

<b>COUNCIL POLICY</b>			
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**Introduction:** The Water Efficient Landscape Policy was initially adopted by Resolution No. 21142 of the Santa Rosa City Council on December 22, 1992 in response to California’s Government Code Section 65591 which requires local agencies to adopt water efficient landscape regulations. The Policy was updated to amend the Applicability, Definitions, Irrigation, Documentation for Compliance, Other Provisions and Provisions for Appeal sections and to add an Appendix to the policy and was adopted as Council Policy 200-XX by the Santa Rosa City Council on June 5, 2007 to apply to projects on or after July 1, 2007. The adopted Policy is shown below.

**The Policy:**

**I. PURPOSE**

The purpose of this policy is to ensure efficient water use by establishing standards for landscape design appropriate to Santa Rosa’s climate, soils, water resources, land use and resource planning.

**II. APPLICABILITY**

1. This policy applies to all new projects, public and private, with landscaping that require conditional use permit or design review by the City, or a Utilities certificate on or after July 1, 2007<sup>1</sup>, and in the following categories: office, commercial, industrial and institutional landscaping; park and greenbelt landscaping; developer-installed landscaping in multiple-family residential and in common areas of single-family residential.
2. This policy does not apply to landscaping in private areas of single-family and multiple-family residential projects, since they are subject to City Council Policy No. 200-19.
3. This policy does not apply to any landscapes irrigated by private well water. However, these projects are encouraged to use this policy as guidelines.
4. This policy does not apply to registered historical sites.
5. This policy does not apply to ecological restoration projects that do not require

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<sup>1</sup> Projects that have a completed application for a Conditional Use Permit, Building Permit, Design Review or Utilities Certificate on file prior to July 1, 2007 will be governed by the City of Santa Rosa Water Efficient Landscape Policy as adopted by City Council Resolution No. 21142 and as amended by City Council Resolution No. 26846.

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permanent irrigation systems.

6. Parks, playgrounds, sports fields, golf courses, schools and cemeteries are exempt from the turf area limit of this policy. In these projects, turf will be allowed in all areas where functional need for turf is demonstrated. Every other requirement of this policy is applicable.

### **III. DEFINITIONS**

For purposes of this Policy, the following definitions apply:

1. Drought resistant cool-season grass - Cool season grasses which can tolerate drought stress. These grasses usually require high-water-use irrigation scheduling to stay green and vital, but will survive under limited water. Examples: turf-type tall fescues e.g., Medallion and Rebel.
2. Functional need (for turf) - Turf planting which serves a functional or practical need rather than purely aesthetic purpose. Examples: athletic fields and pedestrian circulation areas.
3. High-water-use plantings - Turf, annuals, container plantings, and other plants recognized as high-water-use by the *Water Use Classification of Landscape Species* document (<http://www.owue.water.ca.gov/docs/wucols00.pdf>), as it currently exists or maybe amended in the future.
4. Hydrozone - A portion of a landscape having plants with similar water needs. Typically, a hydrozone is served by a valve or set of valves with the same type of irrigation hardware and schedule.
5. Irrigation circuit - A section of an irrigation system, including the piping and sprinkler heads or emitters, that is operated by a single remote control valve.
6. Low-water-use plants - "Mediterranean Region" and native trees, shrubs and groundcovers (such as rosemary), juniper, most native oaks, and other plants recognized as low-water-use by the *Water Use Classification of Landscape Species* document (<http://www.owue.water.ca.gov/docs/wucols00.pdf>), as it currently exists or maybe amended in the future.
7. Low Head Drainage - Water that escapes from the low irrigation heads after a valve has turned off.
8. Matched precipitation rate - All emission devices on a given irrigation valve apply water at the same rate.

