

**Intent**

Design landscape features to avoid invasive species and minimize demand for water and synthetic chemicals.

Requirements**Prerequisites**

2.1 **No invasive plants.** Introduce no invasive plant species into the landscape.

Note: Invasive plant species vary by region. Consult the local Cooperative Extension Service or state agencies. A list of regional resources is available from the U.S. Department of Agriculture, at www.invasivespeciesinfo.gov/unitedstates/state.shtml. Not all nonnative species are considered invasive. Note: Invasive plant species vary by region. Consult the local Cooperative Extension Service or state agencies. A list of regional resources is available from the U.S. Department of Agriculture, at www.invasivespeciesinfo.gov/unitedstates/state.shtml. Not all nonnative species are considered invasive.

Credits

Note: Points shown below are for homes that are fully landscaped. A project that has not completed the designed landscaping may earn up to 50% of the points for each credit as long as 50% or more of the designed landscaping is completed upon certification. In this case, 100% completion of the landscaping must be required by homeowner association or other rules within a specific time period not to exceed one year after occupancy. Erosion controls and soil stabilization measures must be robust enough to be effective for one year. The builder or project team must also develop a landscaping plan that meets the requirements in SS 2 and provide it to the homeowner.

2.2 **Basic landscape design** (2 points). Meet all of the following requirements for all designed landscape softscapes:

- Any turf must be drought-tolerant.
- Do not use turf in densely shaded areas.
- Do not use turf in areas with a slope of 25% (i.e., 4:1 slope).
- Add mulch or soil amendments as appropriate. *Mulch* is defined as a covering placed around plants to reduce erosion and water loss and to help regulate soil temperature. In addition, upon decomposition, organic mulches serve as soil amendments. The type of mulch selected can affect soil pH.
- All compacted soil (e.g., from construction vehicles) must be tilled to at least 6 inches.

AND/OR

2.3 **Limit conventional turf** (maximum 3 points, as specified in **Table 1**). Limit the use of conventional turf in the designed landscape softscapes.

Table 1. Limited Conventional Turf

Percentage of designed landscape softscape area that is conventional turf	Points
41–60%	1
21–40%	2
20% or less	3

AND/OR

2.4 **Drought-tolerant plants** (maximum 2 points, as specified in **Table 2**). Install drought-tolerant plants.

Table 2. Drought-Tolerant Plants

Percentage of installed plants that are drought-tolerant	Points
45–89%	1
90% or more	2

OR

2.5 **Reduce overall irrigation demand by at least 20%** (maximum 6 points, as specified in **Table 3**).

to reduce overall irrigation demand by at least 25% (maximum 6 points, as specified in Table 3). Design the landscape and irrigation system to reduce overall irrigation water usage. The estimates must be calculated and prepared by a landscape professional, biologist, or other qualified professional using the method outlined below.

Table 3. Reduction in Water Demand

Reduction in estimated irrigation water usage	SS 2.5 points	WE 2.3 points	Total points
20–24%	2	0	2
25–29%	3	0	3
30–34%	4	0	4
35–39%	5	0	5
40–44%	6	0	6
45–59%	6	1	7
50–54%	6	2	8
55–59%	6	3	9
60% or more	6	4	10

Method for calculating reduction in irrigation demand

Step 1. Calculate the baseline irrigation water usage:

$$\text{Baseline Usage} = \text{Landscaped Area} * ET_0 * 0.62$$

where ET_0 = Baseline Evapotranspiration Rate (available from local and state Departments of Agriculture)

Step 2. Calculate the design case irrigation water usage:

$$\text{Design Case Usage} = (\text{Landscaped Area} * ET_L \div IE) * CF * 0.62$$

where $ET_L = ET_0 * K_L$ and $K_L = K_S * K_{MC}$. Refer to Tables 4 and 5 for values for K_S and K_{MC} , and to Table 6 for values for IE. For CF, use estimated value based on manufacturer’s specifications for percentage water savings.

Step 3. Calculate the percentage reduction in irrigation water usage:

$$\text{Percentage Reduction} = (1 - \text{Design Case Usage} \div \text{Baseline Usage}) * 100$$

Step 4. Refer to Table 3, above, to determine points earned.

Table 4. Species Factor

Vegetation type	Species factor (KS)		
	Low	Average	High
Trees	0.2	0.5	0.9
Shrubs	0.2	0.5	0.7
Groundcover	0.2	0.5	0.7
Turf	0.6	0.7	0.8

Table 5. Microclimate Factor

Example microclimate impacts	Microclimate factor (KMC)		
	Low	Average	High
Shading	0.5	0.8	1.0
High sun exposure	1.0	1.2	1.5
Protection from wind	0.8	0.9	1.0
Windy area	1.0	1.2	1.5

Table 6. Irrigation Efficiency

Irrigation type	Irrigation efficiency (IE)	
	Low	High
Fixed spray	0.4	0.6
Impact and microspray	0.5	0.7
Rotors	0.6	0.8
Multistream rotators	0.6	0.8

Multistream rotators	0.6	0.8
Low volume and point source (e.g., drip)	0.7	0.9