

City of Brisbane

Planning Commission Agenda Report

TO: Planning Commission For the Meeting of 2/11/16

FROM: Ken Johnson, Senior Planner, via John A. Swiecki, Community Development Director JAS

SUBJECT: RZ-3-15 Zoning Text Amendment to Modify the Title 17 Landscaping Development Standards to be Consistent with the State's requirements for when irrigated landscapes are subject to the Water Conservation in Landscaping Ordinance, BMC Chapter 15.70.

Request: The request is to revise the landscaping requirements in the Brisbane Municipal Code (BMC), Title 17, to be consistent with the state's new requirements, addressing when irrigated landscapes are subject to the Water Conservation in Landscaping Ordinance, BMC Chapter 15.70.

Recommendation: Recommend that the City Council adopt the draft ordinance, amending the landscape development sections of Title 17, via adoption of Resolution RZ-3-16.

Environmental Determination: Actions taken by regulatory agencies, as authorized by state law or local ordinance to assure the protection of natural resources and the environment are categorically exempt from the provisions of the California Environmental Quality Act, per Sections 15307 & 15308 of the State CEQA Guidelines. The exceptions to these categorical exemptions, referenced in Section 15300.2, do not apply.

Background:

In response to the statewide 4-year drought and to build resiliency for future droughts, Governor Brown issued an Executive Order on April 1, 2015 (EO B-29-15) which directed the Department of Water Resources (DWR) to update the State's Model Water Efficient Landscape Ordinance (MWELO) through expedited regulation. The California Water Commission approved the revised MWELO last July. Local agencies have the option of adopting their own ordinances, which must be at least as effective in conserving water as the state's ordinance. Local agencies had until December 1st, 2015 to adopt, or the state's MWELO became effective by default. Alternatively, local agencies working together to base their ordinances on a regional model had until February 1st, 2016 or the state's MWELO became effective. For further information, a Department of Water Resources MWELO Fact Sheet is provided as Attachment 4.

The Bay Area Water Supply and Conservation Agency (BAWSCA), of which the City of Brisbane is a member, drafted a template model ordinance for jurisdictions in the Bay Area region to use as guidance in drafting local ordinances.

BAWSCA released its new model template ordinance in December 2015. Staff has since edited the model, without substantive changes, to replace the City's existing Water Conservation in Landscaping Ordinance, BMC Chapter 15.70. A preliminary draft of the City's Water Conservation in Landscaping Ordinance has been provided with this agenda report for the Commission's reference only (see Attachment 5). Since it is incorporated in Title 15 of the BMC, the Water Conservation in Landscaping Ordinance is not part of the Commission's purview. It is subject to City Council review and approval.

In addition to comprehensively updating BMC Chapter 15.70, specific sections of BMC Title 17 which have cross references to BMC Chapter 15.70 must be amended as well. These Title 17 amendments are the subject of this code amendment.

Since the deadline for jurisdictions working together to adopt a regional model ordinance was February 1st, the state's MWELo is now effective in Brisbane, by default, until such time that a local ordinance is adopted by Council that is at least as effective as the state's ordinance in conserving water.

Discussion:

The landscaping development standards which are contained in various sections of Title 17 currently reference a 1,000 square foot threshold of irrigated landscaping, at which point the provisions of BMC 15.70 are applicable. That reference no longer is consistent with the MWELo, or the BAWSCA model. The MWELo and the BAWSCA model have lowered the size threshold to 500 square feet for irrigated landscapes on new development sites.

The proposed amendment would revise the following sections of Title 17 for consistency:

1. R-1 Residential District: BMC Section 17.06.040.I
2. R-2 Residential District: BMC Section 17.08.040.I
3. R-3 Residential District: BMC Section 17.10.040.I
4. R-BA Brisbane Acres Residential District: BMC Section 17.12.040.K
5. NCRO-1 Neighborhood Commercial District: BMC Section 17.14.050.F
6. SCRO-1 Southwest Bayshore Commercial District: BMC Section 17.16.040.G
7. SP-CRO Sierra Point Commercial District : BMC Section 17.18.040.G
8. TC-1 Crocker Park Trade Commercial District: BMC Section 17.19.040.F
9. M-1 Manufacturing District: BMC Section 17.20.030.F

In order to provide for broader language in Title 17, the references found in the above listed sections would now simply refer to the Water Conservation Ordinance (BMC Chapter 15.70) for new and replacement irrigated landscapes, without including a specific size threshold. Specifically the updated text would read, *"New and rehabilitated, irrigated landscapes are subject to the provisions of the water conservation in landscaping ordinance (refer to Chapter 15.70) or the latest state provisions, whichever is more effective in conserving water."*

The intent is to direct the reader to BMC Chapter 15.70 for irrigated landscapes, where further specificity would be provided for the different types of landscapes. This broader language would

February 11, 2016

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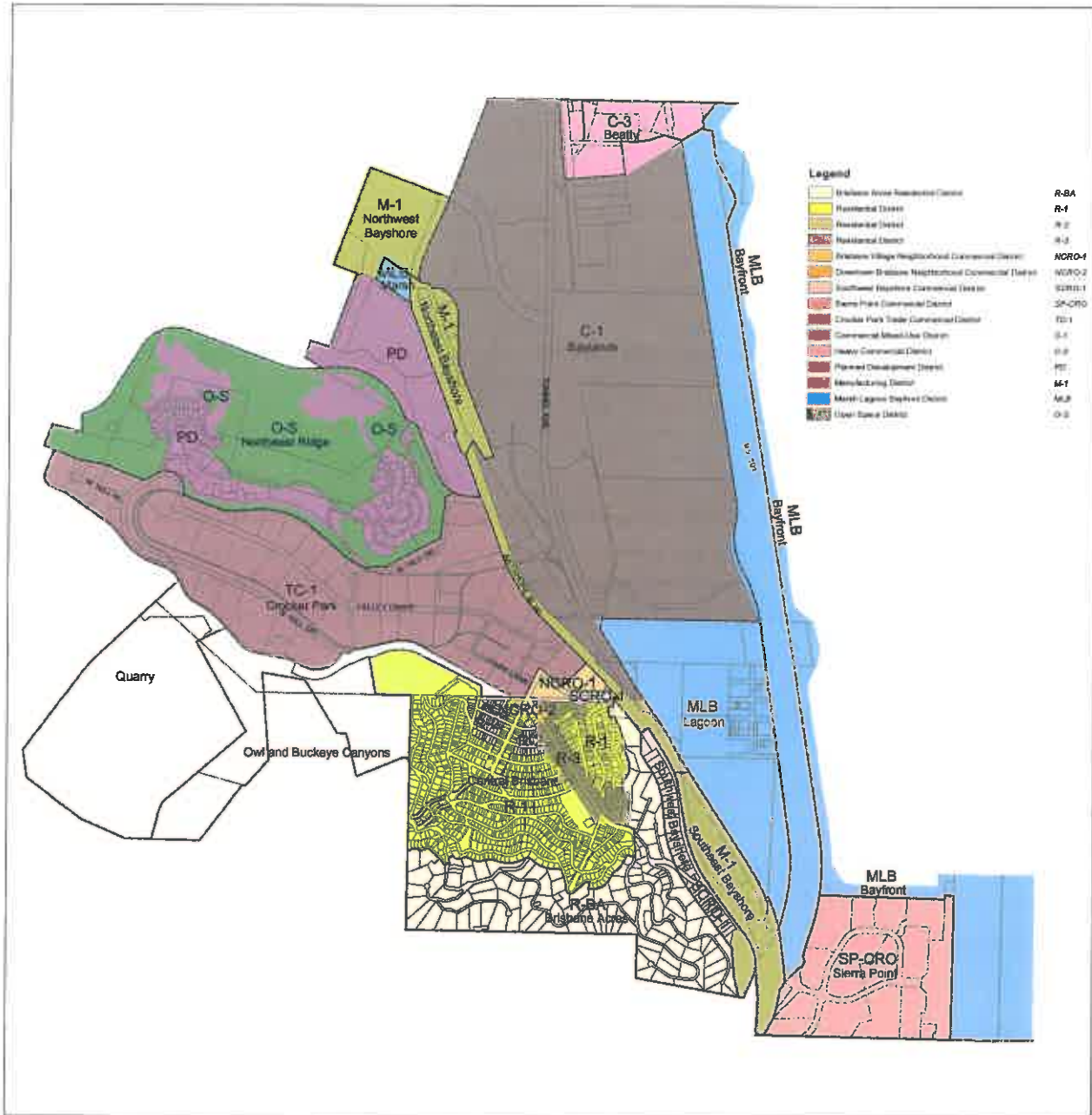
also provide for greater flexibility for any future updates to the Water Conservation in Landscaping Ordinance, without the need to also update Title 17.

Attachments:

1. Zoning Map
2. Redline/Strike-out of Proposed Title 17 amendments
3. Draft Resolution RZ-3-15 and Exhibit A, Draft Ordinance (amending Title 17 development standards sections pertaining to landscaping)
4. Dept. of Water Resources MWELO Fact Sheet
5. Draft Ordinance to Water Conservation in Landscaping Ordinance (for Commission reference, based on BAWSCA template)

Zoning Map

City of Brisbane



LSA



0 0.125 0.25 0.5
MILES

Revised: May 19, 1988
Revised: May 26, 1989
Revised: April 1990
Revised: February 2001
Revised: February 2002
Revised: July 2003



C:\BR14\NGBR\Map\Zoning (P\code)_L_S\LSA (10/6/04)

Redline/Strike-out of Proposed Title 17 amendments

Section 17.06.040.I of Chapter 17.06, R-1 Residential District:

I Landscaping Requirements.

1. Front Setback. A minimum of fifteen percent (15%) of the front setback area shall be landscaped where the lot has a front lot line of thirty (30) feet or greater.
2. Downslope Lots. The rear of any newly constructed main structure on a downslope lot shall be screened with trees and shrubs in accordance with a landscape plan approved by the planning director.
3. ~~Irrigated Landscapes. New and rehabilitated, irrigated landscapes are subject to the provisions of the water conservation in landscaping ordinance (refer to Chapter 15.70) or the latest state provisions, whichever is more effective in conserving water. 3.—New and replacement, irrigated landscapes of one thousand (1,000) square feet, or more, shall be subject to the water conservation in landscaping ordinance. Refer to Chapter 15.70.~~

Section 17.08.040.I of Chapter 17.08, R-2 Residential District:

I Landscaping Requirements.

1. Front Setback. A minimum of fifteen percent (15%) of the front setback area shall be landscaped where the lot has a front lot line of thirty (30) feet or greater.
2. Downslope Lots. The rear of any newly constructed main structure on a downslope lot shall be screened with trees and shrubs in accordance with a landscape plan approved by the planning director.
3. Sites with Three (3) or More Units. Not less than ten percent (10%) of the lot area shall be improved with landscaping where three (3) or more dwelling units are located on the same site.
4. ~~Irrigated Landscapes. New and rehabilitated, irrigated landscapes are subject to the provisions of the water conservation in landscaping ordinance (refer to Chapter 15.70) or the latest state provisions, whichever is more effective in conserving water.—New and replacement, irrigated landscapes of one thousand (1,000) square feet, or more, shall be subject to the water conservation in landscaping ordinance. Refer to Chapter 15.70.~~

Section 17.010.040.I of Chapter 17.10, R-3 Residential District:

I Landscaping Requirements.

