

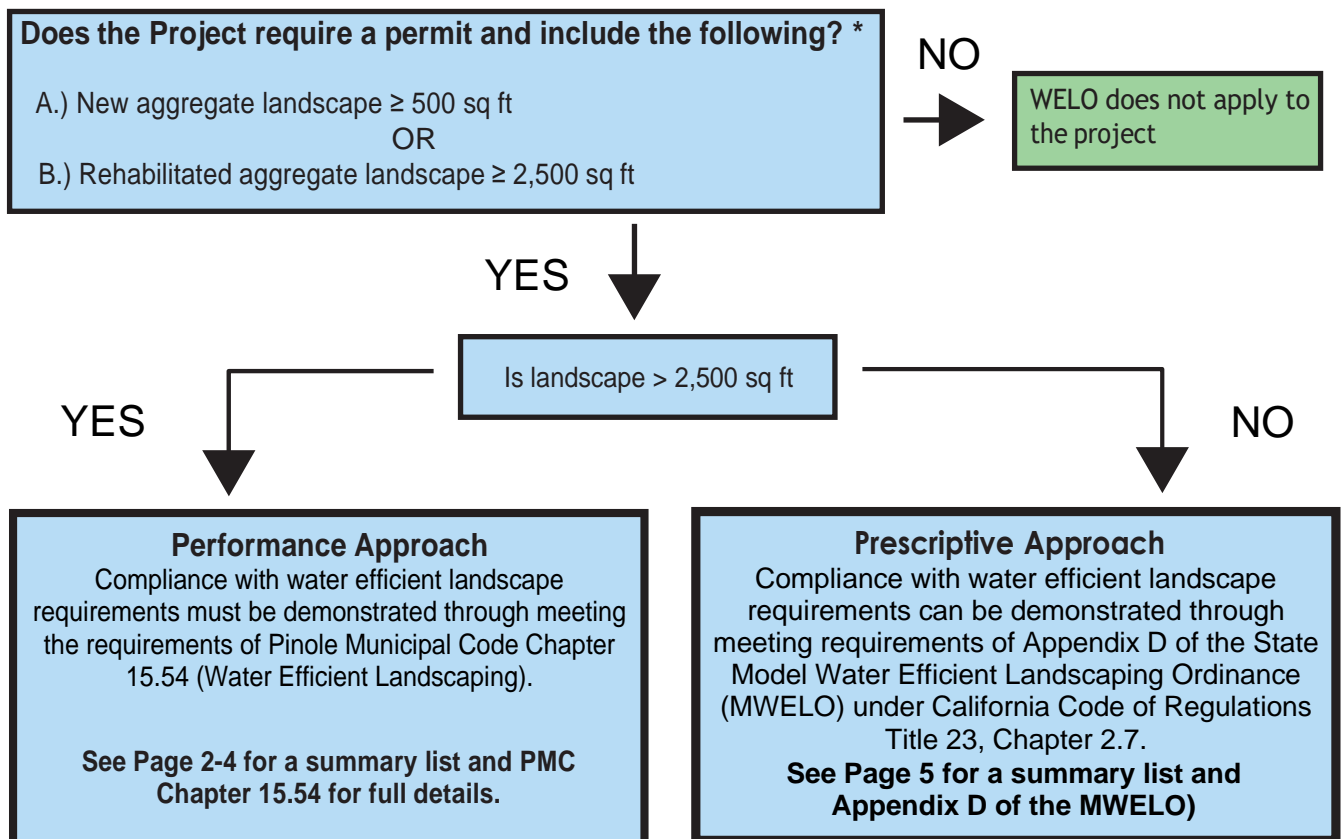


WATER EFFICIENT LANDSCAPE ORDINANCE (WELO) CHECKLIST

On April 1, 2015, Governor Brown issued Executive Order, EO B-29-15 (EO), which directed the Department of Water Resources to update the Water Efficient Landscape Ordinance (WELO). The City of Pinole has adopted Chapter 15.54 (Water Efficient Landscaping) of the Municipal Code based on the updated WELO.

The purpose of this handout is to provide applicants with a checklist and basic information about water efficient landscaping requirements. Please refer to Pinole Municipal Code Chapter 15.54 (Water Efficient Landscaping) for the full ordinance.

