

MSA-S-1829-5027

RC
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cleaned DS

Martin O'Malley
Governor

Anthony G. Brown
Lt. Governor



Margaret G. McHale
Chair

Ren Serey
Executive Director

**STATE OF MARYLAND
CRITICAL AREA COMMISSION
CHESAPEAKE AND ATLANTIC COASTAL BAYS**

1804 West Street, Suite 100, Annapolis, Maryland 21401

(410) 260-3460 Fax: (410) 974-5338

www.dnr.state.md.us/criticalarea/

September 7, 2007

Mr. Blaine Smith
Zoning Administrator
Town of Ocean City
PO Box 158
Ocean City, MD 21843

Re: 13621
Anderson Site Plan

Dear Mr. Smith:

Thank you for providing information on the above referenced site plan. The applicant proposes to construct a single-family dwelling, garage, and driveway. Critical Area issues include stormwater management, pollutant removal, and afforestation.

Total lot size is 6,000 square feet and is designated as an Intensely Developed Area (IDA). Currently, no impervious surface exists on-site. Upon completion of this project, total impervious surface will increase to 2,826 square feet (47.1%). To meet mitigation requirements in the 100-foot Buffer, \$5,300 of landscaping is required. The applicant plans to address this matter on-site using 11 large trees and 90 large shrubs (\$7,730 of plantings). A grass swale and rain garden is also proposed on-site to provide 384 square feet of stormwater management.

Based on the information provided, we have the following comments on this project:


1. Please have the applicant delineate the 100-foot Buffer on the site plan.
2. Please have the applicant provide in the landscape plan a listing of the types of large trees that exist on-site.
3. On the site plan, the applicant lists the required non-structural surface treatment as 894.92 square feet. However, in the application sheets, the applicant states that only 669 square feet of pervious non-structural surface area is required. According to our calculations, the correct number is 894.92 square feet. Please clarify the discrepancy in these numbers.

Anderson Site Plan
September 7, 2007
Page 2

4. Please have the applicant provide information on the amount of roof area that will drain into each rain garden. As stated in the 10% manual, the surface area of the rain garden should be between 20% and 30% of the roof area that will drain into the garden (20% for sandy soils). This will ensure that the rain garden will hold water from a one-inch rainstorm.

Thank you for the opportunity to provide comments on this lot line revision request. Please have the applicant provide the information requested above. If you have any questions, please feel free to call me at (410) 260-3483.

Sincerely,


Nick Kelly
Natural Resource Planner
OC 97-05

Robert L. Ehrlich, Jr.
Governor

Michael S. Steele
Lt. Governor



Martin G. Madden
Chairman

Ren Serey
Executive Director

STATE OF MARYLAND
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February 17, 2005

Mr. Blaine Smith, Zoning Administrator
Town of Ocean City
PO Box 158
Ocean City, MD 21843

VIA FACSIMILE

RE: Site Plan – 100 Channel Buoy Road, Lawrence Anderson

Dear Mr. Smith:

Thank you for providing the above referenced site plan to our office for review. The applicant proposes to construct a new dwelling on a 6000 square foot waterfront lot. A 15-foot setback is required. Commission staff has reviewed the information provided and we have the following comments:

1. It appears that the 10% pollutant reduction requirement is adequately addressed by the proposed grassed swales and raingardens.
2. No information has been provided regarding proposed landscaping. A landscaping plan and schedule should be provided in accordance with the Town's ordinance. Existing vegetation cannot count as mitigation for new development within the Buffer.

Thank you for the opportunity to review and comment on this project. If you have any questions or concerns, please contact me at (410) 260-3477.

Sincerely,

A handwritten signature in cursive script that reads "LeeAnne Chandler".

LeeAnne Chandler
Natural Resources Planner

cc: OC97-05

**Critical Area Project Application
Town of Ocean City**

Date: 8-03-07 File# 13621

Project Name: Anderson

Project Address 100 Channel Buoy Road

Tax Map: 116 Parcel: 1436A Block: — Lot# — Zoning R-1

Property Owner LARRY ANDERSON Phone 1-301-530-4436

Property Owner Address 8500 HAZELWOOD DRIVE BETHESDA, MD 20814

Parcel size (SF): 6,000 or Site Area (SF) _____ (If < 50% of parcel)
Site size (SF) = area of disturbance
plus 5 feet perimeter of actual construction

I. PROJECT DESCRIPTION

Parcels 40,000 SF or more: Critical Area setback is 25 feet. No impervious surface or cantilevering permitted within 25 feet of the shoreline/wetlands. ("Pervious" decks are permitted 10' into setback, per construction standards.)

Parcels less than 40,000 SF: Critical Area set back is equal to the zoning setback (15 feet). No impervious surface or cantilevering permitted within the setback. ("Pervious" decks at ground level are permitted in the setback, per construction standards.)

