



# CITY OF HAYWARD

Hayward City Hall  
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## Cover Memo

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**DATE:** September 10, 2015

**TO:** Council Sustainability Committee

**FROM:** Director of Development Services  
Director of Utilities and Environmental Services

**SUBJECT**  
State Model Water Efficient Landscape Ordinance Revision

### RECOMMENDATION

That the Committee reviews and comments on this report.

### BACKGROUND

A water efficient landscape ordinance addresses landscape requirements for new and rehabilitated development projects. The California Department of Water Resources (DWR) adopted the first Model Water Efficient Landscape Ordinance (State Ordinance) in 1992 with the passing of the Water Conservation in Landscaping Act of 1990 (Assembly Bill 325). The City Council adopted the State Ordinance for use as a local ordinance in the same year. Prompted by the Water Conservation in Landscaping Act of 2006 (Assembly Bill 1881), DWR updated the State Ordinance in 2009. In response, the City Council modified the State Ordinance and subsequently adopted the Bay-Friendly Water Efficient Landscaping Ordinance (Bay-Friendly Ordinance) in 2009 (Attachment I). The Bay-Friendly Ordinance differed slightly from the State Ordinance in that it took a more local, holistic, and sustainable approach to landscaping requirements, which was consistent with the City Council's sustainability goals. The Bay-Friendly Ordinance is enforced by a licensed staff Landscape Architect.

In response to severe drought conditions in recent years, Governor Brown issued Executive Order B-29-15 on April 1, 2015, which directed State agencies to implement immediate measures to save water, increase enforcement against water waste, invest in new technologies and streamline government response to ongoing drought conditions. One of the many actions the State has taken to address the provisions of the Executive Order is the revision of the 2009 State Ordinance. DWR has prepared the amended State Ordinance (Attachment II) through expedited regulation, and solicited public comment and input from stakeholders throughout month of June. The California Water Commission approved the proposed revisions to the State's Ordinance on July 15, 2015. The State's Ordinance is currently pending final approval from the Office of Administrative Law.

Local agencies are required to adopt the State Ordinance or adopt their own ordinances, which must be at least as effective in conserving water as the State's Ordinance. The State Ordinance shall be effective on

December 1, 2015. Local agencies working together to develop a regional ordinance have until February 1, 2016 to adopt. 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.

**DISCUSSION**

DWR estimates that with the new State Ordinance provisions, a typical California landscape will use 12,000 gallons less of water per year, which is twenty percent less than allowed by the 2009 State Ordinance. Commercial landscape will cut water use by thirty-five percent. Over the next three years, it is predicted that 470,000 new homes associated with 20,000 acres of landscape will be built in California. With proper implementation and enforcement, the State Ordinance is expected to lead to substantial water savings.

**Summary of Changes to State Ordinance**

Applicability. The most significant change to the State Ordinance is the reduction in the thresholds for applicability. See the table below for a comparison between the current and proposed ordinances.

Project Type	Hayward Bay-Friendly Ordinance (Consistent with 2009 State Ordinance)	State Ordinance 2015
<i>New CII - Developer Installed</i>	≥ 2,500 sf	≥ 500 sf
<i>New SFR/MFR - Developer Installed</i>	≥ 2,500 sf	≥ 500 sf
<i>New SFR/MFR - Homeowner Provided/Hired</i>	≥ 5,000 sf	≥ 500 sf
<i>Rehabilitated Landscape</i>	Same as above	≥ 2,500 sf

CII - Commercial, Industrial & Institutional  
 SFR - Single Family Residential  
 MFR - Multifamily Residential

In general, the State Ordinance prescribes that all new development projects that include landscape areas equal to or greater than 500 square feet are subject to requirements of the State Ordinance. Staff believes that the State’s applicability thresholds are appropriate and would require most (if not all) landscape projects in Hayward to follow the requirements of the Ordinance. Therefore, staff recommends that the Bay-Friendly Ordinance be amended to be consistent with these new thresholds.

