

Stormwater 101

City of Bessemer
Stormwater Department
Lunch and Learn
August 13, 2022

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Jefferson County Stormwater Program



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WATER

- Is everyone's problem whether too much or not enough
 - Vital to every living thing
 - 2/3 of the human body is made up of water
- Is the universal solvent – absorbs what it comes in contact with
- Is a finite resource
 - Water Cycle

3 sectors of use in Alabama:

- Agriculture
- Public supply
- Industry

Reference: Alabama Watershed Stewards Handbook

2

Alabama's Characteristics (hint: the reason runoff is such an important issue to discuss)

Rain

- Average rainfall 55 inches a year
- Weather is extreme – either too much, or not enough

Soils

- Old and weathered, heavily compacted
- Clay and chert

Waterways

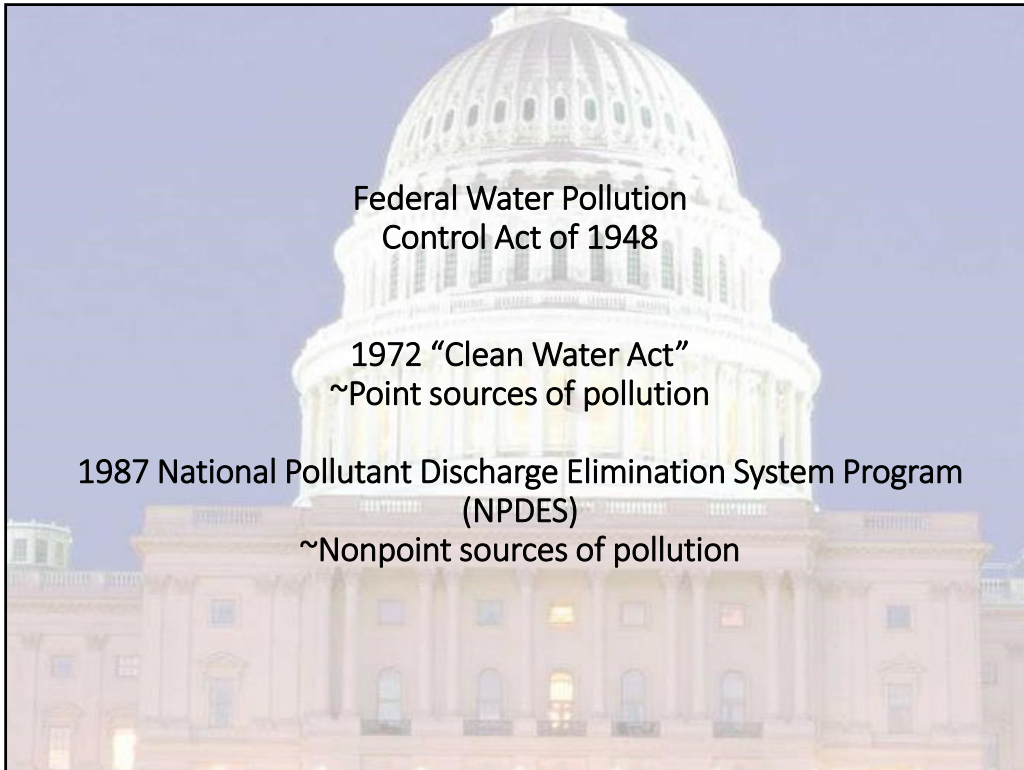
- 10% of the nation's fresh water in the continental US starts in or flows through our borders
- Alabama is divided into 16 river basins with over 132,000 miles of rivers and stream channels

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Why do we have water quality regulations?



