Bay-Wise Gardening
To Help the Environment

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The Watershed includes all the land that drains into the Bay

Chesapeake’s is 64,000 square miles and reaches into 6 states

Largest estuary in US, the third largest in world

It includes 100,000 streams, creeks and rivers

Graphic: Chesapeake Bay Program
We ALL live near the water!

- Almost all Marylanders live within a half mile of a storm drain, river or stream that feeds into the Chesapeake

- Most of Maryland – except for the westernmost corner – is in the Chesapeake watershed.

Graphic: geology.com
Anne Arundel County, MD

- 588 square miles in area
- 520 miles of shoreline
- 764 Bay-Wise Certified Landscapes since 2000
- 2,490 Certifications statewide since 1997

Graphic: maps.aacounty.org
The Bay-Wise Yardstick

Best Practices Include:

1. Control Stormwater Runoff
2. Encourage Wildlife
3. Protect the Waterfront
4. Mow Properly/Water Efficiently
5. Manage Pests with IPM
6. Mulch Appropriately/Recycle Yard Waste
7. Fertilize Wisely
8. Plant Wisely

36 Inches = Certification

Download the Yardstick at baywise.weebly.com
Water From Our Yards Can Reach the Bay

- Precipitation that doesn’t soak into the ground becomes runoff
- Under natural conditions, 10% of stormwater becomes runoff
- The increase in impervious surfaces such as roads, driveways, roofs, walks and compacted lawns has increased the amount of runoff
- Now - 55% of storm water runs off in our urban and suburban areas
- What does runoff carry?

Graphic: rainscaping.org
Five Main Pollutants Carried by Runoff

- **Sediment** – blocks sunlight needed by aquatic plants; too much can kill the base of the food chain, the aquatic plants

- **Excess nutrients** – mostly nitrogen and phosphorus from fertilizers, provides too much food for algae which blooms prolifically before dying; decomposing algae depletes oxygen needed by fish and other aquatic organisms

- **Bacteria and other pathogens** – cat and dog waste is a major source

- **Debris** – plastic bags, bottles and other trash are a hazard to wildlife

- **Household hazardous waste** – cleaning supplies, automotive fluids, herbicides and pesticides can poison fish and the people, pets and the other land animals that consume fish or drink the water
Fortunately, everyone can help by adopting bay-friendly lawn and garden practices.
How to Slow, Spread & Soak In Water

- Rain gardens
- Rain barrels
- Rocks to slow downspouts
More Ways to Slow Runoff

- Stone path set in mulch or pea gravel
- Swales
- Berms
Permeable Surfaces Reduce Runoff

- For driveways, walks and patios

- These surfaces allow water to infiltrate instead of it running off. Porous Pavers, Interlocking Pavers, Open Grids, Permeable Pavement are some options

- Water flows easily through this paving material.
Manage your Lawn and Water with Care

- Mow it High and Let it Lie:
  - Cut 3-4 inches high to shade out and minimize weeds and encourage root growth
  - Let grass cuttings fall and stay in place to naturally feed your lawn

- Fertilize wisely:
  - Do you even need to fertilize? Test your soil to know.
  - If you fertilize, do so in the fall, not spring, for cool season grasses

- Water wisely:
  - Allow cool season lawns to go dormant in summer, watering only when they go limp
  - Group plants with similar requirements
  - Choose plants that survive on rainfall
  - Water in the AM at ground level
More Mulched & Layered Planting Beds

- Layer plants and groundcovers to eventually reduce or eliminate need for mulch.

- Mulched beds of trees, shrubs, flowers and ground covers help capture water much better than lawn.

- Beds on slopes and along outer edges of property will help keep water from running off into storm drains.
Benefits of Converting Lawn to Mixed Landscaping

- Reduce water use, mowing, fertilizers, herbicides, yard waste and runoff
- Save time, money on maintenance
- Increase biodiversity for wildlife, birds, bees and other beneficial insects
- Improve year-long interest
- Increase property values

Photos: Wanda MacLachlan
Welcome Wildlife

- Shelter and water
- Avoid pesticides and yard sprays
- Berries and seeds for birds
- Nectar for pollinators
- Host plants for butterflies and moths
Why Choose Native Plants?

- **Well adapted** to local soil and climate
- Require **less maintenance, water and fertilizing**, once established
- **More resistant** to damaging insects and diseases, requiring less, if any, pesticides
- Provide **high wildlife value** for a healthy ecosystem
- Increasingly available at garden centers
Add a Variety of Ground Covers

Coral bells
*Heuchera* (mixed varieties)

Partridgeberry
*Mitchella repens*

Woodland phlox
*Phlox stolonifera*

Canada Anemone
*Anemone canadensis*

Foamflower
*Tiarella cordifolia*

Green and gold
*Chrysogonum virginianum*

Woodland stonecrop
*Sedum ternatum*

Ostrich fern
*Matteuccia struthiopteris*

Photo: Mary Yee

Photo: Robin Gill
Native Perennials for Sun or Part Sun

False indigo
*Baptisia australis*

Anise hyssop
*Agastache foeniculum*

Blue flag
*Iris versicolor*

Cardinal flower
*Lobelia cardinalis*

Butterflyweed
*Asclepias tuberosa*

Golden ragwort
*Packera aurea*

Beardtongue
*Pensteon digitalis*

Turtlehead
*Chelone glabra*

All photos courtesy of Lady Bird Johnson Wildflower Center
Native Perennials for Shade or Part Shade

- **Virginia bluebells**
  *Mertensia virginica*

- **Celandine poppy**
  *Stylophorum diphyllum*

- **Sensitive fern**
  *Onoclea sensibilis*

- **Crested iris**
  *Iris cristata*

- **Wakerobin**
  *Trillium erectum*

- **Black cohosh**
  *Actaea racemosa*

- **Wild columbine**
  *Aquilegia canadensis*

- **Solomon’s seal**
  *Polygonatum biflorum*

All photos courtesy of Lady Bird Johnson Wildflower Center
Native Shrubs for a Healthy Habitat

Virginia sweetspire
_Itea virginica_

Pink azalea
_Rhododendron Periclymenoides_

American beautyberry
_Callicarpa americana_

Summersweet
_Clethra alnifolia_

All photos: nativeplantcenter.net
Online Resources

Can be purchased at
www.mdflora.org/publications

www.baywise.weebly.com
Home & Garden Information Center

extension.umd.edu/hgic

Find great info:
- Native Planets
- Ground covers
- Managing stormwater
- Pollinators
- Sustainable lawn care
- Weeds
- Invasive Plants
- Rain Gardens and more

- Submit photos and garden questions to Extension Experts!
Master Gardener Consultations

Master Gardeners discuss homeowner’s composting system

Helping residents identify native plants.

Photos: Robin Gill
Join Us in Protecting our Bay and Waterways!
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