the proposed residential landscaping standards as a guideline to implement similar standards for commercial and industrial properties.

Assembly Bill 1, under consideration by the legislature, would prohibit cities and counties from imposing fines for a brown lawn or failure to water a lawn during a state of emergency. While many property owners are taking advantage of turf removal rebates, some lack resources to make those changes, or pay increased rates for water and as a result, have turned off the water to their landscaping. While having dead landscaping is a violation of Chapter 8 of the Municipal Code, staff is proposing a temporary suspension of enforcement of brown lawns for the duration of Governor Brown's executive order B-29-15 provided that the lawn is properly mowed, free of weeds and does not present a fire hazard and the balance of the property is well maintained. All trees and shrubs should continue to be irrigated on the cycles mandated by Cucamonga Valley Water District.

Staff has also received several inquiries from residents wanting to install rainwater capture and graywater systems to irrigate their landscapes. These systems can collect and reuse hundreds of gallons of water that might otherwise be deposited directly into the sewer or storm drain system. Staff has created draft standards for the proper design and permitting where necessary of these systems to provide additional options for homeowners (Exhibit G).

### Building Standards

Staff has also reviewed ways to reduce water use during construction. Water use is required during the grading phase of construction to reduce dust and meet air quality standards for particulates in the air. While it is not feasible to eliminate the use of water during pre-grading, staff is proposing a new policy that would require additional monitoring of watering activities and encourage the use of reclaimed or recycled water for grading activities.

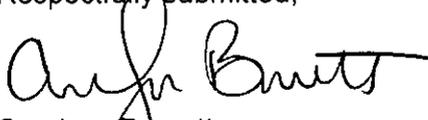
The Fire District's Prevention Bureau has proactively reached out to the State Fire Marshal's Office to ask if the State mandated annual flushing of private fire hydrants and water mains can be suspended or modified to a bi- or tri-annual schedule in order to reduce the amount of water that these maintenance requirements consume. The State Fire Marshal's Office is taking this request under consideration for possible water saving direction that will be applicable throughout the State. The Bureau is also reviewing its policies to see if changes can be made to minimize the impacts that State Fire Code provisions applicable to the installation and maintenance of fire protection water systems have on the region's available water supplies.

### Continued Development Issues

The Governor's drought proclamation does not advocate development restrictions as a method for addressing the drought. Water supply and availability is a State and regional issue, and CVWD has planned for adequate water supplies to meet the long term development needs of the City as outlined in the General Plan. New incoming development is significantly more efficient with respect to water usage. Each project is carefully reviewed to assure it is consistent with the anticipated impacts which were considered with the adoption of the General Plan. Any significant changes are reviewed in detail through the environmental review process, and larger projects are required to conduct State mandated water supply analysis.

Engaging in development restrictions would have a severe economic impact on the long term viability of the City. The City is bound by State requirements to meet its fair share of housing growth to meet the population demands of our region. Restrictions in the extent of commercial and industrial development would reduce revenues to meet the service needs of these population demands by loss of tax generating business and a decline in employment. If Rancho Cucamonga were to restrict growth, the new revenue and employment generating uses would be displaced to surrounding cities who did not have such a restriction. This would result in a long term decline in the revenues necessary to maintain the City as it ages. Staff will be prepared at the study session to illustrate how the City is supported by ongoing improvement and the potential problems with imposing development restrictions.

Respectfully submitted,



Candyce Burnett,  
Planning Director

CB:JN/lis

- Attachments:
- Exhibit A – Executive Order B-29-15 issued by Governor Brown April 1, 2015
  - Exhibit B – Resolution 2015-5-3 of the Cucamonga Valley Water District
  - Exhibit C – Ordinance 2015-5-1 of the Cucamonga Valley Water District
  - Exhibit D – California Building Standards Informational Bulletin outlining emergency building standards to reduce exterior landscape water use for new development.
  - Exhibit E – California Department of Housing and Community Development Informational bulletin advising local jurisdictions to revise their water efficient landscape ordinance.
  - Exhibit F – Proposed revisions to the Municipal Code related to Landscaping.
  - Exhibit G – Draft guidelines for residential graywater and rainwater collecting systems.
  - Exhibit H – Draft policy for Pre-Grading Construction Watering Activities.

**Executive Department**  
State of California

**EXECUTIVE ORDER B-29-15**

**WHEREAS** on January 17, 2014, I proclaimed a State of Emergency to exist throughout the State of California due to severe drought conditions; and

**WHEREAS** on April 25, 2014, I proclaimed a Continued State of Emergency to exist throughout the State of California due to the ongoing drought; and

**WHEREAS** California's water supplies continue to be severely depleted despite a limited amount of rain and snowfall this winter, with record low snowpack in the Sierra Nevada mountains, decreased water levels in most of California's reservoirs, reduced flows in the state's rivers and shrinking supplies in underground water basins; and

**WHEREAS** the severe drought conditions continue to present urgent challenges including: drinking water shortages in communities across the state, diminished water for agricultural production, degraded habitat for many fish and wildlife species, increased wildfire risk, and the threat of saltwater contamination to fresh water supplies in the Sacramento-San Joaquin Bay Delta; and

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

**WHEREAS** new expedited actions are needed to reduce the harmful impacts from water shortages and other impacts of the drought; and

**WHEREAS** the magnitude of the severe drought conditions continues to present threats beyond the control of the services, personnel, equipment, and facilities of any single local government and require the combined forces of a mutual aid region or regions to combat; and

**WHEREAS** under the provisions of section 8558(b) of the Government Code, I find that conditions of extreme peril to the safety of persons and property continue to exist in California due to water shortage and drought conditions with which local authority is unable to cope; and

**WHEREAS** under the provisions of section 8571 of the California Government Code, I find that strict compliance with various statutes and regulations specified in this order would prevent, hinder, or delay the mitigation of the effects of the drought.

**NOW, THEREFORE, I, EDMUND G. BROWN JR.**, Governor of the State of California, in accordance with the authority vested in me by the Constitution and statutes of the State of California, in particular Government Code sections 8567 and 8571 of the California Government Code, do hereby issue this Executive Order, effective immediately.

**IT IS HEREBY ORDERED THAT:**

1. The orders and provisions contained in my January 17, 2014 Proclamation, my April 25, 2014 Proclamation, and Executive Orders B-26-14 and B-28-14 remain in full force and effect except as modified herein.

**SAVE WATER**

2. The State Water Resources Control Board (Water Board) shall impose restrictions to achieve a statewide 25% reduction in potable urban water usage through February 28, 2016. These restrictions will require water suppliers to California's cities and towns to reduce usage as compared to the amount used in 2013. These restrictions should consider the relative per capita water usage of each water suppliers' service area, and require that those areas with high per capita use achieve proportionally greater reductions than those with low use. The California Public Utilities Commission is requested to take similar action with respect to investor-owned utilities providing water services.
3. The Department of Water Resources (the Department) shall lead a statewide initiative, in partnership with local agencies, to collectively replace 50 million square feet of lawns and ornamental turf with drought tolerant landscapes. The Department shall provide funding to allow for lawn replacement programs in underserved communities, which will complement local programs already underway across the state.
4. The California Energy Commission, jointly with the Department and the Water Board, shall implement a time-limited statewide appliance rebate program to provide monetary incentives for the replacement of inefficient household devices.
5. The Water Board shall impose restrictions to require that commercial, industrial, and institutional properties, such as campuses, golf courses, and cemeteries, immediately implement water efficiency measures to reduce potable water usage in an amount consistent with the reduction targets mandated by Directive 2 of this Executive Order.
6. The Water Board shall prohibit irrigation with potable water of ornamental turf on public street medians.
7. The Water Board shall prohibit irrigation with potable water outside of newly constructed homes and buildings that is not delivered by drip or microspray systems.

8. The Water Board shall direct urban water suppliers to develop rate structures and other pricing mechanisms, including but not limited to surcharges, fees, and penalties, to maximize water conservation consistent with statewide water restrictions. The Water Board is directed to adopt emergency regulations, as it deems necessary, pursuant to Water Code section 1058.5 to implement this directive. The Water Board is further directed to work with state agencies and water suppliers to identify mechanisms that would encourage and facilitate the adoption of rate structures and other pricing mechanisms that promote water conservation. The California Public Utilities Commission is requested to take similar action with respect to investor-owned utilities providing water services.

#### **INCREASE ENFORCEMENT AGAINST WATER WASTE**

9. The Water Board shall require urban water suppliers to provide monthly information on water usage, conservation, and enforcement on a permanent basis.
10. The Water Board shall require frequent reporting of water diversion and use by water right holders, conduct inspections to determine whether illegal diversions or wasteful and unreasonable use of water are occurring, and bring enforcement actions against illegal diverters and those engaging in the wasteful and unreasonable use of water. Pursuant to Government Code sections 8570 and 8627, the Water Board is granted authority to inspect property or diversion facilities to ascertain compliance with water rights laws and regulations where there is cause to believe such laws and regulations have been violated. When access is not granted by a property owner, the Water Board may obtain an inspection warrant pursuant to the procedures set forth in Title 13 (commencing with section 1822.50) of Part 3 of the Code of Civil Procedure for the purposes of conducting an inspection pursuant to this directive.
11. The Department shall update the State Model Water Efficient Landscape Ordinance through expedited regulation. This updated Ordinance shall increase water efficiency standards for new and existing landscapes through more efficient irrigation systems, greywater usage, onsite storm water capture, and by limiting the portion of landscapes that can be covered in turf. It will also require reporting on the implementation and enforcement of local ordinances, with required reports due by December 31, 2015. The Department shall provide information on local compliance to the Water Board, which shall consider adopting regulations or taking appropriate enforcement actions to promote compliance. The Department shall provide technical assistance and give priority in grant funding to public agencies for actions necessary to comply with local ordinances.
12. Agricultural water suppliers that supply water to more than 25,000 acres shall include in their required 2015 Agricultural Water Management Plans a detailed drought management plan that describes the actions and measures the supplier will take to manage water demand during drought. The Department shall require those plans to include quantification of water supplies and demands for 2013, 2014, and 2015 to the extent data is available. The Department will provide technical assistance to water suppliers in preparing the plans.

13. Agricultural water suppliers that supply water to 10,000 to 25,000 acres of irrigated lands shall develop Agricultural Water Management Plans and submit the plans to the Department by July 1, 2016. These plans shall include a detailed drought management plan and quantification of water supplies and demands in 2013, 2014, and 2015, to the extent that data is available. The Department shall give priority in grant funding to agricultural water suppliers that supply water to 10,000 to 25,000 acres of land for development and implementation of Agricultural Water Management Plans.
14. The Department shall report to Water Board on the status of the Agricultural Water Management Plan submittals within one month of receipt of those reports.
15. Local water agencies in high and medium priority groundwater basins shall immediately implement all requirements of the California Statewide Groundwater Elevation Monitoring Program pursuant to Water Code section 10933. The Department shall refer noncompliant local water agencies within high and medium priority groundwater basins to the Water Board by December 31, 2015, which shall consider adopting regulations or taking appropriate enforcement to promote compliance.
16. The California Energy Commission shall adopt emergency regulations establishing standards that improve the efficiency of water appliances, including toilets, urinals, and faucets available for sale and installation in new and existing buildings.

#### **INVEST IN NEW TECHNOLOGIES**

17. The California Energy Commission, jointly with the Department and the Water Board, shall implement a Water Energy Technology (WET) program to deploy innovative water management technologies for businesses, residents, industries, and agriculture. This program will achieve water and energy savings and greenhouse gas reductions by accelerating use of cutting-edge technologies such as renewable energy-powered desalination, integrated on-site reuse systems, water-use monitoring software, irrigation system timing and precision technology, and on-farm precision technology.

#### **STREAMLINE GOVERNMENT RESPONSE**

18. The Office of Emergency Services and the Department of Housing and Community Development shall work jointly with counties to provide temporary assistance for persons moving from housing units due to a lack of potable water who are served by a private well or water utility with less than 15 connections, and where all reasonable attempts to find a potable water source have been exhausted.
19. State permitting agencies shall prioritize review and approval of water infrastructure projects and programs that increase local water supplies, including water recycling facilities, reservoir improvement projects, surface water treatment plants, desalination plants, stormwater capture, and greywater systems. Agencies shall report to the Governor's Office on applications that have been pending for longer than 90 days.