1. Front Setback. A minimum of fifteen percent (15%) of the front setback area shall be landscaped where the lot has a front lot line of thirty (30) feet or greater.
2. Downslope Lots. The rear of any newly constructed main structure on a downslope lot shall be screened with trees and shrubs in accordance with a landscape plan approved by the planning director.
3. Sites with Three (3) or More Units. Not less than ten percent (10%) of the lot area shall be improved with landscaping where three (3) or more dwelling units are located on the same site.
4. ~~Irrigated Landscapes. New and rehabilitated, irrigated landscapes are subject to the provisions of the water conservation in landscaping ordinance (refer to Chapter 15.70) or the latest state provisions, whichever is more effective in conserving water.~~~~New and~~

~~replacement, irrigated landscapes of one thousand (1,000) square feet, or more, shall be subject to the water conservation in landscaping ordinance. Refer to Chapter 15.70.~~

Section 17.12.040.K of Chapter 17.12, R-BA Brisbane Acres Residential District:

K Landscaping Requirements.

1. Landscape Plan. All development proposals shall include a landscape plan to be approved by the planning director in consultation with the HCP plan operator. The plan shall show all proposed landscaping and the location of all protected trees and rare plants. The landscape plan shall be consistent with all of the following objectives:
 - a. Preservation of protected trees and rare plants to the greatest extent possible;
 - b. Use of plants that are compatible with the natural flora and fauna, and are not invasive to the HCP area;
 - c. Use of water conserving plants;
 - d. Use of plants that will effectively screen structures and blend with the natural landscape; and
 - e. Use of landscaping that is fire resistant.
2. ~~Irrigated Landscapes. New and rehabilitated, irrigated landscapes are subject to the provisions of the water conservation in landscaping ordinance (refer to Chapter 15.70) or the latest state provisions, whichever is more effective in conserving water. Irrigated Landscapes. New and replacement, irrigated landscapes of one thousand (1,000) square feet, or more, shall be subject to the water conservation in landscaping ordinance. Refer to Chapter 15.70.~~

Section 17.14.050.F of Chapter 17.14, NCRO Neighborhood Commercial District:

F Landscaping Requirements for the NCRO-1 district are as follows:

1. Not less than ten percent (10%) of the lot area shall be improved with landscaping.
2. Landscaping required under this section, including replacement landscaping, shall be according to detailed plans approved by the planning director. The landscape plans shall be consistent with the following objectives:
 - a. Use of plants that are not invasive;
 - b. Use of water conserving plants; and
 - c. Use of plants and other landscape features that are appropriate to the context.
3. ~~Irrigated Landscapes. New and rehabilitated, irrigated landscapes are subject to the provisions of the water conservation in landscaping ordinance (refer to Chapter 15.70) or the latest state provisions, whichever is more effective in conserving water. New and replacement, irrigated landscapes of one thousand (1,000) square feet, or more, shall be subject to the water conservation in landscaping ordinance. Refer to Chapter 15.70.~~

Section 17.16.040.G of Chapter 17.16, the SCRO-1 Southwest Bayshore Commercial District:

G Landscaping Requirements.

1. Not less than ten percent (10%) of the lot area shall be improved with landscaping.
2. Plant materials shall be drought resistant and non-invasive as required by the planning director. Where landscaping is located adjacent to unimproved hillside.

3. Landscaping required under this section, including replacement landscaping, shall be installed according to detailed plans approved by the planning director. The landscape plans shall be consistent with the following objectives:
 - a. Use of plants that are not invasive;
 - b. Use of water conserving plants; and
 - c. Use of plants and other landscape features that are appropriate to the context.
4. ~~Irrigated Landscapes. New and rehabilitated, irrigated landscapes are subject to the provisions of the water conservation in landscaping ordinance (refer to Chapter 15.70) or the latest state provisions, whichever is more effective in conserving water. New and replacement, irrigated landscapes of one thousand (1,000) square feet, or more, shall be subject to the water conservation in landscaping ordinance. Refer to Chapter 15.70.~~

Section 17.18.040.G of Chapter 17.18, the SP-CRO Sierra Point Commercial District:

G Landscaping Requirements.

1. A minimum of twenty-five percent (25%) of the total lot area shall be landscaped. Additional landscaping requirements are set forth in the combined site and architectural design guidelines for Sierra Point.
2. ~~Irrigated Landscapes. New and rehabilitated, irrigated landscapes are subject to the provisions of the water conservation in landscaping ordinance (refer to Chapter 15.70) or the latest state provisions, whichever is more effective in conserving water. New and replacement, irrigated landscapes of one thousand (1,000) square feet, or more, shall be subject to the water conservation in landscaping ordinance. Refer to Chapter 15.70.~~

Section 17.19.040.F of Chapter 17.19, the TC-1 Crocker Park Trade Commercial District:

F Landscaping Requirements.

1. Not less than fifteen percent (15%) of the gross lot area shall be improved with landscaping;
2. Landscaping required under this section, including replacement landscaping, shall be subject to approval of the planning director. The landscape plans shall be consistent with the following objectives:
 - a. Use of plants that are not invasive;
 - b. Use of water conserving plants; and
 - c. Use of plants and other landscape features that are appropriate to the context.
3. ~~Irrigated Landscapes. New and rehabilitated, irrigated landscapes are subject to the provisions of the water conservation in landscaping ordinance (refer to Chapter 15.70) or the latest state provisions, whichever is more effective in conserving water. New and replacement, irrigated landscapes of one thousand (1,000) square feet, or more, shall be subject to the water conservation in landscaping ordinance. Refer to Chapter 15.70~~

Section 17.20.030.F of Chapter 17.20, the M-1 Manufacturing District:

F Landscaping Requirements.

1. Not less than fifteen percent (15%) of the gross lot area shall be improved with landscaping;
2. Landscaping required under this section, including replacement landscaping, shall be according to detailed plans approved by the planning director. The landscape plans shall be consistent with the following objectives:
 - a. Use of plants that are not invasive;
 - b. Use of water conserving plants; and
 - c. Use of plants and other landscape features that are appropriate to the context.
3. ~~Irrigated Landscapes. New and rehabilitated, irrigated landscapes are subject to the provisions of the water conservation in landscaping ordinance (refer to Chapter 15.70) or the latest state provisions, whichever is more effective in conserving water. New and replacement, irrigated landscapes of one thousand (1,000) square feet, or more, shall be subject to the water conservation in landscaping ordinance. Refer to Chapter 15.70;~~

draft
RESOLUTION NO. RZ-3-15

RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF BRISBANE
RECOMMENDING ZONING TEXT AMENDMENT RZ-3-15
TO THE CITY COUNCIL,
SUCH AMENDMENTS PERTAINING TO
LANDSCAPING REQUIREMENTS

WHEREAS, the City's 1994 General Plan contains policies and programs regarding landscaping (Land Use Element Policy 28 and Conservation Element Policy 127 and 128), providing clear performance standards in the Municipal Code for the physical character of all land use developments (Land Use Element Policy 22) and regarding water conservation (Conservation Element Policy 138); and

WHEREAS, the California Department of Water Resources recently lowered the threshold for when irrigated landscapes are subject to the state's Model Water Efficient Landscape Ordinance (MWELO) in response to the Governor's Executive Order EO B-29-15, with the goal of reducing per capita water consumption statewide; and

WHEREAS, local agencies may adopt a local or regional ordinance at least as effective in conserving water; and

WHEREAS, the Bay Area Water Supply and Conservation Agency (BAWSCA) has provided a regional model template as a guide to the City in its development of a companion ordinance to this resolution that would be at least as water conserving as the state's MWELO, which also includes a lowered threshold for applicability; and

WHEREAS, certain development standards provisions found in Title 17 of the Brisbane Municipal Code, regarding irrigated landscape sizes, require amendment for consistency with either the new state standards or the BAWSCA regional model template; and

WHEREAS, the Planning Commission duly noticed and held a public hearing on the proposed amendments on February 11, 2016, at which time oral and written comments were considered; and

WHEREAS, the Planning Commission finds that the proposed amendments are categorically exempt from the California Environmental Quality Act per Sections 15307 and 15308 of the State CEQA Guidelines.

NOW, THEREFORE BE IT RESOLVED, that based on the above findings, the Planning Commission hereby recommends adoption of Zoning Text Amendment RZ-3-15, attached as Exhibit A, to the City Council.

AYES:

NOES:

ABSENT:

TuongVan Do
Chairperson

ATTEST:

JOHN A. SWIECKI, Community Development Director

EXHIBIT A of ATTACHMENT 3

DRAFT ORDINANCE NO. _____

**AN ORDINANCE OF THE CITY OF BRISBANE AMENDING
SECTIONS 17.06.040, 17.08.040, 17.10.040, 17.12.040, 17.14.050,
17.16.040, 17.18.040, 17.19.040, AND 17.20.030 OF THE
MUNICIPAL CODE MODIFYING THE LANDSCAPING
PROVISIONS**

The City Council of the City of Brisbane hereby ordains as follows:

SECTION 1: Section 17.06.040.I of Chapter 17.06, R-1 Residential District, is amended to read as follows:

§17.06.040.I Landscaping Requirements.

1. Front Setback. A minimum of fifteen percent (15%) of the front setback area shall be landscaped where the lot has a front lot line of thirty (30) feet or greater.
2. Downslope Lots. The rear of any newly constructed main structure on a downslope lot shall be screened with trees and shrubs in accordance with a landscape plan approved by the planning director.
3. Irrigated Landscapes. New and rehabilitated, irrigated landscapes are subject to the provisions of the water conservation in landscaping ordinance (refer to Chapter 15.70) or the latest state provisions, whichever is more effective in conserving water.

SECTION 2: Section 17.08.040.I of Chapter 17.08, R-2 Residential District, is amended to read as follows:

§17.08.040.I Landscaping Requirements.

1. Front Setback. A minimum of fifteen percent (15%) of the front setback area shall be landscaped where the lot has a front lot line of thirty (30) feet or greater.
2. Downslope Lots. The rear of any newly constructed main structure on a downslope lot shall be screened with trees and shrubs in accordance with a landscape plan approved by the planning director.
3. Sites with Three (3) or More Units. Not less than ten percent (10%) of the lot area shall be improved with landscaping where three (3) or more dwelling units are located on the same site.
4. Irrigated Landscapes. New and rehabilitated, irrigated landscapes are subject to the provisions of the water conservation in landscaping ordinance (refer to Chapter 15.70) or the latest state provisions, whichever is more effective in conserving water.

SECTION 3: Section 17.010.040.I of Chapter 17.10, R-3 Residential District, is amended to read as follows:

§17.10.040.I Landscaping Requirements.

1. Front Setback. A minimum of fifteen percent (15%) of the front setback area shall be landscaped where the lot has a front lot line of thirty (30) feet or greater.
2. Downslope Lots. The rear of any newly constructed main structure on a downslope lot shall be screened with trees and shrubs in accordance with a landscape plan approved by the planning director.
3. Sites with Three (3) or More Units. Not less than ten percent (10%) of the lot area shall be improved with landscaping where three (3) or more dwelling units are located on the same site.
4. Irrigated Landscapes. New and rehabilitated, irrigated landscapes are subject to the provisions of the water conservation in landscaping ordinance (refer to Chapter 15.70) or the latest state provisions, whichever is more effective in conserving water.

