



CITY OF HAYWARD

Hayward City Hall
777 B Street
Hayward, CA 94541
www.Hayward-CA.gov

Cover Memo

File #: PH 15-085, **Version:** 1

DATE: October 13, 2015

TO: Mayor and City Council

FROM: Director of Utilities & Environmental Services
Director of Development Services

SUBJECT

State Model Water Efficient Landscape Ordinance Revisions: Introduction of an Ordinance repealing Article 12 of Chapter 10 of the Hayward Municipal Code (HMC), known as the Bay-Friendly Water Efficient Landscape Ordinance, adding a new Article 12 to Chapter 10 relating to landscape requirements for new and rehabilitated development projects, and amending Section 11-2.46 of the HMC relating to the Hayward Municipal Water System (Report from Director of Utilities & Environmental Services Ameri and Director of Development Services Rizk)

RECOMMENDATION

That the City Council introduces an Ordinance:

1. Repealing Article 12 of Chapter 10 of the HMC, known as the Bay-Friendly Water Efficient Landscape Ordinance, adding a new Article 12 to Chapter 10 of the HMC relating to landscape requirements for new and rehabilitated development projects; and
2. Amending Section 11-2.46 of the HMC relating to the Hayward Municipal Water System

SUMMARY

In response to severe drought conditions, Governor Brown issued Executive Order B-29-15 on April 1, 2015 which, among other immediate water conservation measures, directed the California Department of Water Resources to update the 2009 State Model Water Efficient Landscape Ordinance. This proposed Ordinance implements more restrictive landscape requirements for new and rehabilitated development projects. 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 or a locally modified ordinance shall be effective on or before December 1, 2015. Given the significant changes to the State Ordinance, staff proposes to repeal and replace the City's existing Bay-Friendly Water Efficient Landscape Ordinance with an updated ordinance that addresses the State revisions while providing some local context (i.e. Bay-Friendly principles), efficiency enhancements, and retaining relevant provisions of the existing ordinance. Staff also proposes to revise the Hayward Municipal Water System Ordinance to reflect changes necessitated by the State revisions related to irrigation water meter requirements.

BACKGROUND

A water efficient landscape ordinance is intended to address 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 Landscape Ordinance <http://www.hayward-ca.gov/CITY-GOVERNMENT/DEPARTMENTS/CITY-CLERK/MUNICIPAL-CODE/WaterEfficientLandscapeOrd.pdf>](http://www.hayward-ca.gov/CITY-GOVERNMENT/DEPARTMENTS/CITY-CLERK/MUNICIPAL-CODE/WaterEfficientLandscapeOrd.pdf) (Bay-Friendly Ordinance) in 2009. The Bay-Friendly Ordinance modified the State Ordinance to have more local, holistic, and sustainable landscaping requirements, which was consistent with the City Council's sustainability goals. The Bay-Friendly Ordinance is enforced by the City's licensed 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 updating the 2009 State Ordinance. DWR has prepared the updated State Ordinance through expedited regulation, and solicited public comment and input from stakeholders throughout the month of June. The California Water Commission approved the proposed revisions to the State's Ordinance on July 15, 2015 and the State Ordinance was entered into the California Code of Regulations on September 15, 2015.

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. It should be noted that while the focus of the previous version of the State Ordinance was solely water use efficiency, the updated State Ordinance promotes the values and benefits of landscape practices that integrate conservation into all aspects of landscape design. 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.

Council Sustainability Committee Review - The Council Sustainability Committee reviewed the revised State Ordinance at the September 10, 2015 meeting. The Committee also reviewed and provided input on potential local enhancements to the State Ordinance, which are discussed in further detail later in this report. Committee members appeared to be generally supportive of staff recommended Bay-Friendly Ordinance changes, and their feedback has been incorporated into the proposed Bay-Friendly Ordinance (Attachment II).

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. It is estimated that commercial landscape will cut water use by thirty-five percent under the new provisions. 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.

Given the significant changes to the State Ordinance, staff is recommending that rather than revising the existing Bay-Friendly Ordinance, the City Council repeal and replace it. This approach allows the City's new Bay-Friendly Ordinance to align with, or even exceed, the requirements of the State Ordinance, while meeting Hayward's holistic and sustainable approaches to landscape improvements.

With that said, below is a summary of the changes DWR has made to the State Ordinance. All changes have been included in the proposed Ordinance (Attachment II).

Summary of Changes to State Ordinance

Implementation of the new regulations will influence the overall look of new landscaping projects throughout the City. A comparison between projects subject to the current ordinance and what potential projects could look like under the proposed ordinance are shown in Attachment IV.

Applicability. The most significant change to the State Ordinance is the reduction in the thresholds for applicability. See Table 1 (Attachment I) for a comparison between the current and proposed ordinances. 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 would require most (if not all) new projects in Hayward to follow the requirements of the Ordinance.

Dedicated Irrigation Meters. The State Ordinance requires 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 for a property owner to measure water specifically used for irrigation. Currently, the City requires 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 residential properties, including single-family homes, duplexes, triplexes and fourplexes.