Existing Conditions

Impervious surface (SF) -0- % of site impervious: -0-

Impervious surface within the 100-foot buffer (SF): -0-

Proposed Conditions

Impervious surface (SF): 2,826 % of site impervious: 47.1%

Total SF of disturbed area: 4,833

Impervious surface within the 100-foot buffer (SF): 2,826

Is project in the 100 foot buffer? Yes No (If yes, continue with Sec. II)
(If no, skip to Sec. III)

II. MITIGATION WORKSHEET IN THE 100-FOOT BUFFER

1. **Detached Single Family Dwellings** (Need Landscaping Plan with schedule/legend per conversion chart below)

Value of Construction: \$ 265,000

- a. Landscape required in the amount of 2% of the cost of construction (Value of construction x .02 = \$ 5,300)
- b. Total landscape provided. Attach landscape plan with schedule of native plant material and cost values. \$ _____
- c. Mitigation requirement (if a - b > 0) = Fee in Lieu of landscape. \$ _____ (To be paid prior to issuance of Certificate of Occupancy.)
- d. Setback from water/wetlands _____ SF x .25 = _____ SF
(Landscape SF to be provided in setback area to be shown on Landscaping Plan)

2. **Multi-Family and Commercial**

All SF values determined from "Landscape Conversion Chart" below.

Activity Description (Complete all that apply):

- a. Trees or shrubs removed from outside of setback: # _____ x _____ SF x 1 = _____ SF
- b. Trees or shrubs removed from setback # _____ x _____ SF x 2 = _____ SF
- c. Pervious to impervious _____ SF x 2 = _____ SF
- d. Improved pervious to improved pervious _____ SF x 1 = _____ SF
- e. Undisturbed surface disturbed but remaining pervious _____ SF x 1 = _____ SF
- f. Impervious to impervious _____ SF x 1 = _____ SF
- g. Impervious to pervious _____ SF x 0 = 0 SF
- h. Construction of decks in setback _____ SF x 2 = _____ SF
- i. TOTAL MITIGATION REQUIRED (sum of a through h) = _____ SF
- j. TOTAL LANDSCAPE PROVIDED (Refer to "Landscape Conversion Chart" below)

	Number	Value	Total
Large trees	# _____	x 200 SF	= _____ SF
Small trees	# _____	x 100 SF	= _____ SF
Large shrubs	# _____	x 75 SF	= _____ SF
Small shrubs	# _____	x 50 SF	= _____ SF
Herbaceous Plants	# _____	x 2 SF	= _____ SF

TOTAL VALUE OF LANDSCAPE PROVIDED _____ SF

k. FEE-IN-LIEU OF LANDSCAPE = i - j x \$1.20 \$ _____
(To be paid prior to issuance of Certificate of Occupancy)

l. Setback from water/wetlands _____ SF x .25 = _____ SF
(Landscape SF to be provided in setback area)

**LANDSCAPE CONVERSION CHART
MITIGATION**

Large tree = 200 square feet = 2" to 2 1/2" caliber - \$200.00 credit
 Small tree = 100 square feet = 1" to 1 1/2" caliber - \$100.00 credit
 Large shrub = 75 square feet = 36" height or spread or 3+ gallon container - \$75 credit
 Small shrub = 50 square feet = 24" height or spread or 1-2 gallon container - \$50 credit
 Herbaceous plants = 2 square feet per plant = 1 quart container - \$2 credit

III. AFFORESTATION (LANDSCAPE) REQUIREMENT OUTSIDE THE 100-FOOT BUFFER

All development or redevelopment within the 1000-foot Critical Area boundary (but outside the 100-foot buffer) must be vegetated with native plant material in an amount of 15% of the site area.

- a. Total landscape required: Parcel size 6000 SF x .15 = 900 SF
 (This SF area must be plantable and vegetated with the required number of plants)
 b. Landscape provided (Refer to Landscape Conversion Chart).

				Existing		Proposed	
Large trees	#	<u>11</u>	x	200 SF =	<u>2200</u>	SF	_____ SF
Small trees	#	_____	x	100 SF =	_____	SF	_____ SF
Large shrubs	#	<u>906</u>	x	75 SF =	<u>5,530</u>	SF	_____ SF
Small shrubs	#	_____	x	50 SF =	_____	SF	_____ SF
Herbaceous Plants	#	_____	x	2 SF =	_____	SF	_____ SF

- 5,300

TOTAL VALUE OF LANDSCAPE PROVIDED: 7,730 SF

IV. STORMWATER MANAGEMENT AND THE 10% RULE

Pollutant reduction requirement for all disturbances over 250 SF in the 1000-foot Critical Area.

1. Single family development subject to stormwater management requirements that use the "Standard Stormwater Management Plan" automatically meet the 10% Rule.
2. Single family development not subject to stormwater management regulations can meet the intent of the 10% Rule by submitting a Water Quality Management Plan.
3. Multi-family and commercial development must submit the 10% Rule Worksheet.

V. HABITAT PROTECTION (skip if it is less than 40,000 SF)

For lots of 40,000 square feet or greater, the applicant must consult with the Maryland Department of Natural Resources to determine the existence of any Habitat Protection Areas that may be affected by the proposed development.