20. The Department shall take actions required to plan and, if necessary, implement Emergency Drought Salinity Barriers in coordination and consultation with the Water Board and the Department of Fish and Wildlife at locations within the Sacramento - San Joaquin delta estuary. These barriers will be designed to conserve water for use later in the year to meet state and federal Endangered Species Act requirements, preserve to the extent possible water quality in the Delta, and retain water supply for essential human health and safety uses in 2015 and in the future.
21. The Water Board and the Department of Fish and Wildlife shall immediately consider any necessary regulatory approvals for the purpose of installation of the Emergency Drought Salinity Barriers.
22. The Department shall immediately consider voluntary crop idling water transfer and water exchange proposals of one year or less in duration that are initiated by local public agencies and approved in 2015 by the Department subject to the criteria set forth in Water Code section 1810.
23. The Water Board will prioritize new and amended safe drinking water permits that enhance water supply and reliability for community water systems facing water shortages or that expand service connections to include existing residences facing water shortages. As the Department of Public Health's drinking water program was transferred to the Water Board, any reference to the Department of Public Health in any prior Proclamation or Executive Order listed in Paragraph 1 is deemed to refer to the Water Board.
24. The California Department of Forestry and Fire Protection shall launch a public information campaign to educate the public on actions they can take to help to prevent wildfires including the proper treatment of dead and dying trees. Pursuant to Government Code section 8645, \$1.2 million from the State Responsibility Area Fire Prevention Fund (Fund 3063) shall be allocated to the California Department of Forestry and Fire Protection to carry out this directive.
25. The Energy Commission shall expedite the processing of all applications or petitions for amendments to power plant certifications issued by the Energy Commission for the purpose of securing alternate water supply necessary for continued power plant operation. Title 20, section 1769 of the California Code of Regulations is hereby waived for any such petition, and the Energy Commission is authorized to create and implement an alternative process to consider such petitions. This process may delegate amendment approval authority, as appropriate, to the Energy Commission Executive Director. The Energy Commission shall give timely notice to all relevant local, regional, and state agencies of any petition subject to this directive, and shall post on its website any such petition.

26. For purposes of carrying out directives 2–9, 11, 16–17, 20–23, and 25, Division 13 (commencing with section 21000) of the Public Resources Code and regulations adopted pursuant to that Division are hereby suspended. This suspension applies to any actions taken by state agencies, and for actions taken by local agencies where the state agency with primary responsibility for implementing the directive concurs that local action is required, as well as for any necessary permits or approvals required to complete these actions. This suspension, and those specified in paragraph 9 of the January 17, 2014 Proclamation, paragraph 19 of the April 25, 2014 proclamation, and paragraph 4 of Executive Order B-26-14, shall remain in effect until May 31, 2016. Drought relief actions taken pursuant to these paragraphs that are started prior to May 31, 2016, but not completed, shall not be subject to Division 13 (commencing with section 21000) of the Public Resources Code for the time required to complete them.
27. For purposes of carrying out directives 20 and 21, section 13247 and Chapter 3 of Part 3 (commencing with section 85225) of the Water Code are suspended.
28. For actions called for in this proclamation in directive 20, the Department shall exercise any authority vested in the Central Valley Flood Protection Board, as codified in Water Code section 8521, et seq., that is necessary to enable these urgent actions to be taken more quickly than otherwise possible. The Director of the Department of Water Resources is specifically authorized, on behalf of the State of California, to request that the Secretary of the Army, on the recommendation of the Chief of Engineers of the Army Corps of Engineers, grant any permission required pursuant to section 14 of the Rivers and Harbors Act of 1899 and codified in section 48 of title 33 of the United States Code.
29. The Department is directed to enter into agreements with landowners for the purposes of planning and installation of the Emergency Drought Barriers in 2015 to the extent necessary to accommodate access to barrier locations, land-side and water-side construction, and materials staging in proximity to barrier locations. Where the Department is unable to reach an agreement with landowners, the Department may exercise the full authority of Government Code section 8572.
30. For purposes of this Executive Order, chapter 3.5 (commencing with section 11340) of part 1 of division 3 of the Government Code and chapter 5 (commencing with section 25400) of division 15 of the Public Resources Code are suspended for the development and adoption of regulations or guidelines needed to carry out the provisions in this Order. Any entity issuing regulations or guidelines pursuant to this directive shall conduct a public meeting on the regulations and guidelines prior to adopting them.

31. In order to ensure that equipment and services necessary for drought response can be procured quickly, the provisions of the Government Code and the Public Contract Code applicable to state contracts, including, but not limited to, advertising and competitive bidding requirements, are hereby suspended for directives 17, 20, and 24. Approval by the Department of Finance is required prior to the execution of any contract entered into pursuant to these directives.

This Executive Order is not intended to, and does not, create any rights or benefits, substantive or procedural, enforceable at law or in equity, against the State of California, its agencies, departments, entities, officers, employees, or any other person.

I **FURTHER DIRECT** that as soon as hereafter possible, this Order be filed in the Office of the Secretary of State and that widespread publicity and notice be given to this Order.

IN WITNESS WHEREOF I have hereunto set my hand and caused the Great Seal of the State of California to be affixed this 1<sup>st</sup> day of April 2015.

\_\_\_\_\_  
EDMUND G. BROWN JR.  
Governor of California

ATTEST:

\_\_\_\_\_  
ALEX PADILLA  
Secretary of State

**RESOLUTION NO. 2015-5-3****RESOLUTION OF THE BOARD OF DIRECTORS OF THE CUCAMONGA VALLEY WATER DISTRICT DECLARING A STAGE 6 SEVERE WATER EMERGENCY PURSUANT TO ITS WATER SUPPLY SHORTAGE CONTINGENCY PLAN TO COMPLY WITH STATEWIDE DROUGHT REGULATIONS**

WHEREAS, on August 26, 2014 the Board of Directors took action to declare a STAGE 2 WATER WATCH pursuant to Title 4 – Chapter 4.24 Water Supply Shortage Contingency Plan which is set forth in the Cucamonga Valley Water District Code (“District Code”). Said action was taken in response to the Governor’s 2014 Executive Order which declared a State of Emergency due to extended drought conditions, and

WHEREAS, on April 1, 2015, the Governor issued a subsequent Executive Order requiring a mandatory 25% statewide reduction in total potable water production and directed the State Water Resources Control Board (“SWRCB”) to develop an Emergency Regulation Implementing The 25% Conservation Standard (“Regulation”); and

WHEREAS, on April 28, the SWRCB published a Notice of Proposed Rulemaking to consider taking action to adopt its Regulation at its May 5-6, 2015 meeting, and

WHEREAS, under the draft Regulation, the District is required to reduce total potable water production by 32% as part of the mandate for a total statewide reduction; and

WHEREAS, based on the Regulation, it is anticipated that the District will need to declare a STAGE 6 – SEVERE WATER EMERGENCY in order to achieve a 32% reduction in total potable water production as mandated by the SWRCB; and

WHEREAS, Water Code Section 31026 provides that the District has the power to restrict the use of water during any emergency caused by drought, or other threatened or existing water shortage, and to prohibit the wastage of water or the use of water during such periods, for any purpose other than household uses or such other restricted uses as may be determined to be necessary by the District and may prohibit use of such water during such periods for specific uses which the District may from time to time find to be nonessential. The District has the authority to impose monetary fines and penalties and take other applicable actions pursuant to Water Code Sections 350-358, 375-377, and 31029; and

WHEREAS, pursuant to the District Code, the Board may take action by resolution to declare, change and rescind, as applicable, the particular stage of the water supply shortage. The District Code provides for declaring Drought Alert Stages and for implementing a corresponding Drought Rate structure in the event such a rate structure is adopted by the Board and made part of the District’s rules and regulations. It is anticipated that the Board will consider the adoption of a Drought Rate on June 9, 2015 and if adopted, it is anticipated that such a rate structure would go into effect on July 1, 2015. Therefore, the Board desires to adopt this Resolution in order to declare a STAGE 6 – SEVERE WATER EMERGENCY and establish the measures to be implemented during said STAGE 6.

NOW THEREFORE BE IT RESOLVED by the Board of Directors as follows:

**RESOLUTION NO. 2015-5-3**

**Section 1**      **Incorporation of Recitals** All of the foregoing Recitals are true and correct and the Board so finds and determines. The Recitals set forth above are incorporated herein and made an operative part of this Resolution.

**Section 2**      **Compliance With SWRCB Reduction Mandate** The Board hereby determines that in order to meet its 32% reduction standard as mandated by the SWRCB, it must declare a STAGE 6 – SEVERE WATER EMERGENCY. The Board hereby determines that the District is required to reduce customer water usage by 32% percent as a result of the SWRCB Regulation which has resulted from severe drought conditions. In addition to Stage 5 measures, limits may be applied to the number of days, frequency and duration of outdoor watering as determined by the District and enacted by Board resolution. Penalties for violating any of the above provisions will be assessed according to the District Code.

**Section 3**      **Declaration Of Stage 6 – Severe Water Emergency** The Board hereby declares a STAGE 6 – SEVERE WATER EMERGENCY and hereby establishes the restrictions and prohibitions as set forth below. The following actions are prohibited, except where necessary to address an immediate health and safety need or to comply with a term or condition in a permit issued by a state or federal agency:

(a) Applying water to outdoor landscapes in a manner that causes runoff such that water flows onto adjacent property, non-irrigated areas, private and public walkways, roadways, parking lots, or a structure is prohibited. Sprinklers shall be adjusted so that there is no runoff, overspray or excessive irrigation from the property;

(b) Using a hose to wash an automobile is prohibited except where the hose is equipped with a shut-off nozzle;

(c) Applying water to any hard surface including, but not limited to, driveways, sidewalks, and asphalt is prohibited. However, in the event there is a need to comply with health and safety requirements, paved areas may be hosed down with the use of a water-broom or water-efficient pressure washer using not more than 5 gallons per minute;

(d) Using potable water in a fountain or other decorative water feature is prohibited, except where the water is part of a recirculating system;

(e) Leaks and broken sprinklers shall be repaired upon notification by the District.

(f) Restaurants will only serve water on request.

(g) Hotels will offer guests the option to not launder linen daily.

(h) Watering outdoor landscapes during and within 48 hours after a measurable rainfall is prohibited.

(i) The irrigation with potable water on ornamental turf areas on public street medians.

**RESOLUTION NO. 2015-5-3**

- (j) The irrigation with potable water of landscapes outside newly constructed homes and buildings in a manner inconsistent with regulations or other requirements established by the California Building Standards Commission.
  
- (k) Restrictions on the number of days of outdoor watering. All customers will be required to move to a three day a week schedule for outdoor irrigation of ornamental landscapes or turf with potable water as follows: Customers with addresses ending in even numbers may water Wednesday, Friday and Sunday. Customers with addresses ending in odd numbers may water Tuesday, Thursday and Saturdays. Commercial, industrial and institutional customers shall be subject to the same schedule in regard to outdoor irrigation of ornamental landscapes or turf with potable water.

Section 4     Fines For Noncompliance     Financial penalties will be assessed in accordance with the notice, imposition, appeal, and collection procedures for noncompliance as set forth in the District Code including, but not necessarily limited to, the applicable provisions of Sections 4.20.040 and 4.24.050 regarding the failure to comply.

(a) For example, financial penalties will be assessed when a customer who, in the reasonable discretion of the General Manager/CEO, or his/her representative, violates the requirements set forth in this Resolution. The applicable provisions of the District Code outline those penalties and the method of notifying a customer.

(b) As set forth in the District Code, the financial penalties will be assessed when a customer violates the requirements outlined in this Resolution as follows:

(i) First Violation - The District shall issue a written notice of a first violation to the customer. The first notice of violation shall be a warning given to the customer by using a door hanger. Any notice required under this Resolution may include, for example and not by way of limitation, the following information: the water conservation stage and restrictions that are in effect; actions required for compliance in order to prevent future violations; and penalties and enforcement actions which may be imposed for future violations.

(ii) Second Violation - For a second violation, the District shall impose a penalty in the amount of fifty dollars (\$50.00) which will be added to the water customer's water bill. The second violation shall be in writing by regular mail to the address at which the customer is normally billed.

(iii) Third Violation - For a third violation, the District shall impose a penalty in the amount of one hundred dollars (\$100.00) which will be added to the customer's water bill.

(iv) Fourth Violation - After a fourth and any subsequent violation, the District shall impose a penalty in the amount of one hundred fifty dollars (\$150.00) which will be added to the customer's water bill.

(v) Notices for the third and subsequent violations shall be given in writing in the

**RESOLUTION NO. 2015-5-3**

following manner: Giving the notice to the customer at the property where the violation occurred; or if the water customer is absent from or unavailable at the premises at which the violation occurred, by leaving a copy with some person of suitable age and discretion at the premises and sending a copy through the regular mail to the address at which the water customer is normally billed; or if a person of suitable age or discretion cannot be found, then by affixing a copy in a conspicuous place at the premises at which the violation occurred, and also sending a copy through the regular mail to the address at which the customer is normally billed.

(c) If the General Manager/CEO, or his/her representative deems it appropriate, water service will be terminated at the location where the violation occurred due to a failure to comply with this Resolution or a failure to pay financial penalties. Any such service termination shall be implemented under the District's authority and procedures including, but not limited to, the District's rules and regulations for water service.

Section 5     Purpose Of Restrictions And Fines The regulatory purposes of imposing the requirements and financial penalties, as set forth in this Resolution, are to conserve water, deter waste and unreasonable use of water, encourage efficiency, and to help cover the costs incident to the investigation, inspection, and administration of enforcement of this Resolution.

Section 6     Future Stage(s) The Board may make a determination as to when it may be necessary to move to a further Stage, or a lesser Stage, under the District Code. Section 4.24.040 of the District Code provides that Stage 1 remains in effect at all times and does not require the Board to adopt a resolution for implementation.

