Monitoring Water Quality in Impaired Watersheds

Bayou Bartholomew, Lake Conway Point Remove, Lower Ouachita-Smackover, and L’Anguille

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Projects’ Ultimate

Provide monthly and annual parameter loadings, as well as unit area loadings in numerous 12 digit HUCs.

The long-term goal of the priority watershed program is to reduce pollutants to levels that will restore all designated uses.
• **Monitoring Structure** — Similar activities are implemented in each monitored watershed that support the projects’ primary goal.

• **Water Quality Requirements** — Incorporates project design, collection and analytical methodologies to generate representative data and allow for an evaluation of water chemistry within the selected watersheds.

• **Discharge Requirements** — Estimate the volume of water that passes the monitoring station during the sampling period.

• **Data Compilation and Statistical Analysis** — Compile and statistically analyze the collected data to provide monthly, annual, and unit area loadings, as well as, compare results between monitoring stations.

• **Reporting Requirements** — Provide project partners with the project outcomes and make the results readily available to the natural resource professionals and to the general public.
The Bayou Bartholomew was included on the Arkansas 2014 303(d) for not supporting designated uses.

ANRC has designated the watershed as a priority watershed.

NRCS also identified the Bayou Bartholomew as a priority in the Mississippi River Basin Healthy Watershed Initiative.
Bayou Bartholomew

Cousart Bayou 1
Cousart Bayou 2
Deep Bayou 1
Deep Bayou 2
Deep Bayou and Bayou Bartholomew Confluence
Bayou Bartholomew Turbidity 2013 - 2017

Bayou Bartholomew TSS 2013 - 2017
LCPR scored 91 in the Final Risk Assessment Matrix Percentile of the Arkansas’ Nonpoint Source Pollution Watershed Risk Matrix and has been selected as a priority watershed.

NRCS identified LCPR as a priority in the Mississippi River Basin Healthy Watershed Initiative.
Lake Conway Point Removed Total Phosphorus

WF1 TP
WF2 TP
LCC TP
WF3 TP
EF1 TP
EF2 TP
PR TP

response

0 0.05 0.1 0.15 0.2 0.25 0.3 0.35 0.4
Lake Conway Point Removed Total Phosphorus

WF1 TP
WF2 TP
LCC TP
WF3 TP
EF1 TP
EF2 TP
PR TP

response
Lake Conway Point Removed Turbidity

- WF1 TURB
- WF2 TURB
- LCC TURB
- WF3 TURB
- EF1 TURB
- EF2 TURB
- PR TURB

response
Portions of the Lower Ouachita – Smackover HUC have been included on the Arkansas 303(d) list for not supporting aquatic life and drinking water designated uses and has been on each subsequent 303(d) list. ANRC has designated the watershed as a priority watershed.

Lower Ouachita – Smackover Watershed

Focused on the “outfalls” of 12 digit HUC
Lower Ouachita - Smackover

Bryant Creek
Guice Creek
Champagnolle Creek
Whitewater Creek
Loyd Creek
Holmes Creek
Sandy Creek
Lower Ouachita - Smackover

Bryant Creek
Guice Creek
Champagnolle Creek
Whitewater Creek
Loyd Creek
Holmes Creek
Sandy Creek
Two Bayou
Locust Bayou
Lower Ouachita - Smackover

Bryant Creek
Guice Creek
Champagnolle Creek
Whitewater Creek
Loyd Creek
Holmes Creek
Sandy Creek
Two Bayou
Locust Bayou
Moro Creek
The L'Anguille River was included on the Arkansas 1998 303(d) list for not supporting aquatic life due to siltation/turbidity and has been on each subsequent 303(d) list.

ANRC has designated the watershed as a priority watershed.

NRCS also identified the L'Anguille River as a priority in the Mississippi River Basin Healthy Watershed Initiative.
L’Anguille River

Copper Creek
Prairie Creek
Indian Creek
Cypress Creek
L’Anguille River

- Copper Creek
- Prairie Creek
- Indian Creek
- Cypress Creek
- First Creek
- Upper Brushy Creek
L’Anguille River

- Copper Creek
- Prairie Creek
- Indian Creek
- Cypress Creek
- First Creek
- Upper Brushy Creek
- Middle Brushy Creek
L’Anguille River

Copper Creek
Prairie Creek
Indian Creek
Cypress Creek
First Creek
Upper Brushy Creek
Middle Brushy Creek
Upper Second Creek
Middle Second Creek
Lower Second Creek
Thank You

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