VI. LANDSCAPE PLAN

Proposed landscape/mitigation plan (including location, botanical name, common name and installation site) and should show all required vegetation according to the Mitigation or Afforestation requirements as well as all vegetation required in accordance with CHAPTER 98, ARTICLE II, LANDSCAPING, OF THE CODE.

VII. SITE PLAN REQUIREMENTS

Critical Area site plan must be drawn to scale and shall include the following information:

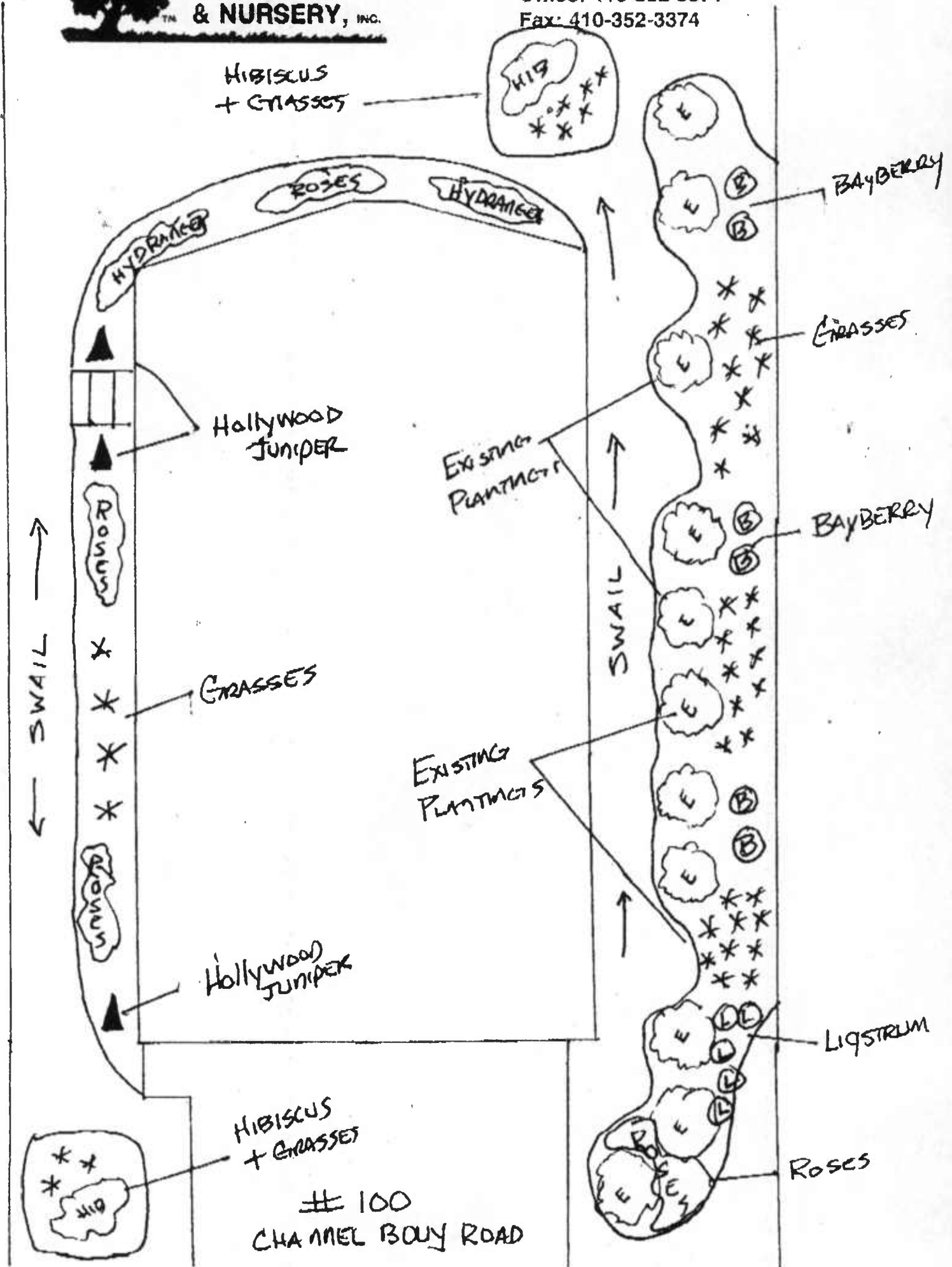
1. A title block, including the name of the project or development and the names of the property owner, project data including street name, tax map -parcel and lot,
2. Property lines and approximate location of adjoining property structures
3. North arrow, scale, and legend,
4. All improvements and impervious surfaces (including all structures, sidewalks, sheds, decks, driveways, pools, etc.) labeled as existing or proposed show dimensions and tabulate
5. Existing and proposed grades and elevation (Topography)
6. Limit of all proposed clearing, grading and disturbance.
7. Existing Vegetation, size and type with legend, and
8. Proposed landscape/mitigation plan (including location, botanical name, common name and installation site)
9. Mean high water line or Delineation of private and State tidal wetlands and Delineation of non-tidal wetlands (If applicable)
10. 100-foot Buffer and setback delineated (If applicable)
11. Habitat protection areas (if applicable)

Reviewed by: J. Slone Smith Zoning Administrator Date 8/24/07
Paul Gray Environmental Engineer Date 8/13/07



Bunting's
LANDSCAPING & NURSERY, INC.