Section 7     CEQA The Board finds that adopting and enforcing mandatory restrictions on water use in order to comply with SWRCB requirements is exempt from the California Environmental Quality Act ("CEQA") pursuant to State CEQA Guidelines Section 15268 and Public Resources Code Section 21080(b)(1) as a ministerial action. The Regulations mandate that each urban water supplier reduce its total potable water production by a specific percentage as imposed by the SWRCB. Therefore, an action to implement a particular drought stage is not a discretionary action and as such it is statutorily exempt from CEQA.

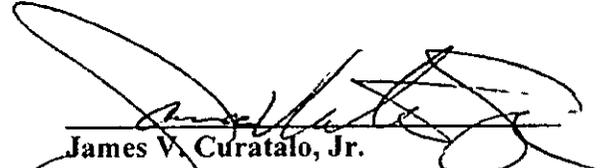
Section 8     Publication Following Adoption This Resolution shall be in full force and effect immediately upon adoption. Within 10 calendar days of adoption of this Resolution, the Board shall issue its determination of shortage and corrective measures by public proclamation published in a daily newspaper of general circulation a minimum of 3 times for 3 consecutive weeks. Three publications in a newspaper regularly published once a week or more often, with at least 5 days intervening between the respective publication dates not counting such publication dates, are sufficient. Such declaration and notice shall provide the extent, terms and conditions respecting the use and consumption of water in accordance with the applicable water conservation stage. Upon such declaration and publication of such notice, due and proper notice shall be deemed to have been given each and every person supplied water within the District.

Section 9     Severability If any section, subsection, clause or phrase in this Resolution is for any reason held invalid, the validity of the remainder of this Resolution shall not be affected thereby. The Board hereby declares that it would have passed this Resolution and each section, subsection, sentence, clause, or phrase thereof, irrespective of the fact that one or more

**RESOLUTION NO. 2015-5-3**

sections, subsections, sentences, clauses or phrases or the application thereof be held invalid.

**PASSED AND ADOPTED this 12th day of May, 2015.**



**James V. Curatalo, Jr.**  
**President**

**ATTEST:**



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**Martin E. Zvirbulis**  
**Secretary**

**ORDINANCE NO. 2015-5-1****ORDINANCE OF THE CUCAMONGA VALLEY WATER DISTRICT REVISING WATER USE EFFICIENCY REQUIREMENTS AND WATER SUPPLY SHORTAGE CONTINGENCY PLAN TO COMPLY WITH STATEWIDE DROUGHT REGULATIONS**

**WHEREAS**, on April 1, 2015, Governor Jerry Brown issued the fourth in a series of Executive Orders directing the State Water Resources Control Board (“SWRCB”) to impose restrictions to achieve a statewide 25% reduction in total potable water production through February 2016; and

**WHEREAS**, on May 5-6, 2015, the SWRCB will take final action to adopt its Emergency Regulation Implementing the 25% Conservation Standard (“Regulation”) which includes a prohibition against certain irrigation practices and an order that all urban water suppliers reduce their total potable water production by a defined percentage which has been applied to each urban water supplier; and

**WHEREAS**, the Board desires to adopt this Ordinance in order to incorporate the additional provisions from the Regulation into the Cucamonga Valley Water District Code (“District Code”) in existing Chapter 4.20 Encouraging Water Use Efficiency and Chapter 4.24 Water Supply Shortage Contingency Plan. These District Code revisions will enable the District to implement the requirements that the SWRCB is imposing on the District by way of the Regulation; and

**WHEREAS**, revisions to the District Code will also provide the framework for declaring Drought Alert Stages and for implementing a corresponding Drought Rate structure in the event such a rate structure is adopted by the Board and made part of the District’s rules and regulations. It is anticipated that the Board will consider the adoption of a Drought Rate on June 9, 2015 and if adopted, it is anticipated that such a rate structure would go into effect on July 1, 2015; and

**WHEREAS**, Water Code Section 31026 provides that the District has the authority to restrict the use of water during any emergency caused by drought, or other threatened or existing water shortage, and to prohibit the wastage of water or the use of water during such periods, for any purpose other than household uses or such other restricted uses as may be determined to be necessary by the District and may prohibit use of such water during such periods for specific uses which the District may from time to time find to be nonessential. The District has the authority to impose monetary fines and penalties and take other applicable actions pursuant to Water Code Sections 350-358, 375-377, and 31029; and

**WHEREAS**, in accordance with Water Code Sections 350 et seq., 375 et seq., and 31027, at least seven (7) days before consideration of this Ordinance, a Notice of Public Hearing was published in the Inland Valley Daily Bulletin, a newspaper of general circulation. A certified copy of the proposed Ordinance was also posted at the District Offices at least five (5) days before the hearing; and

**WHEREAS**, currently the District is at a STAGE 2 WATER WATCH, and based on the proposed Regulation by the SWRCB, it is anticipated that the District will need to declare a new drought stage in order to achieve a 32% reduction in total potable water production as mandated by the SWRCB; and

**NOW THEREFORE, THE BOARD OF DIRECTORS OF THE CUCAMONGA VALLEY WATER DISTRICT DOES HEREBY ORDAIN AS FOLLOWS:**

Section 1 All of the foregoing Recitals are true and correct and the Board so finds and determines. The Recitals set forth above are incorporated herein and made an operative part of this Ordinance.

Section 2 The Board conducted a public hearing on May 12, 2015 at 6:00 p.m., or as soon thereafter as practicable, at the District offices located at 10440 Ashford St., Rancho Cucamonga, CA 91730-2799 as part of the Regular Meeting of the Board.

Section 3 Title 4 – Chapter 4.20 WATER USE EFFICIENCY, Section 4.20.030 of the District Code is hereby amended, in its entirety, in order to include a new provision as item (9):

4.20.030 Water use efficiency practices.

Customers are required to practice the following activities:

- (1) Hosing paved areas for health and safety purposes only with the use of a waterbroom or water-efficient pressure washer using not more than five gallons per minute.
- (2) Wash vehicles using a hose equipped with a shutoff nozzle so that water does not flow to waste.
- (3) All decorative fountains shall be equipped with recirculating systems.
- (4) Upon notification by the District, repair all leaks.
- (5) Adjust sprinklers so there is no run-off, over-spray or excessive irrigation from the property.
- (6) Restaurants will only serve water on request.
- (7) Hotels will offer guests the option to not launder linen daily.
- (8) Industrial customers will review their water-using processes to evaluate ways to increase water conservation.
- (9) Prohibition of watering outdoor landscapes during and within 48 hours after a measureable rainfall.

No water customer of the District shall make, cause, use, or permit the use of water in a manner contrary to any provision of this Chapter.

Section 4 Title 4 – Chapter 4.24 WATER SUPPLY SHORTAGE CONTINGENCY PLAN, Section 4.24.040 of the District Code is hereby revised and amended, in its entirety, in order to make revisions to certain provisions of existing drought alert stages and to add STAGE 6 – SEVERE WATER EMERGENCY and STAGE 7 – WATER CRISIS - CATASTROPHIC:

#### STAGE 1 – ENCOURAGING WATER USE EFFICIENCY

This Stage [Chapter 4.20 of this Code] outlines mandatory prohibited water waste practices. Stage 1 remains in effect at all times and does not require the Board of Directors adopt a resolution for implementation.

#### STAGE 2 - WATER WATCH

A Stage 2 shortage may be declared when the Board of Directors determines that it is likely that the District will require customers to reduce their water usage by ten (10) percent from a time period determined by the District. In addition to Stage 1 measures,

hours of watering are limited to 4 p.m. through 9 a.m., and are enacted by resolution of the Board.

Penalties for violating any of the above provisions will be assessed according to Section 4.24.050

STAGE 3 - WATER ALERT

A Stage 3 shortage may be declared when the Board of Directors determines that it is likely that the District will require customers to reduce their water usage by fifteen (15) percent from a time period determined by the District. In addition to Stage 2 measures, limits may be applied to the number of days, frequency and duration of outdoor watering as determined by the District and enacted by Board resolution.

Penalties for violating any of the above provisions will be assessed according to Section 4.24.050.

STAGE 4 - CRITICAL WATER ALERT

A Stage 4 shortage may be declared when the Board of Directors determines that it is likely that the District will require customers to reduce their water usage by twenty (20) percent from a time period determined by the District. In addition to Stage 3 measures, limits may be applied to the number of days and frequency and duration of outdoor watering as determined by the District when Stage 4 is enacted by resolution of the Board.

Penalties for violating any of the above provisions will be assessed according to Section 4.24.050.

STAGE 5 – WATER EMERGENCY

A Stage 5 shortage may be declared when the Board of Directors determines that it is likely that the District will require customers to reduce their water usage by twenty-five (25) percent from a time period determined by the District. In addition to Stage 4 measures, limits may be applied to the number of days, frequency and duration of outdoor watering as determined by the District and enacted by Board resolution.

Penalties for violating any of the above provisions will be assessed according to Section 4.24.050.

STAGE 6 – SEVERE WATER EMERGENCY

A Stage 6 shortage may be declared when the Board of Directors determines that it is likely that the District will require customers to reduce their water usage by thirty-five (35) percent as a result from a catastrophic event, such as earthquake, loss of imported water supply, other natural disaster or severe drought conditions. In addition to Stage 5 measures, limits may be applied to the number of days, frequency and duration of outdoor watering as determined by the District and enacted by Board resolution. The following end-user prohibitions are also in effect under Stage 6:

- a) The irrigation with potable water on ornamental turf areas on public street medians.
- b) The irrigation with potable water of landscapes outside newly constructed homes and buildings in a manner inconsistent with regulations or other requirements established by the California Building Standards Commission.

Penalties for violating any of the above provisions will be assessed according to Section 4.24.050.

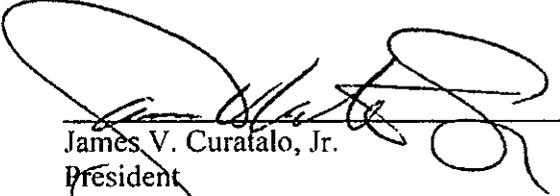
**STAGE 7 - WATER CRISIS - CATASTROPHIC**

A Stage 7 shortage may be declared when the Board of Directors determines that it is likely that the District will require customers to reduce their water usage by fifty (50) percent as a result from a catastrophic event, such as earthquake, loss of imported water supply or other natural disaster. In addition to Stage 6 measures, all non-essential outdoor water may be prohibited as determined by the District and enacted by resolution. Additionally, the use of water for construction purposes shall be curtailed during a water emergency crisis with the exception that recycled water may be used for such purposes. Penalties for violating any of the above provisions will be assessed according to Section 4.24.050

Section 5 The President of the Board shall sign this Ordinance and the Secretary of the Board shall attest thereto, and this Ordinance shall be in full force and effect immediately upon adoption. Within fifteen (15) days after adoption of this Ordinance, a summary of this Ordinance shall be published with the names of the Directors voting for and against this Ordinance and a certified copy of the full text of this Ordinance, along with the names of those Directors voting for and against this Ordinance, shall be posted in the District offices.

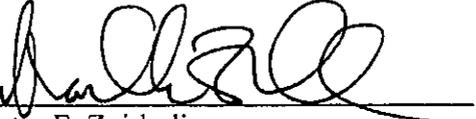
Section 6 If any section, subsection, clause or phrase in this Ordinance is for any reason held invalid, the validity of the remainder of this Ordinance shall not be affected thereby. The Board hereby declares that it would have passed this Ordinance and each section, subsection, sentence, clause, or phrase thereof, irrespective of the fact that one or more sections, subsections, sentences, clauses or phrases or the application thereof be held invalid.

**ADOPTED** this 12th day of May, 2015 by the Board of Directors of the Cucamonga Valley Water District.



James V. Curafalo, Jr.  
President

ATTEST:



Martin E. Zvirbulis  
Secretary

I, **MARTIN E. ZVIRBULIS**, Secretary of the Board of Directors of Cucamonga Valley Water District, do hereby certify that the foregoing **Ordinance No. 2015-5-1** was adopted by the Board of Directors of said District at a regular board meeting held on **May 12, 2015**. A recorded vote of the Board is as follows:

AYES: Directors Cetina, Curatalo, Gonzalez, Reed, Tiegs

NOES: Directors None

ABSENT: Directors None

  
MARTIN E. ZVIRBULIS, SECRETARY  
Cucamonga Valley Water District  
and the Board of Directors thereof

(SEAL)

**BUILDING STANDARDS COMMISSION**  
2525 Natomas Park Drive, Suite 130  
Sacramento, California 95833-2936  
(916) 263-0916 FAX (916) 263-0959



## **BUILDING STANDARDS INFORMATION BULLETIN 15-02**

**DATE:** June 1, 2015

**TO:** LOCAL BUILDING DEPARTMENTS  
STATE AGENCIES AND DEPARTMENTS  
LICENSED CONTRACTORS  
DESIGN PROFESSIONALS  
INTERESTED PARTIES

**SUBJECT:** Emergency Building Standards for Immediate Enforcement –  
Outdoor Landscape Irrigation

The purpose of this Information Bulletin is to bring attention to emergency building standard regulations that amend the 2013 California Green Building Standards Code (CALGreen), Part 11, Title 24, California Code of Regulations and are effective immediately.

