Planting a Rain Garden

Green Gardens Clean Water

A rain garden is a garden area incorporating plants and other features to **slow, capture, and infiltrate** rainfall runoff back into the ground. Rain gardens are an important tool in protecting local watersheds from flooding and pollution during heavy rain events.

Thoughtfully planted, rain gardens can support butterflies, birds, and bees too!

How Big Should it Be?

Calculate the area of the roof that drains to the proposed site. Assuming you're designing to capture standard precipitation of 1", use the formula below to determine the size needed for the garden:
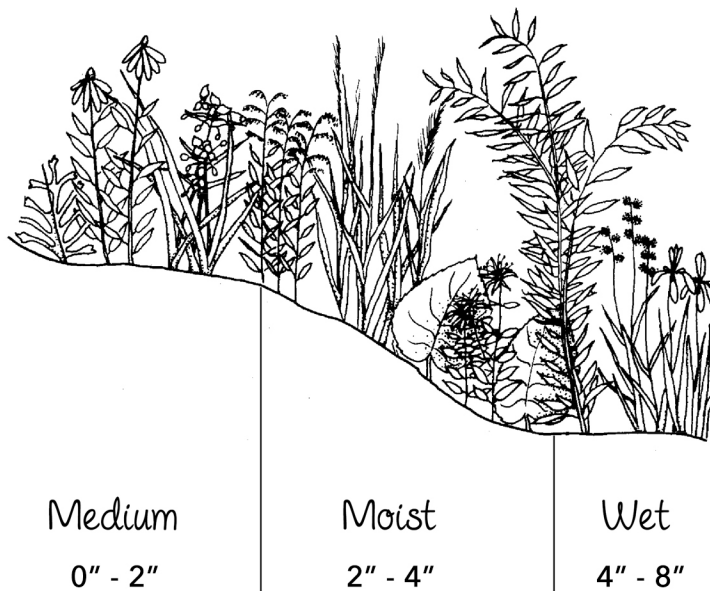
Runoff Volume = roof area x precipitation
(Ex. 1000sf x 1" = 1000" of rainfall during storm)

Garden Depth = usually 4"-8"

Divide the **runoff volume** by the **ponding depth** to determine the garden size.

About Zones

Your rain garden will be excavated to varying depths. Plants should be selected that can tolerate the moisture conditions for each zone.

Native Plants are a Natural Choice

Native plants are adapted to a wide range of soil conditions. Many species can tolerate occasional flooding while still being drought tolerant. Native plants achieve this by developing deep, extensive root systems that infiltrate water deep into the ground.
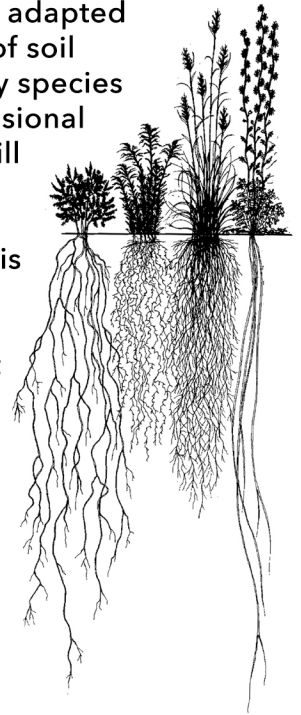
Image:
nrcs.usda.gov

Medium	Moist	Wet
0" - 2"	2" - 4"	4" - 8"

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College of Agricultural Sciences

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Rain Garden Plant Suggestions

This list of plant selections includes native plants arranged by soil moisture zone. For best results select a range of plants with various bloom times. Be sure to include grasses to slow water movement through the garden and infiltrate it back into the soil. See next page for a sample garden design.

Medium

			Bloom Time	Avg Height
~	Bergamot / bee balm	*Monarda fistulosa*	Jul - Sep	3'
	Blue False Indigo	*Baptisia australis*	May - Jun	4'
~	Culver's Root	*Veronicastrum virginicu*	Jul - Aug	4'
	Dense blazingstar	*Liatrus spicata*	Aug - Sep	4'
	Foxglove Beardtonge	*Penstemon digitalis*	May - Jun	2'
~	Golden Alexander	*Zizia aurea*	May - Jun	2'
~	Great Blue Lobelia	*Lobelia siphilitica*	Jul - Sep	2'
	Heath Aster	*Aster ericoides*	Aug - Oct	2'
~	Jacob's Ladder	*Polemonium reptans*	May - Jun	1'
~	Joe Pye Weed	*Eupatorium purpureum*	Aug - Sep	6'
~	Ohio Spiderwort	*Tradescantia ohiensis*	Jun - Jul	1'
~	Orange Coneflower	*Rudbeckia fulgida*	Jul - Sep	4'
~	Purple Coneflower	*Echinacea purpurea*	Jul - Sep	4'
	Royal Catchfly	*Silene ternatum*	Jul - Aug	3'
	Sky Blue Aster	*Aster azureus*	Aug - Oct	3'
*	Wild Blue Phlox	*Phlox divaricata*	May - Jun	1'
	Wild Petunia	*Ruellia humillis*	Jun - Aug	1'
~	Woodland Sunflower	*Helianthus strumosus*	Aug - Oct	4'

Moist

			Bloom Time	Avg Height
*	Wild Blue Phlox	*Phlox divaricata*	May - Jun	1'
~	Golden Alexander	*Zizia aurea*	May - Jun	2'
~	Mistflower	*Eupatorium coelestinu*	Jul - Oct	1'
~	Great Blue Lobelia	*Lobelia siphilitica*	Jul - Sep	2'
~	Bergamot / bee balm	*Monarda fistulosa*	Jul - Sep	3'
	Ironweed	*Vernonia fasciculata*	Jul - Sep	5'
	Dense blazingstar	*Liatrus spicata*	Aug - Sep	4'
	New England Aster	*Aster novae-angliae*	Aug - Oct	5'
	Sneezeweed	*Helenium autumnale*	Aug - Sep	5'

Wet

			Bloom Time	Avg Height
	Blue Flag Iris	*Iris versicolor*	May - Jun	2'
	Common Rush	*Juncus effusus*	Grass	2'
	Prairie Cordgrass	*Spartina pectinata*	Grass	7'
~	Golden Alexander	*Zizia aurea*	May - Jun	2'
	Swamp Milkweed	*Asclepias incarnata*	Jun - Jul	5'
~	VA Mountain Mint	*Pycnanthemum virginia*	Jul - Sep	3'
	Blue Vervain	*Verbena hastata*	Jul - Sep	5'
	Sneezeweed	*Helenium autumnale*	Aug - Sep	5'

*requires some shade   **~shade tolerant**

Blue Mistflower (x5)
Eupatorium coelestinum

Foxglove Beardtongue (x6)
Penstemon digitalis

Virginia Mountain Mint (x1)
Pycnanthemum virginiana

New England Aster (x3)
Symphyotrichum novae-angliae

Common Rush (x15)
Juncus effusus

Prairie Cordgrass (x3)
Spartina pectinata

Joe Pye Weed (x3)
Eutrochium purpureum

1/2" = 1SF
170 Sq. Ft.

= Bloom Color

Dense Blazing Star (x6)
Liatrus spicata

New York Ironweed (x6)
Vernonia fasciculata

Golden Alexander (x4)
Zizia aptera

Helen's Flower (x3)
Helenium autumnale

Swamp Milkweed (x11)
Helenium autumnale

Orange coneflower (x2)
Rudbeckia fulgida

Wild bergamot (x7)
Monarda fistulosa

Inflow

Outflow