10337 N. Bunting Road
Bishopville, Maryland 21813
Office: 410-352-3371
Fax: 410-352-3374

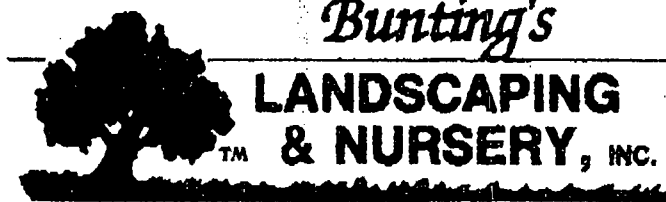


LANDSCAPE PLAN

REVIEWED

Date: 8/24/07

Sign: *[Signature]*



10337 N. Bunting Road
 Bishopville, Maryland 21813
 Office: 410-352-3371
 Fax: 410-352-3374

Piney Island Builders
 100 Channel Buoy Road
 08/21/2007

Proposed Landscape Project

Plantings

- 11 Hibiscus 3 gal
- 43 tall grass 3 gal
- 3 hollywood juniper 3 ft
- 8 hydrangeas 3 gal
- 14 flowering shrub roses 3gal
- 5 ligstrum 2 -3 ft
- 6 southern bayberry 2 -3 ft

Total Plant credit/value \$5,530.00

THANK YOU

**CERTIFIED HORTICULTURIST &
 LANDSCAPE CONSULTANT**

Environmental Design Program

EDitorial Number 8
March 2003



Maryland Department of Natural Resources
C. Ronald Franks, Secretary
www.dnr.state.md.us

Rain Gardens

What's a Rain Garden?

A rain garden is an attractive native plant garden with a purpose: to filter rainwater naturally to reduce stormwater pollution that is degrading our rivers, streams, and the Chesapeake Bay. Rain water (or snowfall) is routed to the garden and filtered naturally by the plants and soils in the garden. This filtration process removes nutrients and pollutants.

Rain gardens use a combination of soils and water-tolerant native plants that catch and hold above-average amounts of water, a concept known as bioretention. The soils and plants then naturally filter out pollutants found in rain and runoff.

Why is a Rain Garden Important?

Under the general practice of storm water management, rainwater is allowed to flow out into the street and storm sewers. Eventually it flows into our regional rivers and streams. These storm waters carry pollutants such as motor oil, pesticides, fertilizers and other harmful chemicals from our lawns and driveways that cause excessive weeds, turbid water, and sediment buildup. By creating a rain garden in your yard you can reduce stormwater runoff, help recharge ground water, and provide great wildlife habitat.

How to Build a Rain Garden

Where To Put Your Rain Garden

A rain garden can be placed almost anywhere, as long as it doesn't interfere with underground utilities. It will be most useful if it is positioned to collect runoff, in spots such as:

- Near a downspout
- In low wet area
- Near a driveway, road, or sidewalk (but watch out for snow and salt)
- At the base of a slope

Engineering the Garden

- Most home rain gardens are simply a depression in the ground. No fancy pipes. No special soil.
- A rain garden can be as shallow as 4" or 5" deep or it can be 1' - 2' or more.
- Almost any size garden is possible. Larger gardens of course will be able to absorb and hold more water.
- Rain gardens work in any kind of soil provided you select appropriate plants. In most yards it is not necessary to amend your soil.
- If your soil drains very slowly and you want to amend it, mix in weed-free compost. For most home rain gardens, layering



Photo courtesy of Low Impact Development Center

rock and sand is not necessary and can sometimes create problems.

- If you want to get technical, you can design a garden to collect the water from a specific area. For example, you could create a garden with enough volume to hold the runoff from your roof during a 1" rainfall.

Choosing Your Plants

- Nature is your palette - trees, shrubs, flowers, ferns, grasses, sedges!
 - Native plants are great for rain gardens. Why?
 - They are easy on the environment because most require no fertilizing or watering.
 - They create a no-fuss, low-maintenance garden.
 - Many native plants have deep and extensive root systems that help loosen the soil so water can quickly infiltrate.
- Go to www.fws.gov/r5cbfo/nursery.htm for a list of native plant nurseries.