During the California Building Standards Commission (CBSC) meeting on May 29, 2015, the CBSC commissioners approved (as amended) emergency building standards proposed by the Department of Housing and Community Development (HCD), the Division of the State Architect-Structural Safety (DSA-SS), the Office of Statewide Health Planning and Development (OSHPD), and CBSC. These emergency standards address exterior landscape irrigation systems applicable to specified residential and nonresidential buildings, and became effective and enforceable June 1, 2015, by local enforcement agencies and state agencies as specified in state law for the affected occupancies.

These emergency standards were developed in response to the Governor's Executive Order No. B-29-15 which addresses current ongoing emergency drought conditions in California. The complete text of each emergency standard is included in the attachment and is available on the Building Standards Commission Website [www.bsc.ca.gov](http://www.bsc.ca.gov) contained within the following state agency submittals:

- **BSC EF-01-15** (for specified nonresidential applications)
- **HCD EF-01-15** (for specified residential applications)
- **DSA-SS EF-01-15** (for specified educational facilities)
- **OSHPD EF-01-15** (for specified health facilities)

Supplement (blue) pages for these emergency regulations will be made available by the International Code Council (ICC) to existing code subscribers once the final rulemaking is certified as complete. Title 24 is composed of thirteen parts and is published by ICC,

the International Association of Plumbing and Mechanical Officials (IAPMO), and the National Fire Protection Agency (NFPA). For information regarding code subscriptions the publisher contact information follows:

- The International Code Council at:  
Website: <http://www.iccsafe.org/contact-icc/>  
Telephone: 800-786-4452  
(Publishes Parts 1, 2, 2.5, 6, 8, 9, 10, 11, and 12 of Title 24)
- The International Association of Plumbing and Mechanical Officials (IAPMO) at:  
Online Store website: <http://iapmomembership.org/>  
Telephone: 909-472-4208 or Email: at [publications@iapmo.org](mailto:publications@iapmo.org)  
(Publishes Parts 4 and 5 of Title 24)
- National Fire Protection Association (NFPA) – BNI Publishers at:  
<http://www.bnibooks.com/>  
Telephone: 888-264-2665  
(Publishes Part 3 of Title 24)

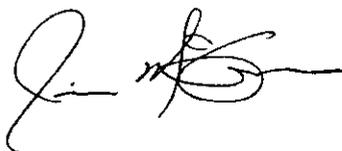
Pursuant to Government Code Section 11346.1, these emergency standards will expire after 180 days unless extended, or replaced with a final adoption of building standards. In order for the emergency building standards to become permanent, the state agencies named herein must complete the rulemaking process by engaging in the certification of compliance of the standards, including bringing the matter back before the CBSC at a public meeting to consider adoption.

During this process, the public will have an opportunity to address the state agencies and the CBSC with comments regarding the code language proposed for adoption and that will replace the emergency building standards language. All related rulemaking documents and announcements from the state agencies and CBSC are additionally made available on the CBSC website [www.bsc.ca.gov](http://www.bsc.ca.gov).

Questions concerning the emergency regulations and application to specific occupancies should be directed to as follows:

- CBSC (916) 263-0916 (For specified non-residential applications)
- HCD (916) 445-9471 (For specified residential applications)
- DSA-SS (916) 445-8100 (For specified educational facilities)
- OSHPD (916) 440-8356 (For specified health facilities)

Questions concerning this bulletin should be directed to this office at (916) 263-0916 or via E-mail at [cbsc@dgs.ca.gov](mailto:cbsc@dgs.ca.gov).



Jim McGowan  
Executive Director

**BUILDING STANDARDS COMMISSION (BSC) EF-01-15 - EMERGENCY EXPRESS TERMS**

**CHAPTER 2  
DEFINITIONS**

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**ET ADJUSTMENT FACTOR (ETAF) [BSC]** For the purposes of this Part, ETAF means a factor of 0.55 that, when applied to reference evapotranspiration, adjusts for plant factors and irrigation efficiency, two major influences upon the amount of water that needs to be applied to the landscape.

**HYDROZONE.** A portion of the landscaped area having plants with similar water needs.

...

**LANDSCAPE (PLANT) COEFFICIENT (K<sub>L</sub>).** The product of the species factor multiplied by the density factor and the microclimate factor.  $(K_L = K_s \times K_d \times K_{me})$  The landscape coefficient is used in the landscape water budget calculation. (UCCE, 2000)

**MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELo) [BSC]** The California ordinance regulating landscape design, installation and maintenance practices that will ensure commercial, multifamily and other developer installed landscapes greater than 2500 square feet meet an irrigation water budget developed based on landscaped area and climatological parameters.

A California regulation commencing with Section 490 of Chapter 2.7, Division 2, Title 23, California Code of Regulations. The MWELo regulation establishes a structure for planning, designing, installing, maintaining and managing water efficient landscapes in new construction and rehabilitated projects.

...

**REFERENCE EVAPOTRANSPIRATION (ET<sub>o</sub>).** [BSC] The estimated rate of evapotranspiration from a standardized surface of well watered, actively growing cool season four to seven inch (10.16 to 17.78 cm) turfgrass with sufficient density to fully shade the soil. The water needs of a landscape planting can be calculated by multiplying the Landscape Coefficient [K<sub>L</sub>] and Reference Evapotranspiration (ET<sub>o</sub>).

**SPECIAL LANDSCAPE AREA (SLA) [BSC]** means an area of the landscape dedicated solely to edible plants, areas irrigated with recycled water, water features using recycled water and areas dedicated to active play such as parks, sports fields, golf courses, and where turf provides a playing surface. For the purposes of this Part, the additional water allowance for SLA's shall be 0.45.

**WATER BUDGET.** Is the estimated total landscape irrigation water use which shall not exceed the maximum applied water allowance calculated in accordance with the Department of Water Resources Model Water Efficient Landscape Ordinance (MWELo).

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**CHAPTER 5  
NONRESIDENTIAL MANDATORY MEASURES**

**Division 5.3- WATER EFFICIENCY AND CONSERVATION**

...

**SECTION 5.302  
DEFINITIONS**

**5.3042.1 Definitions.** The following terms are defined in Chapter 2.

**ET ADJUSTMENT FACTOR (ETAF)**

GRAYWATER.

MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELo).

POTABLE WATER.

RECYCLED WATER.

SUBMETER.

SPECIAL LANDSCAPE AREAS (SLA).

WATER BUDGET.

...

### SECTION 5.304 OUTDOOR WATER USE

~~5.304.1 Water budget. A water budget shall be developed for landscape irrigation use that installed in conjunction with a new building or an addition or alteration conforms to the local water efficient landscape ordinance or to the California Department of Water Resources Model Water Efficient Landscape Ordinance where no local ordinance is applicable.~~

~~Note: Prescriptive measures to assist in compliance with the water budget are listed in Sections 492.5 through 492.8, 492.10 and 492.11 of the ordinance, which may be found at:  
<http://www.water.ca.gov/wateruseefficiency/docs/WaterOrdSec492.cfm>.~~

**5.304.1 Outdoor water use in landscape areas 2,500 square feet or greater. [BSC] When water is used for outdoor irrigation for landscape projects 2,500 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.

**Notes:**

1. MWELo prescriptive measures are listed in Sections 492.4 through 492.8, 492.10 and 492.11 of the 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/>
3. The water budget calculator for use with the 0.55 ETAF is available at the following link:  
<http://water.ca.gov/wateruseefficiency/landscapeordinance/>

**5.304.2 Methods to reduce potable water use. [BSC] Other methods to reduce potable water use in landscape areas include but are not limited to:**

1. Use of captured rainwater, recycled water, or graywater designed per the *California Plumbing Code*.

- a. The use of potable water may be used as a back-up water supply for on-site water recycling and/or reuse systems may be allowed by the Authority Having Jurisdiction (AHJ), provided that it can be demonstrated to the AHJ that the amount of potable water used as back-up in the water recycle or reuse system is less than that which would have been used by other means authorized by the AHJ.

2. Water treated for irrigation purposes and conveyed by a water district or public entity.

**5.304.2.1 Authorized potable water use.** The use of potable water shall be authorized where necessary to address an immediate health and safety need or to comply with a term or condition in a permit issued by a state or federal agency.

**5.304.3 Outdoor water use in landscape areas 1,000 to 2,500 square feet. [BSC]** When water is used for outdoor irrigation for landscape projects at least 1,000 square feet but not more than 2,500 square feet, the following shall apply:

**5.304.3.1 5.304.3 Irrigation design controller and sensor application.**

In new nonresidential construction or building addition or alteration with at least 1,000 but not more than 2,500 square feet of cumulative landscaped area (the level at which the MWEL0 applies), install irrigation controllers and sensors which include the following criteria, and meet manufacturer's recommendations.

**5.304.3.2 5.304.3.1 Irrigation eControllers.**

Automatic irrigation system controllers installed at the time of final inspection shall comply with the following:

1. Controllers shall be weather- or soil moisture-based controllers that automatically adjust irrigation in response to changes in plants' needs as weather conditions change.
2. Weather-based controllers without integral rain sensors or communication systems that account for local rainfall shall have a separate wired or wireless rain sensor which connects or communicates with the controller(s). Soil moisture-based controllers are not required to have rain sensor input.

**Note:** More information regarding irrigation controller function and specifications is available from the Irrigation Association.

**5.304.4 5.304.2 Outdoor potable water use meters.**

For new water service or for addition or alteration requiring upgraded water service for landscaped areas of at least 1,000 square feet but not more than 5,000 square feet (the level at which *Water Code* §535 applies), separate submeters or metering devices shall be installed for outdoor potable water use.

...

**APPENDIX A5  
NONRESIDENTIAL VOLUNTARY MEASURES**

**Division A5.3- WATER EFFICIENCY AND CONSERVATION**

...

**SECTION A5.302  
DEFINITIONS**

**COMPACT DISHWASHER.**

**HYDROZONE.**

**LANDSCAPE (PLANT) COEFFICIENT [KL].**

**MODEL WATER EFFICIENT LANDSCAPE ORDINANCE.**

**PLANTS.**

**POTABLE WATER.**

**RECYCLED WATER.**

**REFERENCE EVAPOTRANSPIRATION ( $ET_o$ ).**

**STANDARD DISHWASHER.**

**SUBMETER.**

...

## SECTION A5.304 OUTDOOR WATER USE

**A5.304.1 ~~A5.304.1.1~~ Reserved.**

**A5.304.2 ~~A5.304.2.1~~ Outdoor potable water use.**

For new water service not subject to the provisions of *Water Code* Section 535, separate meters or submeters shall be installed for indoor and outdoor potable water use for landscaped areas of at least 500 square feet but not more than 1,000 square feet (the level at which Section 5.304.2 applies).

**~~A5.304.4 Potable water reduction.~~**

~~Provide water efficient landscape irrigation design that reduces the use of potable water beyond the initial requirements for plant installation and establishment in accordance with Section A5.304.4.1 or A5.304.4.2. Calculations for the reduction shall be based on the water budget developed pursuant to Section 5.304.1.~~

**~~A5.304.4.1 Tier 1.~~**

~~Reduce the use of potable water to a quantity that does not exceed 60 percent of  $ET_o$  times the landscape area.~~

**~~A5.304.4.2 Tier 2.~~**

~~Reduce the use of potable water to a quantity that does not exceed 55 percent of  $ET_o$  times the landscape area.~~

**Note:** Methods used to accomplish the requirements of this section must be designed to the requirements of the *California Building Standards Code* and shall include, but not be limited to, the following:

1. \_\_\_\_\_ Plant coefficient.
2. \_\_\_\_\_ Irrigation efficiency and distribution uniformity.
3. \_\_\_\_\_ Use of captured rainwater.
4. \_\_\_\_\_ Use of recycled water.
5. \_\_\_\_\_ Water treated for irrigation purposes and conveyed by a water district or public entity.
6. \_\_\_\_\_ Use of graywater.

**~~A5.304.4.3 Verification of compliance.~~**

~~A calculation demonstrating the applicable potable water use reduction required by this section shall be provided.~~

**~~A5.304.5 Potable water elimination.~~**

~~Provide a water efficient landscape irrigation design that eliminates the use of potable water beyond the initial requirements for plant installation and establishment. Methods used to accomplish the requirements of this section must be designed to the requirements of the *California Building Standards Code* and shall include, but not be limited to, the following:~~

1. \_\_\_\_\_ Plant coefficient.
2. \_\_\_\_\_ Irrigation efficiency and distribution uniformity.
3. \_\_\_\_\_ Use of captured rainwater.
4. \_\_\_\_\_ Use of recycled water.

5. ~~Water treated for irrigation purposes and conveyed by a water district or public entity.~~

6. ~~Use of graywater.~~

...

