

# Creating a Tiered Garden

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# Resources

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[extension.umd.edu/hgic](https://extension.umd.edu/hgic)



[extension.umd.edu/learn/ask-gardening](https://extension.umd.edu/learn/ask-gardening)



[marylandgrows.umd.edu](https://marylandgrows.umd.edu)

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[extension.umd.edu/mg](https://extension.umd.edu/mg)



LOCAL  
PROGRAMS

MASTER GARDENER  
HANDBOOK



# What is a tiered garden?

- A way to manage a slope
- Can be very attractive
- Tiers prevent rainwater from flowing quickly down a hill
- Keeps soil intact
- Plants absorb the water
- Can be simple or elaborate



# How many tiers?

Depends on slope- simple to determine  
Each terrace should be no higher than 2ft.  
and no longer than 5 ft.

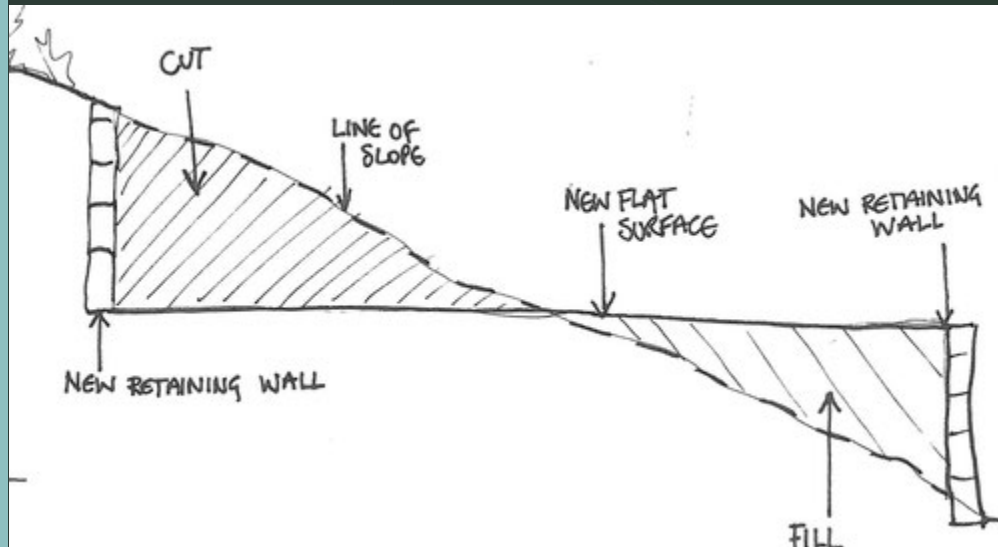


Diagram of the cut and fill method of moving soil to level a sloping garden.





# MG Demonstration Garden - tiered garden example



Located at:  
30 Duke Street  
Prince Frederick



# The issues

- Storm Water run off - 3 parking lots
- Stormwater jumping rock swale
- Erosion of hillside
- Wet area in lower gardens





# Identifying the cause

- Swale contains 10 years of sediment debris
- More intense storms - large volume in short period



## The Plan – Strategies to reduce runoff

- Stabilize slope- erosion cloth and cover crop
- Locate original swale and retention pond plans
- Consult with Extension Coordinator and Sea Grant Educator
- Identify source of failed infrastructure - clogged swale