Designing Your Own Garden

- It is great fun to design your own rain garden. The garden should have a wet zone and an upland zone (dry zone).
- Select water tolerant plants for the wet zone. Wetland plants do well here so choose plants native to sedge meadows, lakeshores, stream banks, wet prairies, and forest swamps. The upland zone can be planted with plants adapted to moderate and dry areas - prairies, savannas, woodlands.
- For best results in sunny gardens, plan for at least 25% - 50% grasses or sedges. In shady gardens at least 50% sedges and ferns is a good rule of thumb for the wet zone.
- Your garden will establish much more quickly if you use plants instead of seeds. Fluctuating water levels make it difficult to establish rain gardens with seed and seeded erosion blankets are sometimes necessary.

How to Build a Rain Garden

- Seedlings (often sold in 4-packs and 6-packs) are a great choice for rain gardens. If you can afford it, plant seedlings at one-foot intervals. 18" spacing is acceptable for seedlings but plants will take longer to fill in. Larger plants, of course, can be planted further apart.
- How many plants will you need? Say you have a 300 square foot garden and you figure the wet zone is about 100 square feet. If you plant with seedlings at one-foot intervals and decide on 50% grasses : 50% flowers, you will need:
100 plants for wet zone (50 grass, 50 flowers)
200 plants for upland zone (100 grass, 100 flowers)

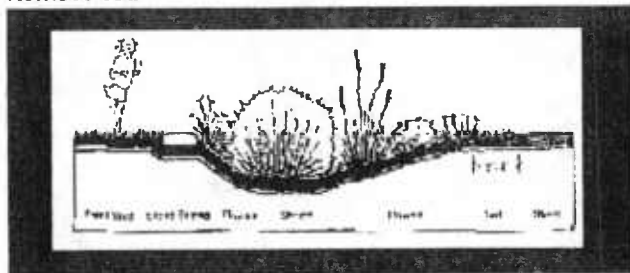
Design Tips

- For a low-maintenance garden, choose a naturalistic style rather than a formal style.
- Keep garden edges neat and tidy. Mowed borders, edging, and fences help instill a look of care to a naturalistic garden.
- Don't be afraid of grasses! Native grasses, with their extensive root system, are the workhorses of a rain garden. Aesthetically, grasses knit the garden into a pleasing composition, toning down the riot of color. In addition, grasses help hold up some of the spindly wildflowers.
- Mix species together. Large areas of one species require more maintenance and are more susceptible to pest problems. In prairie gardens, seeds fall, new seedlings emerge, and gardeners quickly learn that native plants don't stay put.

That said, if you don't mind the extra maintenance, you may want to play a bit with massing - planting an area with a single species. This creates bold splashes of bloom that are great for attracting butterflies

Digging Your Garden

Remove sod



1. Rent a sod cutter or use a spade to remove existing sod. Some people like to kill the sod first because it is easier to remove. It can be killed by covering it with black plastic for several weeks or by using an herbicide.

Dig the garden

1. Before you dig, make sure there are no underground utilities. BG&E will mark underground utilities for free. Call MISS UTILITY at 1-800-257-7777 or go to www.missutility.net.
2. Use a spade to dig the garden.
3. Have fun and play around with depth - it doesn't have to be uniform. To minimize erosion, keep slopes gentle.
4. You may want to use the soil you remove to create a berm on one side of the garden. Just be sure the area is graded so water runs into the garden.

5. If you discover lots of nice topsoil when you dig, you may want to salvage it. Keep it in a pile separate from the subsoil. After digging the garden, you can return this soil as the top layer. If you want to amend the soil, till or spade weed-free compost into the top 4"-6" of the soil.

Planting and Mulching



1. Once your garden is dug, it's nice to give it a trial run. Put the sprinkler on in the garden for 30 to 60 minutes to see how well water infiltrates. Keep in mind that once plants are mature, infiltration will be much quicker. Be sure to let the garden dry out before planting.
2. It is best to plant a rain garden as soon after digging as possible. If you cannot plant it within a week or so, mulch it lightly with fibrous wood mulch.
3. It is important to mulch young rain gardens! If you don't mulch, the soil surface can seal up and prevent water from infiltrating. Mulching also prevents weeds and helps retain moisture so you won't have to water as often.
4. Not all mulches work in rain gardens. Lightweight mulch and flat wood chips will float when it rains. Good results have been obtained using coarse, fibrous shredded wood chips.

Maintaining

First season care

Caring for your garden the first several weeks after planting is critical to its success. The most important tasks the first year are watering and weeding. Young, establishing plants need about an inch of rainfall or water per week. By the second or third season the plants will be able to handle short periods of drought. The best way to keep weeds out is to keep a 3"-5" layer of mulch in place.


Long-term care

By the second or third season your plants should be fairly well established and most of the plants will be able to handle short periods of drought. During longer drought periods, you may need to water your garden. If you've planted native plants, your main task will be cutting back dead vegetation in the spring to clean up the garden for the new season.

Information courtesy of Maplewood

To learn more about rain gardens, or other ways that you can play a role in the Chesapeake Bay Restoration effort, check www.dnr.state.md.us/ed or call 410.260.8710.