For reasons discussed above, staff recommends that the proposed Ordinance requires dedicated irrigation service meters to be installed, and not allow the option to install private submeters. The proposed Bay-Friendly Ordinance reflects this recommendation. In addition, it is recommended that the Hayward Municipal Water System Ordinance (Attachment III) is also 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, to remain consistent with the proposed Bay-Friendly Ordinance.

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 (included as part of the Bay-Friendly

Ordinance in Attachment II), which contains information on the plant factor, irrigation method, irrigation efficiency, and area associated with each watering zone. Calculations are then made to show that the landscape will use less than the maximum allowed water.

Landscape & Irrigation Design Restrictions. A significant change to landscape design restrictions includes the explicit prohibition of high water use plants in street medians. Irrigation design restrictions have also been updated. For example, the minimum width of areas that can be overhead spray irrigated has been amended from eight feet to ten feet. This 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, using treated or untreated graywater or rainwater captured on site meeting the entire need 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,” 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 smaller projects irrigated with graywater (e.g., from clothes washing machines) or rainwater to be subject only to the prescriptive checklist mentioned above.

Local Enhancements to State Ordinance

The City’s existing Bay-Friendly Ordinance exceeded the minimum requirements of the 2009 State Ordinance requirements in many aspects. In some ways, the 2015 State Ordinance is now just “catching up” to what the City has been requiring for many years.

Pursuant to the Council’s stated priorities and commitment to sustainability, staff has included recommendations in the proposed Ordinance which enhance outdoor water efficiency requirements and promote sustainability. At the September 10, 2015 Council Sustainability Committee meeting, staff sought the Committee’s feedback on the inclusion of the following items and additional enhancements.

The Committee was in support of including each item in the proposed Ordinance.

Landfill Diversion. At the September Council Sustainability Committee, staff initially recommended that the proposed 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). The intention of this was to require appropriate processing of landscape project debris and to align with the City's landfill diversion goals. After further review, staff determined that the Ordinance did not address proper disposal of organic waste for landscape projects. There was also discussion of the fact that the Bay-Friendly 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. The proposed Bay-Friendly Ordinance instead requires applicants to include a disposal plan for all landscape debris generated by the project as part of their application package. The disposal plan shall specify that the landscape debris will be separated from garbage and diverted from the landfill.

Native Plant Species. The State Ordinance does not require a specific quantity of native or local climate-adopted plants; however, Bay-Friendly Principles, which are included in the current Bay-Friendly Ordinance, contain a requirement that a minimum of seventy-five percent of plants shall be California native, Mediterranean, or other climate-adapted species that require occasional or no water once established. The proposed Bay-Friendly Ordinance remains consistent with these Bay-Friendly Principles. In the same vein, the provision that prohibits the use of invasive plant species, as defined by the California Invasive Plant Council in the Bay-Friendly Ordinance, has also been included in the proposed 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. The proposed Bay-Friendly Ordinance includes a requirement that all new single family residential developments include plumbing required for a "laundry-to-landscape" graywater system in each home. This is an enhancement from the State Ordinance, which only encourages graywater, but does not require it. The proposed Bay-Friendly Ordinance will also require that all new single family residential development include a minimum of fifty gallon lidded rain catchment device on each parcel.

Allowance of Turf

The Council Sustainability Committee requested that staff review whether the City should consider prohibiting turf from the front yard in new development projects as part of the proposed Bay-Friendly Ordinance. Staff has considered the implications of this, and has ultimately not included the prohibition of turf in the proposed Ordinance for several reasons. The revisions to the State Ordinance significantly ratcheted down the amount of water than can be used in outdoor irrigation, as well as tightened up irrigation requirements (e.g., limiting spray, requiring subsurface). This action, in effect, limits the ability to install large turf areas, but still allows property owners to have some turf area within the property. While turf is a high water using plant, staff did not think it would be appropriate to limit a property owner's ability to select plants that meet the overall goals of the Bay-Friendly Ordinance.

ECONOMIC IMPACT

Adaptation of the Bay-Friendly Ordinance will result in more projects meeting the applicability thresholds, given the reduction in threshold size, and more comprehensive and professional landscape plan submittals as a result of the detailed requirements. These items may result in increased project development costs 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 and the required tracking of all development projects for annual reporting to DWR, the recommended new requirements will result in additional staff time for plan review, plan checks, inspections and project tracking by the City's Landscape Architect, with the likely 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.

Over the coming months, 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

If the City Council approves introduction of the Ordinances to amend the Municipal Code as described in this report, the amendments would be adopted on October 27, 2015 and become effective thirty days afterwards (November 27, 2015).

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

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

Approved by:



Fran David, City Manager

Attachments:

Attachment I
Attachment II
Attachment III
Attachment IV

Table 1 - Applicability Thresholds
Proposed Bay Friendly Water Efficient Landscape Ordinance
Proposed Hayward Municipal Water System Ordinance
Landscape Design Comparison