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9. Microclimate - A section of a landscaped site with unique climatic conditions that affect the amount of water plants within the area use. Examples of landscape microclimates include courtyards, tree understory areas, median islands.
10. Moderate-water-use-plant - Many ornamental trees, shrubs, and groundcovers, most fruit bearing trees, roses, and other plants recognized as moderate-water-use by the *Water Use Classification of Landscape Species* document, (<http://www.owue.water.ca.gov/docs/wucols00.pdf>), as it currently exists or maybe amended in the future.
11. Non-mechanically compacted soil - Soil which has not undergone engineered compaction procedures.
12. Organic amendment - Any fully organic material added to the soil to improve soil structure, and other physical properties of the soil. Examples: composted sawdust, redwood soil conditioner, compost, peat moss.
13. Overspray - Water which is discharged from an overhead irrigation system outside the desired planting area, especially water which wets adjacent hard surfaces, e.g., sidewalks, patios, streets.
14. Porous landscape fabric - A material that allows water to flow through it to the soil surface.
15. Porous mulch - A loose material which is applied to the soil surface to reduce evaporation and retard weed growth. Examples of acceptable mulches include: wood chips, decomposed granite, straw, compost.
16. Project's landscaped area - The parcel area less building, footprints, driveways, paved walks and patios, parking areas and undeveloped open space or designated natural areas. The project's landscaped area does include all areas under irrigation, water features and hardscape other than those noted above.
17. Project water saving techniques (to mitigate run-off from slopes) - Landscape design techniques which either allows irrigation to be applied at a rate close to the infiltration rate of the soil or which captures and recycles run-off.
18. Rain shut-off device - A device which automatically shuts the irrigation system off when a measurable amount of rain occurs.

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19. Reference evapotranspiration - A standard calculation of the quantity of water transpired by a reference crop and evaporated from adjacent soil surfaces as measured by the California Irrigation Management Information System (CIMIS) of weather stations.
20. Registered historical sites - Sites which are registered as historically significant through either national, state, city or county registries.
21. Runoff - Water which is not absorbed by the soil to which it is applied and runs off onto other areas. Runoff usually occurs when water is applied at a rate greater than the infiltration rate of the soil, and is especially problematic on slopes and on heavy clay soils.
22. Water feature - Ornamental or functional body of water or fountain.

#### **IV. PLANT SELECTION, WATER FEATURES, AND USE LIMITATION**

1. Turf, high-water plantings (e.g. annuals, container plants) and water features (e.g., fountains, pools) shall all be considered high-water-uses and shall be limited to not more than 40% of the project's landscaped area if non-drought resistant cool-season grass is used, and to no more than 50% of the landscaped area if drought resistant cool-season grass or warm-season grass is used.
2. Plants selected in all other landscaped areas shall be well-suited to the climate, geology and topographic conditions of the site, and shall be low-water-use once established.
3. No turf or high-water-use plants shall be allowed on slopes exceeding 10%, or 25% where other project water saving techniques can compensate for the increased runoff, and where need for such slopes is demonstrated.
4. No turf shall be allowed in areas eight feet wide or less.
5. Plants having similar water use shall be grouped together in distinct hydrozones and shall be irrigated with separate irrigation circuits.
6. Recirculating water shall be used for all water features.

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**V. SOIL CONDITIONING AND MULCHING**

1. A minimum of one foot depth of non-mechanically compacted soil shall be available for water absorption and root growth in planted areas.
2. In areas with overhead irrigation, organic amendment shall be incorporated into the soil to a minimum depth of 6" at a minimum rate of 5 cubic yards per 1000 square feet, or per specific amendment recommendations from a soils laboratory report.
3. A minimum of a two inch layer of porous mulch shall be applied to all exposed soil surfaces of non-turf areas within the landscaped area. Non-porous material, such as plastic sheeting, shall not be placed under the mulch; porous landscape fabric is permitted.

**VI. IRRIGATION**

1. All planted landscaped areas shall be irrigated with automatic controllers with repeat start-time potential.
2. When the landscape contains more than one type of plant type (turf, ground cover, annual) or a variety of solar exposures, controllers shall have multiple program potential.
3. Separate irrigation circuits shall be provided for different plant types, irrigation methods, solar exposures, microclimates (e.g. understory, courtyard), slopes and soil types.
4. Pressure regulation shall be installed so that all components of the irrigation system operate at the manufacturer's recommended optimal pressure
5. Point application methods (drip, bubbler) shall be used where overhead irrigation would result in overspray, runoff, or non-uniform application.
6. Irrigation delivery systems shall be designed in such a manner that water does not run off or overspray onto adjacent pavement, sidewalks, structures or other non-landscaped areas.

