

An Assessment of Storm Water Runoff Issues in Pine Bluff, White Hall, the University of Arkansas – Pine Bluff and Jefferson County

University of Arkansas – Pine Bluff, Regulatory Science Center
in Cooperation with the
University of Arkansas Cooperative Extension Service
Policy and Issues Education Center

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Background

- The Storm Water Phase II Rule requires small municipalities, urbanized areas and universities to implement programs and practices to control polluted storm water runoff
- Phase II is intended to reduce adverse impacts to water quality and aquatic habitat
- An expansion of the Phase I program and requires NPDES permits (National Pollutant Discharge Elimination System)

Urbanized Area Definition

A central place (or places) and the adjacent densely settled surrounding area that together have a minimum population of 50,000 and a minimum average density of 1,000/sq.mi.

(Bureau of the Census geographers liken it to flying over an urban area and drawing a line around the built-up, developed area as seen from the air)

Storm Water Phase II Rule

- Under CWA 402(p)(6), EPA Issued Initial Phase II Final Rule on August 7, 1995
- EPA Proposed Revised Phase II Regulations on January 9, 1998 [63 FR 1536]
- Requires All Unregulated Sources of Storm Water Discharges to Apply for NPDES Permits by August 7, 2001 (Interim Measure)

Objectives

Assess the current level of knowledge and the concerns regarding storm water runoff issues in the Jefferson County Area

Examine public education and outreach programs that have been established in other small municipal separate storm sewer systems (MS4s)

Suggest public education and outreach tools that may be successfully adapted to the area

Storm Water Phase II Program

Public Education and Outreach

- *Must* implement a public education program, including materials that describe the impacts of storm water and actions to reduce pollution
- *Should* inform the public on steps they can take (i.e., proper septic system maintenance)
- *Should* direct information to targeted groups (i.e., commercial, industrial and institutional entities likely to cause storm water impacts)
- *Should* address viewpoints and concerns of all sub-communities (i.e., minorities, business, construction/development, disadvantaged)

Storm Water Phase II Program Requirements

Minimum Control Measures:

1. Public Education and Outreach
2. Public Involvement/Participation
3. Illicit Discharge Detection and Elimination
4. Construction Site Storm Water Runoff Control
5. Post-Construction Storm Water Management in New Development and Redevelopment
6. Pollution Prevention/Good Housekeeping for Municipal Operations

Need for Awareness

Little Rock (pop. 183,133)

North Little Rock (pop. 60,433)

Fort Smith (pop. 80,268)

Fayetteville (pop. 58,047)

Jonesboro (pop. 55,515)

Pine Bluff (pop. 55,085)

Hot Springs (pop. 35,750)

6th largest city

5th largest urban area (Jefferson Co. pop. 82,656)

Need for Awareness



New Wal-Mart Super Center
Constructed in the
Bayou Bartholomew
Flood Plain spurs other new
construction and development

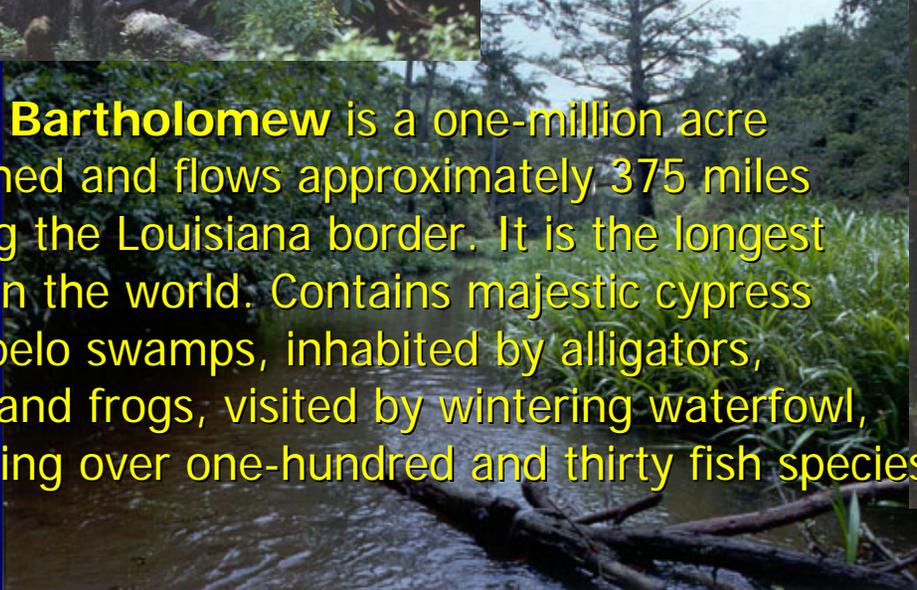
The University's campus surface water
runoff empties directly into the
Arkansas River Watershed



Need for Awareness



Bayou Bartholomew is a one-million acre watershed and flows approximately 375 miles crossing the Louisiana border. It is the longest bayou in the world. Contains majestic cypress and tupelo swamps, inhabited by alligators, turtles and frogs, visited by wintering waterfowl, containing over one-hundred and thirty fish species.



Methods

- No need to recreate the wheel
- There are very successful MS4 education programs in Northwest Arkansas, Texas, Tennessee, Oklahoma, (Most Southern Region States)

Methods

- Develop an urban storm water runoff survey
- Survey will gather information regarding the current knowledge level and specific storm water runoff issues in the area
- Descriptive statistics will be used to summarize the survey results

Methods

- Outstanding education and outreach programs will be identified
- An evaluation of education tools will be conducted using DECMAT
- We will suggest education tools that may be adapted for use in our MS4

Suggestions

- Do you have suggestions of outstanding MS4 programs that we should contact?

Questions?

Acknowledgements

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