**SECTION A5.305  
WATER REUSE**

*[No changes to section A5.305 Water reuse]*

...

**APPENDIX A5  
NONRESIDENTIAL VOLUNTARY MEASURES**

**Division A5.6 - VOLUNTARY TIERS**

...

*[CBSC proposes to update TABLE A5.601 and TABLE A5.602 to reflect the approved emergency regulations]*

**Notation:**

Authority – Health and Safety Code Sections 18930.5, 18934.5 and 18938 (b).

Reference – Health and Safety Code, Division 13, Part 2.5, commencing with Section 18901.

DEPARTMENT OF HOUSING & COMMUNITY DEVELOPMENT (HCD) EF-01-15  
EMERGENCY EXPRESS TERMS

CHAPTER 2  
DEFINITIONS

**ET ADJUSTMENT FACTOR (ETAF).** A factor that, when applied to reference evapotranspiration (ET<sub>o</sub>), adjusts for plant factors and irrigation efficiency, two major influences upon the amount of water that needs to be applied to the landscape.

~~**HYDROZONE.** A portion of the landscaped area having plants with similar water needs.~~

**LANDSCAPE (PLANT) COEFFICIENT (K<sub>L</sub>).** The product of the species factor multiplied by the density factor and the microclimate factor.  $(K_L = K_s \times K_d \times K_{me})$  The landscape coefficient is used in the landscape water budget calculation. (UCCE, 2000)

CHAPTER 4  
DIVISION 4.3 WATER EFFICIENCY AND CONSERVATION  
SECTION 4.304 OUTDOOR WATER USE

**4.304.1 Outdoor potable water use in landscape areas.** 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 factors shall be effective until subsequent revision of the MWELO by the California Department of Water Resources (DWR).

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

**Notes:**

1. Prescriptive measures to assist in compliance with the water budget are available in the Model Water Efficient Landscape Ordinance which may be found at: <http://www.water.ca.gov/wateruseefficiency/docs/WaterOrdSec492.cfm>
2. The water budget calculator for use with the 0.55 ETAF is available at: *[Web address to be established]*

**4.304.1.1 Methods to reduce potable water use.** Other methods to reduce potable water use in landscape areas include but are not limited to:

3. Use of captured rainwater, recycled water, or graywater designed per the *California Plumbing Code*.
  - a. The use of potable water may be used as a back-up water supply for on-site water recycling and/or reuse systems may be allowed by the Authority Having Jurisdiction (AHJ), provided that it can be demonstrated to the AHJ that the amount of potable water used as back-up in the water recycle or reuse system is less than that which would have been used by other means authorized by the AHJ.
4. Water treated for irrigation purposes and conveyed by a water district or public entity.

**4.304.1.2 Authorized potable water use.** The use of potable water shall be authorized where necessary to address an immediate health and safety need or to comply with a term or condition in a permit issued by a state or federal agency.

**4.304.1 4.304.2 Irrigation controllers.** Automatic irrigation system controllers for landscaping provided by the builder and installed at the time of final inspection shall comply with the following:

1. Controllers shall be weather- or soil moisture-based controllers that automatically adjust irrigation in response to changes in plants' needs as weather conditions change.

2. Weather-based controllers without integral rain sensors or communication systems that account for local rainfall shall have a separate wired or wireless rain sensor which connects or communicates with the controller(s). Soil moisture-based controllers are not required to have rain sensor input.

**Note:** More information regarding irrigation controller function and specifications is available from the Irrigation Association.

## APPENDIX A4 RESIDENTIAL VOLUNTARY MEASURES DIVISION A4.3 WATER EFFICIENCY AND CONSERVATION

### SECTION A4.304 OUTDOOR WATER USE

~~**A4.304.1 Low water consumption irrigation system.** Install a low water consumption irrigation system which minimizes the use of spray type heads. Spray type irrigation may only be used at turf areas. The remaining irrigation systems shall use only the following types of low volume irrigation systems:~~

- ~~1. Drip irrigation.~~
- ~~2. Bubblers.~~
- ~~3. Drip emitters.~~
- ~~4. Soaker hose.~~
- ~~5. Stream rotator spray heads.~~
- ~~6. Other systems acceptable to the enforcing agency.~~

~~**A4.304.2 A4.304.1 Rainwater catchment systems.** An approved rainwater catchment system is designed and installed to use rainwater generated by at least 65 percent of the available roof area. Rainwater catchment systems shall be designed and installed in accordance with the *California Plumbing Code*.~~

~~**A4.304.3 Water budget.** When landscaping is provided by the builder, 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 where no local ordinance is applicable.~~

~~**A4.304.4 Potable water reduction.** When landscaping is provided by the builder, a water efficient landscape irrigation system shall be installed that reduces potable water use. The potable water use reduction shall be calculated beyond the initial requirements for plant installation and establishment. Calculations for the reduction shall be based on the water budget developed pursuant to Section A4.304.3.~~

~~**Tier 1.** Reduce the use of potable water to a quantity that does not exceed 65 percent of ETo times the landscape area.~~

~~**Tier 2.** Reduce the use of potable water to a quantity that does not exceed 60 percent of ETo times the landscape area.~~

~~**Note:** Methods used to comply with this section must be designed to meet the requirements of the other parts of the California Building Standards Code and may include, but are not limited to, the following:~~

- ~~1. Plant coefficient.~~
- ~~2. Irrigation efficiency and distribution uniformity.~~
- ~~3. Use of captured rainwater.~~
- ~~4. Use of recycled water.~~
- ~~5. Water treated for irrigation purposes and conveyed by a water district or public entity.~~
- ~~6. Use of graywater.~~

~~**A4.304.5 A4.304.2 Potable water elimination.** When landscaping is provided by the builder and as allowed by local ordinance, a water efficient landscape irrigation design that eliminates the use of potable water beyond the initial requirements for plant installation and establishment. Methods used to accomplish the requirements of this section must be designed to the requirements of the *California Building Standards Code* and shall include, but not be limited to, the following:~~

- ~~1. Plant coefficient.~~
- ~~2. Irrigation efficiency and distribution uniformity.~~
- ~~3. Use of captured rainwater.~~

- 4 2. Use of recycled water.
- 5 3. Water treated for irrigation purposes and conveyed by a water district or public entity.
- 6 4. Use of graywater.

**A4.304.6 A4.304.3 Irrigation metering device.** For new water service connections, landscaped irrigated areas more than 2,500 square feet shall be provided with separate submeters or metering devices for outdoor potable water use.

**APPENDIX A4 RESIDENTIAL VOLUNTARY MEASURES  
DIVISION A4.6 TIER 1 AND TIER 2**

**SECTION A4.601  
GENERAL**

- A4.601.1 Scope.** (No change to text)
- A4.601.2 Prerequisite measures.** (No change to text)
- A4.601.3 Elective measures.** (No change to text)

**A4.601.4 Tier 1.**  
To achieve Tier 1 status a project must comply with the following:

**A4.601.4.1 Mandatory measures for Tier 1.** (No change to text)

**A4.601.4.2 Prerequisite and elective measures for Tier 1.** In addition to the mandatory measures, compliance with the following prerequisite and elective measures from Appendix A4 is also required to achieve Tier 1 status:

- 1. From Division A4.1, Planning and Design. (No change to text)
- 2. From Division A4.2, Energy Efficiency. (No change to text)
- 3. From Division A4.3, Water Efficiency and Conservation.
  - ~~3.1. Comply with the landscape irrigation water budget requirement in Section A4.304.3.~~
  - ~~3.2. Comply with the Tier 1 potable water use reduction for landscape irrigation design in Section A4.304.4.~~
  - ~~3.3~~ 3.1 Comply with at least two elective measures selected from Division A4.3.
- 4. From Division A4.4, Material Conservation and Resource Efficiency. (No change to text)
- 5. From Division A4.5, Environmental Quality. (No change to text)

**A4.601.5 Tier 2.** To achieve Tier 2 status a project must comply with the following.

**Note:** (No change to text)

**A4.601.5.1 Mandatory measures for Tier 2.** (No change to text)

**A4.601.5.2 Prerequisite and elective measures for Tier 2.** In addition to the mandatory measures, compliance with the following prerequisite and elective measures from Appendix A4 is also required to achieve Tier 2 status:

- 1. From Division A4 1, Planning and Design. (No change to text)
- 2. From Division A4.2, Energy Efficiency. (No change to text)
- 3. From Division A4.3, Water Efficiency and Conservation.
  - ~~3.1 Comply with the landscape irrigation water budget requirement in Section A4.304.3.~~
  - ~~3.2 Comply with the Tier 2 potable water use reduction for landscape irrigation design in Section A4.304.4.~~
  - ~~3.3~~ 3.1 Comply with at least three elective measures selected from Division A4.3.
- 4. From Division A4.4, Material Conservation and Resource Efficiency. (No change to text)
- 5. From Division A4.5, Environmental Quality. (No change to text)

**RESIDENTIAL OCCUPANCIES APPLICATION CHECKLIST  
(APPENDIX A4, SECTION A4.602)**

FEATURE OR MEASURE	LEVELS APPLICANT TO SELECT ELECTIVE MEASURES			VERIFICATIONS ENFORCING AGENCY TO SPECIFY VERIFICATION METHOD		
	Mandatory	Prerequisites and electives <sup>1</sup>		Enforcing Agency  <input type="checkbox"/> All	Installer or Designer  <input type="checkbox"/> All	Third party  <input type="checkbox"/> All
		Tier 1	Tier 2			
<b>WATER EFFICIENCY AND CONSERVATION</b>						
<b>Outdoor water Use</b>						
<b>4.304.1</b> When landscaping is provided, a water budget (calculations) 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.  <u>Applies to landscaped areas for buildings for which building permits have been submitted on or after June 1, 2015 until future revision of the MWELO by Dept. of Water Resources (DWR).</u>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>4.304.1 4.304.2</b> Automatic irrigation systems controllers installed at the time of final inspection shall be weather or soil moisture-based.	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<del><b>A4.304.1</b> Install a low-water consumption irrigation system which minimizes the use of spray type heads.</del>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<del><b>A4.304.2 A4.304.1</b> A rainwater capture, storage and re-use system is designed and installed</del>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<del><b>A4.304.3</b> A water budget shall be developed for landscape irrigation.</del>		<input checked="" type="checkbox"/> <sup>2</sup>	<input checked="" type="checkbox"/> <sup>2</sup>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<del><b>A4.304.4</b> Provide water efficient landscape irrigation design that reduces the use of potable water. Tier 1. Does not exceed 65 percent of ETo times the landscape area. Tier 2. Does not exceed 60 percent of ETo times the landscape area.</del>		<input checked="" type="checkbox"/> <sup>2</sup>	<input checked="" type="checkbox"/> <sup>2</sup>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<del><b>A4.304.5 A4.304.2</b> A landscape design is installed which does not utilize potable water.</del>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<del><b>A304.6 A4.304.3</b> For new water service connections, landscaped irrigated areas more than 2,500 square feet shall be provided with separate submeters or metering devices for outdoor potable water use.</del>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**DIVISION OF THE STATE ARCHITECT (DSASS) EF-01-15 - EMERGENCY EXPRESS TERMS**

**CHAPTER 1  
ADMINISTRATION**

...

**SECTION 105  
DIVISION OF THE STATE ARCHITECT**

...

**105.1.1 Application - Public elementary and secondary schools and community colleges.** New building construction, alterations and additions and related site work on a new or existing site.

...

**CHAPTER 2  
DEFINITIONS**

...

**SECTION 202  
GENERAL**

...

**EVAPOTRANSPIRATION ADJUSTMENT FACTOR (ETAF). [DSA]** For the purposes of this Part, ETAF means a factor of 0.65 that, when applied to reference evapotranspiration, adjusts for plant factors and irrigation efficiency, two major influences upon the amount of water that needs to be applied to the landscape.

...

~~**HYDROZONE.** A portion of the landscaped area having plants with similar water needs.~~

...

~~**LANDSCAPE (PLANT) COEFFICIENT (KI).** The product of the species factor multiplied by the density factor and the microclimate factor.  $\{KI = K_s \times K_d \times K_{mc}\}$  The landscape coefficient is used in the landscape water budget calculation. (UCCE, 2000)~~

...

~~**MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWEL)** The California ordinance regulating landscape design, installation and maintenance practices that will ensure commercial, multifamily and other developer installed landscapes greater than 2500 square feet meet an irrigation water budget developed based on landscaped area and climatological parameters. A California regulation commencing with Section 490 of Chapter 2.7, Division 2, Title 23, California Code of Regulations. The MWEL regulation establishes a structure for planning, designing, installing, maintaining and managing water efficient landscapes in new construction and rehabilitated projects.~~

...

