City of Pomona

User's Guide to City Landscape Water Conservation Requirements For Compliance with AB 325, Water-Efficient Landscape Ordinance

A Water Budget for Landscapes has been adopted.

The City of Pomona has adopted a landscaping ordinance that requires new landscapes to be designed to conserve water. A water budget approach has been approved as the method to assist designers and planners to achieve this goal. Currently the City of Pomona has adopted an annual water budget, also known as Maximum Applied Water Allowance or MAWA, of 26 gallons per square foot of landscaping. This is the total amount of water that can be applied on an annual basis to every square foot of landscape space in the project. Project applicants can pick up a copy of the complete City landscape water conservation ordinance from the Planning Department. An abbreviated version of this ordinance is provided below to help quickly guide you through the process.

• How to meet the water budget goal.

Three basic steps are involved. These are:

- Organize the landscape into hydrozones containing plants of similar water needs.
- Calculate the volume of water that is needed on an annual basis for each hydrozone.
- Total the volume of water of all hydrozones to get the Estimated Applied Water Use (EAWU) and check to see if it matches the adopted water budget (MAWA) of 26 gallons per square foot. Show these calculations on page 4 of this form for submittal with the working drawings.

• What needs to be submitted to the City?

In addition to other landscaping requirements, the applicant must provide at least two sets of working drawings that include:

- A landscape planting plan that illustrates the landscape areas
- All hydrozones and the amount of square feet for each zone must be calculated. Three hydrozone groups are typically used: Low, Moderate, and High.
- An irrigation schedule indicating the four season watering cycles throughout the year.

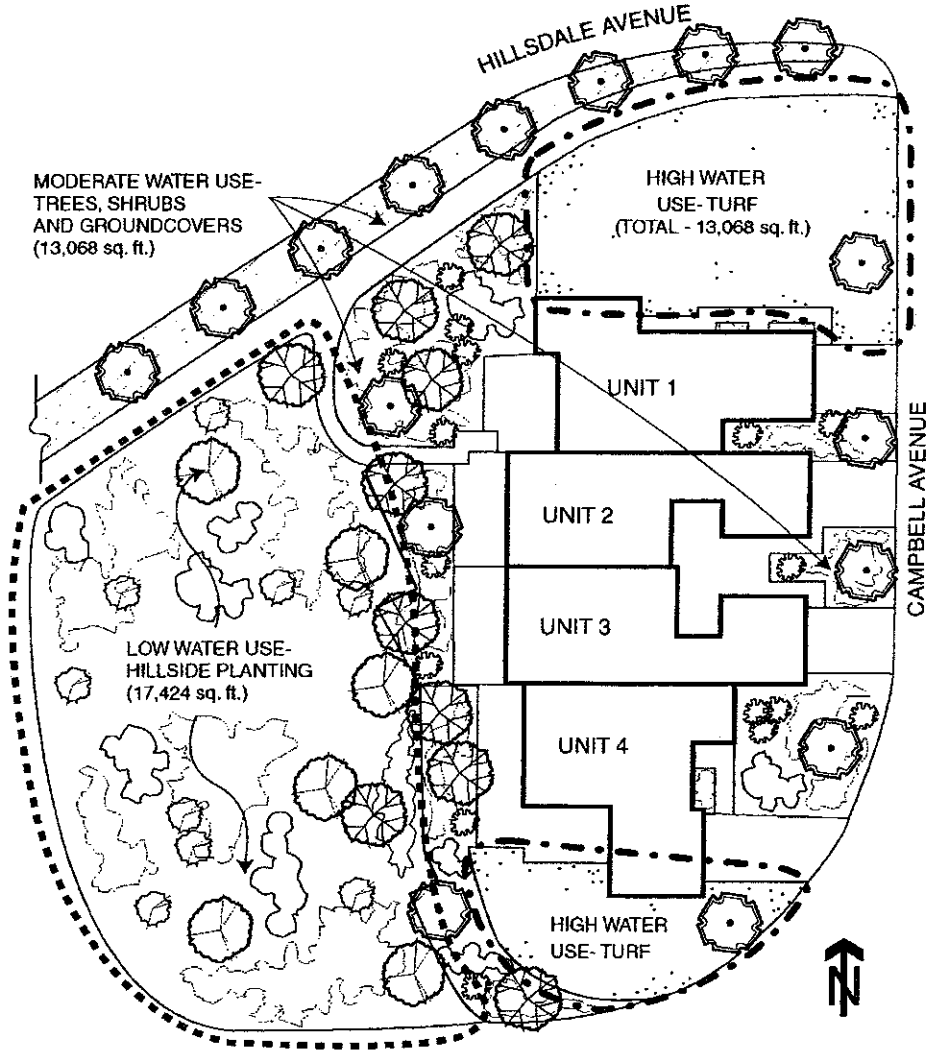
Quick Tips on meeting City requirements...

It is relatively simple to meet the City landscape water budget requirements. A checklist of tips are provided below to help you attain speedy compliance and approval.