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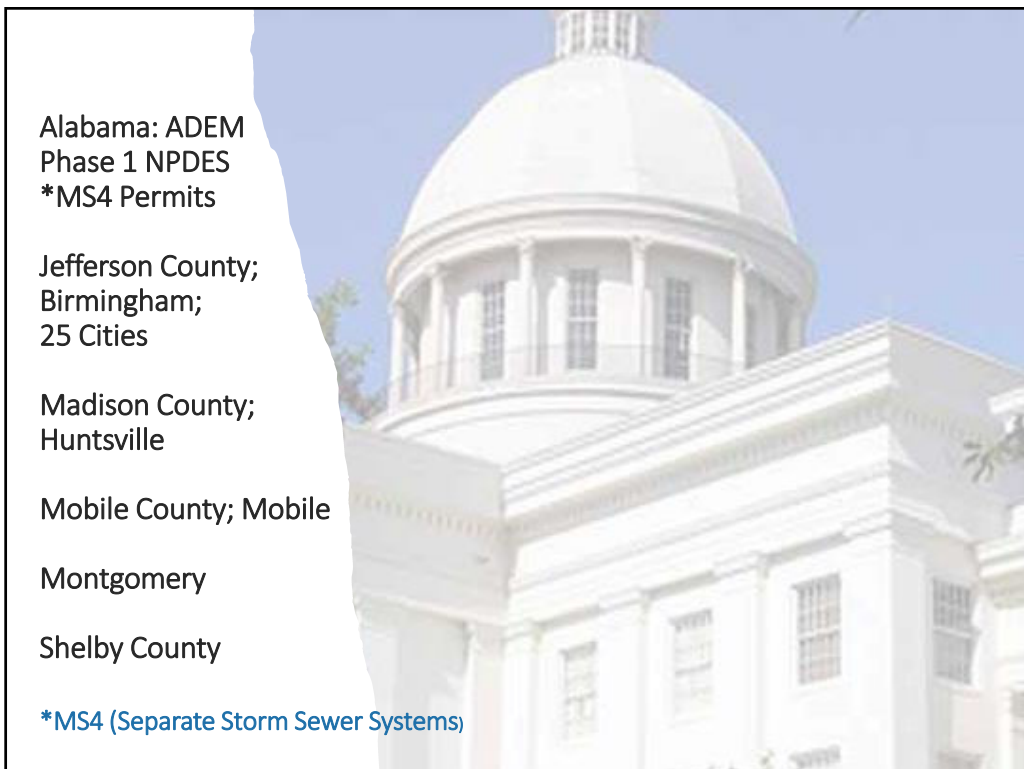


Federal Water Pollution
Control Act of 1948

1972 "Clean Water Act"
~Point sources of pollution

1987 National Pollutant Discharge Elimination System Program
(NPDES)
~Nonpoint sources of pollution

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Alabama: ADEM
Phase 1 NPDES
*MS4 Permits

Jefferson County;
Birmingham;
25 Cities

Madison County;
Huntsville


Mobile County; Mobile

Montgomery

Shelby County

*MS4 (Separate Storm Sewer Systems)

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Jefferson County Stormwater Program

NPDES Permit ALS000001 Phase I MS4 Requirements

(Oct 2018- Sept 2023)

- Structural controls
- Public Education and Public Involvement
- Illicit Discharge Detection and Elimination
- Construction Site Storm Water Runoff Control
- Post Construction Stormwater Management; New and Redevelopment
- Spill Prevention Response
- Pollution Prevention / Good Housekeeping
- Pesticides, Herbicides, Fertilizers
- Oils, Toxics, and Household Hazardous Waste Control
- Industrial Storm Water Runoff
- Monitoring
- Inspections and Enforcement