# Planning the garden



Determining number of tiers - based on slope

Creating a list of materials and budget - total budget - \$780

Determining what plants to install - base on soil texture, light

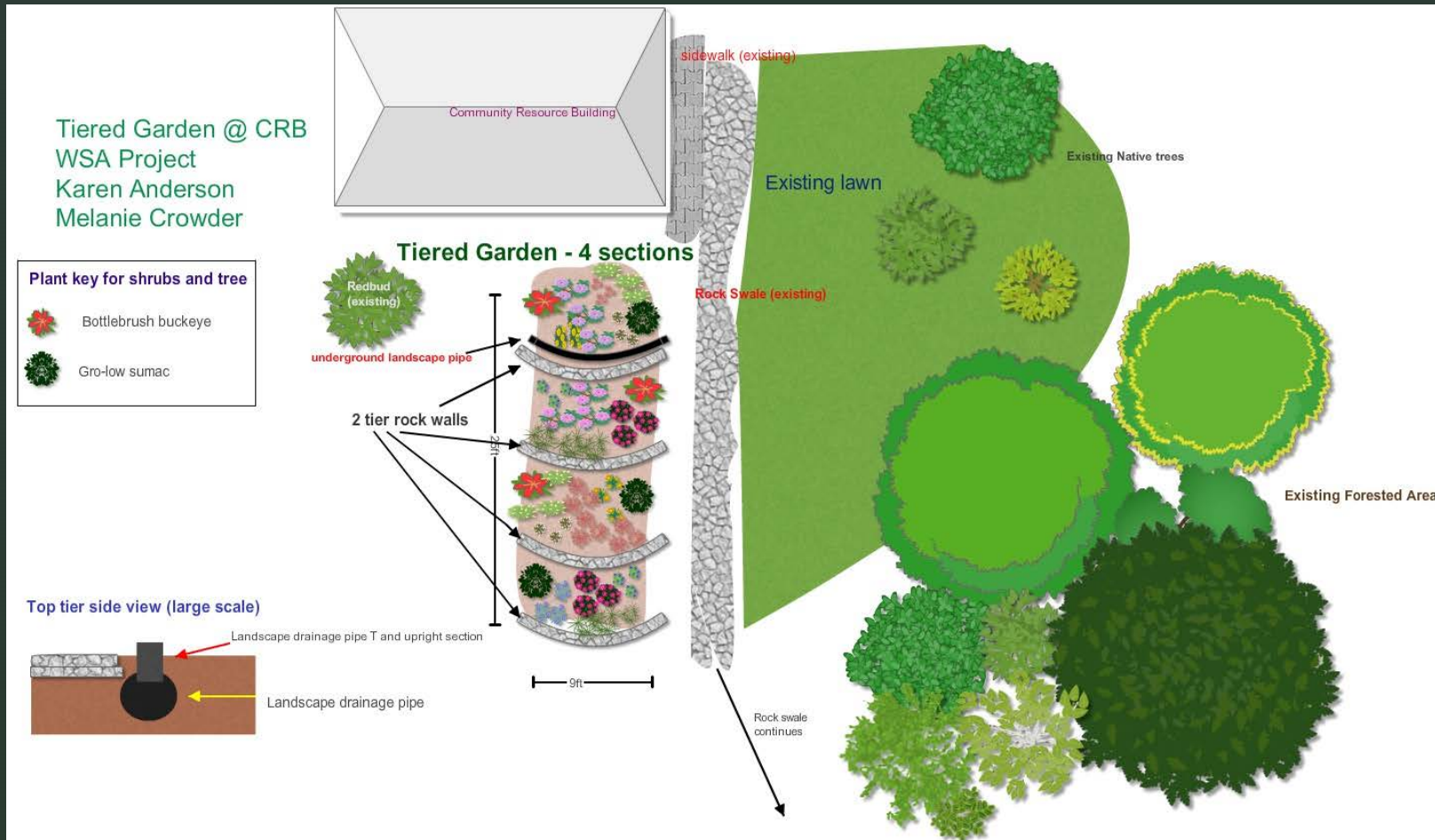
Ordering materials

Creating a simple design

Identify sources of funding

Identified steps/phases to accomplish the project

# Design of the Tiered Garden



Garden design plan:

- 4 tiers
- Top tier with drainage
- Retaining block “walls”



# Supply list



- Outdoor landscaping drain pipe, t-connector, end caps, & couplers
- Pea gravel
- Retaining wall block
- Plants - shrubs and perennials