1. Design landscapes with Low hydrozone areas that are greater than or equal in size to the amount of High hydrozone area used. The water budget will be met as long as High hydrozone areas do not exceed the total amount of Low hydrozone areas. In other words, for each square foot of High hydrozone used, there must be a square foot of Low hydrozone used. The remaining square feet may fall into the Moderate hydrozone area.
2. Develop irrigation schedules that meet the four season water needs as calculated in the City water budget limit (MAWA).

Sample Landscape Plan

	WATER USE ZONE 3	SCIENTIFIC NAME	QTY	SIZE	REMARKS
TREES	M	Liquidambar styraciflua	10	15 gal.	double-staked
	L	Quercus agrifolia	6	24" box	"
	M	Quercus virginiana	8	24" box	"
	M	Podocarpus gracilior	16	15 gal.	"
	L	Pinus halepensis	6	15 gal.	"
SHRUBS	M	Abelia 'Edward Goucher'	25	1 gal.	
	M	Rhaphiolepis indica	10	5 gal.	
	L	Arbutus unedo	5	15 gal.	
	L	Baccharis pilularis	25	1 gal.	
	L	Cistus spp.	35	1 gal.	
	L	Phormium tenax	18	1 gal.	
GROUND	M	Vinca major	Flats @ 15" o.c.		
COVER	L	Lonicera japonica 'Halliana'	Flats @ 30" o.c.		



Irrigation schedules must be programmed to provide water to each landscape hydrozone according to seasonal Eto measurements. Low hydrozone species require .3 (30%) of the seasonal Eto; Moderate hydrozone species require .5 (50%); High hydrozone plants require .8 (80%) of the seasonal Eto.

Sample Water Budget Calculation Sheet

This is the only form that needs to be submitted with each landscape project by applicant.

Project Site: *Housing Complex*

Project Reference Number: *AB 1245-95*

Project Location: *Inland, Southern California*

Landscape Architect/Designer: *Worldwide Design*

Note: AB 325 Guidelines provide a Maximum Applied Water Allowance/Water Budget for Landscape Areas of 26 gallons per square foot per year.

Project Calculations from worksheet:

1. **City Maximum Applied Water Allowance (MAWA)**
   This is the Water Budget for the project.

   Total Area to be landscaped in square feet (sq. ft.): 43,560 x **26 gal.** = **1,132,560 gallons/year**

2. **Estimated Applied Water Use (EAWU)**
   This is the estimated amount of water the project will require.

A. Low Hydrozone Area:	17,424 sq. ft. x **16 gal.**	=	**278,784 gals./yr.**
B. Moderate Hydrozone Area:	13,068 sq. ft. x **26 gal.**	=	**339,768 gals./yr.**
C. High Hydrozone Area:	13,068 sq. ft. x **36 gal.**	=	**470,448 gals./yr.**
Total Estimated Applied Water Use:		=	**1,089,000 gallons/yr.**
MAWA (1,132,560 gals./yr.) minus EAWU (1,089,000 gals./yr.)		=	**43,560 gals./yr.**

[**This project passes**. The Estimated Applied Water Use (EAWU) is less than the Maximum Applied Water Allowance (MAWA). Total Estimated Applied Water Use in gallons per year from item 2 above must be lower than City Maximum Applied Water Allowance in item 1 for project to pass.]

Written Water Conservation Statement:
(Provide a brief summary of how the project has been designed to achieve conservation and efficiency in water use.)

This landscape design groups plants with similar water needs together into distinct hydrozones of Low, Moderate, and High. The amount of turfgrass area is limited in size and offers passive recreational use. Each hydrozone is on a separate irrigation valve. A drip irrigation system and 4" - 6" layer of organic mulch is used on the hillside planting. An automatic controller with rain shut-off capability is used to efficiently irrigate the landscape and prevent waste of water.

Date: _____ **Prepared by:** _____

City of Pomona
Water Conservation Concept Statement

This is the only form that needs to be submitted with each landscape project by the applicant.

Project Site:

Project Reference Number:

Project Location:

Landscape Architect/Designer:

City of Pomona Maximum Applied Water Allowance / Water Budget for Landscape Areas:
26 gallons per square foot per year

Project Calculations from worksheet:

1. **City Maximum Applied Water Allowance (MAWA) / Water Budget**

   Total Area to be landscaped in square feet (s.f.): _____ x **26 gal.** = _____

2. **Estimated Applied Water Use (EAWU)**

   A. Low Hydrozone Area in s.f.: _____ x **16 gal.** = _____

   B. Moderate Hydrozone Area in s.f.: _____ x **26 gal.** = _____

   C. High Hydrozone Area in s.f.: _____ x **36 gal.** = _____

   Total Estimated Applied Water Use in gallons per year: _____

Total Estimated Applied Water Use (EAWU) in gallons per year from item 2 above must be lower than City Maximum Applied Water Allowance in item 1 for project to pass.

■ Note: This is a constant water need value calculated for this hydrozone for the City of Pomona. See complete City ordinance for water budget definitions and formulas used to calculate the values adopted by the City.

Written Water Conservation Statement:

(Provide a brief summary of how the project has been designed to achieve conservation and efficiency in water use.)

Date: _____ **Prepared by:** _____