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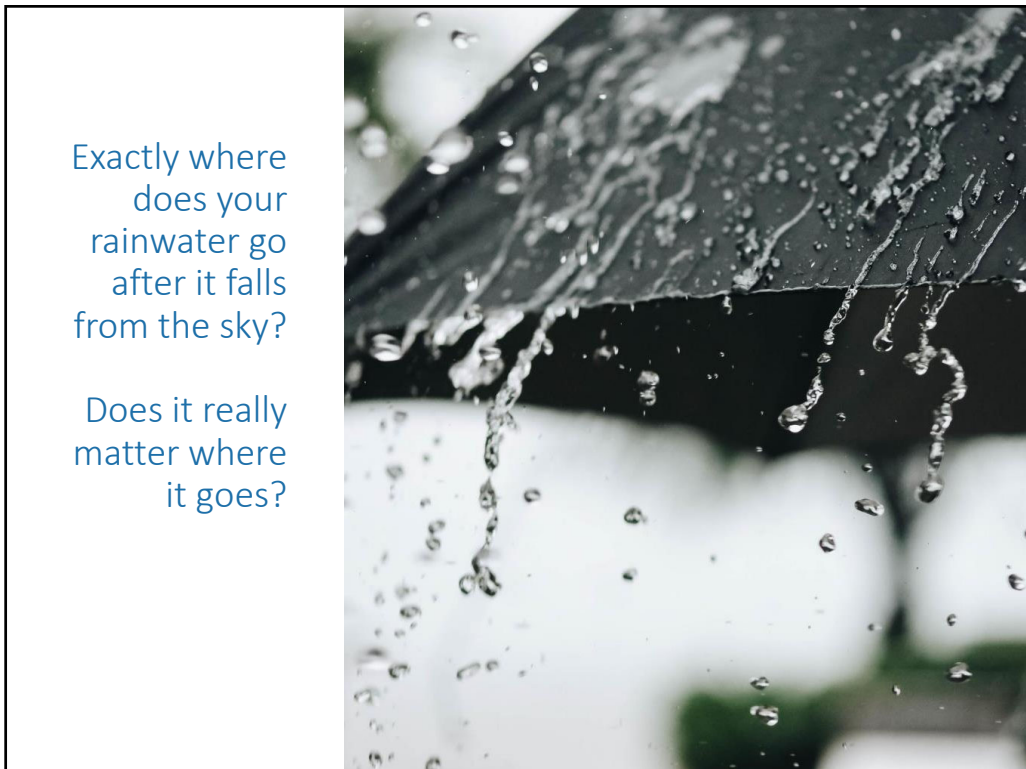
Local Stormwater (MS4) Programs

- City of Bessemer
- City of Birmingham
- City of Hoover
- City of Leeds
- Jefferson County Commission
- Jefferson County Department of Health Watershed Division Program
 - Implements various stormwater requirements on behalf of Storm Water Management Authority, Inc. (SWMA)
 - Adamsville – Brighton – Brookside - Center Point - Clay – Fairfield
 - Gardendale - Graysville – Homewood - Hueytown – Irondale – Lipscomb
 - Maytown – Midfield Mulga - Mountain Brook – Pinson - Pleasant Grove
 - Tarrant – Trussville - Vestavia Hills

