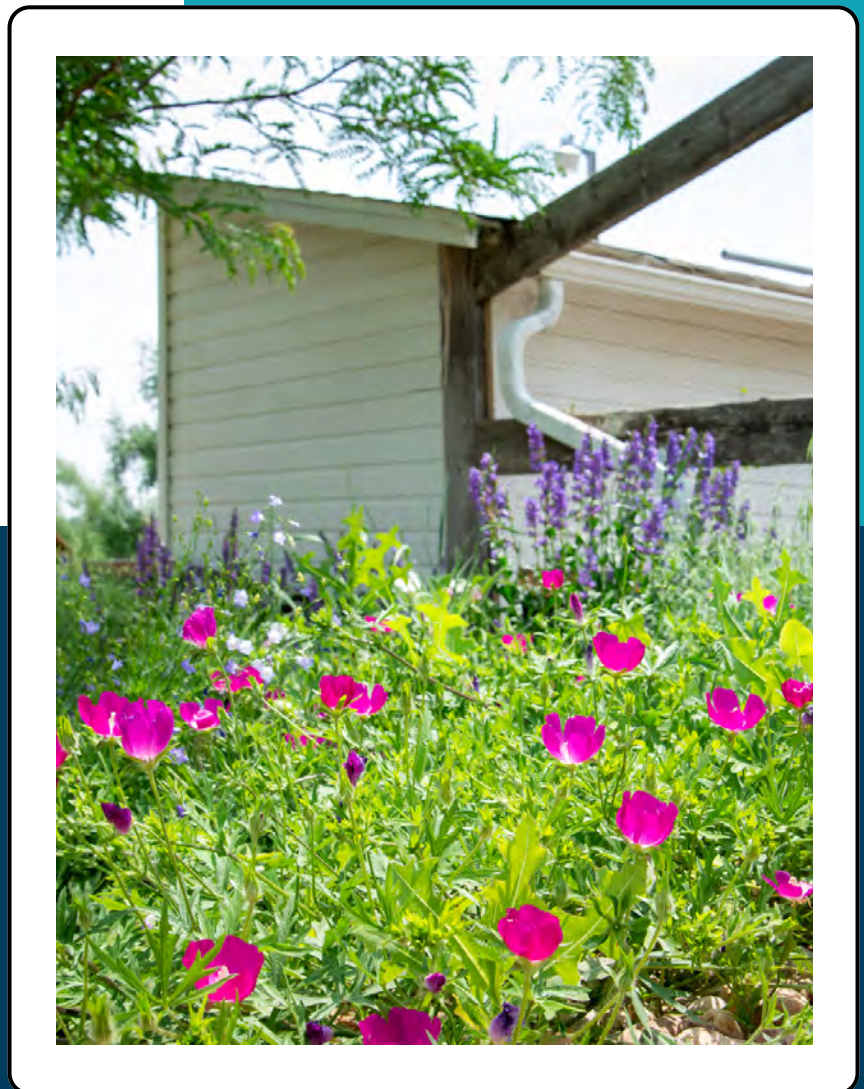


OCTOBER 2022

RESIDENTIAL RAINGARDEN PILOT PROJECT

PART SHADE PLANTING LAYOUT: 2



PRODUCED BY



**COLORADO
WATER CENTER**
COLORADO STATE UNIVERSITY



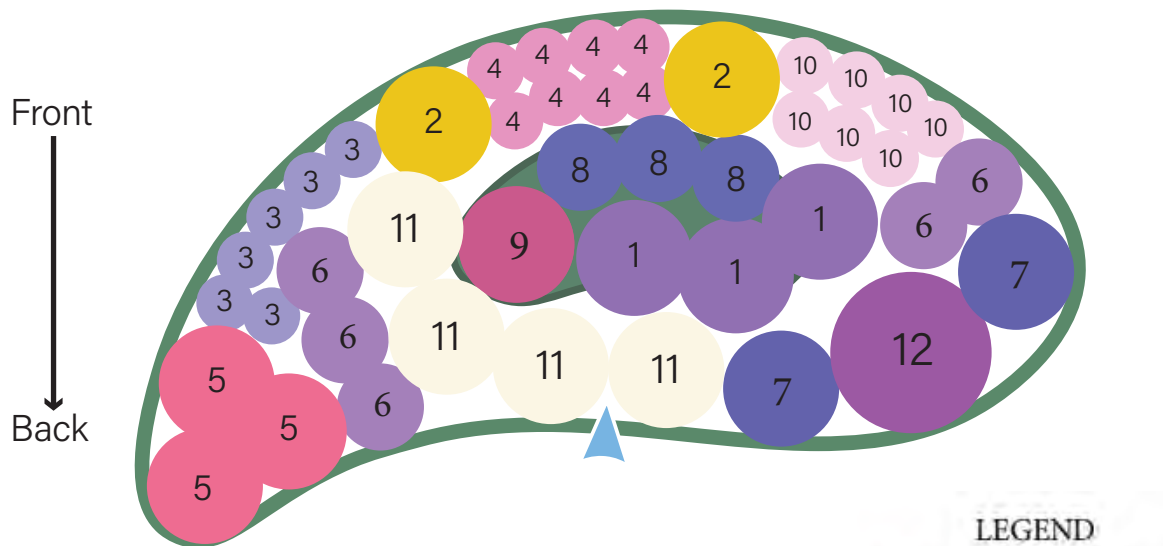
COLORADO
Colorado Water
Conservation Board
Department of Natural Resources






**HORTICULTURE AND
LANDSCAPE ARCHITECTURE**
COLORADO STATE UNIVERSITY

Rain Garden - Partial Shade

Layout 2 - 100ft²



LEGEND

-  Point of Water Entrance
-  Low Point of Garden
-  Rain Garden

- 1 Beebalm - *Monarda fistulosa*
- 2 Goldenrod - *Solidago sp.*
- 3 Harebells - *Campanula rotundifolia*
- 4 Prairie Smoke - *Geum triflorum*
- 5 Purple Coneflower - *Echinacea purpurea*
- 6 Purple prairie clover - *Dalea purpurea*
- 7 Rocky Mountain Penstemon - *Penstemon strictus*
- 8 Spiderwort - *Tradescantia occidentalis*
- 9 Swamp milkweed - *Asclepias incarnata*
- 10 Tufted Evening Primrose - *Oenothera caespitosa*
- 11 White yarrow - *Achillea lanulosa*
- 12 Winecups/poppy mallow - *Callirhoe involucrata*

