

Community Development
Department
(925) 673-7300
www.ci.clayton.ca.us

LANDSCAPE PROJECT APPLICATION

A Landscape Project Application is required by the City of Clayton's Landscape Water Conservation Standards, Clayton Municipal Code Section 17.80, for certain landscape projects. This application contains important information and the submittal requirements for compliance with these standards.

What is a Landscape Project Application?

A Landscape Project Application (LPA) is a request for the installation of landscaping and irrigation in compliance with Section 17.80 - Landscape Water Conservation Standards of the Clayton Municipal Code (CMC).

The following projects are required to submit a Landscape Project Application:

Developer Projects: New landscape development for commercial, multifamily, and single-family home projects with irrigated landscape areas cumulatively equal to or greater than 500 square feet, and rehabilitated landscape development for commercial, multifamily, and single-family home projects with irrigated landscape areas cumulatively equal to or greater than 2,500 square feet, when requiring a building permit, grading permit, plan check, or design review.

Single Family Projects (Property Owner): New property owner-directed single-family home projects with irrigated landscape areas cumulatively equal to or greater than 500 square feet and rehabilitated property owner-directed single-family home projects with irrigated landscape areas cumulatively equal to or greater than 2,500 square feet, when requiring a building permit, grading permit, plan check, or design review.

How Do I Apply?

☐ Step 1: Determine Landscape Project Application Requirements

Does the landscape project contain water feature(s) with more than 100 square feet of total surface area or turf or other high water use plants that are not considered to be a "Special Landscape Area"? High water use plants are those designated as "high water use" in the Water Use Classification of Landscape Species (WUCOLS) report. The WUCOLS report can be found here:

<http://www.water.ca.gov/wateruseefficiency/docs/wucols00.pdf>

Step 2: Complete the Appropriate Application Forms

A. If the project does **NOT** include a water feature with more than 100 square feet of total surface area, turf, or other high water use plants that are not considered to be a “Special Landscape Area”, then the following shall be completed and submitted:

- Community Development General Application Form
- Certificate of Compliance - Landscape and Irrigation Design
- Hydrozone Information Table
- Landscape and Irrigation Plans (See requirements below)
- Landscape and Irrigation Maintenance Schedule (See requirements below)

-OR-

B. If the project **DOES** include a water feature with more than 100 square feet of total surface area or turf or other high water use plants that are not considered to be a “Special Landscape Area”, then the following shall be completed:

- Community Development General Application Form
- Certificate of Compliance - Landscape and Irrigation Design
- Hydrozone Information Table
- Landscape and Irrigation Plans (See requirements below)
- Landscape and Irrigation Maintenance Schedule (See requirements below)
- Water Allowance Worksheet

Landscape and Irrigation Plan Requirements

1. The planting plan shall:
 - a. Identify all Special Landscape Areas, which include edible plants, such as vegetable gardens or orchards, areas irrigated with recycled water, water features using recycled water, cemeteries, and areas dedicated to active play (parks, sports fields, golf courses).
 - b. Identify plants by their common and botanical name.
 - c. Identify type and surface area of water features.
2. The irrigation plan shall:
 - a. Show the location and size of the landscape irrigation water meter.
 - b. Show the location, type, and size of all components of the irrigation system, including, but not limited to, controllers, main and lateral lines, valves, sprinkler heads, moisture sensing devices, rain switches, quick couplers, pressure regulators, and backflow prevention devices.
 - c. Identify the static water pressure at the point of connection to the public water supply.
 - d. Identify the flow rate (gallons per minute), application rate (inches per hour), and design operating pressure (pressure per square inch) for each station.
 - e. Identify any applicable graywater discharge piping, system components, and areas of distribution.

Step 3: Submit Applications Forms

The required Landscape Project Application shall be submitted to the Clayton Community Development Department concurrently with the application for a building or grading permit for the project. If a project requires design review approval, preliminary landscaping plans shall be submitted with the design review application; however, all Landscape Project Application components shall be submitted with a building or grading permit.

What Then Happens to my Application?