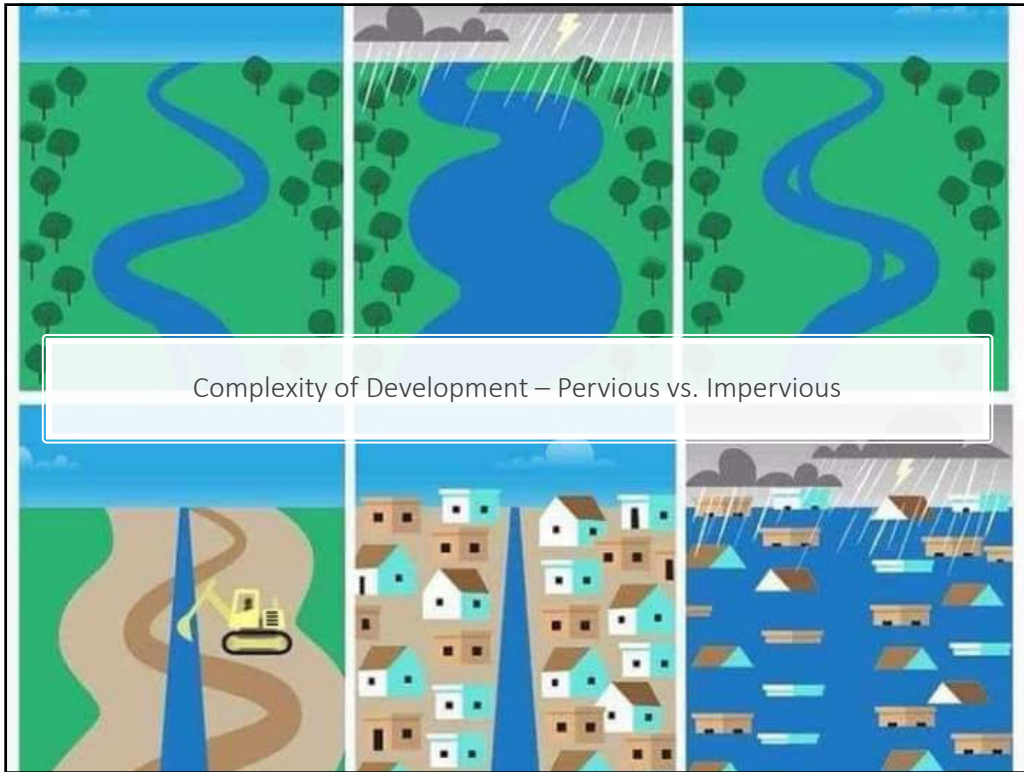
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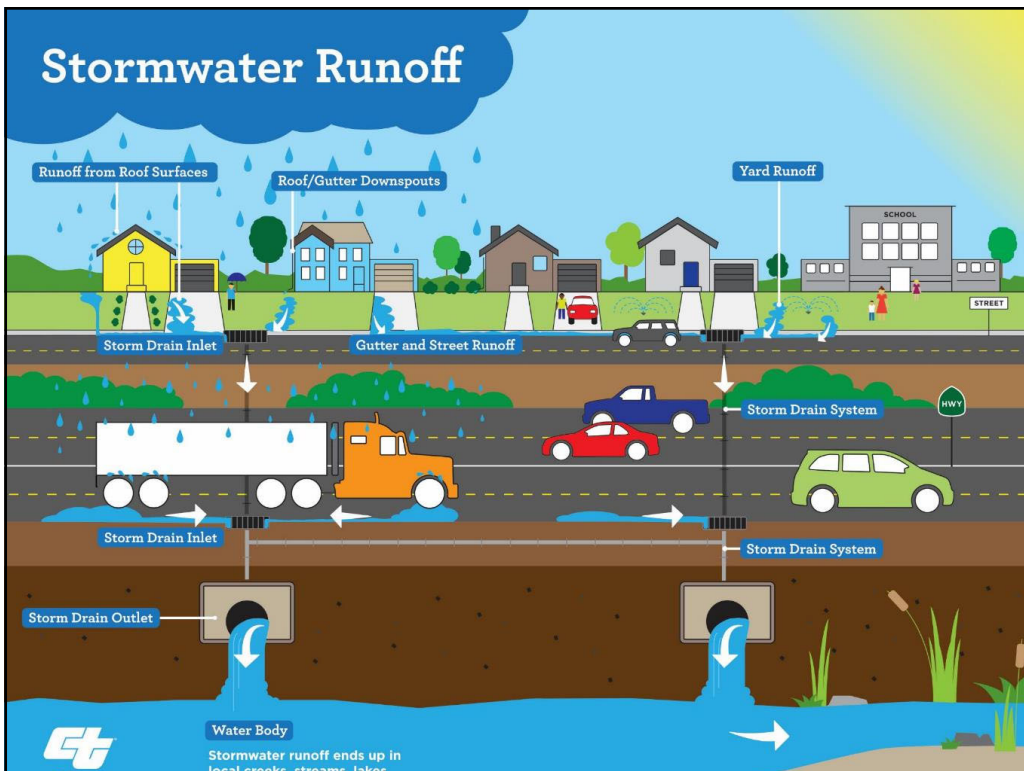
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Stormwater Drainage Systems prevent streets from flooding by transporting rain to the nearest waterway with NO FILTRATION OR TREATMENT. Include gutters, curb inlets, open ditches, and pipes.

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ILLCIT DISCHARGES



Only Rain Down the (Storm) Drain!

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How does rainwater get polluted?

Does it really matter what rain comes in contact with before it flows into the waterways??



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NON-POINT SOURCE (NPS) POLLUTION



Your everyday activities can create NPS pollution.

