

## Herbaceous Plant Care

### **Description**

Properly plant and maintain herbaceous plants to maximize plant health and conserve water.

This BMP is directly adapted from *Flower Management Before, During and Following Drought* by J.E. Klett, J L. Vickerman, and C. Wilson, as posted on the GreenCO web site (<http://www.greenco.org/downloadables/Drought%20Flower%20Management.pdf>).

BMP Type			
Design			X
Installation			X
Maintenance/Operation			X
Green Industry Relevance			
ASLA	X	GCC	X
ALCC	X	ISA	X
CALCP	X	RMSGGA	
CGGA	X	WFC	
CNA	X		

### **Basic Practice Guidelines**

1. Prepare soil before planting by loosening it to 12 inches. If a heavy clay or sandy soil, add 2 to three inches of compost on the soil surface and then till in to a 12-inch depth.
2. Apply one to two inches of organic mulch between flowers to reduce evaporation and control water-using weeds. This practice is particularly critical during drought conditions, but helps to conserve water under all conditions.
3. Fertilizing perennials is generally not needed if proper soil preparation is done prior to planting. Fertilizer causes lush growth that requires more water. If fertilization is needed, a slow release fertilizer can be applied in the spring.
4. Moderate fertilization for bedding plants (annuals) is recommended either in liquid or granular form or a combination of both.
5. Annual and perennial flowers under water stress will have drooping leaves and a lack of blooms. Foliage often appears gray-green in color. Water when signs of stress become obvious. Apply irrigation in the evening or early morning to minimize evaporation. Avoid watering between the hours of 10 A.M. and 6 P.M.
6. Overhead spray irrigation is the least water-wise method because much water is lost to evaporation and wind drift. Soaker hoses or drip irrigation are more efficient because they deliver water to the ground level near roots. Hand watering is another alternative that maximizes delivery of water to the soil and roots.
7. When selecting plants, be aware that some perennials are more efficient at utilizing water than others. Choose plants to match the site conditions and consider plants with lower water needs.
8. Group plants with similar water needs together and water accordingly. (*See the Plant Selection and Placement BMP for more information.*) See Appendix E for water requirements of various plants in different portions of Colorado.

9. Gray-leaved annuals and perennials are often more drought tolerant. Spring bulbs are drought avoiders as they complete their life cycle prior to the onset of hot weather.

### **Regional or Industry Considerations/Adaptations**

1. When water restrictions are expected or mild restrictions are in place, annuals can be watered two to three times per week if approximately one inch of water is applied during each irrigation cycle. Water perennials deeply (one inch of water or more) two times per week during hot, dry periods.
2. During drought restrictions when no watering is allowed, annuals and perennials should not be planted.
3. Following removal of drought restrictions, it is important to resume watering. Water perennials well in the fall and monthly during dry winters with no snow cover to ensure survival during the dormant season. Mulching the crowns of dormant perennials will prevent frost heaving and conserve moisture in the plant through the winter.
4. Some drought-tolerant annuals include:

Annual Fountain Grass – (*Pennisetum setaceum*)  
Bachelor Button – (*Centaurea cyanus*)  
Coreopsis – (*Coreopsis tinctoria*)  
Cosmos – (*Cosmos sulphureus*)  
Creeping Zinnia – (*Sanvitalia procumbens*)  
Cup Flower – (*Nierembergia hippomanica* var. *violacea*)  
Dusty Miller – (*Senecio cineraria*)  
Gazania – (*Gazania rigens*)  
Globe Amaranth – (*Gomphrena globosa*)  
Johnny-Jump-Up – (*Viola tricolor*)  
Mealy Cup Sage – (*Salvia farinacea*)  
Mexican Sunflower – (*Tithonia rotundifolia*)  
Moss Rose – (*Portulaca grandiflora*)  
Periwinkle – (*Catharanthus roseus*)  
Rocket Larkspur – (*Conslida ambigua*)  
Rudbeckia – (*Rudbeckia hirta* var. *pulcherrima*)  
Spider Flower – (*Cleome hassleriana*)  
Sweet Alyssum – (*Lobularia maritima*)

5. Some drought tolerant perennials include:

Artemisia – (*Artemisia* species)  
Blanket Flower – (*Gaillardia x grandiflora*)  
Blue Fescue – (*Festuca cinerea*)  
Creeping Phlox – (*Phlox subulata*)  
Creeping Potentilla – (*Potentilla neumanniana*)

German Statice – (*Goniolimon tataricum*)  
Globe Thistle – (*Echinops ritro*)  
Hens and Chicks – (*Sempervivum tectorum*)  
Ice Plant – (*Delosperma* species)  
Lambs Ear – (*Stachys bysantina*)  
Lavender Cotton – (*Santolina chamaecyparissus*)  
Little Bluestem – (*Schizachyrium scoparium*)  
Oriental Poppy – (*Papaver orientale*)  
Ozark Primrose – (*Oenothera missouriensis*)  
Penstemon – (*Penstemon* species)  
Plumbago – (*Ceratostigma plumbaginoides*)  
Poppy Mallow – (*Callirhoe involucrata*)  
Prairie Coneflower – (*Ratibida columnifera*)  
Prairie Dropseed – (*Sporobolus heterolepis*)  
Purple Coneflower – (*Echinacea purpurea*)  
Russian Sage – (*Perovskia atriplicifolia*)  
Snow-in-Summer – (*Cerastium tomentosum*)  
Stonecrop – (*Sedum* species)  
Yarrow – (*Achillea* species)

### **Key References**

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