Staff will review the Landscape Project Application for compliance with the provisions of Section 17.80 – Landscape Water Conservation Standards of the Clayton Municipal Code. Staff will only release issuance of the associated grading permit or the building permit upon demonstrated compliance with the CMC.

What is Required for Grading/Building Permit Signoff?

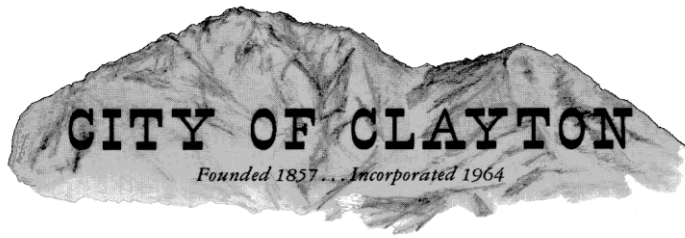
Prior to staff releasing the final signoff on the building permit, the following completed documents and forms need to be submitted to the Clayton Community Development Department for review:

- Certificate of Compliance – Landscape and Irrigation Installation
- Certificate of Compliance – Landscape Water Audit
- Certificate of Compliance – Landscape Maintenance
- Certificate of Completion
- Landscape and Irrigation Maintenance Schedule (See requirements below)
- Soils Management Report (Required for large landscape projects and multiple landscape installations)

Landscape and Irrigation Maintenance Schedule Requirements

The specifications and schedule include the following:

- 1) An annual maintenance schedule, which includes: routine inspection; adjustment and repair of the irrigation system and its components; aerating turf areas; replenishing mulch; seasonal pruning; weeding in all landscape areas; and removing obstructions to emission devices;
- 2) The repair of all irrigation equipment shall be done with the originally installed components or their equivalents; and
- 3) The total amount of irrigation is less than or equal to the Maximum Applied Water Allowance (MAWA), if applicable.



Certificate of Compliance

Landscape and Irrigation Design

Please fill in the required information and check the appropriate boxes to demonstrate the landscape and irrigation plans, as designed, comply with Clayton's Landscape Water Conservation Standards (CMC Chapter 17.80).

Project Name: _____

Project Address: _____

Applicant Name: _____

Applicant Address: _____

Project Area Measurements

Total turf area: _____ square feet

Total non-turf landscape area: _____ square feet

Total water feature area: _____ square feet

Please select one of the following:

- The landscape design does **NOT** contain a water feature(s) with an area more than 100 square feet, turf, or other high water use plants that are not considered to be a "Special Landscape Area".
- The landscape design includes: 1) water feature(s) with more than 100 square feet of total surface area; or 2) turf or high water use plants that do not qualify as a "Special Landscape Area". If this box is checked, a Water Allowance Worksheet must be submitted to demonstrate the landscaping is designed to use less than the Maximum Applied Water Allowance (MAWA).

Landscape Design Checklist:

- Design incorporates most recent acceptable best management practices for water-efficient landscape design.
- Landscape plans including planting, irrigation, and installation details are attached.
- Plant material is well suited to the local climate and soil conditions.
- For residential areas, the plantings shall be climate adapted and have an average Water Use Classification of Landscape Species (WUCOLS) plant factor of 0.3 for 75% of the plant area, excluding edibles.
- For non-residential areas, the plantings are climate adapted and have an average WUCOLS plant factor of 3.0 for 100% of the plant area, excluding edibles.
- Plant material is spaced appropriately based on their expected mature size and will not block sprinklers at their mature size.
- No turf is specified in medians, areas narrower than 10 feet, or on slopes steeper than 15%.
- Turf does not exceed 25% of the landscape area for residential projects and no turf is specified for non-residential projects.

- No high water use plants with a WUCOLS plant factor of 0.7 to 1.0 are located in the street median.
- Soil amendments comply with the soils report and are appropriate for selected plant materials.
- If rototilling is required, a minimum compost rate of four cubic yards per 1,000 square feet of permeable area, to a depth of six inches.
- Three inches of mulch applied on all exposed soil surfaces of planting areas with mulch, such as shredded bark, specified in bio-retention areas and slopes.