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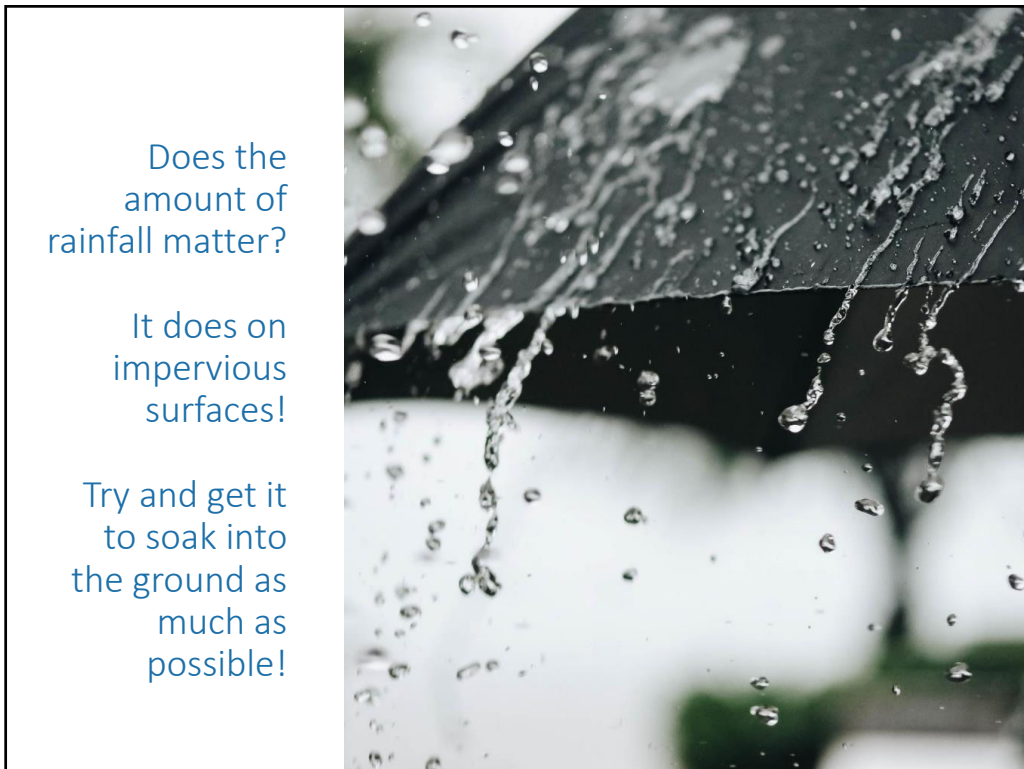
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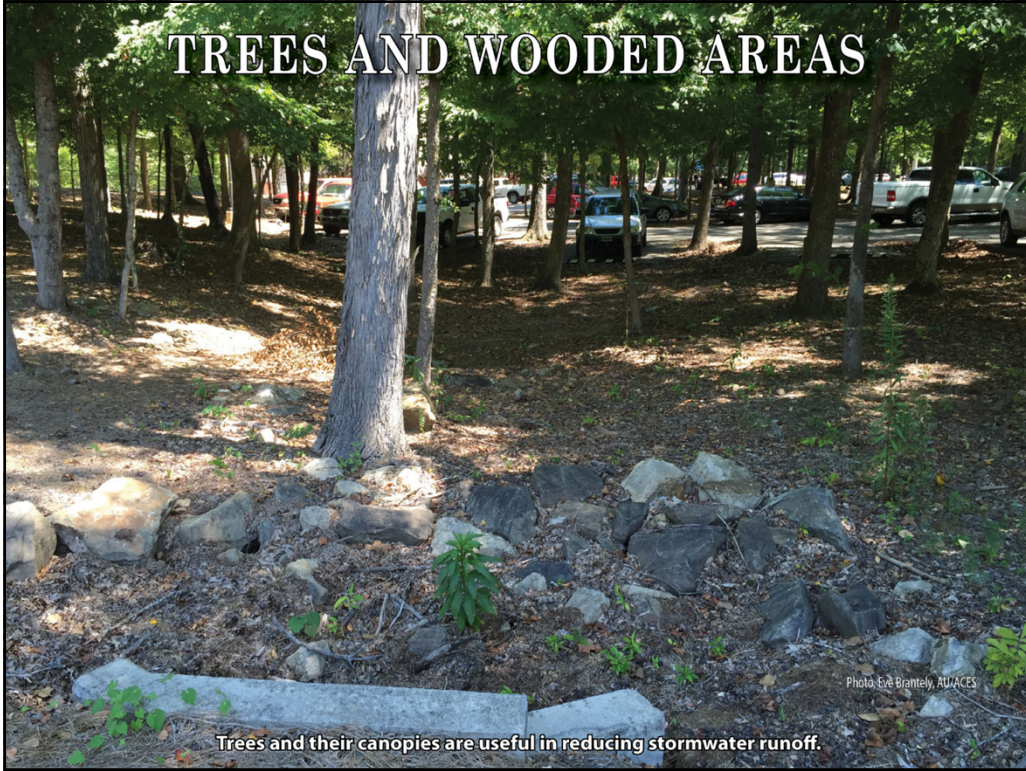