For further reference on how East Bay Municipal Utility District (EBMUD) reviews for water efficiency in water service applications, please visit: <https://www.ebmud.com/water/conservation-and-rebates/water-efficiency-review>.



* The following projects are exempt:

- 1) Registered local, state or federal historical sites;
- 2) Ecological restoration projects that do not require a permanent irrigation system;
- 3) Mined-land reclamation projects that do not require a permanent irrigation system; and
- 4) Existing plant collections, as part of botanical gardens and arboretums open to the public.

WELO CHECKLIST: PERFORMANCE APPROACH

The Performance Approach involves demonstration of compliance with standard submittal requirements established in Pinole Municipal Code Chapter 15.54 (Water Efficient Landscaping). The following checklist highlights elements of the Performance Approach to demonstrate compliance. Please refer to Pinole Municipal Code Chapter 15.54 (Water Efficient Landscaping) for the full text of the ordinance.

I. Landscape Documentation Package (PMC Section 15.54.020)

- A. Project information
- B. Water Efficient Landscape Worksheet
- C. Soil management report
- D. Landscape design plan
- E. Irrigation design plan
- F. Grading design plan

II. Water Efficient Landscape Worksheet (PMC Section 15.54.022)

- A. A project applicant shall complete the Water Efficient Landscape Worksheet in Appendix B of the State of California Model Water Efficient Landscape Ordinance, which contains information on the plant factor, irrigation method, irrigation efficiency, and area associated with each hydrozone.
- B. Water budget calculations shall adhere to all of the requirements.

III. Soil Management Report (PMC Section 15.54.024)

- A. The project shall have soil samples submitted to a laboratory for analysis and recommendations.
- B. The soil analysis report shall be made available to the professionals preparing the landscape design plans and irrigation design plans.
- C. The project applicant, or designee, shall submit the soil analysis report as part of the Landscape Documentation Package (if there is mass grading) or Certificate of Completion (if there is no mass grading).
- D. The project applicant, or his/her designee, shall submit documentation verifying implementation of soil analysis report recommendations to the City of Pinole with a Certificate of Completion.

IV. Landscape Design Plan (PMC Section 15.54.026)

- A. A condensed summary list is included in the following to provide a general idea of landscape design plan criteria. Please see Section 15.54.026 for the full list of requirements.
 - i. Review full plant, water feature, and soil/mulch specifications under Section 15.54.026.
 - a. Plant material (water use, climate, avoid turf on slopes >25%, avoid invasive species, etc.)
 - b. Water features (recirculating water systems for features, recycled water for features, etc.)
 - c. Soil preparation and mulch (soil treatment, compost rate, mulch specifications, etc.)
 - ii. The landscape design plan shall include the following:

- a. Delineate and label each hydrozone. Identify each hydrozone as low, moderate, high water, or mixed water use;
- b. Identify recreational areas and areas permanently and solely dedicated to edible plants;
- c. Identify areas irrigated with recycled water;
- d. Identify type of mulch and application depth;
- e. Identify soil amendments, type, and quantity;
- f. Identify type and surface area of water features;
- g. Identify hardscapes (pervious and non-pervious);
- h. Identify location, installation details, and twenty-four (24) hour retention or infiltration for retention facilities (e.g., infiltration beds, swales, basins, retention ponds, pervious surfaces)
- i. Identify any applicable rain harvesting or catchment technologies and capacity;
- j. Identify any graywater discharge piping, system components and area(s) of distribution;
- k. **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";**
- l. Include the signature of a licensed landscape architect, licensed landscape contractor, or any other person authorized to design a landscape.

V. **Irrigation Design Plan (PMC Section 15.54.028)**

- A. A condensed summary list is included in the following to provide a general idea of irrigation design plan criteria. Please see Section 15.54.028 for the full list of requirements.
 - i. Review full irrigation details, including systems and hydrozones, under Section 15.54.028.
 - ii. The irrigation design plan shall include the following.
 - a. Location and size of separate water meters for landscape;
 - b. Location, type and size of all components of the irrigation system;
 - c. Static water pressure at the point of connection to the public water supply;
 - d. Flow rate (gallons per minute), application rate (inches per hour), and design operating pressure (pressure per square inch) for each station;
 - e. Recycled water irrigation systems as specified in Section 15.54.042;
 - f. **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";**
 - g. Include the signature of a licensed landscape architect, certified irrigation designer, licensed landscape contractor, or any other person authorized to design an irrigation system.