Dedicated Irrigation Meters. Another change included in the State Ordinance is the requirement for either dedicated irrigation service meters or private submeters to be installed for all non-residential irrigated landscapes of 1,000 square feet or more, and residential irrigated landscapes of 5,000 square feet or more. Dedicated irrigation service meters are read by the City for billing purposes, and consumption is charged at a non-residential rate. Private submeters are not used for billing and are simply a way of measuring water specifically used for irrigation. Currently, the City requires that new water service accounts have a separate irrigation meter when the property contains 5,000 or more square feet of irrigated landscape for both non-residential developments and multifamily residential. The current requirement does not apply to single-family type residential properties, including single-family homes, duplexes, triplexes and four-plexes. Staff recommends that the City amend the Bay-Friendly Ordinance to be consistent with the State Ordinance in this regard, with the exception of requiring private submeters.

Dedicated irrigation service meters allow for the City to measure water used specifically for irrigation, while a private submeter is a meter that can only be accessed by the property owner. For this reason, both the Bay-Friendly Ordinance and the Hayward Municipal Water System Code (Section 11-2.46) will need to be amended to require dedicated irrigation service meters for all non-residential irrigated landscapes of 1,000 square feet or more, and residential irrigated landscapes of 5,000 square feet or more.

Limits Potable Irrigation Water Usage. The State Ordinance also lowers the current maximum allowed irrigation water with potable water by twenty-one percent for single-family residential developments and thirty-six percent for multi-family residential developments, including multi-family developments with more than four (4) units. Essentially, this requires landscapes to be designed within a “water budget” that is lower than the 2009 State Ordinance, limiting the use of high water-use plants. This is measured using the Water Efficient Landscape Worksheet, which contains information on the plant factor, irrigation method, irrigation efficiency, and area associated with each hydrozone. Calculations are then made to show the landscape will use less than the maximum allowed water.

Landscape & Irrigation Design Restrictions. The State Ordinance now explicitly prohibits the use of high water use plants in street medians. In addition, the minimum width of areas that can be overhead spray irrigated has been amended from eight feet to ten feet, which means that areas less than ten feet wide must be irrigated with subsurface drip or other technology that produces no overspray or runoff. Staff is further recommending that the Bay-Friendly Ordinance include a provision to explicitly prohibit irrigation overspray onto impervious surfaces.

Professional Submittal. The State Ordinance will require applicable project landscape plans to be prepared by a licensed landscape architect, and an irrigation auditing and audit report submittal for all new development projects installed after December 1, 2015.

Agency Reporting. All local agencies will report on the implementation and enforcement of their ordinances to DWR by December 31, 2015, and subsequent annual reporting to DWR by January 31st of each year thereafter beginning in 2017.

Prescriptive checklist. Smaller projects with rehabilitated landscape areas under 2,500 square feet, or which use recycled water for irrigation, may comply with the performance requirements of the State Ordinance or conform to the prescriptive measures checklist contained within Appendix D of the State Ordinance. The intention of this checklist option is to simplify compliance for smaller projects by providing a template for submittal that is less complex than would otherwise be required for larger projects.

Recycled Water. The use of recycled water for irrigation continues to be incentivized in the State Ordinance by allowing landscapes using recycled water to have a higher Evapotranspiration Adjustment Factor (ETAF). This will allow a higher “water budget,” so to speak, and can provide the opportunity to plant higher water using plants.

Graywater & Rainwater Systems . A new section has been added to the State Ordinance to allow certain projects irrigated with graywater (e.g. from clothes washing machines) or rainwater to be subject only to the prescriptive checklist mentioned above. These projects are limited to those with 2,500 square feet of

landscape or less, and must meet the parcel's landscape water requirement entirely with treated or untreated graywater or rainwater captured on site.

### **Local Enhancements to State Ordinance**

The existing Hayward Bay-Friendly Ordinance exceeded the 2009 State Ordinance requirements in many aspects. The 2015 State Ordinance is now just "catching up" to what the City has been requiring for many years.