Irrigation Design Checklist:

- Overhead irrigation is not utilized if irrigation results in overspray.
- Distinct hydrozones are irrigated separately by one or more irrigation valves.
- Smart irrigation controllers with an ET or daily soil moisture rain sensor and the ability to maintain all data in the event of a power outage are specified.
- Plan specifies separate water meters for landscape irrigation for residential landscapes 5,000 square feet or greater and non-residential landscapes 1,000 square feet or greater.
- Pressure regulators and irrigation controls specified on the irrigation system to ensure dynamic pressure within manufacturer's recommended range.
- Manual shut-off valve specified closest to each water supply connection, before each control valve manifold for residential irrigation systems, and before each control valve manifold or individual control valve for non-residential systems.
- Recycled water will be used, if available. If recycled water is used, ET adjustment factor does not exceed 1.0.
- Runoff, overspray, low head drainage, or other water waste prevention is specified.
- No overhead irrigation is specified within 12 inches of any non-permeable surface.
- Irrigation devices have matched precipitation rates for each irrigation zone with maximum precipitation rate of 1.2 inches per hour or 0.75 inches per hour on all slopes 25% or greater.
- No overhead irrigation in areas less than ten feet wide in any direction, unless no water waste will occur.
- Manual shutoff valves are specified at each point of connection.
- Irrigation plans include a controller map and programming tables to be placed in all irrigation controller cabinets. Controller map differentiates each controller zone and for each irrigation valve, the controller programming table specifies the plant water requirement (high, medium, low, or very low), sun exposure, irrigation emission device type, precipitation rate, station flow rate, optimal pressure, soil type, infiltration rate, square footage of area, and degree of slope.
- Each irrigation valve controls the irrigation to one hydrozone and a separate irrigation valve for top of a slope and bottom of a slope.
- Master shut-off valves are specified.
- Flow sensors that detect high flow conditions for all projects 5,000 square feet or greater.
- Water features have re-circulating systems and fountains, including nozzles, and have no wind drift or overspray.
- Soils management report is attached for large landscape projects.
- Design complies with Stormwater Control Plan requirements.
- Soil erosion is minimized and the soil infiltration rate is improved or maintained.
- Avoids drainage onto non-permeable hardscapes within the property lines and prevents runoff of all irrigation and natural rainfall outside property lines.

I/We certify that the landscape and irrigation plans for the above listed project comply with the Landscape Water Conservation Standards of the City of Clayton.

Signature*	Date	
Name (print)	Telephone Number	
	Fax Number	
Title	Email Address	
License Number or Certification Number		
Company	Street Address	
City	State	Zip Code
Clayton Business License Number	Expiration	

*Signature of the landscape designer/architect.



Certificate of Compliance

Landscape and Irrigation Installation

Please fill-in the required information and check the appropriate boxes to demonstrate the landscaping and the irrigation system were installed in compliance with the City of Clayton Landscape Water Conservation Standards (CMC Chapter 17.80).

Project Name: _____

Project Address: _____

Applicant Name: _____

Applicant Address: _____

Landscape Installation Checklist:

- Installed project area measurements match the landscape plans.
- Plant material is the same as specified in the plans and any substitutes are determined to be equivalent or less in water usage, per Water Use Classification of Landscape Species (WUCOLS).
- Installation incorporates most recent acceptable best management practices for water efficient landscape design.
- Any plant substitutions are well suited to the local climate and soil conditions.
- All plants are located in accordance with the landscape plans.
- Any changes to the irrigation system or plant material shall maintain district hydrozones that are irrigated separately by one or more irrigation valve(s).
- Turf does not exceed 25% of the landscape area and no turf is installed in the medians, areas narrower than 10 feet, or on slopes greater than 15%.
- No high water use plants with a WUCOLS plant factor of 0.7 to 1.0 are located in the street median.
- Soil amendments, as recommended in the soils report, were utilized and are appropriate for the selected plant materials.
- Rototilling, where required, consists of four cubic yards per 1,000 square feet of compost to a depth of six inches.
- A minimum of three inches of mulch has been applied in all exposed soil surfaces in planting areas, such as shredded bark, specified in bio-retention areas and slopes.