VI. **Grading Plan (PMC Section 15.54.030)**

- A. A condensed summary list is included in the following to provide a general idea of grading plan criteria. Please see Section 15.54.030 for the full list of requirements.
 - i. The grading plan shall include height of graded slopes; drainage patterns; pad elevations; finish grade; and stormwater retention improvements, if applicable.
 - ii. The following are highly recommended steps to prevent excessive erosion and runoff:

- a. Grade so that all irrigation and normal rainfall remains within property lines and does not drain on to non-permeable hardscapes;
 - b. Avoid disruption of natural drainage patterns and undisturbed soil; and
 - c. Avoid soil compaction in landscape areas.
- iii. **The following statement: "I have complied with the criteria of the ordinance and applied them accordingly for the efficient use of water in the grading design plan" and shall bear the signature of a licensed professional as authorized by law.**

VII. <u>Certification of Completion (PMC Section 15.54.032)</u>
--

- A. The Certificate of Completion shall include the following:
- i. Project information sheet;
 - ii. 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;
 - iii. Irrigation scheduling parameters used to set the controller (see Section 15.54.034);
 - iv. Landscape and irrigation maintenance schedule (see Section 15.54.036);
 - v. Irrigation audit report (see PMC Section 15.54.038); and
 - vi. Soil analysis report, if not submitted with Landscape Documentation Package, and documentation verifying implementation of soil report recommendations (see Section 15.54.024).
- B. The project applicant shall:
- i. Submit the signed Certificate of Completion to the City of Pinole for review;
 - ii. Ensure that copies of the approved Certificate of Completion are submitted to the local water purveyor and property owner or his or her designee.

WELO CHECKLIST: PRESCRIPTIVE APPROACH

The Prescriptive Approach involves demonstration of compliance through a streamlined method, generally for landscapes between 500 and 2,500 square feet, based on Appendix D of the State Model Water Efficient Landscaping Ordinance (MWELo) under California Code of Regulations Title 23, Chapter 2.7. The following checklist highlights elements of the Prescriptive Approach.

I. Plant Material (Chapter 2.7, Appendix D (b) (3))

- A. For residential areas, 75% of the plant area shall consist of plants that have an average WUCOLS plant factor of 0.3. WUCOLS plants database can be found online at: <http://ucanr.edu/sites/WUCOLS/>
- B. For non-residential areas, 100% of the plant area shall consist of plants that have an average WUCOLS plant factor of 0.3.
- C. Add note to plans: "A minimum 3-inch layer of mulch shall be applied on all exposed soilsurfaces of planting areas except turf areas, creeping or rooting groundcovers, or direct seeding applications where mulch is contraindicated."

II. Turf (Appendix D (b) (4))

- A. Turf shall not exceed 25% of the landscape area in residential areas.
- B. No turf permitted in non-residential areas
- C. Turf not permitted on slopes greater than 25%.
- D. Turf is prohibited in parkways less than 10 feet wide.

III. Irrigation (Appendix D (b) (5))

- A. Appendix D of the State Model Water Efficient Landscaping Ordinance (MWELo)
- B. Pressure regulators shall be installed on the irrigation system to ensure dynamic pressure of the system is within the manufacturer's recommended pressure range.
- C. Manual shut-off valves installed as close as possible to the point of connection of the water supply.
- D. Areas less than 10-feet in width in any direction shall be irrigated with subsurface irrigation or other means that produces no runoff or overspray.
- E. For non-residential projects with landscape areas of 1,000sqft or more, private sub-meter(s) to measure landscape water use shall be installed.
- F. Add note to plans: "At the time of final inspection, the permit applicant must provide the owner of the property with a certificate of completion, certificate of installation, irrigation schedule of landscape and irrigation maintenance."
- G. Add note to plans: "Unless contradicted by a soils test, 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"