~~**REFERENCE EVAPOTRANSPIRATION (ET<sub>o</sub>).** The estimated rate of evapotranspiration from a standardized surface of well watered, actively growing cool season four to seven inch (10.16 to 17.78 cm) turfgrass with sufficient density to fully shade the soil. The water needs of a landscape planting can be calculated by multiplying the Landscape Coefficient [KI] and Reference Evapotranspiration (ET<sub>o</sub>).~~

~~**SPECIAL LANDSCAPE AREA (SLA). [DSA]** means an area of the landscape dedicated solely to edible plants, areas irrigated with recycled water, water features using recycled water and areas dedicated to active play such as parks, sports fields, golf courses, and where turf provides a playing surface. For the purposes of this Part, the additional water allowance for SLA's shall be 0.35.~~

...

**CHAPTER 3  
GREEN BUILDING**

~~**3.01.1 Scope.** Buildings shall be designed to include the green building measures specified as mandatory in the application checklists contained in this code. Voluntary green building measures are also included in the application checklists and may be included in the design and construction of structures covered by this code, but are not required unless adopted by a city, county, or city and county as specified in Section 101.7.~~

...

~~**301.4 Public schools and community colleges.** [DSA] Newly constructed buildings and facilities on new or existing sites shall comply with Chapter 5. Alterations of or additions to existing buildings shall only be required to comply with Chapter 5, Section 5.304.~~

...

CHAPTER 5 - NON-RESIDENTIAL MANDATORY MEASURES  
DIVISION 5.3- WATER EFFICIENCY AND CONSERVATION

...  
SECTION 5.302  
DEFINITIONS

5.302.1 Definitions. The following terms are defined in Chapter 2.

EVAPOTRANSPIRATION ADJUSTMENT FACTOR (ETAF).

GRAYWATER.

MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWEL0).

POTABLE WATER.

RECYCLED WATER.

SUBMETER.

SPECIAL LANDSCAPE AREAS (SLA).

WATER BUDGET.

...  
SECTION 5.304  
OUTDOOR WATER USE

**5.304.1 Outdoor potable water use in landscape areas 2,500 square feet or greater. [DSA]** When potable water is used for outdoor irrigation for landscape projects 2,500 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 0.65 and an additional water allowance for special landscape areas (SLA) of 0.35.
2. The California Department of Water Resources Model Water Efficient Landscape Ordinance (MWEL0) commencing with Section 490 of Chapter 2.7, Division 2, Title 23, California Code of Regulations including an evapotranspiration adjustment factor (ETAF) of 0.65 and an additional water allowance for special landscape areas (SLA) of 0.35.

**Note:** The MWEL0 prescriptive measures to assist in compliance with the water budget are listed in Sections 492.4 through 492.8, 492.10 and 492.11 of the MWEL0, which may be found at:  
<http://www.water.ca.gov/wateruseefficiency/docs/WaterOrdSec492.cfm>.

**5.304.2 Alternate methods to reduce outdoor potable water use in landscape areas. [DSA].** As allowed by a district's local city or county water or health agency, methods to reduce potable water use in landscape areas shall be permitted to include but are not limited to:

1. Use of captured rainwater, recycled water, or graywater designed per the California Plumbing Code.
  - a. Supplementary water supply: The use of potable water shall only be permitted as a back-up water supply for on-site water reuse systems.

2. Water treated for irrigation purposes and conveyed by a water district or public entity.

**5.304.2.1 Authorized potable water use.** The use of potable water shall be authorized where necessary to address an immediate health and safety need or to comply with a term or condition in a permit issued by a state or federal agency.

**5.304.3 Outdoor water use in landscape areas 1,000 to 2,500 square feet.** When water is used for outdoor irrigation for landscape projects at least 1,000 square feet but not more than 2,500 square feet, the following shall apply:

**5.304.3.1 Irrigation controller and sensor application.** In new nonresidential construction or building addition or alteration with at least 1,000 but not more than 2,500 square feet of cumulative landscaped area (the level at which the MWEL0 applies), install irrigation controllers and sensors which include the following criteria, and meet manufacturer's recommendations.

**5.304.3.2 Controllers.** Automatic irrigation system controllers installed at the time of final inspection shall comply with the following:

1. Controllers shall be weather- or soil moisture-based controllers that automatically adjust irrigation in response to changes in plants' needs as weather conditions change.
2. Weather-based controllers without integral rain sensors or communication systems that account for local rainfall shall have a separate wired or wireless rain sensor which connects or communicates with the controller(s). Soil moisture-based controllers are not required to have rain sensor input.

**Note:** More information regarding irrigation controller function and specifications is available from the Irrigation Association.

**5.304.4 Outdoor water use meters.** For new water service or for addition or alteration requiring upgraded water service for landscaped areas of at least 1,000 square feet but not more than 5,000 square feet (the level at which Water Code §535 applies), separate submeters or metering devices shall be installed for outdoor water use.

...

Notation

Authority: Education Code Sections 17280—17317 and 81130--81147.

Reference(s): Education Code Sections 17310 and 81142.



**DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT  
DIVISION OF CODES AND STANDARDS**

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**May 29, 2015**

**INFORMATION BULLETIN 2015- 03 (SHL, FBH, MH)**

**TO: Local Code Enforcement Agencies  
Third-Party Agencies (FBH)  
Interested Parties (SHL, FBH, MH)  
State Agencies and Departments  
Division Staff**

**SUBJECT: Emergency Regulations Effective June 1, 2015  
Outdoor Potable Water Reduction  
2013 California Green Building Standards (CALGreen) Code**

The purpose of this Information Bulletin (IB) is to inform local enforcement agencies and all stakeholders affected by California building standards of the recent adoption and approval of emergency regulations in the 2013 California Green Building Standards Code (Part 11, Title 24 California Code of Regulations). These emergency regulations were approved by the California Building Standards Commission (CBSC) on May 29, 2015, and are effective **June 1, 2015**. The emergency regulations require water budgets for irrigation of outdoor landscaped areas in new residential construction. The full text of the emergency rulemaking, developed by the Department of Housing and Community Development (HCD), is included as Attachment A to this IB. Further information on other state agency proposals and availability of a published Supplement is addressed in the California Building Standards Commission's IB No. 15-02 available at the following website: <http://www.bsc.ca.gov/pubs/bullet.aspx>

**BACKGROUND**

Governor Brown's Executive Order B-29-15 (April 1, 2015) provides a summary of the ongoing drought conditions in California starting with the declaration of a State of Emergency (January 17, 2014), and a Continued State of Emergency (April 25, 2014): citing evidence of a record low snowpack, decreased water levels in reservoirs, reduced river flows, and declining supplies in underground water basins. In addition, the Governor acknowledged that a distinct possibility exists for drought conditions to continue. Further, Executive Order B-29-15 found that conditions of extreme peril to the safety of persons and property continue to exist due to water shortage and drought conditions with which local authority is unable to cope. To address these concerns, Executive Order B-29-15 specified that strict compliance with identified statutes and regulations would prevent, hinder or delay, or mitigate the effects of the drought.

The objectives and individual directives applicable to this rulemaking include focus on saving water and increasing enforcement against water waste. The full text of Executive Order B-29-15 may be viewed at: [http://gov.ca.gov/s\\_executiveorders.php](http://gov.ca.gov/s_executiveorders.php)

In view of the urgency to conserve California's water resources, as deemed essential by the Governor's Executive Order B-29-15 and prior proclamations, HCD, in coordination with other state agencies, proposed the adoption of these building standards through the emergency adoption process.

**SUMMARY (See Attachment A for complete regulatory text)**

**RESIDENTIAL EMERGENCY REGULATIONS IN THE 2013 CALGREEN CODE  
EFFECTIVE JUNE 1, 2015:**

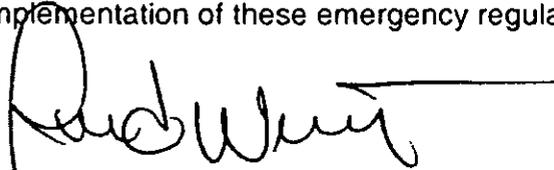
- A water budget shall be developed for landscape irrigation use that conforms to the local water efficient landscape ordinance or to the California Department of Water Resources' (DWR) Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent. This requirement applies to permit applications for newly constructed residential structures with landscaping.
- Until the next update of the MWELO by DWR, the following factors shall be used in the calculation of Maximum Applied Water Allowance (MAWA) as addressed in the MWELO.
  1. ET Adjustment Factor (ETAF) = 0.55.
  2. Special Landscape Areas (SLA) Factor = 0.45. (The resulting total ETAF for SLA shall be 1.0).
- Local agency adoption of MWELO and similar ordinances:
  - The HCD emergency regulations supersede the MWELO and CALGreen residential Tier 1 or Tier 2 (Sections A4.304.3 and A4.304.4). Local agencies will need to modify local ordinances to reflect HCD's changes to ETAF factors, in the MAWA formula.
  - Local agencies who have adopted a local ordinance more stringent than the MWELO will need to verify whether the ordinance will need to be revised to reflect changes in water use allowances resulting from these emergency regulations.
- The MWELO, as codified in the California Code of Regulations, Title 23 Waters, Division 2, Department of Water Resources, Chapter 2.7 Model Water Efficient Landscape Ordinance, should be consulted for further information on methodology and resources needed for compliance with these regulations. See the following DWR website: <http://www.water.ca.gov/wateruseefficiency/landscapeordinance/>
- DWR is in the process of revising their online calculator for calculating the MAWA (maximum allowable water) and the Estimated Total Water Use (homeowner

estimated water use based on types of plantings and landscape area). This calculator should also be available at DWR's website:

<http://www.water.ca.gov/wateruseefficiency/landscapeordinance/>

- The emergency regulations will remain in effect unless superseded by subsequent revisions to the emergency building standards as adopted through the certifying rulemaking process. Code users should subscribe to mailing lists for HCD as well as CBSC to remain updated on the status of these emergency regulations.

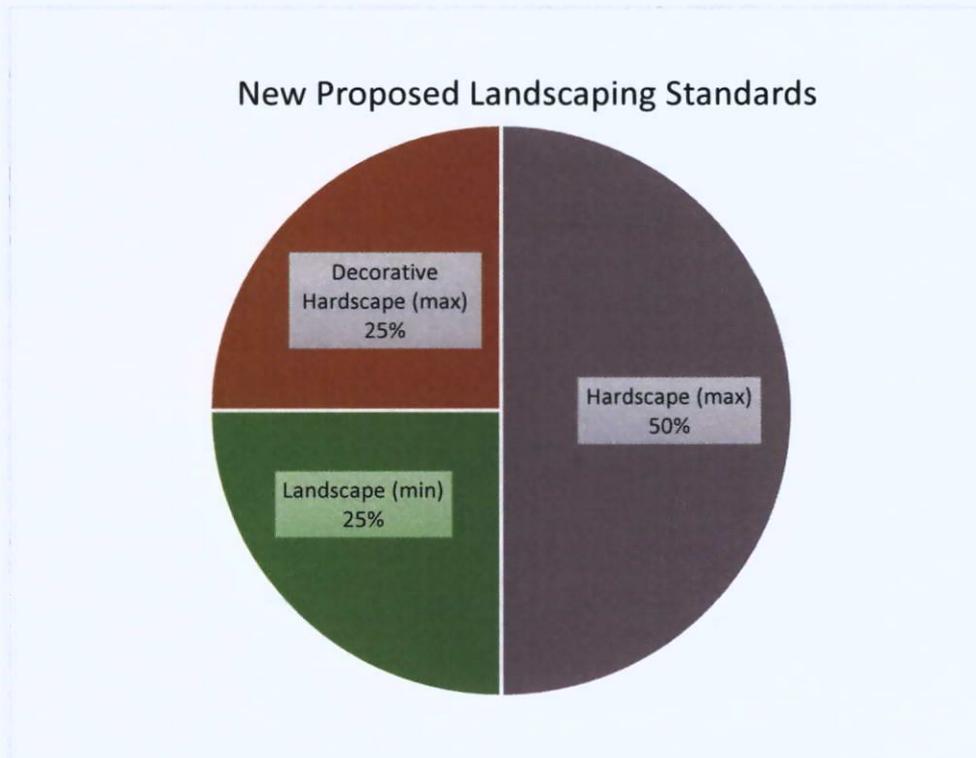
Questions or concerns regarding this Information Bulletin and effective dates may be directed to Kyle Krause, State Housing Law Program Manager, at (916) 263-4719. Specific questions related to preparation of water budgets and compliance with water efficient landscape ordinances should be directed to Julie Saare-Edmonds, Senior Environmental Scientist, Landscape and Green Building Program, DWR, at (916) 651-9676. You may also visit the State Housing Law website for general guidelines related to implementation of these emergency regulations.

A handwritten signature in black ink, appearing to read "Richard Weinert", with a horizontal line extending to the right from the end of the signature.