Irrigation Installation Checklist:

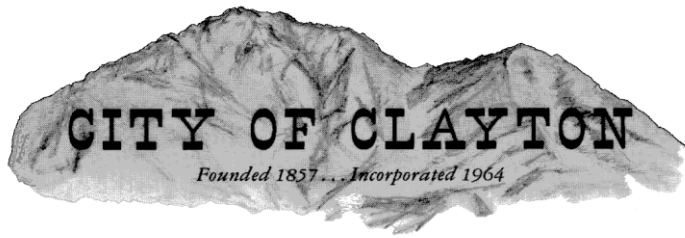
- All irrigation equipment is the same as identified in the irrigation plans, and any substitutes are equivalent.
- Irrigation hydrozones are the same as indicated on the landscape plans and any field-adjusted irrigation zones were installed so that distinct hydrozones are irrigated separately by one or more irrigation valve.
- Smart irrigation controllers utilizing ET or daily soil moisture rain sensor with the ability to maintain data in the event of a power outage were installed.
- Separate water meters for landscape irrigation for residential landscapes 5,000 square feet or greater and non-residential landscapes 1,000 square feet or greater.

- Pressure regulators and irrigation controls installed to ensure dynamic pressure within manufacturer's recommended range.
- Manual shutoff valves installed closest to each water supply connection; before each control valve manifold for residential irrigation systems; and before each control valve manifold or individual control valve for non-residential systems.
- Point of connection is the same as specified on the plans.
- System has been installed and tested to prevent runoff, low head drainage, and overspray.
- Overhead irrigation is not resulting in overspray or is installed within 12 inches of any non-permeable surface.
- No overhead irrigation in areas less than 10 feet wide in any direction.
- Manual shutoff valves at each point of connection.
- Irrigation devices have matched precipitation rates for each irrigation zone with maximum precipitation rates of 1.2 inches per hour or 0.75 inches per hour on all slopes 25% or greater.
- Controller map(s) and programming table(s) were placed in all irrigation controller cabinets.
- Separate irrigation valves were installed and separate hydrozones created for the top of a slope and bottom of a slope.
- Master shutoff valve has been installed.
- Flow sensors that detect high flow conditions for projects with 5,000 square feet or greater were installed.
- All water features have recirculating water systems and fountains, including nozzles, and have no wind drift or overspray.
- Installation complies with Stormwater Control Plan requirements.
- Soil erosion is minimized and the soil infiltration rate is improved or maintained.
- Installation avoids drainage onto non-permeable hardscapes within the property lines and prevents runoff of all irrigation and natural rainfall outside property lines.

I/We certify that the landscape and irrigation installation for the above listed project comply with the Landscape Plans and the Landscape Water Conservation Standards of the City of Clayton.

Signature*	Date	
Name (print)	Telephone Number	
	Fax Number	
Title	Email Address	
License Number or Certification Number		
Company	Street Address	
City	State	Zip Code
Clayton Business License Number	Expiration	

*Signature of the landscape contractor or installer.



Certificate of Compliance

Landscape and Irrigation

Water Audit

A landscape water audit needs to be performed within thirty (30) days of the start of the landscape period or immediately upon completion of the landscape installation. Prior to releasing the project's certificate of occupancy, a water audit must be completed and all non-compliance issues shall be addressed, including all items listed on this Certificate of Compliance. The Water Audit must be conducted and this form must be completed by an EPA WaterSense certified Irrigation System Auditor.

Project Name: _____

Project Address: _____

Applicant Name: _____

Applicant Address: _____

Landscape Water Audit Checklist:

- Installed project areas match those of the approved Landscape and Irrigation plans.
- Plant material is the same as specified in the plans and any substitutes are determined to be equivalent or less in water usage, per Water Use Classification of Landscape Species (WUCOLS).
- Project has incorporated most recent acceptable best management practices for water-efficient landscape design.
- Plants used are well suited to the local climate and soil conditions.
- Plants are spaced appropriately based on their expected mature size and will not block sprinklers at their mature size.
- No turf is planted in medians, areas narrower than 10 feet, or on slopes steeper than 15%.
- Only specified soil amendments appropriate for the selected plants were utilized.
- A minimum of three inches of mulch is installed for all exposed soil surfaces in non-turf planting areas.