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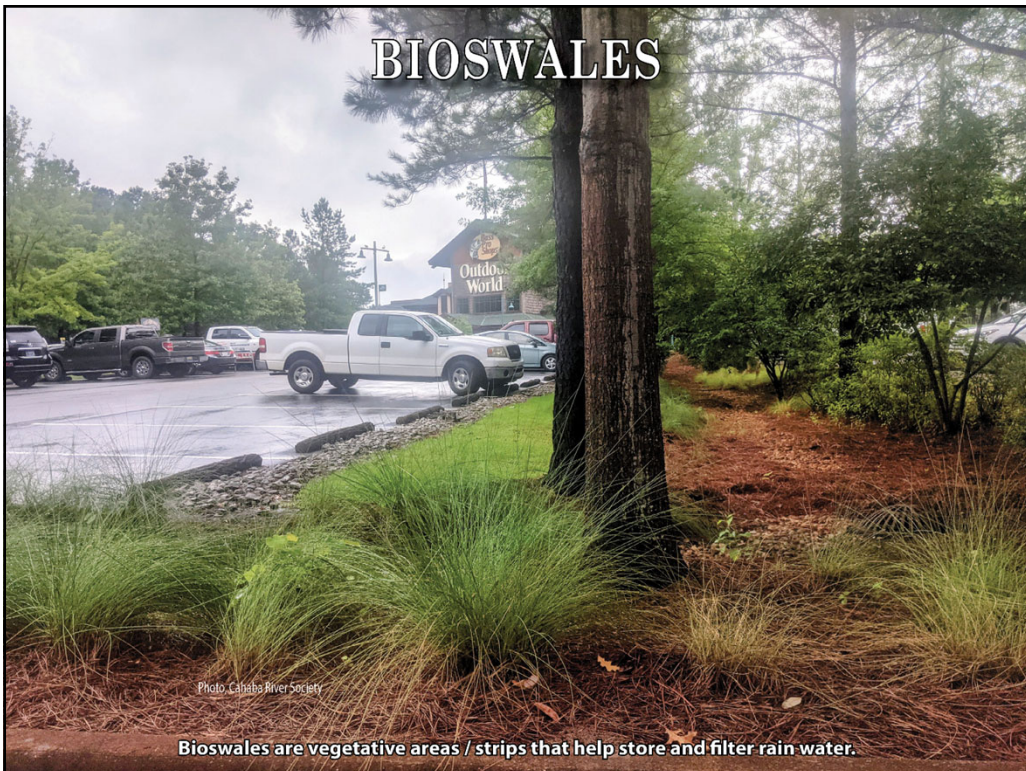
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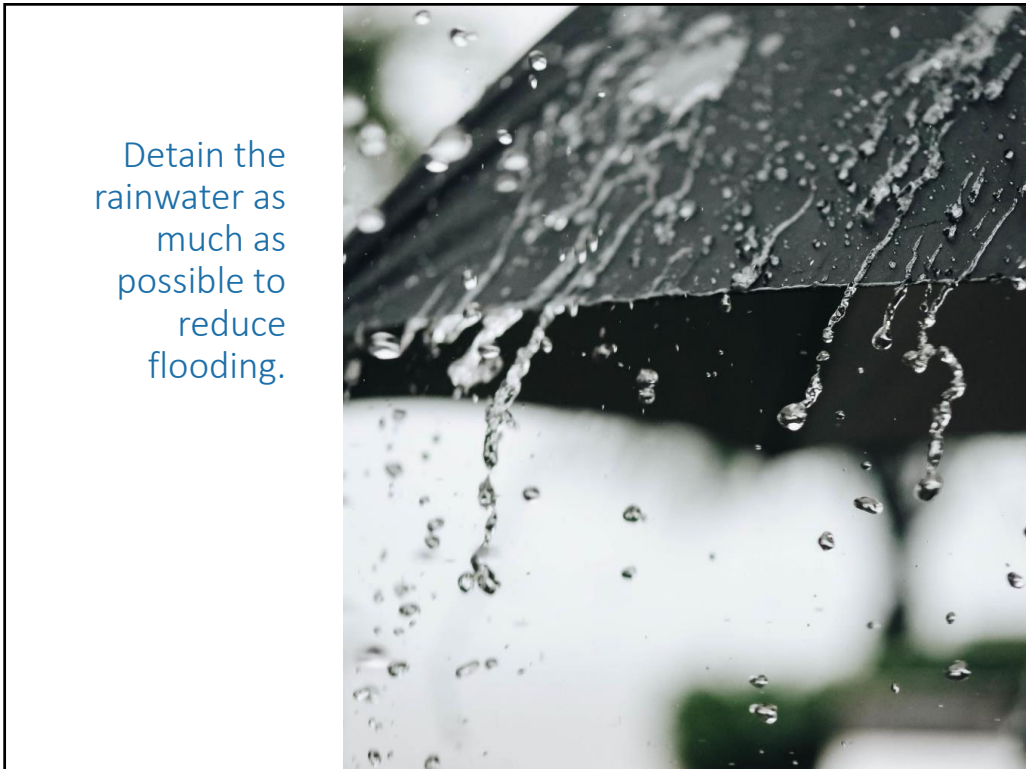
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