SECTION 4: Section 17.12.040.K of Chapter 17.12, R-BA Brisbane Acres Residential District, is amended to read as follows:

§17.12.040.K Landscaping Requirements.

1. Landscape Plan. All development proposals shall include a landscape plan to be approved by the planning director in consultation with the HCP plan operator. The plan shall show all proposed landscaping and the location of all protected trees and rare plants. The landscape plan shall be consistent with all of the following objectives:
 - a. Preservation of protected trees and rare plants to the greatest extent possible;
 - b. Use of plants that are compatible with the natural flora and fauna, and are not invasive to the HCP area;
 - c. Use of water conserving plants;
 - d. Use of plants that will effectively screen structures and blend with the natural landscape; and
 - e. Use of landscaping that is fire resistant.
2. Irrigated Landscapes. New and rehabilitated, irrigated landscapes are subject to the provisions of the water conservation in landscaping ordinance (refer to Chapter 15.70) or the latest state provisions, whichever is more effective in conserving water.

SECTION 5: Section 17.14.050.F of Chapter 17.14, NCRO Neighborhood Commercial District, is amended to read as follows:

§17.14.050.F Landscaping Requirements for the NCRO-1 district are as follows:

1. Not less than ten percent (10%) of the lot area shall be improved with landscaping.
2. Landscaping required under this section, including replacement landscaping, shall be according to detailed plans approved by the planning director. The landscape plans shall be consistent with the following objectives:
 - a. Use of plants that are not invasive;
 - b. Use of water conserving plants; and
 - c. Use of plants and other landscape features that are appropriate to the context.
3. Irrigated Landscapes. New and rehabilitated, irrigated landscapes are subject to the provisions of the water conservation in landscaping ordinance (refer to Chapter 15.70) or the latest state provisions, whichever is more effective in conserving water.

SECTION 6: Section 17.16.040.G of Chapter 17.16, the SCRO-1 Southwest Bayshore Commercial District, is amended to read as follows:

§17.16.040.G Landscaping Requirements.

1. Not less than ten percent (10%) of the lot area shall be improved with landscaping.
2. Plant materials shall be drought resistant and non-invasive as required by the planning director. Where landscaping is located adjacent to unimproved hillside.
3. Landscaping required under this section, including replacement landscaping, shall be installed according to detailed plans approved by the planning director. The landscape plans shall be consistent with the following objectives:
 - a. Use of plants that are not invasive;
 - b. Use of water conserving plants; and
 - c. Use of plants and other landscape features that are appropriate to the context.
4. Irrigated Landscapes. New and rehabilitated, irrigated landscapes are subject to the provisions of the water conservation in landscaping ordinance (refer to Chapter 15.70) or the latest state provisions, whichever is more effective in conserving water.

SECTION 7: Section 17.18.040.G of Chapter 17.18, the SP-CRO Sierra Point Commercial District, is amended to read as follows:

§17.18.040.G Landscaping Requirements.

1. A minimum of twenty-five percent (25%) of the total lot area shall be landscaped. Additional landscaping requirements are set forth in the combined site and architectural design guidelines for Sierra Point.
2. Irrigated Landscapes. New and rehabilitated, irrigated landscapes are subject to the provisions of the water conservation in landscaping ordinance (refer to Chapter 15.70) or the latest state provisions, whichever is more effective in conserving water.

SECTION 8: Section 17.19.040.F of Chapter 17.19, the TC-1 Crocker Park Trade Commercial District, is amended to read as follows:

§17.19.040.F Landscaping Requirements.

1. Not less than fifteen percent (15%) of the gross lot area shall be improved with landscaping;
2. Landscaping required under this section, including replacement landscaping, shall be subject to approval of the planning director. The landscape plans shall be consistent with the following objectives:
 - a. Use of plants that are not invasive;
 - b. Use of water conserving plants; and
 - c. Use of plants and other landscape features that are appropriate to the context.
3. Irrigated Landscapes. New and rehabilitated, irrigated landscapes are subject to the provisions of the water conservation in landscaping ordinance (refer to Chapter 15.70) or the latest state provisions, whichever is more effective in conserving water.

SECTION 9: Section 17.20.030.F of Chapter 17.20, the M-1 Manufacturing District, is amended to read as follows:

§17.20.030.F Landscaping Requirements.

1. Not less than fifteen percent (15%) of the gross lot area shall be improved with landscaping;
2. Landscaping required under this section, including replacement landscaping, shall be according to detailed plans approved by the planning director. The landscape plans shall be consistent with the following objectives:
 - a. Use of plants that are not invasive;
 - b. Use of water conserving plants; and
 - c. Use of plants and other landscape features that are appropriate to the context.
3. Irrigated Landscapes. New and rehabilitated, irrigated landscapes are subject to the provisions of the water conservation in landscaping ordinance (refer to Chapter 15.70) or the latest state provisions, whichever is more effective in conserving water.

* * *

The above and foregoing Ordinance was regularly introduced and after the waiting time required by law, was thereafter passed and adopted at a regular meeting of the City Council of the City of Brisbane held on the _____ day of _____, 2016, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

Mayor

ATTEST:

City Clerk

APPROVED AS TO FORM:

City Attorney



Governor Brown's Drought Executive Order of April 1, 2015 (EO B-29-15) directed DWR to update the State's Model Water Efficient Landscape Ordinance (Ordinance) through expedited regulation. The California Water Commission approved the revised Ordinance on July 15, 2015.

Which Projects are Subject to the Ordinance?

New development projects that include landscape areas of 500 sq. ft. or more are subject to the Ordinance. This applies to residential, commercial, industrial and institutional projects that require a permit, plan check or design review. The previous landscape size threshold for new development projects ranged from 2500 sq. ft. to 5000 sq. ft.

The size threshold for existing landscapes that are being rehabilitated has not changed, remaining at 2500 sq. ft. Only rehabilitated landscapes that are associated with a building or landscape permit, plan check, or design review are subject to the Ordinance.

When Does the Ordinance Go into Effect?

Local agencies (cities and counties) have until December 1, 2015 to adopt the Ordinance or adopt their own ordinance, which must be at least as effective in conserving water as the State's Ordinance. Local agencies working together to develop a regional ordinance have until February 1, 2016 to adopt, but they are still subject to the December 2015 reporting requirements (see *Reporting Requirements* below). If a local agency does not take action on a water efficient landscape ordinance by the specified dates, the State's Ordinance becomes effective by default.

What are the Significant Revisions?

More Efficient Irrigation Systems

- Dedicated landscape water meters or submeters are required for residential landscapes over 5000 sq. ft. and non-residential landscapes over 1000 sq. ft.
- Irrigation systems are required to have pressure regulators and master shut-off valves.
- All irrigation emission devices must meet the national standard stated in the Ordinance to ensure that only high efficiency sprinklers are installed.
- Flow sensors that detect and report high flow conditions due to broken pipes and/or popped sprinkler heads are required for landscape areas greater than 5000 sq. ft.
- The minimum width of areas that can be overhead irrigated was changed from 8 feet to 10 feet; areas less than 10 feet wide must be irrigated with subsurface drip or other technology that produces no over spray or runoff.

Incentives for Graywater Usage

Landscapes under 2500 sq. ft. that are irrigated entirely with graywater or captured rainwater are subject only to the irrigation system requirements of Appendix D, Prescriptive Compliance Option.

Updated 7/31/15

Improvements in Onsite Stormwater Capture

Friable soil is required in planted areas to maximize water retention and infiltration. Four yards of compost per 1000 sq. ft. of area must be incorporated. Other recommended measures for increasing onsite stormwater retention are listed in the Ordinance.

Limiting the Portion of Landscapes that can be Planted with High Water Use Plants

The maximum amount of water that can be applied to a landscape is reduced from 70% of the reference evapotranspiration (ET_o) to 55% for residential landscape projects, and to 45% of ET_o for non-residential projects. This water allowance reduces the landscape area that can be planted with high water use plants such as cool season turf. For residential projects, the coverage of high water use plants is reduced from 33% to 25% of the landscaped area. In non-residential landscapes, planting with high water use plants is not feasible. However, unchanged in the Ordinance is the extra water allowance made for non-residential areas when used for specific functional areas, such as recreation and edible gardens. Extra water allowance is also made for landscapes irrigated with recycled water, as was the case in the previous ordinance.

The irrigation efficiency of devices used to irrigate landscapes is one of the factors that goes into determining the maximum amount of water allowed. Rather than having one default irrigation efficiency for the entire site, the revised Ordinance allows the irrigation efficiency to be entered for each area of the landscape. The site-wide irrigation efficiency of the previous ordinance was 0.71; the revised Ordinance defines the irrigation efficiency of drip as 0.81 and that of overhead spray as 0.75.

Median strips cannot be landscaped with high water use plants, precluding the use of cool season turf. Also because of the requirement to irrigate areas less than ten feet wide with subsurface irrigation or other means that produces no runoff or overspray, the use of cool season turf in parkways is limited.

Reporting Requirements

All local agencies will report on the implementation and enforcement of their ordinances to DWR by December 31, 2015. Local agencies developing a regional ordinance will report on their adopted regional ordinance by March 1, 2016. Reporting for all agencies will be due by January 31st of each year thereafter.

Prescriptive Checklist Option for Landscapes under 2500 sq. ft.

Projects with landscape areas under 2500 sq. feet may comply with the performance requirements of the Ordinance or conform to the prescriptive measures contained in Appendix D. Many will find that the Appendix D checklist simplifies compliance.

How Much Water Will Be Saved?

DWR estimates that a typical California landscape will use 12,000 gallons less a year, or 20 percent less than allowed by the 2009 ordinance. Commercial landscapes will cut water use by 35%. Over the next three years, it is predicted that 472,000 new homes associated with 20,000 acres of landscape will be built in California. With proper implementation and enforcement by local agencies, the Ordinance will lead to substantial water savings.

How Can I Get Additional Assistance?

In Fall 2015, DWR will release a guidance document to accompany the Ordinance. Training workshops for local agency staff and landscape professionals will be held throughout the State.

Contact Information:

Julie Saare-Edmonds, DWR Senior Environmental Scientist at Julie.Saare-Edmonds@water.ca.gov or (916) 651-9676

Updated 7/31/15

(Note: This is a preliminary draft of the update to the Water Conservation in Landscaping ordinance is based on the BAWSCA model template ordinance (12/15). It is for Commission reference only and may be subject to change prior to submittal to City Council for adoption.)