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7. Sprinkler heads shall have matched precipitation rates on each irrigation circuit.
8. Rain shut-off devices shall be installed on each irrigation controller.
9. Check valves shall be installed where elevation differential may cause low head drainage.

## **VII. DOCUMENTATION FOR COMPLIANCE**

The following documentation is to be presented to the City at each of the four steps of review defined below. This documentation is required for compliance with this policy.

### **STEP 1: PRELIMINARY DESIGN REVIEW**

In the Preliminary Landscape Statement (See Appendix A), briefly describe the planting and design actions that are intended to meet the requirements of this policy.

### **STEP 2: FINAL DESIGN REVIEW**

The following shall be submitted with a design review application or with a conditional use permit application when involving design review or when required to apply for a Utilities Certificate:

- A. The landscape planting design plan that accurately and clearly identifies and depicts:
  - new and existing trees, shrubs, groundcovers, turf, and any other planting areas;
  - plants by botanical name and common name;
  - plant sizes and quantities;
  - property lines, new and existing building footprints, streets, driveways, sidewalks and other hardscape features;
  - pools, fountains, water features,
- B. A conceptual irrigation design plan or statement which describes irrigation methods and design actions that will be employed to meet the irrigation specifications of this policy.

### **STEP 3: BUILDING PERMIT/PLAN CHECK**

The following shall be reviewed and approved prior to a building permit being issued:

- A. The planting design as submitted at step 2.
- B. The irrigation plan drawn at the same scale as the planting plan that::

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- Accurately and clearly identifies and depicts irrigation system point of connection;
  - Accurately and clearly identifies and depicts irrigation system components, e.g. controller, pipe, remote-control valves, sprinklers and other application devices, rain shut-off device, check valves, pressure regulating devices, backflow prevention devices.
  - Includes the Hydrozone Table and Hydrozone Summary Table (See Appendix B)
- C. Where slopes exceed 10%, a grading plan drawn at the same scale as the planting plan that accurately and clearly identifies finished grades and spot elevations where contours exist within landscaped areas.
- D. The Certificate of Conformance (See Appendix C), completed by the design professional, which substantiate compliance with all requirements of this policy.

**STEP 4: COMPLETION OF INSTALLATION**

Upon installation and completion of the landscape a final inspection shall be performed to verify policy compliance. The Water Conservation Program requires advance notice for all inspections. Inspections can be requested for either morning or afternoon during regular business hours. Specific times of the day cannot be scheduled. Building permit final approval shall not be completed until the landscape inspection is approved. An extension of the building permit to complete landscape and irrigation installation shall be requested and must be approved by the Chief Building Official prior to occupancy.

**VIII. OTHER PROVISIONS**

1. The Director of Utilities will consider and may allow the substitution of design alternatives and innovation which may equally reduce water consumption for any of these requirements.
2. The Director of Utilities will accept documentation methods, water allowance determination, and landscape and irrigation design requirements of the State of California Model Water Efficient Landscape Ordinance instead of sections 2-6 of these requirements where it can be demonstrated that the State procedure will more effectively address the design requirements of the project.

**IX. PROVISIONS FOR APPEAL**

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The applicant or any affected person may appeal the final decision of staff regarding plan check or final inspection to the Director of Utilities, or a final decision of the Director of Utilities to the Board of Public Utilities by filing a written notice of appeal within ten City working days of the date of the decision. The decision of the Board of Public Utilities shall be final and may not be appealed to the City Council. An appeal regarding plan check must be submitted prior to the installation of the landscape.

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**Appendix A**

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*Preliminary Landscape Statement*

Project Name \_\_\_\_\_

Project Location \_\_\_\_\_

Type of Project (e.g., commercial, residential) \_\_\_\_\_

The *Preliminary Landscape Statement* is to be submitted at Preliminary Design Review.

Briefly describe the planting and design actions intended to meet the requirements of the Water Efficient Landscape Policy.