Irrigation Water Audit Checklist:

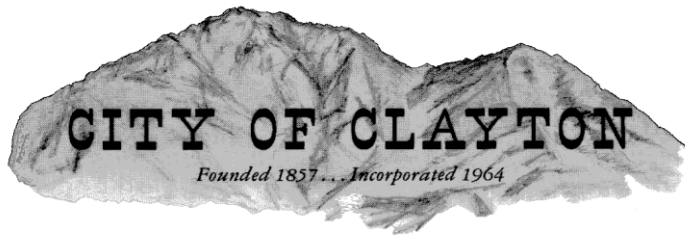
- Overhead irrigation was not used where it would result in overspray.
- Distinct hydrozones are irrigated separately by one or more irrigation valves.
- Smart irrigation controller(s) with an ET or daily soil moisture rain sensor are installed.
- Point of connection is the same as specified in the plans.
- Recycled water is used, if available.
- Irrigation system does not have runoff, low head drainage, or overspray.
- No overhead irrigation is installed within 12 inches of any non-permeable surface.
- Sprinkler stations have matched a precipitation rate for each irrigation zone with a maximum precipitation rate of 1.2 inches per hour or 0.75 per hour on all slopes 25% or greater.
- Dynamic water pressure at sprinkler heads and other emission devices is within manufacturer's specifications.
- No overhead irrigation is installed in areas less than 10 feet wide in any direction.
- Manual shutoff valves are installed at each point of connection.

- Controller map(s) and programming table(s) are in all irrigation controller cabinets.
- Separate irrigation valves are installed for the top of a slope and bottom of a slope, and designated as separate hydrozones.
- A recirculation system has been installed for all water features and fountains, including nozzles, and has no wind drift or overspray.
- Project complies with Stormwater Control Plan requirements.
- The site's landscape soils infiltration rate is the same as or better than the native soil.
- Project avoids draining onto non-permeable hardscapes within the property lines, and prevents runoff of all irrigation and natural rainfall outside of the property lines.

I/We certify that the landscape and irrigation audit for the above listed project complies with the Landscape Plans, the Landscape and Irrigation Schedule, and the Landscape Water Conservation Standards of the City of Clayton.

Signature*	Date	
Name (print)	Telephone Number	
	Fax Number	
Title	Email Address	
License Number or Certification Number		
Company	Street Address	
City	State	Zip Code
Clayton Business License Number	Expiration	

*Signature of the EPA WaterSense certified Irrigation System Auditor.



Certificate of Compliance

Landscape and Irrigation Maintenance

The landscape designer or installer shall develop and submit a landscape maintenance specification and schedule, which shall incorporate the maintenance checklist below. Please fill-in the required information below and check the appropriate boxes to demonstrate the landscaping and irrigation system will be properly maintained in compliance with Clayton's Landscape Water Conservation Standards (CMC Chapter 17.80).

Project Name: _____

Project Address: _____

Applicant Name: _____

Applicant Address: _____

- Certificate of Completion is attached.

Landscape Maintenance Checklist:

- Maintenance practices incorporate most recent acceptable best management practices for water-efficient landscape maintenance.
- Plants selected for replanting are well suited to the local climate and soil conditions.
- Plants for replanting are spaced appropriately based on the expected mature size and will not block sprinklers at their mature size.
- Only use appropriate soil amendments for any replacement plants.
- Maintain a minimum of three inches of mulch for all exposed soil surfaces in non-turf planting areas.