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY OF BRISBANE

**AMENDING CHAPTER 15.70 OF THE MUNICIPAL CODE AMENDING THE WATER
CONSERVATION IN LANDSCAPING REGULATIONS**

The City Council of the City of Brisbane hereby ordains as follows:

SECTION 1: This Ordinance is adopted in light of the following facts and circumstances, which are hereby found and declared by the City Council:

- A. A reliable minimum supply of potable water is essential to the public health, safety and welfare of the people and economy of the City of Brisbane, California.
- B. The California Water Conservation in Landscaping Act, also known as the State Landscape Model Ordinance ("Model Ordinance"), has been implemented by a Statewide Landscape Task Force which was overseen by the California Urban Water Conservation Council. The California Water Conservation in Landscaping Act was amended pursuant to AB 2717 (Chapter 682, Stats. 2004) and AB 1881 (Chapter 559, Stats. 2006).
- C. AB 1881 required cities and counties, no later than January 1, 2010, to adopt the updated Model Ordinance or an equivalent document which is "at least as effective as" the Model Ordinance in conserving water. In the event cities and counties do not take such action, the State's Model Ordinance will be deemed to be automatically adopted by statute.
- D. The City Council adopted a Water Conservation in Landscaping Ordinance on June 7th, 2010 to comply with the requirement of AB 1881.
- E. Governor Brown issued Executive Order B-29 on April 1, 2015 which directed State agencies to implement immediate measures to save water, increase enforcement against water waste, and streamline government response to ongoing drought conditions.
- F. The California Department of Water Resources prepared an update to the State's Model Ordinance to address the provisions in Executive Order B-29, and the California Water Commission approved the proposed revisions on July 15, 2015.

- G. Local agencies are required to adopt the revised State Model Ordinance or adopt local ordinance at least as effective in conserving water.
- H. The City of Brisbane has developed this local Water Conservation In Landscaping Ordinance to meet the requirements and guidelines of the Model Ordinance and to address the unique physical characteristics, including average landscaped areas, within Brisbane's jurisdiction in order to ensure that this Ordinance will be "at least as effective as" the Model Ordinance in conserving water.
- I. Although this Water Conservation in Landscaping Ordinance is more streamlined and simplified than the Model Ordinance, the City Council finds that it is "at least as effective as" the Model Ordinance for the following reasons:
 - (1) this Ordinance applies to more accounts than the Model Ordinance does because it lowers the size threshold for applicable rehabilitated landscapes from 2,500 square feet to 1,000 square feet, to better reflect the typical landscaped areas located within this City's boundaries;
 - (2) this Ordinance includes a default turf restriction of no turf or high water use plants in the irrigated area and requires that at least 80% of the plants in non-turf landscape areas be native plants, low-water using plants, or no-water using plants (unless the applicant elects to perform a water budget). The Model Ordinance does not contain any such default turf restrictions or specified plant requirements.
- J. Although this Water Conservation in Landscaping Ordinance is more streamlined and simplified than the Model Ordinance, the City Council further finds that it is "at least as effective as" the Model Ordinance because this Ordinance includes water budget parameters and values and landscape parameters that are consistent with the Model Ordinance. By using the same water budget parameters as the Model Ordinance (e.g., plant factors, irrigation efficiency), this Ordinance will be as effective as the Model Ordinance in developing landscape water budgets. By using the same landscape parameters as the Model Ordinance for, among other things, slope restrictions and width restrictions for turf, irrigation times, and minimum mulch requirements, this Ordinance will be at least as effective as the Model Ordinance in achieving water savings.
- K. Article X, Section 2 of the California Constitution and Section 100 of the California Water Code declare that the general welfare requires water resources be put to beneficial use, waste or unreasonable use or unreasonable method of use of water be prevented, and conservation of water be fully exercised with a view to the reasonable and beneficial use thereof.
- L. The City Council finds and determines that this Ordinance is consistent with the provisions requiring reductions in outdoor water use for landscaping in the California Green Building Standards Code, as such provisions will be implemented in the coming years. Such requirements include the development of a water budget for landscape irrigation in accordance with methodology outlined in either the Model Ordinance or pursuant to a locally adopted ordinance.
- M. The State Legislature has identified the provision of a more reliable water supply and the protection, restoration and enhancement of the Delta ecosystem as a high

priority for the state. Pursuant to this, in November 2009, the State Legislature passed Senate Bill 7 (7th Extraordinary Session) requiring certain urban water suppliers to reduce per capita urban water use by 20% by the year 2020. Accordingly, the [City Council/Board of Directors/Board of Supervisors] finds that implementation of this Ordinance is consistent with the policies and goals established by the State Legislature in enacting SB 7 (7th Extraordinary Session).

- N. Article XI, Section 7 of the California Constitution declares that a city or county may make and enforce within its limits all local, policy, sanitary, and other ordinances and regulations not in conflict with general laws.
- O. The City Council finds and determines that this Ordinance is not subject to the California Environmental Quality Act (Public Resources Code Section 2100 et seq.) ("CEQA") pursuant to Section 15307 (the activity assures the maintenance, restoration, enhancement, or protection of a natural resource) and Section 15378(b)(2) (the activity is not a project as it involves general policy and procedure making) of the State CEQA Guidelines, California Code of Regulations, Title 14, Chapter 3, since it makes and implements policies and procedures to ensure that water resources are conserved by reducing water consumption through the establishment of a structure for planning, designing, installing, maintaining and managing water-efficient landscapes.
- P. The adoption and enforcement of this Ordinance is necessary to manage the City's potable water supply in the short and long-term and to avoid or minimize the effects of drought and shortage within the City. This Ordinance is essential to ensure a reliable and sustainable minimum supply of water for the public health, safety and welfare.

Section 2: Chapter 15.70 in Title 15 of the Municipal Code is amended in its entirety to read as follows:

Chapter 15.70 WATER CONSERVATION IN LANDSCAPING

Sections:

15.70.010	Title
15.70.020	Applicability
15.70.030	Definitions
15.70.040	Compliance With Chapter
15.70.050	Application and Approval
15.70.060	Outdoor Water Use Efficiency Checklist
15.70.070	Water Budget Calculations
15.70.080	Landscape and Irrigation Design Plans
15.70.090	Landscape Audit Report
15.70.100	Landscape and Irrigation Maintenance Schedule
15.70.110	Stormwater Management
15.70.120	Provisions for Existing Landscapes Over One Acre in Size
15.70.130	Enforcement of Chapter

§15.70.010 Title

This Chapter shall be known as the City of Brisbane Water Conservation in Landscaping Ordinance.

§15.70.020 Applicability

- A. The provisions of this Ordinance shall apply to all of the following landscape projects:
1. New construction projects with an aggregate landscape area equal to or greater than 500 square feet requiring a building or landscape permit, plan check or design review,
 2. rehabilitated landscape projects with an aggregate landscape area equal to or greater than 1,000 square feet requiring a building or landscape permit, plan check, or design review;
 3. existing landscapes limited to Sections 493, 493.1 and 493.2 in Division 2, Title 23 of the California Code of Regulations; all other existing landscapes shall only be subject to the provisions for existing landscapes provided for in Section 15.70.180 "Provisions for Existing Landscapes Over One Acre in Size".
 4. cemeteries. New and rehabilitated cemeteries shall only be subject to the provisions of Section 15.70.070 "Water Budget Calculations", Section 15.70.120 "Landscape Audit Report", and Section 15.70.120 "Landscape and Irrigation Maintenance Schedule." Existing cemeteries are limited to 15.70.180 "Provisions for Existing Landscapes Over One Acre in Size"
- B. Any project with an aggregate landscape area of 2,500 square feet or less may comply with the performance requirements of this ordinance or conform to the prescriptive measures contained in the Water Conservation Compliance Technical Guidance Document.*
- C. For projects using treated or untreated graywater or rainwater captured on site, any lot or parcel within the project that has less than 2500 sq. ft. of landscape and meets the lot or parcel's landscape water requirement (Estimated Total Water Use) entirely with treated or untreated graywater or through stored rainwater captured on site is subject only to the requirements for irrigation systems detailed in the Prescriptive Compliance Option Section of the Water Conservation Compliance Technical Guidance Document.
- D. This ordinance does not apply to:
1. New construction with irrigated landscape areas less than 500 square feet, rehabilitated landscapes with irrigated landscape areas less than 1,000 square feet, or landscapes that do not require a building or

* Water Conservation Compliance Technical Guidance Document is not included at this time.

landscape permit, plan check or design review, or new or expanded water service;

2. Landscapes, or portions of landscapes, that are only irrigated for an establishment period;
3. Registered local, state or federal historical sites where landscaping establishes a historical landscape style, as determined by a public board or commission responsible for architectural review or historic preservation;
4. Ecological restoration or mined-land reclamation projects that do not require a permanent irrigation system; or
5. Community gardens or plant collections, as part of botanical gardens and arboreturns open to the public, agricultural uses, commercial nurseries and sod farms.

§15.70.030 Definitions

1. “applied water” means the portion of water supplied by the irrigation system to the landscape.
2. “automatic irrigation controller” means a timing device used to remotely control valves that operate an irrigation system. Automatic irrigation controllers are able to self-adjust and schedule irrigation events using either evapotranspiration (weather-based) or soil moisture data.
3. “backflow prevention device” means a safety device used to prevent pollution or contamination of the water supply due to the reverse flow of water from the irrigation system.
4. “Certificate of Completion” means the document required under Section 492.9.
5. “certified irrigation designer” means a person certified to design irrigation systems by an accredited academic institution, a professional trade organization or other program such as the US Environmental Protection Agency’s WaterSense irrigation designer certification program and Irrigation Association’s Certified Irrigation Designer program.
6. “certified landscape irrigation auditor” means a person certified to perform landscape irrigation audits by an accredited academic institution, a professional trade organization or other program such as the US Environmental Protection Agency’s WaterSense irrigation auditor certification program and Irrigation Association’s Certified Landscape Irrigation Auditor program.
7. “check valve” or “anti-drain valve” means a valve located under a sprinkler head, or other location in the irrigation system, to hold water in

the system to prevent drainage from sprinkler heads when the sprinkler is off.

8. "common interest developments" means community apartment projects, condominium projects, planned developments, and stock cooperatives per [Civil Code Section 1351](#).
9. "compost" means the safe and stable product of controlled biologic decomposition of organic materials that is beneficial to plant growth.
10. "conversion factor (0.62)" means the number that converts acre-inches per acre per year to gallons per square foot per year.
11. "distribution uniformity" means the measure of the uniformity of irrigation water over a defined area.
12. "drip irrigation" means any non-spray low volume irrigation system utilizing emission devices with a flow rate measured in gallons per hour. Low volume irrigation systems are specifically designed to apply small volumes of water slowly at or near the root zone of plants.
13. "ecological restoration project" means a project where the site is intentionally altered to establish a defined, indigenous, historic ecosystem.
14. "effective precipitation" or "usable rainfall" (Eppt) means the portion of total precipitation which becomes available for plant growth.
15. "emitter" means a drip irrigation emission device that delivers water slowly from the system to the soil.
16. "established landscape" means the point at which plants in the landscape have developed significant root growth into the soil. Typically, most plants are established after one or two years of growth.
17. "establishment period of the plants" in reference to termination of irrigation after establishment, generally means the first two years after installing the plant in the landscape. Typically, most plants are established after one or two years of growth. Native habitat mitigation areas and trees may need three to five years for establishment.
18. "Estimated Total Water Use" (ETWU) means the total water used for the landscape as described in Section 492.4.
19. "ET adjustment factor" (ETAF) means a factor of 0.55 for residential areas and 0.45 for non-residential areas, 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. The ETAF for new and existing (non-rehabilitated) Special Landscape Areas shall not exceed 1.0. The ETAF for existing non-rehabilitated landscapes is 0.8.