With that said, and given the Council's stated priorities, it is recommended that the existing Bay-Friendly Ordinance for Hayward should not only adopt the State's new provisions for water conservation, but also find opportunities to continue to enhance sustainability. Staff is seeking the Committee's feedback on the inclusion of the following items, as well as any additional items not mentioned:

Landfill Diversion. Staff recommends the revised Bay Friendly Ordinance include a requirement to comply with City's current Construction and Demolition Debris Waste Reduction and Recycling Requirements Ordinance (Chapter 5, Article 10). Additionally, the Ordinance could reference the Alameda County Plant Debris Landfill Ban Ordinance 2008-01, which requires landscape professionals, residents, and businesses in Alameda County to separate all plant debris from garbage.

Native Species: The State Ordinance does not explicitly require the use of native plants; however, Bay-Friendly Principles, which are included in the current Bay-Friendly Ordinance, contain a requirement that a minimum of 75 percent of plants shall be California native, Mediterranean, or other climate-adapted species that require occasional or no water once established. It is recommended that the amended Bay-Friendly Ordinance remain consistent with Bay-Friendly Principles. Staff also recommends continuing to include the provision that prohibits the use of invasive plant species, as defined by the California Invasive Plant Council in the Bay-Friendly Ordinance. The State Ordinance only "strongly discourages" the use of invasive species.

Graywater & Rainwater Systems. As mentioned above, there is an incentive in the State Ordinance for special circumstances where graywater or rainwater is used to irrigate the landscape. Staff recommends that the Bay-Friendly Ordinance require that all new single family residential developments include plumbing required for a "laundry-to-landscape" graywater system in each home. The State Ordinance encourages graywater, but does not require it. With respect to rain catchment (via cisterns or barrels, for example), staff is also recommending that the Bay-Friendly Ordinance requires that all new single family residential development include rain catchment on each parcel, with the minimum capacity size to be determined at a later date. Acknowledging that rain catchment systems are not a "one-size fits all" solution with variables that need to be considered, the staff will work on determining an acceptable minimum capacity size prior to bringing this Ordinance before the City Council.

### **ECONOMIC IMPACT**

Adaptation of the Bay-Friendly Ordinance will result in more projects meeting the applicability thresholds, given the reduction in threshold size, and potentially more comprehensive and professional landscape plan submittals as a result of the detailed requirements. These items may result in increased costs of construction for the Development community in order to meet the compliance requirements.

Some of these costs can be balanced with savings in water costs resulting from more efficient water use.

### **FISCAL IMPACT**

Currently, one full-time staff Landscape Architect reviews, inspects and accepts all permitted landscape and irrigation improvement projects. Due to the lowering of thresholds requiring water efficiency landscaping, the recommended new requirements will result in additional staff time for plan review, plan checks, and inspections by the City's Landscape Architect, with the possibility that additional staffing may be needed. Also, with new "laundry-to-landscape" graywater and rainwater system requirements, Building plan checkers and inspectors will have additional responsibilities.

Staff will evaluate impacts and formulate a recommendation to City Council for staff augmentation and/or other measures to adequately respond to the impacts of the proposed new regulations. As all of this effort is to serve development needs and respond to a State mandate, any additional staffing and related costs can be recovered through new or increased fees, which would be proposed for inclusion in the City's Master Fee Schedule.

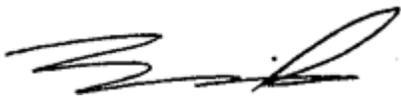
### **NEXT STEPS**

Upon receiving input from the Committee, Staff will prepare the proposed revisions to the Bay-Friendly Ordinance for introduction at the October 20, 2015 City Council meeting. The Ordinance would then be scheduled for adoption on October 27, 2015 and would become effective 30 days afterwards (November 27, 2015).

*Prepared by:* Michelle Koo, RLA, ASLA, Landscape Architect, Development Services  
Corinne Ferreyra, Senior Management Analyst, Utilities & Environmental Services

*Recommended by:* David Rizk, Director of Development Services  
Alex Ameri, Director of Utilities & Environmental Services

Approved by:



Fran David, City Manager

Attachments:

Attachment I

City of Hayward Bay-Friendly Water Efficient  
Landscape Ordinance

Attachment II

California Department of Water Resources  
Model Water Efficient Landscape Ordinance  
(July 9, 2015)