Irrigation Maintenance Checklist:

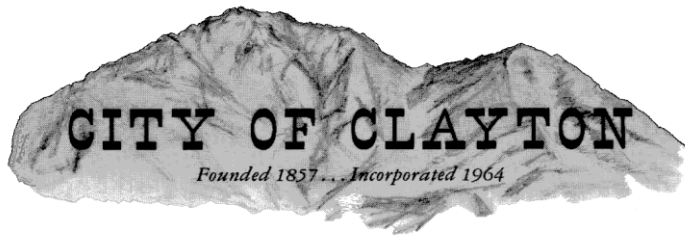
- Any changes to overhead irrigation do not result in overspray.
- Changes to irrigation system or plant material shall maintain distinct hydrozones that are irrigated separately by one or more irrigation valves.
- Medians, areas narrower than 10 feet, or on slopes greater than 15%, shall not be replanted in turf.
- Smart irrigation controller(s) utilizing ET or soil moisture sensors are in the ET or sensor mode.
- The existing irrigation point of connection is used for any irrigation system changes.
- Maintenance practices are incorporated to prevent runoff, low head drainage, and overspray.
- No overhead irrigation can be moved within 12 inches of any non-permeable surface.
- Sprinkler stations have matched precipitation rates for each irrigation zone with a maximum precipitation rate of 1.2 inches per hour or 0.75 inches for all slopes 25% or greater.
- Irrigation controls are used to maintain dynamic water pressure at sprinkler heads and other emission devices within manufacturer's specifications.
- No overhead irrigation is used in areas less than 10 feet wide in any direction.
- Manual shutoff valves are maintained at each point of connection.

- Controller map(s) and programming table(s) are kept in all irrigation controller cabinets.
- Separate irrigation valves are maintained for the top of a slope and bottom of a slope, and will be maintained as separate hydrozones.
- Recirculation system will be maintained for all water features and fountains, including nozzles, and shall have no wind drift or overspray.
- Fountain(s) and their nozzles are maintained so that no wind drift or overspray will occur.
- Maintenance practices comply with Stormwater Control Plan requirements.
- Infiltration rates for the landscape soils are maintained or improved with site maintenance practices.
- Site is maintained to avoid drainage onto non-permeable hardscapes within the project and prevent runoff of irrigation and rainfall outside property lines.

I/We certify that the landscape and irrigation maintenance for the above listed project complies with the Landscape Plans, the Landscape and Irrigation Schedule, and the Landscape Water Conservation Standards of the City of Clayton.

Signature*		Date	
Name (print)	Telephone Number		
	Fax Number		
Title	Email Address		
License Number or Certification Number			
Company	Street Address		
City	State	Zip Code	
Clayton Business License Number	Expiration		

*Signature of landscape maintenance contractor.



Certificate of Completion

This Certificate is completed by the project applicant upon completion of the landscape project.

PROJECT INFORMATION SHEET

Date		
Project Name		
Name of Project Applicant	Telephone Number	
	Fax Number	
Title	Email Address	
Company	Street Address	
City	State	Zip Code

Project Address and Location:

Street Address		Parcel, tract, or lot number, if available.
City		Latitude/Longitude (optional)
State	Zip Code	

Property Owner or his/her designee:

Name	Telephone Number	
	Fax Number	
Title	Email Address	
Company	Street Address	
City	State	Zip Code

Property Owner

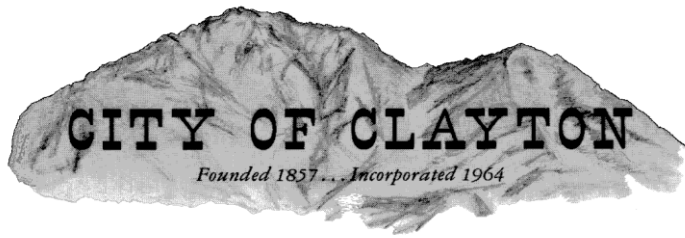
I/We certify that I/we have received copies of all the documents within the Landscape Project Application and the Certificate of Completion and that it is our responsibility to see that the project is maintained in accordance with the Landscape and Irrigation Maintenance Schedule.

Property Owner Signature

Date

Please answer the questions below:

1. Date the Landscape Documentation Package was submitted to the City of Clayton _____
2. Date the Landscape Documentation Package was approved by the City of Clayton _____
3. Date that a copy of the Water Efficient Landscape Worksheet (including the Water Budget Calculation) was submitted to the local water purveyor _____



Hydrozone Information Table

This worksheet is a required component of the Landscape Project Application. Please complete the hydrozone table(s) for each hydrozone. Use as many tables as necessary to provide the square footage of landscape area per hydrozone.