20. "evapotranspiration rate" means the quantity of water evaporated from adjacent soil and other surfaces and transpired by plants during a specified time.
21. "flow rate" means the rate at which water flows through pipes, valves and emission devices, measured in gallons per minute, gallons per hour, or cubic feet per second.
22. "flow sensor" means an inline device installed at the supply point of the irrigation system that produces a repeatable signal proportional to flow rate. Flow sensors must be connected to an automatic irrigation controller, or flow monitor capable of receiving flow signals and operating master valves. This combination flow sensor/controller may also function as a landscape water meter or submeter.
23. "friable" means a soil condition that is easily crumbled or loosely compacted down to a minimum depth per planting material requirements, whereby the root structure of newly planted material will be allowed to spread unimpeded.
24. "Fuel Modification Plan Guideline" means guidelines from a local fire authority to assist residents and businesses that are developing land or building structures in a fire hazard severity zone.
25. "graywater" means untreated wastewater that has not been contaminated by any toilet discharge, has not been affected by infectious, contaminated, or unhealthy bodily wastes, and does not present a threat from contamination by unhealthful processing, manufacturing, or operating wastes. "Graywater" includes, but is not limited to, wastewater from bathtubs, showers, bathroom washbasins, clothes washing machines, and laundry tubs, but does not include wastewater from kitchen sinks or dishwashers. [Health and Safety Code Section 17922.12](#).
26. "hardscapes" means any durable material (pervious and non-pervious).
27. "hydrozone" means a portion of the landscaped area having plants with similar water needs and rooting depth. A hydrozone may be irrigated or non-irrigated.
28. "infiltration rate" means the rate of water entry into the soil expressed as a depth of water per unit of time (e.g., inches per hour).
29. "invasive plant species" means species of plants not historically found in California that spread outside cultivated areas and can damage environmental or economic resources. Invasive species may be regulated by county agricultural agencies as noxious species. Lists of invasive plants are maintained at the California Invasive Plant Inventory and USDA invasive and noxious weeds database.
30. "irrigation audit" means an in-depth evaluation of the performance of an irrigation system conducted by a Certified Landscape Irrigation Auditor.

An irrigation audit includes, but is not limited to: inspection, system tune-up, system test with distribution uniformity or emission uniformity, reporting overspray or runoff that causes overland flow, and preparation of an irrigation schedule. The audit must be conducted in a manner consistent with the Irrigation Association's Landscape Irrigation Auditor Certification program or other U.S. Environmental Protection Agency "Watersense" labeled auditing program.

31. "irrigation efficiency" (IE) means the measurement of the amount of water beneficially used divided by the amount of water applied. Irrigation efficiency is derived from measurements and estimates of irrigation system characteristics and management practices. The irrigation efficiency for purposes of this ordinance are 0.75 for overhead spray devices and 0.81 for drip systems.
32. "irrigation survey" means an evaluation of an irrigation system that is less detailed than an irrigation audit. An irrigation survey includes, but is not limited to: inspection, system test, and written recommendations to improve performance of the irrigation system.
33. "irrigation water use analysis" means an analysis of water use data based on meter readings and billing data.
34. "landscape architect" means a person who holds a license to practice landscape architecture in the state of [California Business and Professions Code, Section 5615](#).
35. "landscape area" means all the planting areas, turf areas, and water features in a landscape design plan subject to the Maximum Applied Water Allowance calculation. The landscape area does not include footprints of buildings or structures, sidewalks, driveways, parking lots, decks, patios, gravel or stone walks, other pervious or non-pervious hardscapes, and other non-irrigated areas designated for non-development (e.g., open spaces and existing native vegetation).
36. "landscape contractor" means a person licensed by the state of California to construct, maintain, repair, install, or subcontract the development of landscape systems.
37. "Landscape Documentation Package" means the documents required under Section 492.3.
38. "landscape project" means total area of landscape in a project as defined in "landscape area" for the purposes of this ordinance, meeting requirements under Section 490.1.
39. "landscape water meter" means an inline device installed at the irrigation supply point that measures the flow of water into the irrigation system and is connected to a totalizer to record water use.

- 40. "lateral line" means the water delivery pipeline that supplies water to the emitters or sprinklers from the valve.
- 41. "local agency" means a city or county, including a charter city or charter county, that is responsible for adopting and implementing the ordinance. The local agency is also responsible for the enforcement of this ordinance, including but not limited to, approval of a permit and plan check or design review of a project.
- 42. "local water purveyor" means any entity, including a public agency, city, county, or private water company that provides retail water service.
- 43. "low volume irrigation" means the application of irrigation water at low pressure through a system of tubing or lateral lines and low-volume emitters such as drip, drip lines, and bubblers. Low volume irrigation systems are specifically designed to apply small volumes of water slowly at or near the root zone of plants.
- 44. "main line" means the pressurized pipeline that delivers water from the water source to the valve or outlet.
- 45. "master shut-off valve" is an automatic valve installed at the irrigation supply point which controls water flow into the irrigation system. When this valve is closed water will not be supplied to the irrigation system. A master valve will greatly reduce any water loss due to a leaky station valve.
- 46. "Maximum Applied Water Allowance" (MAWA) means the upper limit of annual applied water for the established landscaped area as specified in Section 492.4. It is based upon the area's reference evapotranspiration, the ET Adjustment Factor, and the size of the landscape area. The Estimated Total Water Use shall not exceed the Maximum Applied Water Allowance. Special Landscape Areas, including recreation areas, areas permanently and solely dedicated to edible plants such as orchards and vegetable gardens, and areas irrigated with recycled water are subject to the MAWA with an ETAF not to exceed 1.0. $MAWA = (ET_o) (0.62) [(ETAF \times LA) + ((1-ETAF) \times SLA)]$
- 47. "median" is an area between opposing lanes of traffic that may be unplanted or planted with trees, shrubs, perennials, and ornamental grasses.
- 48. "microclimate" means the climate of a small, specific area that may contrast with the climate of the overall landscape area due to factors such as wind, sun exposure, plant density, or proximity to reflective surfaces.
- 49. "mined-land reclamation projects" means any surface mining operation with a reclamation plan approved in accordance with the Surface Mining and Reclamation Act of 1975.

- 50. "mulch" means any organic material such as leaves, bark, straw, compost, or inorganic mineral materials such as rocks, gravel, or decomposed granite left loose and applied to the soil surface for the beneficial purposes of reducing evaporation, suppressing weeds, moderating soil temperature, and preventing soil erosion.
- 51. "new construction" means, for the purposes of this ordinance, a new building with a landscape or other new landscape, such as a park, playground, or greenbelt without an associated building.
- 52. "non-residential landscape" means landscapes in commercial, institutional, industrial and public settings that may have areas designated for recreation or public assembly. It also includes portions of common areas of common interest developments with designated recreational areas.
- 53. "operating pressure" means the pressure at which the parts of an irrigation system are designed by the manufacturer to operate.
- 54. "overhead sprinkler irrigation systems" or "overhead spray irrigation systems" means systems that deliver water through the air (e.g., spray heads and rotors).
- 55. "overspray" means the irrigation water which is delivered beyond the target area.
- 56. "parkway" means the area between a sidewalk and the curb or traffic lane. It may be planted or unplanted, and with or without pedestrian egress.
- 57. "permit" means an authorizing document issued by local agencies for new construction or rehabilitated landscapes.
- 58. "pervious" means any surface or material that allows the passage of water through the material and into the underlying soil.
- 59. "plant factor" or "plant water use factor" is a factor, when multiplied by ETo, estimates the amount of water needed by plants. For purposes of this ordinance, the plant factor range for very low water use plants is 0 to 0.1, the plant factor range for low water use plants is 0.1 to 0.3, the plant factor range for moderate water use plants is 0.4 to 0.6, and the plant factor range for high water use plants is 0.7 to 1.0. Plant factors cited in this ordinance are derived from the publication "Water Use Classification of Landscape Species". Plant factors may also be obtained from horticultural researchers from academic institutions or professional associations as approved by the California Department of Water Resources (DWR).
- 60. "project applicant" means the individual or entity submitting a Landscape Documentation Package required under Section 492.3, to request a

permit, plan check, or design review from the local agency. A project applicant may be the property owner or his or her designee.

61. "rain sensor" or "rain sensing shutoff device" means a component which automatically suspends an irrigation event when it rains.
62. "record drawing" or "as-builts" means a set of reproducible drawings which show significant changes in the work made during construction and which are usually based on drawings marked up in the field and other data furnished by the contractor.
63. "recreational area" means areas, excluding private single family residential areas, designated for active play, recreation or public assembly in parks, sports fields, picnic grounds, amphitheaters or golf course tees, fairways, roughs, surrounds and greens.
64. "recycled water," "reclaimed water," or "treated sewage effluent water" means treated or recycled waste water of a quality suitable for nonpotable uses such as landscape irrigation and water features. This water is not intended for human consumption.
65. "reference evapotranspiration" or "ET_o" means a standard measurement of environmental parameters which affect the water use of plants. ET_o is expressed in inches per day, month, or year as represented in Water Conservation Compliance Technical Guidance Document and is an estimate of the evapotranspiration of a large field of four- to seven-inch tall, cool-season grass that is well watered. Reference evapotranspiration is used as the basis of determining the Maximum Applied Water Allowances so that regional differences in climate can be accommodated.
66. "Regional Water Efficient Landscape Ordinance" means a local Ordinance adopted by two or more local agencies, water suppliers and other stakeholders for implementing a consistent set of landscape provisions throughout a geographical region. Regional ordinances are strongly encouraged to provide a consistent framework for the landscape industry and applicants to adhere to.
67. "rehabilitated landscape" means any relandscaping project that requires a permit, plan check, or design review, meets the requirements of Section 490.1, and the modified landscape area is equal to or greater than 2,500 square feet.
68. "residential landscape" means landscapes surrounding single or multifamily homes.
69. "run off" means water which is not absorbed by the soil or landscape to which it is applied and flows from the landscape area. For example, run off may result from water that is applied at too great a rate (application rate exceeds infiltration rate) or when there is a slope.

- 70. "soil moisture sensing device" or "soil moisture sensor" means a device that measures the amount of water in the soil. The device may also suspend or initiate an irrigation event.
- 71. "soil texture" means the classification of soil based on its percentage of sand, silt, and clay.
- 72. "Special Landscape Area" (SLA) means an area of the landscape dedicated solely to edible plants, recreational areas, areas irrigated with recycled water, or water features using recycled water.
- 73. "sprinkler head" or "spray head" means a device which delivers water through a nozzle.
- 74. "static water pressure" means the pipeline or municipal water supply pressure when water is not flowing.
- 75. "station" means an area served by one valve or by a set of valves that operate simultaneously.
- 76. "swimming pool" means any structure intended for swimming, recreational bathing or wading that contains water over 24 inches (610 mm) deep. This includes in-ground, above ground, and on-ground pools; hot tubs; spa and fixed in place wading pools
- 77. "swing joint" means an irrigation component that provides a flexible, leak-free connection between the emission device and lateral pipeline to allow movement in any direction and to prevent equipment damage.
- 78. "submeter" means a metering device to measure water applied to the landscape that is installed after the primary utility water meter.
- 79. "turf" means a ground cover surface of mowed grass. Annual bluegrass, Kentucky bluegrass, Perennial ryegrass, Red fescue, and Tall fescue are cool-season grasses. Bermudagrass, Kikuyugrass, Seashore Paspalum, St. Augustinegrass, Zoysiagrass, and Buffalo grass are warm-season grasses.
- 80. "valve" means a device used to control the flow of water in the irrigation system.
- 81. "water conserving plant species" means a plant species identified as having a very low or low plant factor.
- 82. "water feature" means a design element where open water performs an aesthetic or recreational function. Water features include ponds, lakes, waterfalls, fountains, artificial streams, spas, and swimming pools (where water is artificially supplied). The surface area of water features is included in the high water use hydrozone of the landscape area. Constructed wetlands used for on-site wastewater treatment or stormwater best management practices that are not irrigated and used

solely for water treatment or stormwater retention are not water features and, therefore, are not subject to the water budget calculation.