Advancing the application of economically sound and environmentally sensitive building and site-design techniques. The Environmental Design Program is an Education, Bay Policy and Growth Management Project of the Maryland Department of Natural Resources and is funded in part through the Maryland Coastal Zone Management Program, Maryland Department of Natural Resources, pursuant to National Oceanic and Atmospheric Award No. NA17OZ1124. For more information: 
Tel: (410) 260.8710 www.dnr.state.md.us/ed

Full Sun Plants for Rain Gardens
Coastal Plain

FULL SUN PERENNIALS, GRASSES AND
FERNS - COASTAL PLAIN

<i>Ajuga reptans</i>	Carpetbugle	Many cultivars, evergreen groundcover, purple flowers, up to 10" tall in flower, foliage hugs the ground
<i>Amsonia hubrechtii</i>	Bluestar flower, Arkansas bluestar	Blue summer flowers, fine texture, yellow fall foliage
<i>Amsonia tabernaemontana</i>	Bluestar flower	3' tall, Blue summer flowers, butterfly plant
<i>Amsonia X 'Blue Ice'</i>	Bluestar flower	More compact form of Bluestar flower
<i>Asclepias tuberosa</i>	Butterfly weed	Bright orange summer flowers, Monarch butterfly larval food
<i>Aster novae-angliae</i>	New England Aster	Large billowing clouds of blue-purple flowers in the fall, several cultivars available
<i>Aster novae-angliae 'Purple Dome'</i>	Purple Dome New England Aster	Compact fall flowering purple aster, habitat plant
<i>Aster novi-belgii 'Professor Anton Kippenburg'</i>	New York Aster	Large perennial, purple fall flowers, fine texture
<i>Carex stricta</i>	Tussuck sedge	Groundcover, clumper, yellow-green flowers
<i>Ceratostigma plumbaginoides</i>	Leadwort	Plumbago blue flowers, semi-evergreen, needs good drainage, very drought tolerant
<i>Chasmanthium latifolium</i>	Upland Sea Oats, Spangle Grass	3' tall, spreading groundcover
<i>Chelone glabra</i>	White Turtlehead	Larval food, white summer flowers
<i>Chelone lyonii</i>	Pink Turtlehead	Hot Lips' is a good cultivar, butterflies like this
<i>Deschampsia cespitosa</i>	Tufted Hair Grass	Clumping arching small grass, fall inflorescence
<i>Echinacea purpurea 'Kim's Knee-Hi'</i>	Dwarf Purple Coneflower	15" tall, medium pink daisy like flower, fragrant
<i>Echinacea purpurea 'Magnus'</i>	Magnus Purple Coneflower	Dark pink summer flowers, fragrant, tolerant of moist and dry conditions, butterflies
<i>Echinacea purpurea 'Razzmatazz'</i>	Razzmatazz Purple Coneflower	Very showy flowers, double form, summer dark pink flowers, butterflies
<i>Eragrostis spectabilis</i>	Purple Love Grass	Weeping form, fine texture
<i>Eupatorium coelestinum</i>	Hardy Ageratum	Purple upright (2') fall blooming perennial, butterflies like it
<i>Eupatorium rugosum 'Chocolate'</i>	White Snakeroot	3' tall, white summer flowers, dark burgundy toned foliage
<i>Helianthus angustifolius</i>	Narrow-leaved Sunflower	Late summer bright yellow flowers all up and down 8' tall stalks, spreads

Full Sun Plants for Rain Gardens
Coastal Plain

<i>Hemerocallis</i> 'Happy Returns'	Dwarf hybrid daylily	12" tall, repeat bloomer, dark yellow flowers, NON- INVASIVE form
<i>Hibiscus moscheutos</i>	Marsh Mallow	Several color cultivars, generally pink, 3' tall, very wet tolerant, coarse/bold texture
<i>Iris cristata</i>	Dwarf Crested Iris	Edger, 8-10" tall, light purple early spring flowers
<i>Iris ensata</i> 'Rikki Pikki'	Rikki Pikki Japanese Iris	Tolerant of dry and wet condition, white flowers
<i>Iris ensata</i> 'Royal Robe'	Royal Robe Japanese Iris	Tolerant of dry and wet conditions, dark purple flowers
<i>Iris fulva</i>	Copper Iris	One of the Louisiana Iris parents, Orange late spring flowers, linear foliage, tolerant of wet and dry conditions
<i>Iris</i> LA Hybrids	Louisiana Iris	Several color choices, 3' tall, late spring-early summer flower, linear foliage
<i>Iris prismatica</i>	Slender Blue Flag	Linear form, blue late spring flowers
<i>Iris siberica</i>	Siberian Iris	Several color cultivars, spreading iris, very tolerant of a range of conditions, Spring bloom, 'Caesar's Brother' is a darker purple cultivar
<i>Iris versicolor</i>	Northern Blue Flag	Tolerant of very wet and drier conditions, medium blue flowers
<i>Iris virginica</i>	Southern Blue Flag	Tolerant of very wet and drier conditions, medium blue flowers
<i>Juncus effusus</i>	Soft Rush	Semi-evergreen, clumping, upright, 3' tall
<i>Liatrus spicata</i> 'Kobold'	Gayfeather or Blazing Star	Purple form of linear flowering perennial, summer flower, clump foliage 12" tall, best in the drier portions of a raingarden
<i>Lilium superbum</i>	Turk's Cap Lily	Orange, tall summer flowering bulb
<i>Liriope spicata</i>	Creeping Lilyturf	Evergreen, spreading linear groundcover, 12" tall with purple summer flowers
<i>Lobelia cardinalis</i>	Cardinal Flower	Bright red summer flowers, hummingbird attractor
<i>Muehlenberia capillaris</i>	Pink Muhly Grass	24-30" tall grass with soft mauvy-pink inflorescence in late summer/fall
<i>Narcissus</i> naturalizing types	Daffodils	Some cultivars such as 'Ice Follies' and 'Thalia' seem to tolerate wet winter conditions better than others; if you are planting in the upper zones of the garden, plant freely
<i>Oenothera fruticosa</i>	Sundrops	Spreading semi-evergreen groundcover, Bright yellow flowers in Spring