Richard Weinert  
Deputy Director  
Division of Codes and Standards

## Revisions to the Municipal Code related to Landscaping

1. **Revise the landscape/hardscape/decorative hardscape ratio for residential properties to allow for alternative landscape designs and for simpler interpretation.**
  - a. Limit functional hardscape to a maximum of 50% of the front yard area
    - i. Functional hardscape to be defined as driveways, walkways or any impervious surface.
    - ii. Does not include mow curbs or concrete borders that define landscape areas.
  - b. Modify the minimum landscape requirement to 25% of the front yard area
    - i. Landscape is currently defined as live plant material or combination of live plant material and synthetic turf.
    - ii. Fountains will be counted as part of the landscape area and must use a recirculating water system.
    - iii. Allow mulch to be used to help soften open spaces between live plants but not to be extensively used in place of live plant material.
    - iv. Clarify that turf is not a required plant material.
    - v. Landscape designs should accommodate appropriate plant spacing based on mature size of the plant.
    - vi. Where a parkway is integrated into the main property, it shall be counted as part of the front yard area and subject to the 50/25/25 rule.
    - vii. Where a parkway is separated from the main property by a sidewalk, separate standards for parkways will apply.
    - viii. Front yard slopes must have adequate landscaping for slope stability and erosion control.
  - c. Modify the allowed decorative hardscape to 25% of the front yard area
    - i. Decorative hardscape to be defined as permeable materials like gravel, lava rock, decomposed granite and similar materials that are walkable, but also allow for groundwater penetration. Other materials could be considered and approved by the Planning Director.
    - ii. Require the use of a variation of size, color or type of material based on the square footage of the lot to provide visual interest.
      1. Less than 5,000 square feet – one variation
      2. 5,001-10,000 square feet – two variations
      3. 10,001 or more square feet – three variations
    - iii. Prohibit the use of concrete to permanently hold material in place.



2. **Revise landscaping standards for developed parkways (divided from the main property by a sidewalk)**
  - a. Clarify that turf is not required within the parkway areas.
  - b. Allowed alternatives shall consist of:
    - i. Low water use planting, excluding cactus, roses and all other plants that contain sharp, pointed and thorn type plant structures.
    - ii. Low water use turf alternatives (groundcovers and grasses).
    - iii. Decomposed Granite (DG) and stabilizer installed appropriately in accordance to City Standards.
    - iv. Wood Mulches, Barks and Chips installed appropriately in accordance to City Standards.
    - v. Synthetic turf installed on permeable surfaces, but not with tree root protection zone described in the installation section.
  - c. Prohibit the following materials within developed parkways
    - i. Concrete, Cobble, Pavers, Gravel, Stones, Rocks, Bare Dirt.
    - ii. Anything impermeable, permanent or firm fixed in place.
  - d. If existing street tree is present it must be protected at all times and properly irrigated by either spray head, bubbler or drip system to ensure the life of the tree.
  
3. **Clarify the requirements for front yard landscaping for new development**
  - a. Eliminate the requirement for 2 trees, shrubs and seeded groundcover for new development.
  - b. Require new development to comply with the approved landscape plans.

**4. Revise requirements for rehabilitation of commercial landscapes**

- a. Require a Site Development Review permit for all commercial landscape projects of 2,500 square feet or more, consistent with the Water Efficient Landscapes chapter of the Development Code. Currently, it is only required for projects of 5,000 square feet or more.

**5. Revise landscape maintenance**

- a. Revise the nuisance determination for lack of “substantial” landscaping.
- b. All areas shall be maintained in a neat and clean condition.
- c. All landscape materials shall be maintained in a healthy, trimmed and weed-free condition.
- d. Plant material that dies shall be replaced promptly upon its demise.
- e. Synthetic turf shall be properly maintained to prevent a “matted” look.
- f. It shall be unlawful to severely prune plant materials to the extent that the plant materials’ propose has been nullified.

	<b>City of Rancho Cucamonga</b> BUILDING AND SAFETY SERVICES DEPARTMENT 10500 Civic Center Drive Rancho Cucamonga, CA Tel: (909) 477-2710 Fax: (909) 477-2711 <a href="http://www.CityofRC.us">www.CityofRC.us</a> To start an account and the application process online Click <b>Accelerate</b> <a href="https://aca.accela.com/cityofrc">https://aca.accela.com/cityofrc</a>	<b>BUILDING STANDARD S-X</b>	
	Page 1 of 8		
	X/X/2015 EFFECTIVE DATE	X/X/15 REVISION DATE	
<b>Guidelines for Residential Graywater &amp; Rainwater                  Collecting Systems</b>			

**INTENT**

The intent of the standard is to identify local requirements related to the construction of Residential Graywater and Rain Collecting Systems within the City as adopted in the latest California Plumbing Code. The user of this standard must comply with all code requirements.

**AUTHORITY**

This standard is in accordance with the adopted 2013 California Code of regulations Title 24, the California Plumbing Code, Chapters 16 and 17 and Rancho Cucamonga Ordinance No. 862, Chapter 15.20.

**TABLE OF CONTENTS**

I	INTRODUCTION	2
II	DEFINITIONS	2
III	UNDERSTANDING YOUR NEEDS	2
IV	DIFFERENT COLLECTION SYSTEMS	3
	A. RAINWATER COLLECTING SYSTEM: RAIN BARRELS	3
	B. RAINWATER COLLECTING SYSTEMS: CISTERNS	4
	C. RESIDENTIAL GRAYWATER SYSTEMS	4
V	DISTRIBUTION METHODS FOR RESIDENTIAL RAINWATER AND GRAYWATER	7
VI	PERMITTING REQUIREMENTS	8

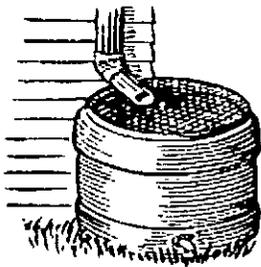
Approved by. _____ <small style="text-align: center;">Signature</small>	Trang Huynh P.E. Building & Safety Services Director
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## I. INTRODUCTION

**The Guidelines to Conserving Water through Rainwater Collecting and Graywater Reuse systems for Outdoor Use** is designed to give homeowners an overview of graywater and rainwater irrigation systems including information for systems that do not require permits. Additionally, this guideline gives information on permitting requirements for installing more complicated residential rainwater collecting and graywater system in accordance to Chapters 16 (Graywater systems) and 17 (Rainwater systems) of the latest adopted California Plumbing code.

## II. DEFINITIONS

Rainwater and Graywater systems are alternative plumbing systems that help to conserve our limited water supply. Currently, most of us use clean drinking water straight from the tap to water our gardens. Graywater and rainwater systems give you another water choice for irrigating and can save you money on your water bill. Using non potable water to irrigate your garden can also help replenish local aquifers. Graywater and rainwater are different with distinct requirements for system design and permitting.



**Rainwater is collected precipitation from rooftops and other above ground impervious surfaces that is stored in catchment tanks for later use.** Rainwater collecting systems can range from a simple barrel at the bottom of a downspout to multiple cisterns with pumps and filtration. The harvested rainwater is low in sodium and chloramine and fluoride free. Rainwater is different than potable tap water and requires specific measures for its safe reuse in your garden



**Graywater is untreated household wastewater generated from hand washing, laundry and bathing.** This wastewater can be diverted from the sewer to irrigate outdoor plants and landscape. Graywater cannot include any wastewater from toilets, kitchen sinks, dishwashers or washing machines laundering soiled diapers or other sources of contamination such as darkrooms. Graywater cannot be stored for more than 24 hours. Graywater is different than potable tap water and requires specific measures for its safe reuse in your garden.

## III. UNDERSTANDING YOUR NEEDS

**To design your alternative plumbing system you should know:**

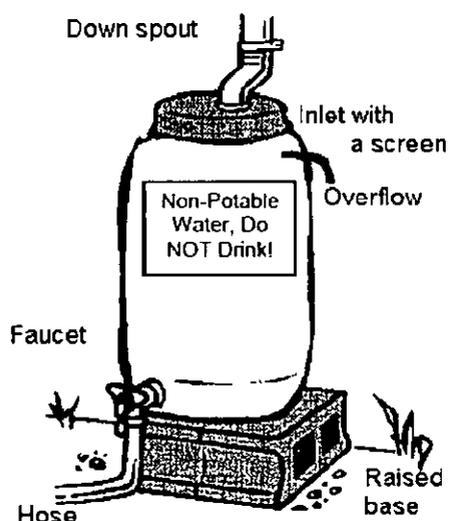
- How much water is needed for your garden?
- How much water will be produced from your graywater or rainwater systems?
- What type of water do the plants need (rainwater is acidic, graywater is basic)?
- When do you need it (daily, monthly, and biannually)?
- Where are you going to get it from (shower, sink, and roof)?
- How are you going to deliver the water to the garden (pump system, gravity flow)?
- Which distribution system do you plan to use (sub-surface, drip, mulch basin)?

## IV. DIFFERENT COLLECTION SYSTEMS

### A. RAINWATER COLLECTING SYSTEM: RAIN BARRELS

According to the latest adopted version of the California Plumbing Code section 1702.2, allows no permit or city approval is needed for rain barrel systems of 100 gallons or less per container, provided the following requirements and conditions are met:

**Rain Barrel (Less than 100 gallons —no permit required)** A rain barrel system is a simple rainwater collector that captures and stores a portion of the runoff from a roof down spout. A hose attached to the bottom of the rain barrel can be used to irrigate your garden. A rain barrel will only capture a small fraction of the rainwater that flows off your roof, the rest of the runoff will still need to drain to a safe overflow location.



Drawing Credit: City of Ottawa, Canada

#### Requirements:

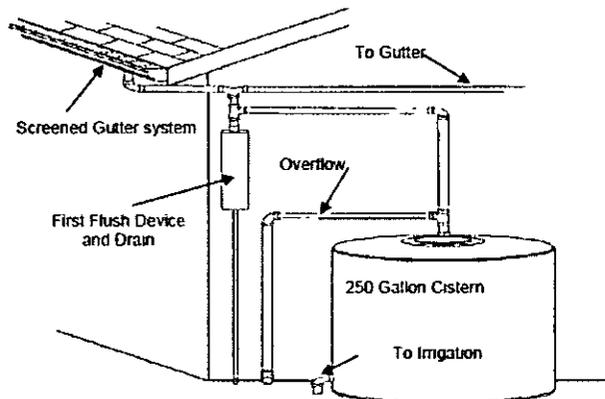
1. Your rain barrel should have a spigot/faucet so that you can access the water, an overflow pipe, a sealed and screened lid with an opening to attach your downspout and screens on all vents.
2. All rainwater collection systems must have an overflow to a safe disposal location (storm water drain or rain garden).
3. If you intend to water edible plants with your rainwater, consider installing a first flush diverter, which disposes of the first inch of rain and ensures that you harvest only the cleanest rainwater.
4. Rain barrel must be secured on a firm, level surface so that it will not tip over. It can be raised slightly to help with gravity flow irrigation.
5. Provide a labeled "Non-Potable Water, Do NOT Drink!" On the barrel.
6. Secured to ensure all child safety precautions are taken to prevent drowning
7. Rain barrels shall be sited at grade on a sound and level surface at or near gutter downspouts.
8. Water collected shall be used for irrigation only.
9. Rain barrel openings shall be screened with a fine mesh (.05 inch x .05 inch) to pre-vent mosquitoes from entering.
10. Gutters serving rain barrels shall be debris screened.
11. Large openings shall be securely fastened to prevent accidental drowning.
12. No pumps, connections to domestic water or interior use are permitted.
13. Rain barrels shall be located a minimum of 3 feet from the property line.
14. Overflow or discharge from rain barrels may not discharge across the public right-of- way or adjacent property, or in any way create a nuisance.
15. Collection vessel(s) for each existing downspout shall not exceed 100 gallons in the aggregate.
16. Rain barrels and gutters shall be cleaned annually with a non-toxic cleaner such as vinegar.
17. Rainwater from rain barrels is not required to be treated.

18. Use of rainwater collected from rain barrels is not limited to subsurface irrigation.

## B. RAINWATER COLLECTING SYSTEMS: CISTERNS

Note: Rain catchment systems over 100 gallons or over 100 gallons in aggregate per downspout will be considered cisterns subject to the permitting requirements.

**Cisterns (Greater than 100 gallons)** Cisterns are larger systems that can hold much more water and may include pumps to move the rainwater to the garden. More complex systems can involve plumbing and electrical work, soil excavation or other structural work. Permits with the reviews and approvals from Building and Planning Departments are required for cistern systems.



- **Note:** The size of your system depends on how big your roof is, how much rain-water storage you have, and how you intend to use the water. A typical standard is that you can collect 600 gallons of water for every 1,000 sq.ft. of roof area for every inch of rain.
- **Requirements:** Some of the requirements for the rain barrel system might be applicable to this Cistern system as described on page 3 of these guidelines. Consult a licensed professional plumber for the design, construction, and safety considerations.

## C. RESIDENTIAL GRAYWATER SYSTEMS

### 1. Types of Graywater Systems:

There are three types of graywater systems that vary in complexity, volume of water produced and permitting requirements. In order to determine which system is right for you, you need to know your irrigation needs, including yard size, soil type, groundwater level and budget. The easiest, most low-tech system uses a washing machine and gravity to move laundry water directly out to the garden. To further ensure safety, graywater cannot be used on the edible portions of vegetables and must be used for sub-surface irrigation in order to reduce human contact or ponding. You cannot store graywater so only divert the amount needed to water your garden. All systems must be installed and maintained according to California Plumbing Code section 1602.