- 83. "watering window" means the time of day irrigation is allowed.
- 84. "WUCOLS" means the Water Use Classification of Landscape Species published by the University of California Cooperative Extension and the Department of Water Resources 2014.

§15.70.040 Compliance with chapter

- A. All owners of new construction and rehabilitated landscapes of applicable sizes shall (1) complete the Landscape Project Application (Section 15.70.050) and (2) comply with the Landscape and Irrigation Maintenance Schedule (Section 15.70.150) requirements of this Ordinance.
- B. All owners of existing landscapes over one acre in size, even if installed before enactment of this Ordinance, shall: (1) comply with local agency programs that may be instituted relating to irrigation audits, surveys and water use analysis, and (2) shall maintain landscape irrigation facilities to prevent water waste and runoff.
- C. The project applicant shall:
 - 1. Prior to construction, submit all portions of the Landscape Project Application, except the Landscape Audit Report, to the City; and
 - 2. Upon approval of the Landscape Project Application by the City,
 - a. receive a permit or approval of the plan check or design review and record the date of the permit in the Certificate of Completion;
 - b. submit a copy of the approved Landscape Documentation Package along with the record drawings, and any other information to the property owner or his/her designee; and
 - 3. After construction, submit the landscape audit report and certificate of completion to the city.
- D. As the approving authority the City will:
 - 1. Provide the project applicant with the Ordinance and Landscape Project Application requirements and the procedures for permits, plan checks, design reviews, or new or expanded water service;
 - 2. Review the Landscape Project Application submitted by the project applicant;
 - 3. Approve or deny the project applicant's Landscape Project Application submittal;

4. Issue or approve a permit, plan check or design review that complies with the approved Landscape Project Application or approve a new or expanded water service application that complies with the approved Landscape Project Application; provided that all other requirements applicable to the issuance or approval of such permit, plan check, or design review or approval of new or expanded water service have been satisfied

§15.70.050 Landscape Project Application and Documentation Package

- A. The elements of a landscape must be designed to achieve water efficiency and will comply with the criteria described in this Ordinance. In completing the Landscape Project Application, project applicants may choose one of two options to demonstrate that the landscape meets the Ordinance's water efficiency goals. Regardless of which option is selected, the applicant must complete and comply with all other elements of the Ordinance. The options include:

1. Planting restrictions:

- a. The landscape areas may include no turf or high-water using plants; and
- b. At least 80% of the landscape areas shall be planted with native, low to very low water using plants; or the

2. Water Budget Calculation option (Section 15.70.070).

- B. The Landscape Project Application shall include the following elements:

1. Project identifying information (e.g. address, lot number, assessor's parcel number);
2. Project contact information
3. Applicant signature and date with Certification statement, "I agree to comply with the requirements of the water efficient landscape ordinance and submit a complete Landscape Documentation Package".
4. Project type (e.g., new, rehabilitated, public, private)
5. Total landscape area (Square feet)
6. Water supply type (e.g., potable, recycled)
7. Checklist of all documents in Landscape Documentation Package
8. Soil Management Report (Section 15.70.060) or Soil Management Survey (see the Water Conservation Compliance Technical Guidance Document)
9. Grading Design Plan (Section 15.70.100) or Grading Design Survey Water (see the Conservation Compliance Technical Guidance Document)

10. Landscape Design Plan (Section 15.70.080);
11. Irrigation System Design Plan (Section 15.70.090);
12. Outdoor Water Use Efficiency Checklist (see the Water Conservation Compliance Technical Guidance Document);
13. Water Budget Calculations (Section 15.70.070), if the applicant selects to use a water budget option rather than the planting restrictions option; and

§15.70.060 Soil Management Report

- A. In order to reduce runoff and encourage healthy plant growth, a soil management report shall be completed by the project applicant, or his/her designee, or the applicant shall complete a Soil Management Survey (see the Water Conservation Compliance Technical Guidance Document). The soil management report shall be completed as follows:
 1. Submit soil samples to a laboratory for analysis and recommendations.
 - a. Soil sampling shall be conducted in accordance with laboratory protocol, including protocols regarding adequate sampling depth for the intended plants.
 - b. The soil analysis shall include:
 - i. soil texture;
 - ii. infiltration rate determined by laboratory test or soil texture infiltration rate table;
 - iii. pH;
 - iv. total soluble salts;
 - v. sodium
 - vi. percent organic matter; and
 - vii. recommendations
 - c. In projects with multiple landscape installations (i.e. production home developments) a soil sampling rate of 1 in 7 lots or approximately 15% of the total lots will satisfy this requirement.
 2. The project applicant, or his/her designee, shall comply with one of the following:

- a. If significant mass grading is not planned, the soil analysis report shall be submitted to the local agency as part of the Landscape Documentation Package; or
 - b. If significant mass grading is planned, the soil analysis report shall be submitted to the local agency as part of the Certificate of Completion.
3. The soil analysis report shall be made available, in a timely manner, to the professionals preparing the landscape design plans and irrigation design plans to make any necessary adjustments to the design plans.
4. The project applicant, or his/her designee, shall submit documentation verifying implementation of soil analysis report recommendations to the local agency with Certificate of Completion.

§15.70.070 Water Budget Calculations

- A. Project applicant may elect to complete a water budget calculation for the landscape project using the Water Efficient Landscape Worksheet in Water Conservation Compliance Technical Guidance Document, or the applicant may elect the planting restrictions option.
- B. Water budget calculations, if prepared, shall adhere to the following requirements:
 1. The plant factor used shall be from WUCOLS or from horticultural researchers with academic institutions or professional associations as approved by the California Department of Water Resources (DWR). The plant factor ranges from 0 to 0.1 for very low water using plants, 0.1 to 0.3 for low water use plants, from 0.4 to 0.6 for moderate water use plants, and from 0.7 to 1.0 for high water use plants.
 2. All water features shall be included in the high water use hydrozone.
 3. Temporarily irrigated areas, for an establishment period, are not to be included as a water use hydrozone per Section 15.70.020, but shall be identified as being irrigated for an establishment period only.
 4. All Special Landscape Areas (SLA) shall be identified and their water use included in the water budget calculations.
 5. The reference evapotranspiration adjustment factor (ETAF) for SLA shall not exceed 1.0. The ETAF for all other landscaped areas shall not exceed 0.55 for residential areas and 0.45 for non-residential areas.
 6. ETo values from the Reference Evapotranspiration Table in the Water Conservation Compliance Technical Guidance Document shall be used in calculating the Maximum Applied Water Allowance (MAWA) and Estimated Total Water Use (ETWU). For geographic areas not covered in the Water

Conservation Compliance Technical Guidance Document, use data from other cities located nearby in the same reference evapotranspiration zone, as found in the CIMIS Reference Evapotranspiration Zones Map, Department of Water Resources, 1999. For the purpose of determining Estimated Total Water Use, average irrigation efficiency is assumed to be 0.75 for overhead spray devices and 0.81 for drip system devices.

7. MAWA shall be calculated using the equation below:

$$\text{MAWA} = (\text{ET}_o) (0.62) [(0.55 \times \text{LA}) + (0.45 \times \text{SLA})] \text{ for residential areas}$$

$$\text{MAWA} = (\text{ET}_o) (0.62) [(0.45 \times \text{LA}) + (0.55 \times \text{SLA})] \text{ for non-residential areas}$$

Where:

MAWA = Maximum Applied Water Allowance (gallons per year)

ET_o = Reference Evapotranspiration (inches per year)

0.62 = Conversion Factor (to gallons)

0.55 = Reference Evapotranspiration Adjustment Factor (ETAF) for residential areas

0.45 = Reference Evapotranspiration Adjustment Factor (ETAF) for non-residential areas

LA = Landscape Area including SLA (square feet)

0.45 = Additional Water Allowance for SLA in residential areas

0.55 = Additional Water Allowance for SLA in non-residential areas

SLA = Special Landscape Area (square feet)

8. A local agency or project applicant may consider Effective Precipitation (25% of annual precipitation) in tracking water use and may use the following equation to calculate the MAWA:

$$\text{MAWA} = (\text{ET}_o - \text{Eppt}) (0.62) [(0.55 \times \text{LA}) + (0.45 \times \text{SLA})] \text{ for residential areas.}$$

$$\text{MAWA} = (\text{ET}_o - \text{EPPT}) (0.62) [(0.45 \times \text{LA}) + (0.55 \times \text{SLA})] \text{ for non-residential areas.}$$

9. Estimated Total Water Use (ETWU) will be calculated using the equation below. The sum of the ETWU calculated for all hydrozones will not exceed the MAWA.

$$\text{ETWU} = (\text{ET}_o)(0.62) \left(\frac{\text{PF} \times \text{HA}}{\text{IE}} + \text{SLA} \right)$$

Where:

ETWU = Estimated Total Water Use per year (gallons)

ET_o = Reference Evapotranspiration (inches)

PF = Plant Factor from WUCOLS (see Section 491)

HA = Hydrozone Area [high, medium, and low water use areas]
(square feet)
0.75 = Irrigation Efficiency (IE) for overhead spray devices
0.81 = Irrigation Efficiency (IE) for drip system devices
SLA = Special Landscape Area (square feet)
0.62 = Conversion Factor

§15.70.080 Landscape Design Plan

- A. For the efficient use of water, a landscape shall be carefully designed and planned for the intended function of the project. A landscape design plan meeting the following design criteria shall be submitted as part of the Landscape Documentation Package.

1. Plant Material

- a. Each hydrozone shall have plant materials with similar water use, with the exception of hydrozones with plants of mixed water use, as specified in Section 492.7(a)(2)(D).
- b. Plants shall be selected and planted appropriately based upon their adaptability to the climatic, geologic, and topographical conditions of the project site. Methods to achieve water efficiency shall include one or more of the following:
 - i. use the Sunset Western Climate Zone System which takes into account temperature, humidity, elevation, terrain, latitude, and varying degrees of continental and marine influence on local climate;
 - ii. Turf is not allowed on slopes greater than 25% where the toe of the slope is adjacent to an impermeable hardscape and where 25% means 1 foot of vertical elevation change for every 4 feet of horizontal length (rise divided by run x 100 = slope percent).
 - iii. High water use plants, characterized by a plant factor of 0.7 to 1.0, are prohibited in street medians.
- a. A landscape design plan for projects in fire-prone areas shall address fire safety and prevention. A defensible space or zone around a building or structure is required per [Public Resources Code Section 4291\(a\)](#) and [\(b\)](#). Avoid fire-prone plant materials and highly flammable mulches. Refer to the local Fuel Modification Plan guidelines.