Shrub	<i>Aesculus parviflora</i>	Bottlebrush buckeye
Shrub	<i>Rhus aromatica</i> 'gro-low'	Fragrant sumac
Herbaceous Perennial	<i>Zizia aurea</i>	Golden Alexanders
Herbaceous Perennial	<i>Eutrochium dubium</i> 'Baby Joe'	Joe Pye weed - baby joe variety
Herbaceous Perennial	<i>Asclepias Incarnata</i>	Swamp milkweed
Herbaceous Perennial	<i>Monarda fistulosa</i>	Wild bergamot
Herbaceous Perennial	<i>Penstemon digitalis</i>	Foxglove beardtongue
Herbaceous Perennial	<i>Conoclinium coelestinium</i>	Blue mistflower
Ground cover (ferns, sedges, etc.)	<i>Packera aurea</i>	Golden groundsel
Ground cover (ferns, sedges, etc.)	<i>Geranium maculatum</i>	Wild geranium
Ground cover (ferns, sedges, etc.)	<i>Carex pensylvanica</i>	Pennsylvania sedge
Grasses	<i>Schyzachyrium scoparium</i>	Little bluestem



### Plant List

- All native
- Adapted to wet or dry
- Variety of colors, bloom times, and heights



# Phase 1 Rock swale cleanup





- Master Gardeners Bay-Wise Program  
Working with Scout Troop and Watershed Stewards

Resources  
Calvert County Extension Office

<https://extension.umd.edu/locations/calvert-county>

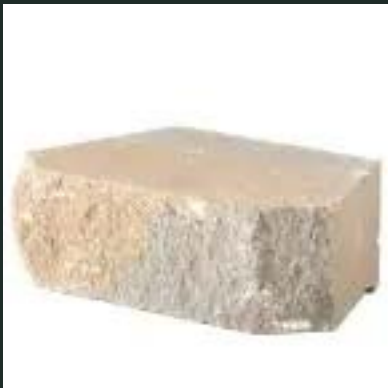
410-535-3662





# Phase 2: Hardscape Installation

- Installation on May 1, 2022



# Phase 3 Planting

## Shrubs

Bottlebrush buckeye

Fragrant sumac

## Herbaceous perennials

Golden alexander

Joe Pye weed - baby Joe

Swamp milkweed

Wild bergamot

Foxglove beardtongue

Blue mistflower

## Groundcover

Golden groundsel

Wild geranium

Pennsylvania sedge

Little bluestem





# Plant list for sunny slopes

Broom sedge  
Common milkweed  
Butterfly milkweed  
Partridge pea  
Mistflower  
Southeastern wildrye  
Virginia wildrye  
Red cedar  
Prickly pear  
Hairy beardtongue

Clustered mountain mint  
Black eyed susan  
Winged sumac  
Pasture rose  
Gray goldenrod  
Wrinkle leaf goldenrod  
American Germander  
Purple top



# Plant list for shady slopes

## Herbaceous perennials:

Eastern Columbine  
Eastern Bottlebrush grass  
White wood aster  
Woodland sunflower  
Wreath goldenrod  
Goat's beard  
Obedient plant



## Ground covers:

Golden groundsel  
Creeping phlox  
Foamflower  
Christmas fern  
Seersucker sedge or blue  
wood sedge



## Shrubs:

Wild Hydrangea  
Blackhaw  
Virginia sweetspire  
Maple-leaf viburnum  
Sumac - 'Gro low'



# Funding

- Grant – Calvert Garden Club
- Master Gardeners - funds from plant sale





# Education and Follow up

- Garden Tours
- Presentations – Garden Smarter and Garden Clubs
- Educational Brochure and Signage
- Share lessons learned





# Thank you!



# References

[How to Level a Sloping Garden \(with Pictures\) - wikiHow](#)

VA Tech Reducing Erosion and Runoff: [426-722.pdf \(vt.edu\)](#)

[Stop Erosion - Solving Drainage and Erosion Problems | Northern Virginia Soil and Water Conservation District \(fairfaxcounty.gov\)](#)

[Native Plants for Shady Slopes | University of Maryland Extension \(umd.edu\)](#)

[Native Plants for Sunny Slopes | University of Maryland Extension \(umd.edu\)](#)

Nuts for Native - blog posts

**Where to Buy Native Plants:**

Chesapeake Natives, Upper Marlboro

MD Native Plant Society - [Maryland Native Plant Society - Native Plant Nurseries \(mdflora.org\)](#)