- **Clothes Washer System (no permit required)** Laundry-to-landscape systems divert gray-water from the washing machine to your garden without cutting into existing plumbing. Washing machines have internal pumps which can be used to pump water directly out to the garden. No permit is required as long as no pump (other than the washing machine itself) or surge tank is used.
- **Simple System (Less than 250 gallons a day.)** These systems include reusing water from a bathroom sink or shower. Simple systems require permits

and involve altering plumbing and can include surge tanks and pumps. Simple Systems are not covered in these guidelines.

- **Complex System (Greater than 250 gallons a day.)** These systems supply a large volume of water. Complex systems rely on pumps, surge tanks, filtration systems and are expensive to install and require ongoing maintenance. Complex systems must be designed by a qualified professional plumber and meet all the requirements of the California Plumbing Code. Complex Systems are not covered in these guidelines.

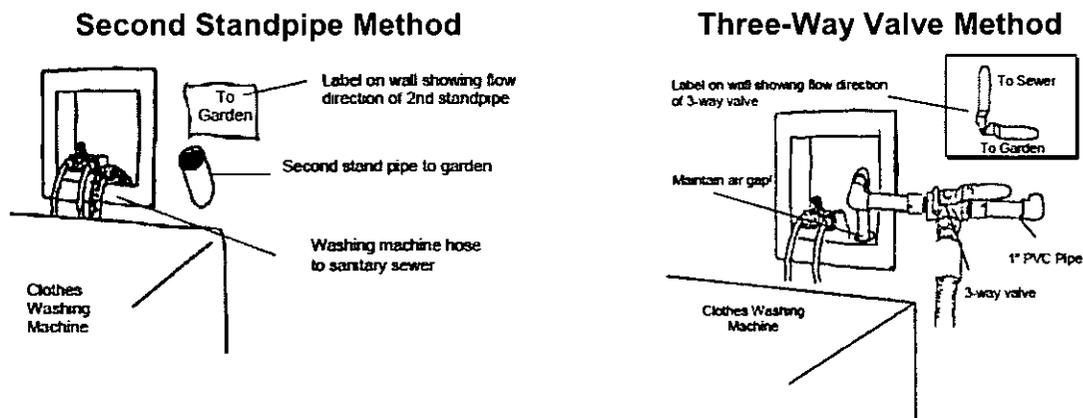
## 2. Clothes Washer Systems

Washing machine systems are the least complicated type of graywater system. They are great for gardens with minimal irrigation needs, are low cost, easy to install, and require very little maintenance. No permit is required for a clothes washing machine, providing all system design and code requirements according to the latest adopted California Plumbing Code section 1601. Permits are required for systems that include tanks or pumps.

### a. Designing a Clothes Washer System:

- Attach washing machine discharge hose to either a 3-way valve to switch between a graywater system and the sewer or a second standpipe. Graywater must be capable of being reconnected to the sewer.
- Graywater then travels out to the garden. A mulch basin with 2" cover is the simplest system for distribution and irrigation.
- Clearly label flow direction to sewer or yard. Once outside the building, the discharge must drain directly to the disposal field by hose or pipe. Piping at five foot increments & at hose connection point is to be permanently labeled: **"CAUTION: NONPOTABLE WATER, DO NOT DRINK"**
- All graywater must be used the same day it was produced.

Two examples of methods to divert washing machine graywater to the garden:



The second standpipe is installed in the wall or through the floor before it goes out to the garden. The clothes washing machine hose is moved by hand from the normal building sewer connection to the irrigation system standpipe.

A three-way valve and piping are assembled to switch between the normal building sewer connection and the irrigation system. A vacuum breaker or backflow device may be required for proper operation depending on site elevations. Consult a plumber.

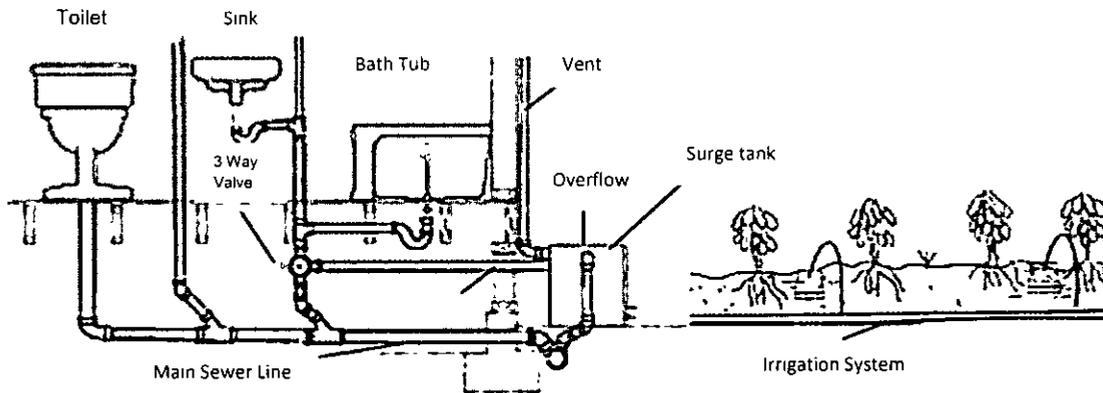
**b. Clothes Washer System Requirements:**

Permit from the City of Rancho Cucamonga Building and Safety Services Department is not required, but the following requirement shall be used:

1. The design shall allow the user to direct the flow either to the irrigation or disposal field or the building sewer. The direction control of the graywater shall be clearly labeled and readily accessible to the user.
2. The installation, change, alteration or repair of the system does not include a potable water connection or a pump and does not affect other building, plumbing, electrical or mechanical components including structural features, egress, fire-life safety, sanitation, potable water supply piping or accessibility.  
**Note:** The pump in a clothes washer shall not be considered part of the graywater system.
3. The graywater shall be contained on the site where it is generated.
4. Graywater shall be directed to and contained within an irrigation, mulch basin, or disposal field.
5. Ponding or runoff is prohibited, and shall be considered a nuisance.
6. Graywater may be released above the ground surface provided at least two (2) inches (51mm) of mulch, rock or soil or a solid shield covers the release point. Other methods which provide equivalent separation are also acceptable.
7. Graywater systems shall be designed to minimize contact with humans and domestic pets.
8. Water used to wash diapers or similarly soiled or infectious garments shall not be used and shall be diverted to the building sewer.
9. Graywater shall not contain hazardous chemicals derived from activities such as cleaning car parts, washing greasy or oily rags or disposing of waste solution from home photo labs or similar hobbyist or home occupational activities.
10. Exemption from construction permit requirements of this code shall not be deemed to grant authorization for any graywater system to be installed in a manner that violates other provisions of this code or any other laws or ordinances of the City of Rancho Cucamonga.

### 3. Simple and Complex Graywater Systems:

These systems shall be designed by a licensed professional plumbing contractor. The diagram below can be used as a reference for one of the designs.

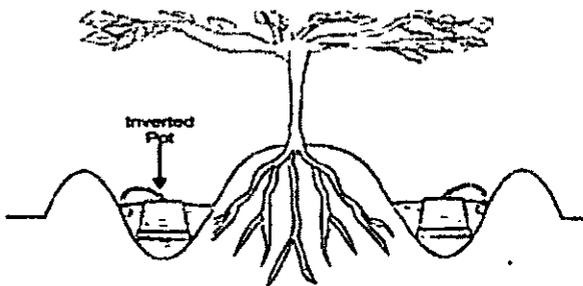


## V. DISTRIBUTION METHODS FOR RESIDENTIAL RAINWATER AND GRAYWATER

Although rainwater and graywater systems are different and have distinct characteristics and permitting requirements, they have similar distribution methods and allowable uses. Residential rainwater and graywater may replace drinking water for watering plants and lawn.

### A. TYPES OF IRRIGATION SYSTEMS:

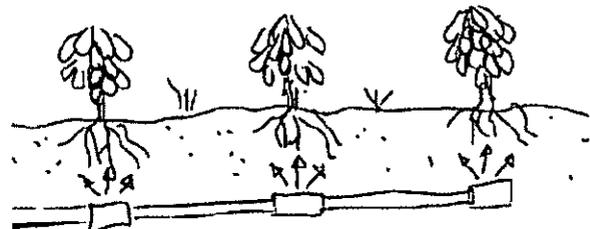
- Mulch Basin– simplest method of irrigation
- Sub-Surface Plant Drip System– more complex system
- Sub-Surface Irrigation for Lawns– more complex design and venting requirements

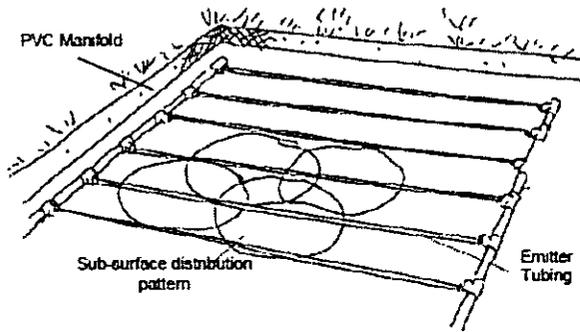


**1. Mulch Basins** are trenches located between or around plants filled with mulch designed to prevent ponding or surfacing.

The diagram (to the left) illustrates a branched subsurface irrigation system that waters plants without the use of specialized drip emitters, using tubing for controlled saturation at the roots. Pots are located below the surface of the system to provide air pockets around the tubing to prevent root intrusion. This system is less prone to clogging, but requires more volume for even distribution.

**2. Sub-Surface Plant Drip System** directly irrigates plants at the root system at a regulated low volume. Sub-surface drip emitters must be designed to resist root infiltration and generally require a pump and filter. (See diagram to right)





**3. Sub-Surface Irrigation for Lawns** Mulch Basins are trenches located between or around plants filled with mulch designed to prevent ponding or surfacing. The diagram (to the left) illustrates a branched subsurface irrigation system that waters plants without the use of specialized drip emitters, using tubing for controlled saturation at the roots. Pots are located below the surface of the system to provide air pockets around the tubing to prevent root intrusion. This system is less prone to clogging, but requires more volume for even distribution.

**VI. PERMITTING REQUIREMENTS**

**A. Rainwater Collecting Systems Permitting Requirements:**

System type	Building permit	Planning Review and Approval
Rain Barrel (<100 gallons)	No	No
Cistern (<360 gallons)	Yes	Yes
Cisterns (>360 gallons)*	Yes	Yes
Cisterns >5000 gallons & >2:1 height to width OR Cisterns above grade (raised) OR below grade (underground)*	Yes	Yes
Cisterns within a building	Yes	Yes
Pumps added to any system	Yes	Yes

**B. Graywater Systems Permitting Requirements:**

System type	Building permit	Planning Review and Approval
Clothes Washer System	No*	No
Simple (<250 gallons)	Yes	Yes
Complex (>250 gallons)	Yes	Yes
* A permit shall not be required for a clothes washer system that does not cut or alter the existing plumbing piping as long as it is in compliance with the Graywater Systems Requirements as specified in the latest adopted California Plumbing Code.		

For additional information and inquiries, please contact:  
 Building and Safety Services Department  
 City of Rancho Cucamonga  
 10500 Civic Center Drive, P.O. Box 807 Rancho Cucamonga, CA 91730  
 (909) 477-2710 ext. 4248  
[www.CityofRC.us](http://www.CityofRC.us)



Revised: \_\_\_\_\_  
Effective Date: \_\_\_\_\_

Ref. Code & Section: \_\_\_\_\_

Page 1

**SUBJECT:** PRE- GRADING CONSTRUCTION WATERING ACTIVITIES

**PURPOSE:** The purpose of this policy is to set direction for the possible reduction of potable water used by closely monitoring the watering activities during the preparation of soil prior to the start of grading operations in response to the drought conditions and restrictions as established by the Governor of the State of California Executive Order.

**POLICY:** During the duration of the Governor's Executive Order regarding severe drought conditions, the procedures as shown below shall be included in the General Grading Notes shown on the cover sheet of the grading plan prior to issuance of the grading permit.

**BACKGROUND:** On January 17, 2014, California Governor Brown issued Executive Order B-29-15 proclaiming a state of emergency due to severe drought conditions existing throughout the State of California. On April 1, 2015, Governor Brown announced actions for statewide mandatory water reductions. Prior to the start of grading operations, contractors typically set out sprinklers and pre-water a construction site to loosen the ground for the movement of dirt and other earth materials. This watering operation may take days and, in the past, was frequently unregulated and was not monitored closely. Thousands of gallons of water could be wasted due to the over watering situations.

**PROCEDURE:** The following notes shall be shown on the grading plans:

**PRE-WATERING OF THE PROJECT CONSTRUCTION SITE**

- a) The watering activities shall not occur within 24-hours after a rainy day;
- b) The watering activities shall be done during the day time and the contractor shall monitor the watering and correct over watering situations;
- c) Contractors shall identify and use the reclaimed or recycled water sources, if it is available, for watering activities

APPROVED: \_\_\_\_\_  
Trang Huynh, P.E.  
Building and Safety Services Director