PARTIAL SHADE 2 SUBSTITUTION LIST

All Plants on list are Native to the Rocky Mountain/Front Range Region

Layout Number	Original Plant	Subsitution	Tier	Dimensions	Color
1	Beebalm	Rose Vervain (<i>Glandularia canadensis</i>)	top/mid	1ft tall, 1.5ft spread	blue/purple fragrant flowers, can become a groundcover
		Rocky Mountain Columbine (<i>Aquilegia caerulea</i>)	mid	1.5ft tall, 1ft spread	Light blue and white flowers
2	Goldenrod	Cutleaf Coneflower (<i>Rudbeckia laciniata</i>)	mid	3ft tall, 2ft spread	large yellow coneflowers
		Switchgrass (<i>Panicum virgatum</i>)	top	2-5ft tall, 2-3ft spread	ornamental grass with red flower panicles
3	Harebells	Showy Fleabane (<i>Erigeron speciosus</i>)	mid	1.5ft tall, 1.5ft spread	lavendar, aster-like flowers with yellow center
		White Yarrow (<i>Achillea millefolium</i>)	top	1-2ft tall, 1.5ft spread	white flowers, finely textured foliage
4	Prairie Smoke	Rose Vervain (<i>Glandularia canadensis</i>)	top/mid	1ft tall, 1.5ft spread	blue/purple fragrant flowers, can become a groundcover
		Rocky Mountain Columbine (<i>Aquilegia caerulea</i>)	mid	1.5ft tall, 1ft spread	Light blue and white flowers
5	Purple Coneflower	Great Blue Lobelia (<i>Lobelia siphilitica</i>)	top	2ft tall, 2ft spread	small, blue/purple flowers in a tall panicle
		Rocky Mountain Penstemon (<i>Penstemon strictus</i>)	top	2ft tall, 2ft spread	purple/blue flowers
6	Purple Prairie Clover	Wild Beebalm (<i>Monarda fistulosa</i>)	top/mid	2ft tall, 2ft spread	purple or pink flowers
		Rocky Mountain Penstemon (<i>Penstemon strictus</i>)	top	2ft tall, 2ft spread	purple/blue flowers
7	Rocky Mountain Penstemon	Great Blue Lobelia (<i>Lobelia siphilitica</i>)	top	2ft tall, 2ft spread	small, blue/purple flowers in a tall panicle
		Cutleaf Coneflower (<i>Rudbeckia laciniata</i>)	mid	3ft tall, 2ft spread	large yellow coneflowers
8	Spiderwort	Harebells (<i>Campanula rotundifolia</i>)	mid/low	1.5ft tall, 10" spread	light blue, ballon-like flower with delicate foliage
		Rocky Mountain Iris (<i>Iris missouriensis</i>)	low	1.5ft tall, 10" spread	Blue flowers, bulbs resprout
9	Swamp Milkweed	American Spikenard (<i>Maianthemum racemosum</i>)	mid/low	2.5ft tall, 2ft spread	wavy, ovate foliage with pinkish white glowers that smell like roses
		Purple Monkey Flower (<i>Mimulus lewisii</i>)	low	2.5ft tall, 2ft spread	fuschia snap dragon-like flowers with yellow throats
10	Tufted Evening Primrose	Winecups (<i>Callirhoe involucrata</i>)	top/mid	10" tall, 2-3ft spread	GROUNDCOVER, fuschia flowers
		Sea Pink (<i>Armeria maritima</i>)*	top	1ft tall, 1ft spread	pink globes of flowers, *naturalized
11	White Yarrow	Western Marsh Marigold (<i>Caltha leptosepala</i>)	low	10" tall, 1ft spread	white flowers with yellow centers
		Queen Cup (<i>Clintonia uniflora</i>)	mid	10" tall, 10" spread	white, 6 petal delicate flower forming a purple fruit eaten by birds
12	Winecups	Western Columbine (<i>Aquilegia formosa</i>)	mid	1.5ft tall, 2ft spread	red and yellow penduous flowers
		Switchgrass (<i>Panicum virgatum</i>)	top	2-5ft tall, 2-3ft spread	ornamental grass with red flower panicles

Tiers:

Top: lowest water requirements, planted along the garden berm

Mid: average water requirement, planted on the sloping sides of the garden

Low: higher water requirements, planted in the basin, roots must withstand wet conditions up to 12 hours

Part Shade Plant Guide Layout 2



1. Beebalm (*Monarda fistulosa*)

Mature Height	2-4ft tall and 2-3ft spread
Care & Water	Once established, water once per week. Deadhead to promote blooming.
Flowering Time	May-September
Hardiness	Zones 3-9, plant 20" apart
Special Features and Notes	Attracts bees, butterflies, hummingbirds, and other pollinators. Deer and rabbit resistant. Prone to powdery mildew when overwatered.



2. Goldenrod (*Solidago spp*)

Mature Height	3-5ft tall and 3-4ft spread
Care & Water	Once established, water once per week. Deadhead to promote more blooms.
Flowering Time	August-September
Hardiness	Zones 3-8, plant 28" apart
Special Features and Notes	Attracts bees, butterflies, beetles, and birds. Deer resistant. Spreads through rhizomes and can be divided to propagate.



