



PUBLIC WORKS DEPARTMENT

Council Meeting Date: December 15, 2009
Staff Report #: 09-177

Agenda Item #: F3

REGULAR BUSINESS: Direction to Staff on Revisions to Chapter 12.44, "Water Efficient Landscaping," of the Menlo Park Municipal Code Pursuant to Enaction of the Water Conservation in Landscaping Act (Assembly Bill 1881)

RECOMMENDATION

Staff recommends that the City Council provide direction on revisions to Chapter 12.44, "Water Efficient Landscaping," of the Menlo Park Municipal Code pursuant to enactment of the Water Conservation in Landscaping Act (Assembly Bill 1881).

BACKGROUND

The City's current Water-Efficient Landscaping Ordinance (Menlo Park Municipal Code Chapter 12.44), was adopted on December 1, 1992. The ordinance applies to:

- All projects that involve developing or redeveloping the entire property with one or more new structures (except that projects involving 1 or 2 detached single family residential units are exempt).
- All projects where remodeling, renovation or expansion of existing structures includes re-landscaping or results in the loss of 25% or more of the landscaped area due to damage or neglect (except that projects with total landscaped areas of less than 2,500 square feet and projects with a landscaped area loss of 2,500 square feet or less are exempt).
- All landscaping projects (other than construction of decks, patios, barbecues, play equipment and swimming pools) that require either a planning approval or a building permit.

The ordinance also exempts ecological restoration projects and properties with historical site zoning designations. The ordinance affects properties citywide regardless of water district boundaries.

The State *Water Conservation in Landscaping Act of 2006* (the Act) was signed into law in September of 2006. The Act required the State Department of Water Resources (DWR) to prepare an updated Model Water Efficient Landscape Ordinance (MWELo) which was released in September 2009. The MWELo is deemed to be in effect for all cities, counties and water purveyors on January 1, 2010, unless they have adopted a different ordinance that is at least as effective as the MWELo. Local agencies must notify DWR which ordinance they have adopted by January 31, 2010. DWR has not developed any analyses of the actual water savings expected to result from enactment of

the MWELO, and will not be collecting any water usage or savings data from local agencies.

The Bay Area Water Supply and Conservation Agency (BAWSCA) prepared a draft regional Water Conservation in Landscaping ordinance for use by its member agencies if they so choose (Attachment B). The BAWSCA draft ordinance meets the requirement of being at least as effective as the MWELO because it applies a similar water savings approach to a larger number of projects, specifically by including projects with smaller landscape areas. BAWSCA has also not developed any analyses of actual water savings expected to result from their approach, but has recommended its member agencies adopt their draft ordinance to provide for consistency throughout the BAWSCA service area.

ANALYSIS

The Council is being asked to provide direction to staff on several variables for updating the City's current Water Efficient Landscaping Ordinance (City Code 12.44). Those variables ("Key Concepts") are listed below with accompanying recommendations and rationale. Staff recommends, in general, that the City adopt the BAWSCA ordinance with the following exceptions: (1) preserve provisions of the current City ordinance that are more stringent (and thus conserve more water) than the BAWSCA ordinance, and (2) delete provisions from the BAWSCA ordinance that are inconsistent with City ordinance construction and administration. A comparison between the City's current Water Efficient Landscape Ordinance, the MWELO, the BAWSCA draft and the staff recommendation for revisions is included as Attachment C.

The following are key concepts for the Council to consider in providing direction and staff's recommended approach for each.

Applicability and Exemptions

The City's current ordinance applies to projects with landscapes exceeding 2,500 square feet unless specifically exempted (e.g. 1 or 2 detached single family residential units). The BAWSCA draft establishes 2 thresholds (tiers) for applicability: Tier 1 encompasses all projects¹ with irrigated landscape areas between 1,000 and 2,500 square feet, and Tier 2 are all projects with irrigated landscape areas greater than 2,500 square feet. The MWELO applies to projects with 2,500 or more square feet of landscape area, or new homeowner-provided landscape projects in residential projects with 5,000 or more square feet of landscape area, where a building or landscaping permit, plan check or design review is required.

Staff recommends adopting the BAWSCA thresholds and include applicability to single family residential projects. This approach will ensure that the City's ordinance is as effective as the MWELO by applying to single family residential projects, and will provide for greater consistency in water savings among the different project types.

¹ For purposes of this discussion, "project" is defined as new construction and rehabilitated landscapes requiring building or landscaping permit, plan check, design review or new/expanded water service. The City does not currently issue stand-alone landscaping permits.

Turf Limitations and Slope

The City's current ordinance limits turf (mowed grass area) to 25% of the landscaped area or, for residential areas, 500 square feet per dwelling unit, whichever is greater. The BAWSCA draft limits turf area to 25% of the landscape area. The MWELO allows unlimited turf as long as the maximum applied water allowance (MAWA) calculated for the area is not exceeded.

The City's current ordinance prohibits turf in areas where the slope is 15% or greater. Both the BAWSCA draft and the MWELO permit turf on slopes up to 25%. Staff recommends preserving the City's existing turf area and slope limitations.

Irrigation Hours, Systems and Metering

The current City ordinance limits irrigation hours to 10:00 p.m. to 7:00 a.m. Staff recommends preserving these limits in lieu of the more permissive BAWSCA and MWELO hours (8:00 p.m. to 10:00 a.m.).