- b. The use of invasive plant species listed by the California Invasive Plant Council is prohibited.
- c. The architectural guidelines of a common interest development, which include community apartment projects, condominiums, planned developments, and stock cooperatives, shall not prohibit or include conditions that have the effect of prohibiting the use of low-water use plants as a group.

2. Water Features

- a. Recirculating water systems shall be used for water features.
- b. Where available, recycled water shall be used as a source for decorative water features.
- c. Surface area of a water feature shall be included in the high water use hydrozone area of the water budget calculation.
- d. Pool and spa covers are required on any newly constructed pool or spa.

3. Soil Preparation, Mulch and Amendments

- a. Prior to the planting of any materials, compacted soils shall be transformed to a friable condition. On engineered slopes, only amended planting holes need meet this requirement.
- b. Soil amendments shall be incorporated according to recommendations of the soil report and what is appropriate for the plants selected.
- c. For landscape installations, compost at a rate of a minimum of four cubic yards per 1,000 square feet of permeable area shall be incorporated to a depth of six inches into the soil. Soils with greater than 6% organic matter in the top 6 inches of soil are exempt from adding compost and tilling.
- d. A minimum three inch (3") layer of mulch shall be applied on all exposed soil surfaces of planting areas except in turf areas, creeping or rooting groundcovers, or direct seeding applications where mulch is contraindicated. To provide habitat for beneficial insects and other wildlife, up to 5% of the landscape area may be left without mulch. Designated insect habitat must be included in the landscape design plan as such.
- e. Stabilizing mulching products shall be used on slopes that meet current engineering standards.
- f. The mulching portion of the seed/mulch slurry in hydro-seeded applications shall meet the mulching requirement.

- g. Organic mulch materials made from recycled or post-consumer shall take precedence over inorganic materials or virgin forest products unless the recycled post-consumer organic products are not locally available. Organic mulches are not required where prohibited by local Fuel Modification Plan Guidelines or other applicable local ordinances.
- 4. The landscape design plan, at a minimum, shall:
 - a. delineate and label each hydrozone;
 - b. identify each hydrozone as low, moderate, high water, or mixed water use;
 - c. identify recreational areas;
 - d. identify areas permanently and solely dedicated to edible plants;
 - e. identify areas irrigated with recycled water and the recycled water source;
 - f. identify type of mulch and application depth;
 - g. identify soil amendments, type, and quantity;
 - h. identify type and surface area of water features;
 - i. identify hardscapes (pervious and non-pervious);
 - j. identify location, installation details, and 24-hour retention or infiltration capacity of any applicable storm water best management practices that encourage on-site retention and infiltration of storm water. Project applicants shall refer to the local agency or regional Water Quality Control Board for information on any applicable storm water technical requirements. Storm water best management practices are to be used.
 - k. identify any applicable rain harvesting or catchment technologies and their 24-hour retention or infiltration capacity;
 - l. identify any applicable graywater discharge piping, system components and area(s) of distribution;
 - m. contain the following statement: "I have complied with the criteria of the ordinance and applied them for the efficient use of water in the landscape design plan"; and
 - n. bear the signature of a licensed landscape architect, licensed landscape contractor, or any other person authorized to design a landscape.

§15.70.090 Irrigation Design Plan

This section applies to landscaped areas requiring permanent irrigation, not areas that require temporary irrigation solely for the plant establishment period. For the efficient use of water, an irrigation system shall meet all the requirements listed in this section and the manufacturers' recommendations. The irrigation system and its related components shall be planned and designed to allow for proper installation, management, and maintenance. An irrigation design plan meeting the following design criteria shall be submitted as part of the Landscape Documentation Package.

A. System:

1. Landscape water meters, defined as either a dedicated water service meter or private submeter, shall be installed for all non-residential irrigated landscapes of 1,000 sq. ft. and for residential irrigated landscapes of 5,000 sq. ft. or greater. A landscape water meter may be either:
 - a. a customer service meter dedicated to landscape use provided by the local water purveyor; or
 - b. a privately owned meter or submeter.
2. Automatic irrigation controllers utilizing either evapotranspiration or soil moisture sensor data utilizing non-volatile memory shall be required for irrigation scheduling in all irrigation systems.
3. If the water pressure is below or exceeds the recommended pressure of the specified irrigation devices, the installation of a pressure regulating device is required to ensure that the dynamic pressure at each emission device is within the manufacturer's recommended pressure range for optimal performance.
 - a. If the static pressure is above or below the required dynamic pressure of the irrigation system, pressure-regulating devices such as inline pressure regulators, booster pumps, or other devices shall be installed to meet the required dynamic pressure of the irrigation system.
 - b. Static water pressure, dynamic or operating pressure, and flow reading of the water supply shall be measured at the point of connection. These pressure and flow measurements shall be conducted at the design stage. If the measurements are not available at the design stage, the measurements shall be conducted at installation.
4. Sensors (rain, freeze, wind, etc.), either integral or auxiliary, that suspend or alter irrigation operation during unfavorable weather conditions shall be required on all irrigation systems, as appropriate for local climatic conditions.

5. Manual shut-off valves (such as a gate valve, ball valve, or butterfly valve) shall be required, as close as possible to the point of connection of the water supply, to minimize water loss in case of an emergency (such as a main line break) or routine repair.
6. Backflow prevention devices shall be required to protect the water supply from contamination by the irrigation system. A project applicant shall refer to the applicable local agency code (i.e., public health) for additional backflow prevention requirements.
7. Flow sensors that detect high flow conditions created by system damage or malfunction are required for all on non-residential landscapes and residential landscapes of 5000 sq. ft. or larger.
8. Master shut-off valves are required on all projects except landscapes that make use of technologies that allow for the individual control of sprinklers that are individually pressurized in a system equipped with low pressure shut down features.
9. The irrigation system shall be designed to prevent runoff, low head drainage, overspray, or other similar conditions where irrigation water flows onto non-targeted areas, such as adjacent property, non-irrigated areas, hardscapes, roadways, or structures.
10. Relevant information from the soil management plan, such as soil type and infiltration rate, shall be utilized when designing irrigation systems.
11. The design of the irrigation system shall conform to the hydrozones of the landscape design plan.
12. The irrigation system must be designed and installed to meet, at a minimum, the irrigation efficiency criteria as described in Section 492.4 regarding the Maximum Applied Water Allowance.
13. All irrigation emission devices must meet the requirements set in the American National Standards Institute (ANSI) standard, American Society of Agricultural and Biological Engineers'/International Code Council's (ASABE/ICC) 802-2014 "Landscape Irrigation Sprinkler and Emitter Standard, All sprinkler heads installed in the landscape must document a distribution uniformity low quarter of 0.65 or higher using the protocol defined in ASABE/ICC 802-2014.
14. It is highly recommended that the project applicant or local agency inquire with the local water purveyor about peak water operating demands (on the water supply system) or water restrictions that may impact the effectiveness of the irrigation system.
15. In mulched planting areas, the use of low volume irrigation is required to maximize water infiltration into the root zone.
16. Sprinkler heads and other emission devices shall have matched

precipitation rates, unless otherwise directed by the manufacturer's recommendations.

17. Head to head coverage is recommended. However, sprinkler spacing shall be designed to achieve the highest possible distribution uniformity using the manufacturer's recommendations.
18. Swing joints or other riser-protection components are required on all risers subject to damage that are adjacent to hardscapes or in high traffic areas of turfgrass.
19. Check valves or anti-drain valves are required on all sprinkler heads where low point drainage could occur.
20. Areas less than ten (10) feet in width in any direction shall be irrigated with subsurface irrigation or other means that produces no runoff or overspray.
21. Overhead irrigation shall not be permitted within 24 inches of any non-permeable surface. Allowable irrigation within the setback from non-permeable surfaces may include drip, drip line, or other low flow non-spray technology. The setback area may be planted or unplanted. The surfacing of the setback may be mulch, gravel, or other porous material. These restrictions may be modified if:
 - a. the landscape area is adjacent to permeable surfacing and no runoff occurs; or
 - b. the adjacent non-permeable surfaces are designed and constructed to drain entirely to landscaping; or
 - c. the irrigation designer specifies an alternative design or technology, as part of the Landscape Documentation Package and clearly demonstrates strict adherence to irrigation system design criteria. Prevention of overspray and runoff must be confirmed during the irrigation audit.
22. Slopes greater than 25% shall not be irrigated with an irrigation system with a application rate exceeding 0.75 inches per hour. This restriction may be modified if the landscape designer specifies an alternative design or technology, as part of the Landscape Documentation Package, and clearly demonstrates no runoff or erosion will occur. Prevention of runoff and erosion must be confirmed during the irrigation audit.

B. Hydrozone

1. Each valve shall irrigate a hydrozone with similar site, slope, sun exposure, soil conditions, and plant materials with similar water use.
2. Sprinkler heads and other emission devices shall be selected based on what is appropriate for the plant type within that hydrozone.

3. Where feasible, trees shall be placed on separate valves from shrubs, groundcovers, and turf to facilitate the appropriate irrigation of trees. The mature size and extent of the root zone shall be considered when designing irrigation for the tree.
4. Individual hydrozones that mix plants of moderate and low water use, or moderate and high water use, may be allowed if:
 - a. plant factor calculation is based on the proportions of the respective plant water uses and their plant factor; or
 - b. the plant factor of the higher water using plant is used for calculations.
5. Individual hydrozones that mix high and low water use plants shall not be permitted.
6. On the landscape design plan and irrigation design plan, hydrozone areas shall be designated by number, letter, or other designation. On the irrigation design plan, designate the areas irrigated by each valve, and assign a number to each valve. Use this valve number in the Hydrozone Information Table (see the Water Conservation Compliance Technical Guidance Document). This table can also assist with the irrigation audit and programming the controller.

C. The irrigation design plan, at a minimum, shall contain:

1. location and size of separate water meters for landscape;
2. location, type and size of all components of the irrigation system, including controllers, main and lateral lines, valves, sprinkler heads, moisture sensing devices, rain switches, quick couplers, pressure regulators, and backflow prevention devices;
3. static water pressure at the point of connection to the public water supply;
4. flow rate (gallons per minute), application rate (inches per hour), and design operating pressure (pressure per square inch) for each station;
5. recycled water irrigation systems as specified in Section 492.14;
6. the following statement: "I have complied with the criteria of the ordinance and applied them accordingly for the efficient use of water in the irrigation design plan"; and
7. the signature of a licensed landscape architect, certified irrigation designer, licensed landscape contractor, or any other person authorized to design an irrigation system.