Hydrozone*	Zone or Valve	Irrigation Method**	Area (Square Feet)	% of Landscape Area
Choose an item.		Choose an item.		
Choose an item.		Choose an item.		
Choose an item.		Choose an item.		
Choose an item.		Choose an item.		
Choose an item.		Choose an item.		
Choose an item.		Choose an item.		
Choose an item.		Choose an item.		
Choose an item.		Choose an item.		
Choose an item.		Choose an item.		
Choose an item.		Choose an item.		
Choose an item.		Choose an item.		
Choose an item.		Choose an item.		
Choose an item.		Choose an item.		
Choose an item.		Choose an item.		
Choose an item.		Choose an item.		
Choose an item.		Choose an item.		
Total Square Footage				100%

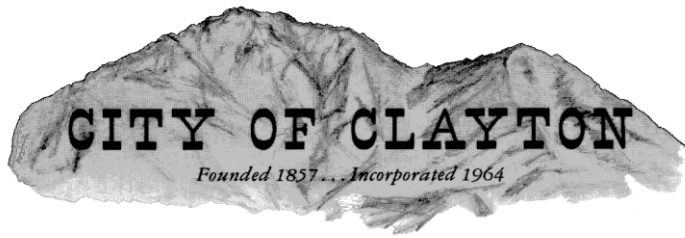
Summary Hydrozone Table		
Hydrozone*	Area (Square Feet)	% of Landscape Area
High Water Use		
Moderate Water Use		
Low Water Use		
SLA (High Water Use)		
	Total =	100%

***Hydrozone** (use WUCLOS)

- HW = High Water Use Plants, Water Features
- MW = Moderate Water Use Plants
- LW = Low Water Use Plants
- SLA = Special Landscape Area (HW)

****Irrigation Method**

- MS = Micro-spray
- S = Spray
- R = Rotor
- B = Bubbler
- D = Drip
- O = Other



Water Allowance Worksheet

This worksheet is a required component of the Landscape Project Application for projects that include a water feature with more than 100 square feet of total surface area or turf or other high water use plants that are not considered to be a "Special Landscape Area". In lieu of this worksheet, a Water Budget Calculator worksheet found on the State's website can be submitted: <http://www.water.ca.gov/wateruseefficiency/landscapeordinance/>

Reference Evapotranspiration (ETo)

Hydrozone # /Planting Description ^a	Plant Factor (PF)	Irrigation Method ^b	Irrigation Efficiency (IE) ^c	ETAF (PF/IE)	Landscape Area (sq. ft.)	ETAF x Area	Estimated Total Water Use (ETWU) ^d
Regular Landscape Areas							
				Totals	(A)	(B)	
Special Landscape Areas							
				1			
				1			
				1			
				Totals	(C)	(D)	
				ETWU Total			
				Maximum Allowed Water Allowance (MAWA)^e			

- a) **Planting Description** (Use WUCLOS) – High Water (HW), Moderate Water (MW), or Low Water (LW) Use Plants
- b) **Irrigation Method** – overhead spray, drip
- c) **Irrigation Efficiency** – 0.75 for overhead spray and 0.81 for drip
- d) **Estimated Total Water Use - ETWU** (Annual gallons required) = Eto X 0.62X ETFA X Area (.062 converts acre-inches/year to gallons/square foot/year)
- e) **Maximum Allowed Water Allowance - MAWA** (Annual Gallons Allowed) = (Eto)(0.62) [(ETAF X LA) + ((1-ETAF) X SLA)] (0.62 converts acre-inches/year to gallons/square foot/year, LA is total landscape area in square feet, SLA is total special landscape area in square feet, and ETAF is 0.55 for residential areas and 0.45 for non-residential areas)

ETAF Calculations

Regular Landscape Areas

All Landscape Areas

Total ETAF x Area	(B)
Total Area	(A)
Average ETAF*	B ÷ A

Total ETAF x Area	(B+D)
Total Area	(A+C)
Site wide ETAF	(B+D) ÷ (A+C)

*Average ETAF must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.