Full Sun Plants for Rain Gardens
Coastal Plain

<i>Panicum virgatum</i> 'Prairie Skies'	Switch Grass	Fine Texture, clumping, 6-8' tall, 'Heavy Metal' is another good cultivar
<i>Pennisetum alopecuroides</i>	Dwarf Fountain Grass	3' clumping ornamental grass, very showy seed heads, birds like it
<i>Phlox paniculata</i> 'David'	David Garden Phlox	Very mildew resistant white form, 2-3' tall,
<i>Phlox subulata</i> 'Emerald Cushion Blue', 'Emerald Cushion Pink' or 'Candy Stripe'	Thrift, Creeping Phlox	Blue, Pink or Pink and White Striped Spring flowers on evergreen mat of foliage, fine texture, butterflies like it
<i>Rudbeckia fulgida</i>	Black-eyed Susan	Perennial form of black-eyed Susan - 'Goldsturm' is most typical cultivar, summer yellow daisy flower form
<i>Rudbeckia hirta</i>	Black-eyed Susan	Annual form of Black-Eyed Susan, State flower of Maryland
<i>Sisyrinchium atlanticum</i>	Coastal Blue-eyed grass	Fine texture, blue flower, clumping form
<i>Solidago</i> 'Firecracker'	Firecracker Goldenrod	Late summer, early Fall yellow perennial, birds and butterflies like it, flowers "explode" visually
<i>Solidago</i> 'Golden Fleece'	Golden Fleece Goldenrod	Late summer, early Fall yellow perennial, birds and butterflies like it
<i>Solidago sempervirens</i>	Seaside Goldenrod	Yellow late summer flowers
<i>Tradescantia virginiana</i>	Spiderwort	Long blooming perennial, several color cultivars, 18"-30" tall, reblooms if cut back after first flowering
<i>Tripsacum dactyloides</i>	Gamma Grass	Clumping arching small grass, fall inflorescence
<i>Verbena hastata</i>	Blue Vervain	Blue upright flowers
FULL SUN - COASTAL PLAIN - SHRUBS		
<i>Cephalanthus occidentalis</i>	Buttonbush	Summer white flowers, coarse texture, likes wet feet
<i>Chaemacyparis pisifera</i> 'Filafera aurea'	Dwarf Sawara False Cypress	Fine texture, "evergreen" (yellow) foliage, weeping form
<i>Chaemacyparis thyoides</i> 'Heatherbun'	Dwarf White Cedar	Fine texture, rounded form, evergreen
<i>Clethra alnifolia</i> 'Ruby Spice'	Dwarf Summersweet	Pink upright summer flowers, yellow fall color, suckering shrub

