

NC COASTAL FEDERATION LOW IMPACT DEVELOPMENT:

RAIN GARDENS

What is a rain garden?

A rain garden is a shallow depression planted with native plants that captures and infiltrates rain before it becomes polluted stormwater runoff.

Why do we need rain gardens?

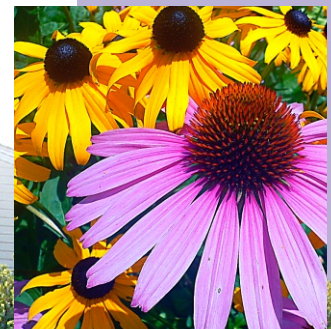
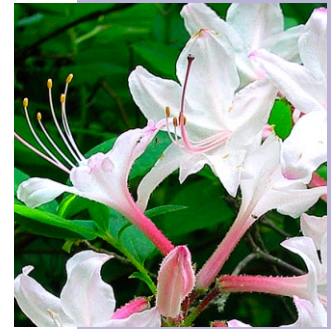
When rain falls on surfaces such as rooftops and parking lots it is not absorbed into the ground. Instead, it flows over these hard surfaces collecting pollutants along the way. This polluted stormwater runs into fragile coastal waters, degrading the health of creeks, rivers and sounds. Rain gardens reduce polluted runoff.

What are the benefits of rain gardens?

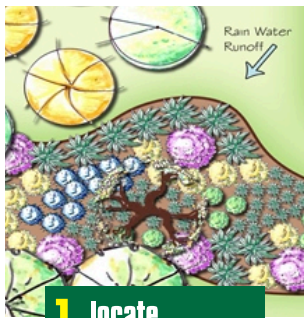
- rain gardens reduce polluted stormwater runoff
- reduce flooding
- recharge groundwater
- enhance the beauty of your yard
- provide places for wildlife to live

A Few Rain Garden FAQs

- ***Does a rain garden form a pond?***
No. rain soaks into the ground so the rain garden is dry between rain events.
- ***Are they a breeding ground for mosquitoes?***
No. Mosquitoes need 7 to 12 days to lay and hatch eggs, rain gardens are generally dry after 1-3 days.
- ***Is a rain garden expensive?***
Back yard rain gardens should not be expensive with the main cost being that of plants.



BASICS FOR BUILDING A RAIN GARDEN



1 locate

Select an area that will capture and absorb runoff. The location will depend on the amount of hard surfaces, how water flows across the land and the type of soil on your property.



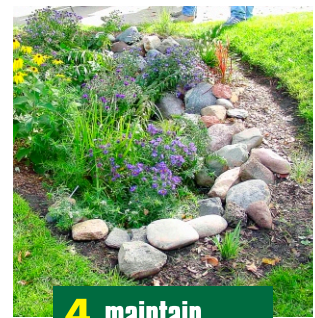
2 design

Rain gardens are shallow depressions, typically 4-8 inches lower than the surrounding lawn. They can be many shapes and sizes depending on the location you select and the amount of runoff you plan to capture.



3 build & plant

Dig a shallow depression for the outline and base of the rain garden, making sure the bottom depth is at least 1-2 feet above the water table. It is best to plant your rain garden with native plants in the spring or fall when the plants will establish most easily.



4 maintain

You may need to periodically water your garden for the first growing season until the plants are fully established. If you use native plants, maintenance of your rain garden may only include annual mulching and weeding.

The four steps above present a general overview of how to build a rain garden. Before you begin your rain garden project see the specific rain garden resources listed on www.nccoast.org/raingarden.

HOW A RAIN GARDEN WORKS



Rain gardens are shallow depressions containing native plants. They work the way nature does. They capture stormwater runoff so it can soak into the ground.

Resources

- NC State BAE Stormwater Home Page
NC Cooperative Extension Info
www.bae.ncsu.edu/topic/raingarden/index.htm
- University of Wisconsin's Extension Service Publications
<http://clean-water.uwex.edu/pubs/home.htm>
- Low Impact Development Center
www.lowimpactdevelopment.org
- NC Division of Soil and Water Conservation Community Conservation Assistance Program (CCAP) Funding
www.enr.state.nc.us/DSWC/pages/ccap_program.html
- Low Impact Development Center site on rain gardens, includes design templates
www.lowimpactdevelopment.org/raingarden_design/sitemap.htm
- NCSU rain garden guide for building rain gardens in North Carolina
www.bae.ncsu.edu/topic/raingarden/stormwater.htm
- Great manual with overall information about rain gardens and design specs
www.dnr.state.wi.us/ORG/WATER/WM/dsfm/shore/documents/rgmanual.pdf
- Eight page brochure on the value of rain gardens
learningstore.uwex.edu/pdf/GWQ034.pdf
- Useful information from Maine
www.umext.maine.edu/onlinepubs/PDFpubs/2702.pdf

About NCCF: Citizens Working Together for a Healthy Coast

The North Carolina Coastal Federation (NCCF) is the state's only non-profit organization focused exclusively on protecting and restoring the coast of North Carolina through education, advocacy and habitat restoration and preservation. For more information call 252.393.8185 or check out NCCF's website at www.nccoast.org.



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