Staff also recommends that the ordinance require the use of standard, commonly available irrigation system components that achieve water conservation, e.g. separate valves for each hydrozone, automatic irrigation controllers that use soil moisture or evapotranspiration sensors, backflow preventers, etc. These devices are listed in both the BAWSCA draft and the MWELO.

The City currently requires separate water meters for irrigation systems on projects subject to the City's existing ordinance. Staff recommends the ordinance require separate irrigation metering for irrigated landscape areas of 5,000 or more square feet. That threshold would be consistent with both the BAWSCA draft and the MWELO, while avoiding unnecessary cost increases for property owners who would have to pay for new meters or for the water purveyors for additional meter reading and cross connection control inspections.

Pool and Spa Covers

The BAWSCA draft lists pool and spa covers as "required," where the MWELO lists them as "recommended." The City does not regulate the installation or operation of pool or spa covers, and has no means of enforcing their use. Therefore, staff does not recommend including this requirement in the revised ordinance.

Continuing Compliance

The City's ordinance requires that a deed restriction stating that the lot is subject to the landscape ordinance be recorded prior to final inspection and occupancy. The deed restriction states that any re-landscaping by present or future owners shall adhere to the ordinance. Neither the BAWSCA draft nor the MWELO include this requirement. Staff recommends preserving the requirement for deed restrictions to ensure ongoing maintenance and compliance. The Council may wish to consider adding a civil penalty to the revised ordinance to enhance the City's ability to restore compliance.

Ordinance Construction and Administration

Several elements of both the BAWSCA draft and the MWELO either address City responsibilities for implementing and administering the ordinance or are redundant to other City ordinances. One example, found under "Landscape Audit Report" in the

BAWSCA draft, states, “Local agency shall administer ongoing programs that may include, but not be limited to, post-installation landscape inspection...” Another states, “Local agencies shall prevent water waste resulting from inefficient landscape irrigation...” Staff believes it would be unnecessary to include such language in the ordinance, and that it could create conflict with other City ordinances.

Cost to Property Owners/Developers

Property owners and developers undertaking applicable projects will need to complete a Landscape Documentation Package and submit it with their land use or building permit application. The package contains items similar to those required by the City’s current ordinance but with more detail. The costs associated with complying with the revised ordinance include consultant fees for package preparation and verification of installation, potential City fees for processing of landscape packages, and recording fees for deed restrictions.

Staff contacted several landscape professionals to inquire about the range of costs for preparing landscape documentation packages, calculations, irrigation designs and inspections. The landscape professionals were reluctant to provide any specific cost data due to the high variability in project sizes, water needs and client preferences. However, staff believes that a typical single family residence project could be adequately designed, documented and inspected for less than \$3,000.

The impact the ordinance will have on staff is dependent upon the number of sites that will be affected. Staff reviewed single family residential building permit records for the period between November 2007 and November 2009. Approximately 250 applications were received for new construction and additions that might have been subject to the new ordinance. A separate review of historical water usage data showed that 14 of 30 properties selected at random were exceeding the Maximum Applied Water Allowance (MAWA) for landscape irrigation as calculated under the new methods (i.e. BAWSCA or MWELO). Thus, while the owners of those 250 single family residences might have spent an additional \$3,000 for the required landscape documentation package, they could have realized savings of \$550 per year² on average by designing, installing and maintaining landscapes and irrigation systems in accordance with the revised ordinance.

The implementation process will have minimal impact on City resources. Although a larger number of projects will be subject to the new ordinance, the staff effort required will be limited to providing information to applicants, reviewing a checklist and sending more complicated landscape plans out for detailed review. Staff recommends a base fee of \$250 for landscape documentation processing, to be supplemented by the applicant for any outside consultant reviews and additional staff time required for large projects.

Outreach

Staff has met with representatives of California Water Service Company (Cal Water) Bear Gulch District and the O’Connor Tract Cooperative Water District to obtain their input to the new ordinance as it will be in effect within their district boundaries in the

² Savings based on 2009 water rates. Payback period for \$3,000 design package would be approximately 5-1/2 years.

City. Both districts have provided valuable input to the process. Staff will continue to work with them on refinements to how applications are processed and on outreach to water customers and developers.

Once Council has given direction, staff will begin to draft the City's new ordinance, which will be presented to the Council in January 2010. Staff also plans to commence notifying water district customers and prospective developers of the new requirements, as well as the anticipated date for the Council meeting where adoption of the ordinance will be considered. Staff will also develop handouts, checklists, website content and other materials to assist the public with understanding the new requirements and with locating qualified designers.

POLICY ISSUES

The ordinance, once revised, will serve as City policy and will govern processing of permits and new water service connections for applicable projects.

ENVIRONMENTAL REVIEW

This action is not a project and is not subject to the California Environmental Quality Act.

Lisa Ekers
Engineering Services Manager

PUBLIC NOTICE: Public Notification was achieved by posting the agenda, with this agenda item being listed, at least 72 hours prior to the meeting.

ATTACHMENTS:

- A. [Model Water Efficient Landscape Ordinance \(MWELO\), California State Department of Water Resources](#)
- B. [Bay Area Water Supply and Conservation's \(BAWSCA\) Draft Water Conservation in Landscaping Ordinance](#)
- C. [Comparison Between Landscape Ordinances: Menlo Park, MWELO, BAWSCA and Recommended City Ordinance](#)