3. Harebells/Bluebells (*Campanula rotundifolia*)

Mature Height	1ft tall and 1ft spread, stems are weak and the plant often bends over.
Care & Water	Once established, water once per week.
Flowering Time	June-September, periwinkle color flowers.
Hardiness	Zones 2-7, plant 6" apart
Special Features	Attracts hummingbirds. When grown from seed, the plants start blooming

Part Shade Plant Guide Layout 2



and Notes	the second year.
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4. Prairie Smoke ([Geum triflorum](#))

Mature Height	1ft tall and 1ft spread
Care & Water	Once established, water once per week.
Flowering Time	May-July
Hardiness	Zones 3-8, plant 10" apart
Special Features and Notes	Looks like mini truffula trees! Attracts butterflies and is deer resistant. Rabbits like to eat the blooms.



5. Purple Coneflower ([Echinacea purpurea](#))

Mature Height	2-4ft tall and 2ft wide, upright growth habit.
Care & Water	Once established, water once per week.
Flowering Time	July-September
Hardiness	Zones 3-9, plant 18" apart
Special Features and Notes	Attracts pollinators while blooming, after flowers are finished the seed heads then attract songbirds. Deer resistant.



6. Purple Prairie Clover ([Dalea purpurea](#))

Mature Height	1-3ft tall and 1-2ft spread
Care & Water	Once established, water once per week.
Flowering Time	July-August

Part Shade Plant Guide Layout 2



Hardiness	Zones 3-8, plant 12" apart
Special Features and Notes	They bloom from bottom to top. Nitrogen fixer adding nitrogen back into the soil. Attracts bees, birds, and butterflies. Deer and rabbit resistant.

7. Rocky Mountain Penstemon (*Penstemon strictus*)

Mature Height	2-3ft tall and 2-3ft spread
Care & Water	Once established, water once per week.
Flowering Time	Early June
Hardiness	Zone 3-8, plant 20" apart
Special Features and Notes	Evergreen perennial that attracts hummingbirds, bees, and other pollinators. Spires of deep purple/indigo flowers above mat of foliage.



8. Spiderwort (*Tradescantia occidentalis*)

Mature Height	1-2ft tall with 1ft spread
Care & Water	Once established, water once per week.
Flowering Time	April-September
Hardiness	Zones 4-9, plant 10" apart
Special Features and Notes	Each flower only lasts one day, the plant blooms in succession. Attracts native bees. Deer resistant.



9. Swamp Milkweed (*Asclepias incarnata*)

Mature Height	4-5ft tall with 2-3ft spread
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Part Shade Plant Guide Layout 2



Care & Water	Once established, water once per week.
Flowering Time	June-September
Hardiness	Zones 3-11, plant 30" apart
Special Features and Notes	Toxic to dogs, cats, and horses if consumed. Attracts butterflies (especially Monarchs) and hummingbirds. Deer resistant.

9. Tufted Evening Primrose (*Oenothera caespitosa*)

Mature Height	1ft tall with 2ft spread
Care & Water	Once established, water once per week.
Flowering Time	April-August
Hardiness	Zones 4-8, plant 24" apart
Special Features and Notes	Delicate foliage with large flowers that bloom in the afternoon and close in the morning, the withered petals turn pink. Attracts birds.



10. White Yarrow (*Achillea lanulosa*)

Mature Height	2-3ft tall with 2ft spread
Care & Water	Once established, water once per week.
Flowering Time	June-mid September
Hardiness	Zones 2-9, plant 18" apart
Special Features and Notes	Flowers and leaves (when crushed) have a pleasant aroma. White yarrow is the original native variety but other varieties bloom yellow, pink, or red.

Part Shade Plant Guide Layout 2

11. Winecups/Poppy Mallow (*Callirhoe involucrata*)

Mature Height	6in-1ft tall with 3ft spread
Care & Water	Once established, water once per week.
Flowering Time	March-June
Hardiness	Zones 4-8, plant 3ft apart
Special Features and Notes	Ornate foliage that is attractive when not in bloom. Attracts butterflies and hummingbirds.