Full Sun Plants for Rain Gardens
Coastal Plain

<i>Clethra alnifolia</i> 'Sixteen Candles'	Sixteen Candles Summersweet	White upright summer flowers, bees and butterflies like it, yellow fall color, suckering shrub
<i>Cornus sericea</i>	Redosier Dogwood	Red twigs in the winter and yellow fall leaf color, white flowers; there is a yellow cultivar, winter fruit for birds
<i>Fothergilla gardenii</i> 'Mt. Airy'	Fothergilla	White fuzzy flowers in spring, yellow-orange-red fall color
<i>Hydrangea arborescens</i>	Smooth Hydrangea	White summer flowers, upright, 3-4' tall, cut back in late spring, blooms on new wood; 'Annabelle' is a tried and true cultivar
<i>Hydrangea quercifolia</i> 'Pee Wee'	Dwarf Oakleaf Hydrangea	Very drought tolerant, white summer flowers, red fall color, coarse texture
<i>Ilex decidua</i>	Possumhaw	Deciduous holly, needs one male for every 6 females (ie 'Warren's Red'(female) and 'Red Escort' (male)), showy winter fruit
<i>Ilex glabra</i> 'Nana' or 'Densa'	Dwarf Inkberry	Fine texture, evergreen shrub, takes shearing well
<i>Ilex glabra</i> 'Shamrock'	Shamrock Inkberry	Fine texture, evergreen shrub, takes shearing well
<i>Ilex opaca</i>	American Holly	Many cultivars, grows in sun and shade, evergreen, wildlife plant, screening, # 2 is very reliable
<i>Ilex verticillata</i>	Winterberry	Needs one male for every 6 females (ie 'Afterglow' (female) and 'Jim Dandy' (Male)), showy winter red fruit, wildlife plant
<i>Ilex verticillata</i> 'Maryland Beauty' or 'Red Sprite'	Dwarf female Winterberry	Needs 'Jim Dandy' as pollinator, 3' tall, rounded form, heavy fruit
<i>Ilex vomitoria</i> 'Shilling's Dwarf'	Dwarf Yaupon Holly	Low mounding form, fine texture, zone 7b (sheltered 7a OK)
<i>Itea virginiana</i> 'Henry's Garnet'	Henry's Garnet Virginia Sweetspire	Medium size arching shrub (3-5' tall and wide), white spring flowers, burgundy red fall color, dark red winter stems, butterfly and bird plant
<i>Itea virginiana</i> 'Little Henry'	Little Henry Virginia Sweetspire	Dwarf form; also sold as 'Spricht', red fall color and white spring flowers, red winter stems
<i>Kalmia angustifolia</i>	Sheep Laurel	Evergreen, similar to Mountain Laurel but shorter
<i>Magnolia virginiana</i>	Sweetbay Magnolia	Upright oval form, semi-evergreen, fragrant white flowers, medium-coarse texture
<i>Myrica cerifera</i> 'Nana'	Dwarf Wax Myrtle	Fine-medium texture, evergreen, shears well
<i>Myrica pensylvanica</i>	Northern Bayberry	Fine texture, evergreen, shears well, wildlife plant
<i>Pieris floribunda</i>	Mountain Pieris	Evergreen, white spring flowers

Full Sun Plants for Rain Gardens
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<i>Rhododendron viscosum</i>	Swamp Azalea	White fragrant late spring flowers, likes the wetter areas of a raingarden
<i>Rosa</i> 'Knock-out Radrazz'	Radrazz Knock Out Rose	Shrub rose, needs good drainage, blooms all summer, lightly fragrant. Very mildew resistant and low care.
<i>Vaccinium corymbosum</i>	Highbush blueberry	Many cultivars, red fall color, white spring flowers, blue fruit, birds like plant
<i>Viburnum acerifolium</i>	Mapleleaf viburnum	Mauvey fall color, maple shaped leaves, white flower
<i>Viburnum carlesii</i>	Korean Spice Viburnum	Fargrant white flowers in spring, glossy medium texture foliage, bird favorite
<i>Viburnum dentatum</i>	Arrowwood, Southern Arrowwood	White summer flowers, upright form, black fruit
<i>Viburnum dentatum</i> 'Blue Muffin'	Compact Arrowwood	Blue fruit, white flowers, deciduous, upright form
<i>Viburnum trilobum</i>	American Cranberry Bush	Deciduous, Red fruit, yellow-red fall color, wildlife plant
<i>Zenobia pulverulenta</i>	Dusty Zenobia	Evergreen, glaucous foliage, white flowers, 'Woodlander's Blue' is on available cultivar, medium shrub
FULL SUN - COASTAL PLAIN - TREES		
<i>Acer campestre</i>	Hedge Maple	Dense foliage, small tree, good fall color
<i>Acer rubrum</i>	Red Maple	Many cultivars available, great fall color and fast growing canopy tree
<i>Alnus incana</i>	Speckled Alder	Multi-stem shrub/small tree, nice winter bark and upright form, Nitrogen fixer
<i>Alnus serrulata</i>	Smooth Alder	Multi-stem shrub/small tree, nice winter bark and upright form, Nitrogen fixer
<i>Betula nigra</i> 'Heritage' or 'Dura-Heat'	Heritage or Dura-Heat River Birch	Salmon and gray exfoliating bark, pendulous habit
<i>Betula nigra</i> 'Little King'	Little King River Birch	Dwarf River birch; also called 'Fox Valley'
<i>Celtis laevigata</i>	Sugarberry	Upright, smooth gray bark, shade tree
<i>Chionanthus virginicus</i>	Fringetree	May grow more shrublike at first but becomes a small tree, white spring flowers, yellow fall color, females will get a black 'drupe' that looks like an olive

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<i>Hamamelis virginiana</i>	Witchhazel	Yellow flowers, orange-red-yellow fall color
<i>Magnolia grandiflora</i> 'Little Gem'	Little Gem Magnolia	Dwarf form of Southern Magnolia, evergreen, fragrant summer white blooms
<i>Nyssa aquatica</i>	Swamp Tupelo	Coastal areas and South of Washington DC only
<i>Taxodium distichum</i>	Bald Cypress	Fine texture, deciduous conifer