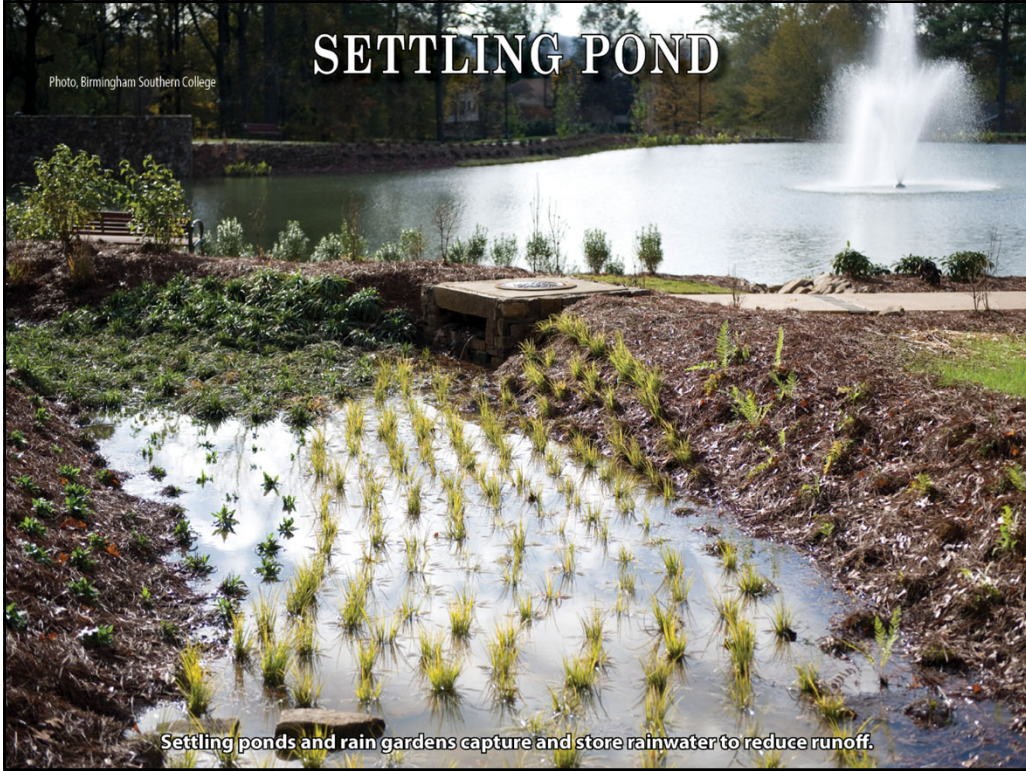
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Jefferson County Stormwater Water Program

<http://www.jccal.org/Default.asp?ID=2022&pg=Community+Outreach>