§15.70.100 Grading Design Plan

- A. For the efficient use of water, grading of a project site shall be designed to minimize soil erosion, runoff, and water waste. A grading plan or completed Grading Design Survey (see the Water Conservation Compliance Technical Guidance Document) shall be submitted as part of the Landscape Documentation Package. A comprehensive grading plan prepared by a civil engineer for other City permits satisfies this requirement. The grading plan shall indicate finished configurations and elevations of the landscape area including:

1. height of graded slopes;
2. drainage patterns;
3. pad elevations;
4. finish grade; and
5. storm water retention improvements, if applicable

§15.70.110 Certificate of Completion

- A. The Certificate of Completion (see Water Conservation Compliance Technical Guidance Document for a sample certificate) shall include the following elements:
1. Project information sheet that contains:
 - a. Date
 - b. Project name
 - c. Project applicant name, telephone, and mailing address;
 - d. Project address and location; and
 - e. Property owner name, telephone, and mailing address;
 2. certification by either the signer of the landscape design plan, the signer of the irrigation design plan, or the licensed landscape contractor that the landscape project has been installed per the approved Landscape Documentation Package;
 - a. where there have been significant changes made in the field during construction, these “as-built” or record drawings shall be included with the certification;
 - b. A diagram of the irrigation plan showing the hydrozones shall be kept on-site for subsequent management purposes.
 3. irrigation scheduling parameters used to set the controller;
 4. landscape and irrigation maintenance schedule;

5. irrigation audit report; and
 6. soil analysis report, if not submitted with Landscape Documentation Package, and documentation verifying implementation of soil report recommendations.
- B. The project applicant shall:
1. submit the signed Certificate of Completion to the local agency for review;
 2. ensure that copies of the approved Certificate of Completion are submitted to the local water purveyor and property owner or his or her designee.
- C. The local agency will, after receipt of the signed Certificate of Completion from the project applicant, approve or deny the Certificate of Completion. If the Certificate of Completion is denied, the local agency will provide information to the project applicant regarding reapplication, appeal, or other assistance.

§15.70.120 Landscape Audit Report

- A. The Landscape Audit Report shall follow inspection by the installer to confirm that the landscaping and irrigation system were installed as specified in the Landscape and Irrigation Design Plan and it shall document that an irrigation system test and tune up was performed for distribution uniformity and to prevent overspray or run off that would cause overland flow, and it shall include an irrigation schedule.
- B. The Landscape Audit Report shall include the following statement: "The landscape and irrigation system has been installed as specified in the Landscape and Irrigation Design Plan and complies with the criteria of the Ordinance and the permit".
- C. Local agency will administer on-going programs that may include, but not be limited to, post-installation landscape inspection, irrigation water use analysis, irrigation audits, irrigation surveys and verification of applicant supplied water budget calculations to evaluate compliance with the MAWA.

§15.70.130 Irrigation Scheduling

- A. For the efficient use of water, all irrigation schedules shall be developed, managed, and evaluated to utilize the minimum amount of water required to maintain plant health. Irrigation schedules shall meet the following criteria:
 1. Irrigation scheduling shall be regulated by automatic irrigation controllers.
 2. Irrigation scheduling restrictions are to be confirmed with the City prior to installation. Notwithstanding other applicable restrictions, overhead irrigation hours are generally between 8:00 p.m. and 10:00 a.m., except where weather conditions prevent watering. Operation of the irrigation system outside the normal watering window is allowed for auditing and system maintenance.
 3. For implementation of the irrigation schedule, particular attention must be paid to irrigation run times, emission device, flow rate, and current reference

evapotranspiration, so that applied water meets the Estimated Total Water Use. Total annual applied water shall be less than or equal to Maximum Applied Water Allowance (MAWA). Actual irrigation schedules shall be regulated by automatic irrigation controllers using current reference evapotranspiration data (e.g., CIMIS) or soil moisture sensor data.

4. Parameters used to set the automatic controller shall be developed and submitted for each of the following:
 1. The plant establishment period;
 2. The established landscape; and
 3. Temporarily irrigated areas
5. Each irrigation schedule shall consider for each station all of the following that apply:
 - a. irrigation interval (days between irrigation);
 - b. irrigation run times (hours or minutes per irrigation event to avoid runoff);
 - c. number of cycle starts required for each irrigation event to avoid runoff;
 - d. amount of applied water scheduled to be applied on a monthly basis;
 - e. application rate setting;
 - f. root depth setting;
 - g. plant type setting;
 - h. soil type;
 - i. slope factor setting;
 - j. shade factor setting; and
 - k. irrigation uniformity or efficiency setting.

§15.70.150 Landscape and Irrigation Maintenance Schedule

- A. Landscapes shall be maintained to ensure water use efficiency. A regular maintenance schedule shall be submitted with the Certificate of Completion.
- B. A regular maintenance schedule shall include, but not be limited to, routine inspection; adjustment and repair of the irrigation system and its components; aerating and dethatching turf areas; replenishing mulch; fertilizing; pruning; weeding in all landscape areas; and removing obstructions to emission devices. Operation of the irrigation system outside the normal watering window is allowed for auditing and system maintenance.

- C. Repair of all irrigation equipment shall be done with the originally installed components or their equivalents or with components with greater efficiency.
- D. The project applicant is encouraged to implement established landscape industry sustainable Best Practices for all landscape maintenance activities.

§15.70.140 Stormwater Management and Rainwater Retention

- A. Stormwater management practices minimize runoff and increase infiltration which recharges groundwater and improves water quality. Implementing stormwater best management practices into the landscape and grading design plans to minimize runoff and to increase on-site rainwater retention and infiltration are encouraged.
- B. Project applicants shall refer to the City or Regional Water Quality Control Board for information on any applicable stormwater technical requirements.
- C. All planted landscape areas are required to have friable soil to maximize water retention and infiltration.
- D. It is strongly recommended that landscape areas be designed for capture and infiltration capacity that is sufficient to prevent runoff from impervious surfaces (i.e. roof and paved areas) from either: the one inch, 24-hour rain event or (2) the 85th percentile, 24-hour rain event, and/or additional capacity as required by any applicable local, regional, state or federal regulation.
- E. It is recommended that storm water projects incorporate any of the following elements to improve on-site storm water and dry weather runoff capture and use:
 - 1. Grade impervious surfaces, such as driveways, during construction to drain to vegetated areas.
 - 2. Minimize the area of impervious surfaces such as paved areas, roof and concrete driveways.
 - 3. Incorporate pervious or porous surfaces (e.g., gravel, permeable pavers or blocks, pervious or porous concrete) that minimize runoff.
 - 4. Direct runoff from paved surfaces and roof areas into planting beds or landscaped areas to maximize site water capture and reuse.
 - 5. Incorporate rain gardens, cisterns, and other rain harvesting or catchment systems.
 - 6. Incorporate infiltration beds, swales, basins and drywells to capture storm water and dry weather runoff and increase percolation into the soil.
 - 7. Consider constructed wetlands and ponds that retain water, equalize excess flow, and filter pollutants.

§15.70.160 Recycled Water

- A. The installation of recycled water irrigation systems shall allow for the current and future use of recycled water.
- B. All recycled water irrigation systems shall be designed and operated in accordance with all applicable local and State laws.
- C. Landscapes using recycled water are considered Special Landscape Areas. The ET Adjustment Factor for new and existing (non-rehabilitated) Special Landscape Areas shall not exceed 1.0.

§15.70.170 Graywater Systems

- A. Graywater systems promote the efficient use of water and are encouraged to assist in on-site landscape irrigation. All graywater systems shall conform to the California Plumbing Code and any applicable local ordinance standards. Refer to Section II (B) for the applicability of this ordinance to landscape areas less than 2,500 square feet with the Estimated Total Water Use met entirely by graywater.

§15.70.180 Provisions for Existing Landscapes Over One Acre in Size

- A. This section shall apply to all existing landscapes that were installed before [*Ordinance adoption date*] and are over one acre in size.
 - 1. Irrigation Audit, Irrigation Survey, and Irrigation Water Use Analysis.
 - a. For landscapes that have a water meter, the City is the administrator for programs that may include, but not limited to, irrigation water use analyses, irrigation surveys, and irrigation audits to evaluate water use and provide recommendations as necessary to reduce landscape water use to a level that does not exceed the MAWA for existing landscapes. The MAWA for existing landscapes shall be calculated as:
$$\text{MAWA} = (0.8) (\text{ET}_o)(\text{LA})(0.62).$$
 - b. For landscapes that do not have a meter, the City is the administrator for programs that may include, but not limited to, irrigation surveys and irrigation audits to evaluate water use and provide recommendations as necessary in order to prevent water waste.
 - c. All landscape irrigation audits for existing landscapes that are greater than one acre in size shall be conducted by a certified landscape irrigation auditor.

- B. Water Waste Prevention.

- 1. The City prohibits water waste resulting from inefficient landscape irrigation by prohibiting runoff from leaving the target landscape due to low head drainage, overspray, or other similar conditions where water flows onto adjacent property, non-irrigated areas, walks, roadways, parking lots, or structures.

2. Restrictions regarding overspray and runoff may be modified if:
 - a. the landscape area is adjacent to permeable surfacing and no runoff occurs; or
 - b. the adjacent non-permeable surfaces are designed and constructed to drain entirely to landscaping.

§15.70.190 Penalties

- A. The violation of any of the provisions of this chapter shall constitute an infraction and a public nuisance, punishable by the fines, penalties and enforcement provisions set forth in Chapters [1.14](#), [1.16](#) and [1.18](#) of this code.
- B. In addition to any other criminal or civil enforcement proceedings, every violation of this chapter, or any permit or approval granted pursuant to this chapter, determined to be a public nuisance may be abated by the city in accordance with the provisions of [Chapter 8.36](#) of the Brisbane Municipal Code.
- C. This chapter may be enforced by the city manager and his authorized representatives (the "enforcement official"). The director of community development, the director of public works/city engineer, and the city building inspector are hereby designated as authorized representatives of the city manager, with full power to enforce the provisions of this chapter.
- D. The enforcement official has the authority to conduct such inquiries, audits inspections, or surveys to ensure compliance with the requirements of this chapter. Whenever the enforcement official determines that a violation of this chapter has occurred, the enforcement official may serve an administrative citation pursuant to [Chapter 1.16](#) of this code, or an administrative compliance order pursuant to [Chapter 1.18](#) of this code, or both.

§15.70.200 Public Education

- A. Publications. Education is a critical component to promote the efficient use of water in landscapes. The use of appropriate principles of design, installation, management and maintenance that save water is encouraged in the community.
 - i. The City will provide information to all applicants regarding the design, installation, management, and maintenance of water-efficient landscapes and irrigation systems.
- B. All model homes that are landscaped shall use signs and written information to demonstrate the principles of water-efficient landscapes that are described in this Ordinance.

- i. Signs shall be used to identify the model as an example of a water efficient landscape featuring elements such as hydrozones, irrigation equipment, and others that contribute to the overall water efficient theme. Signage shall include information about the site water use as designed per the local ordinance; specify who designed and installed the water efficient landscape; and demonstrate low water use approaches to landscaping such as using native plants, graywater systems, and rainwater catchment systems.
- ii. Information shall be provided about designing, installing, managing, and maintaining water efficient landscapes.

§15.70.210 Severability

If any section, subsection, sentence, clause or phrase of this Ordinance is for any reason held by a court of competent jurisdiction to be invalid or unconstitutional, such decision shall not affect the validity of the remaining portions of this Ordinance. The City Council of the City of Brisbane hereby declares that it would have passed this Ordinance and each section, subsection, sentence, clause and phrase thereof, irrespective of the fact that one or more sections, subsections, sentences, clauses or phrases may be held invalid or unconstitutional.

* * *

The above and foregoing Ordinance was regularly introduced and after the waiting time required by law, was thereafter passed and adopted at a regular meeting of the City Council of the City of Brisbane held on the _____ day of _____, 2016, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

Mayor

ATTEST:

City Clerk

APPROVED AS TO FORM:

City Attorney