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\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Project Representative

\_\_\_\_\_  
Phone

\_\_\_\_\_  
Address

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**Appendix B**

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On landscape and irrigation plans, include the total planned square footage of planted areas for high water use plants (i.e.- turf, annuals and container plants); moderate water use plants (i.e. - ornamental trees, shrubs ground covers, and perennials primarily irrigated by sprinklers); and low water use plants (i.e. - drought tolerant plants irrigated primarily through drip emitters). The planting plan must include specific plant names that fit in each category. The following tables should appear on all landscape and irrigation plans:

<b>Hydrozone Table Complete for all valves</b>						
Valve No.	Irrigation Method (Spray, drip, etc.)	Plant type (High, Moderate, Low)	GPM	Precipitation Rate (in/hr)	Area (ft <sup>2</sup> )	% of Landscape
1						
2						
3						

<b>Summary Hydrozone Table</b>		
Plant Type	Area (ft <sup>2</sup> )	% of Landscape
Low water use		
Moderate water use		
High water use		
Total		

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## Appendix C

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### WATER EFFICIENT LANDSCAPE POLICY

#### *Certificate of Conformance*

Project Name \_\_\_\_\_

Project Location \_\_\_\_\_

Type of Project (e.g., commercial, residential) \_\_\_\_\_

The *Certificate of Conformance* is to be submitted with the building permit application, together with complete planting, irrigation and, where necessary, grading plans.

Please check all boxes, unless otherwise noted, and fill in appropriate blanks.

#### I Plant Selection, Water Features, and Use Limitation

1. Check one:

- Turf, high-water-use plantings (e.g. high-water-use plants, container plants) and water feature (e.g. fountains, pools) cover not more than 40% of the project's landscaped area if non-drought resistant cool-season grass is used, and to no more than 50% of the landscaped area if drought resistant or warm-season grass is used.

Type of grass used \_\_\_\_\_.

Total high-water-use coverage \_\_\_\_\_ %.

- This project is exempt from the turf area limit of this policy because it falls into one of the following categories: park, playground, sports field, golf course, school, and cemetery. (Circle appropriate category)

2.  Plants selected in all other landscaped areas are well-suited to the climate, geology and topographic conditions of the site, and shall be low-water-use once established.

3. Check one:

- No turf or high-water-use plants are used on slopes exceeding 10%.

- Turf is used on slopes up to 25% with the following special water saving

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techniques used to compensate for increased run-off:

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- 4.  No turf is used in areas eight feet wide or less.
- 5.  Plants having similar water use are grouped together in distinct hydrozones and are irrigated with separate irrigation circuits.
- 6. Check if water features are used:  
 Recirculating water is used for all water features.

**II Soil Conditioning and Mulching**

- 1.  A minimum of one foot depth of non-mechanically compacted soil is available for water absorption and root growth in planted areas.
- 2. Check one:  
 In areas with overhead irrigation, organic amendment is specified to be incorporated into the soil to a minimum depth of 6" at a minimum rate of 5 cubic yards per 1000 square feet.  
 Amendment recommendations from a soils laboratory report are specified, and this report is attached.
- 3.  A minimum of a two inch layer of porous mulch is specified to be applied to all exposed soil surfaces of non-turf areas within the landscaped area. No non-porous material, such as plastic sheeting, will be placed under the mulch.

**III Irrigation**

- 1.  All landscaped areas are irrigated with automatic systems with repeat start-time potential.
- 2. Check if appropriate:  
 This landscape contains more than one type of plant type (turf, ground cover, annual) or a variety of solar exposures, therefore controllers with multiple programs are used.

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Separate irrigation circuits are provided for different plant types, irrigation methods, solar exposures, microclimates, slopes and soil types.

Pressure regulation is provided to effect correct operating pressure for each water delivery hardware type (e.g. spray, rotor, drip, bubbler). The specific pressure regulation techniques employed are:

Point application methods (drip, bubbler) are used where overhead irrigation would result in overspray, runoff, or non-uniform application.

Irrigation delivery systems are designed in such a manner that water does not run off or overspray onto adjacent pavement, sidewalks, structures or other non-landscaped areas.

Sprinkler heads have matched precipitation rates on each valve circuit.

Rain shut-off devices are specified for each irrigation controller.

Check valves specified where elevation differential may cause low head drainage.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Project Design Professional

\_\_\_\_\_  
Phone

\_\_\_\_\_  
Address