National Estuarine Research Reserve System

Stormwater & South Carolina
Design & Development

Stormwater and Your Bottom Line

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Why should you care?

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what is stormwater?
stormwater & development

Natural Ground Cover
- 40% evapotranspiration
- 10% runoff
- 25% shallow infiltration
- 25% deep infiltration

10%-20% Impervious Surface
- 38% evapotranspiration
- 20% runoff
- 21% shallow infiltration
- 21% deep infiltration

35%-50% Impervious Surface
- 35% evapotranspiration
- 30% runoff
- 20% shallow infiltration
- 15% deep infiltration

75%-100% Impervious Surface
- 30% evapotranspiration
- 55% runoff
- 10% shallow infiltration
- 5% deep infiltration
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- **Time**
- **Volume of Water**
- **Peak Flow**

Urban

Natural

Rain Event

Time
What is a watershed?

A watershed is an area of land that drains to a single outlet.
what is a watershed?
what’s in stormwater?

- heavy metals
- sediments
- pesticides
- fertilizers
- bacteria
- oils
what’s in stormwater?
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- rapid growth
- aquatic-based tourism
- commercial fisheries
- recreational fisheries
- swimming beaches
- quality of life
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57th annual sun fun festival

Have Fun in the Sun
Kick off the summer season with sun, sand and surf at the 57th Annual Sun Fun Festival in

Visit the Cherry Grove Pier and experience the best fishing on the Carolina coast.
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swashes a.k.a. tidal creeks
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COMMUNITY NEWS

Bacterial levels dangerous in beach swashes

Risking infection | Braden Ray, 8, of Williamsport, Penn., digs a hole in the sand at left while Tommy McGeehan, 10, of King of Prussia, Penn., splashes in the swash behind the Hampton Inn and Suites Friday. The S.C. Department of Health and Environmental Control cautions beach visitors to avoid these areas after storms such as Ernesto because of bacterial levels.
8000 stormwater retention ponds in coastal SC

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HORRY COUNTY

Child in retention pond taken to hospital

An Horry County child nearly drowned in a retention pond on Wednesday afternoon, said Battalion Chief Justin Gibbins of Horry County Fire Rescue.

The child, whose name, age and condition were not available Wednesday, was taken to Conway Medical Center around 7 p.m., Gibbins said.

The incident happened in a retention pond in the Emerald Lakes subdivision, Gibbons said.

He said the child could be moved to Medical University of South Carolina because of possible bacteria in the pond water.
stormwater & your community

- your drinking water
- your recreation
- your health
- your quality of life
what can you do?

- planning at watershed scale
- alternative development & design
- responsible development practices
- support local initiatives
- lead by example
what can you do?

- pick up your pet waste and discard in trash or toilet
- never put anything or wash anything into a storm drain
- proper yard care practices, including proper chemical use and storage
remember:
we all live downstream

IF YOU THINK
PICKING UP
DOG POOP IS
UNPLEASANT,
TRY DRINKING IT.

Pet waste washes into storm drains,
polluting our rivers, lakes and drinking
cwater sources. Get the scoop.

www.Earth911.org   1-877-EARTH911