Management Plan for the Choctawhatchee, Pea and Yellow Rivers Watersheds – A Roadmap for the Future Based on Sustainable Water Resource Management Planning

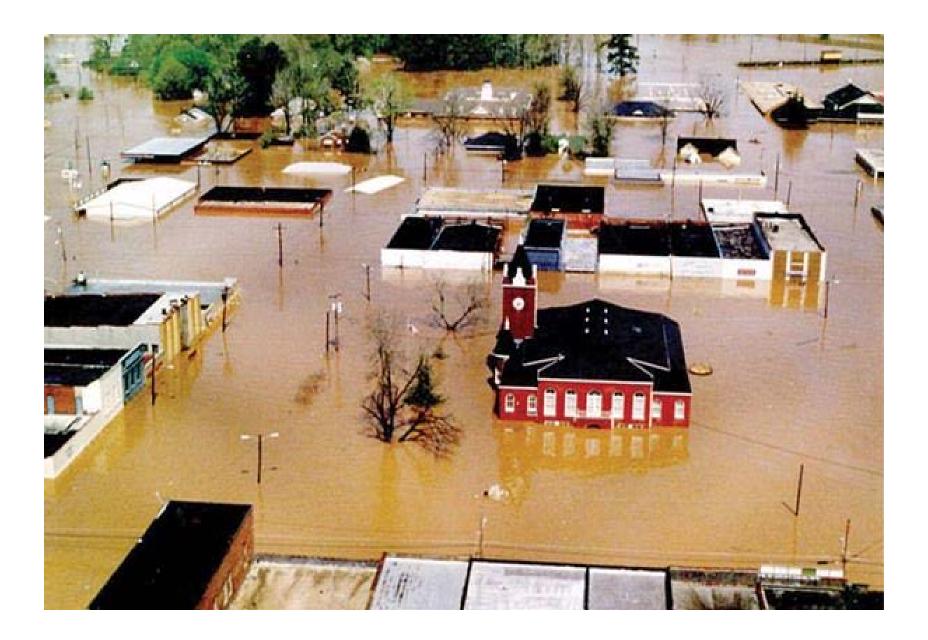
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September 9-11, 2015

Orange Beach, Alabama

The Beginning.....



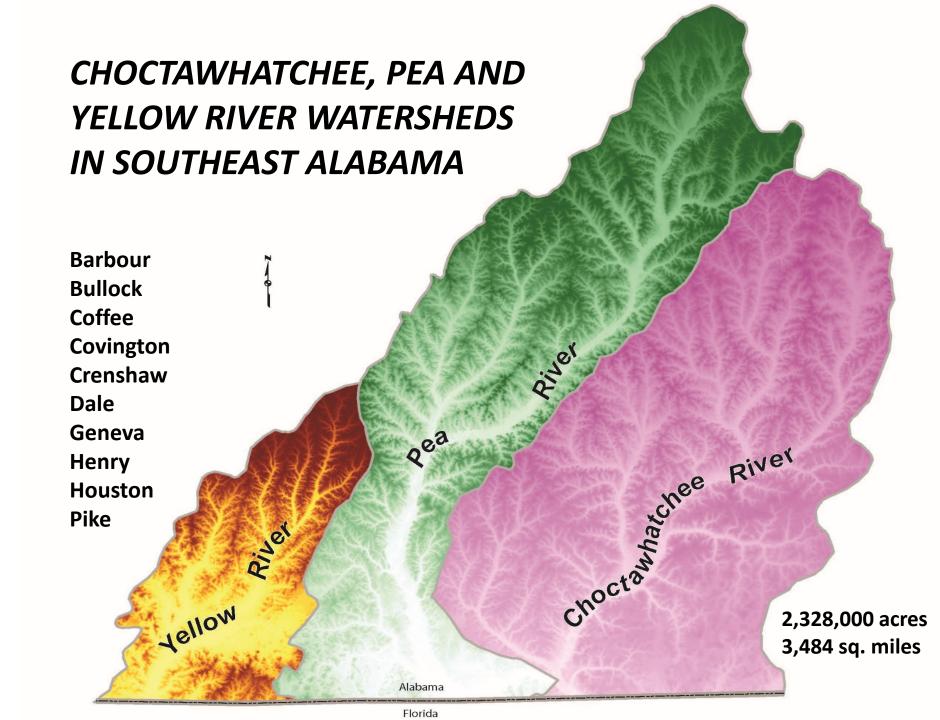


The Creation.....

Choctawhatchee, Pea and Yellow Rivers Watershed Management Authority (CPYRWMA)

- PL 91-602 (May, 1991)
- Watershed Concept protecting and managing state watersheds
- Operates within nature's boundaries not political boundaries
- Strategic Management Elements Water Quantity, Water Quality, Flood Control, and Education
- Board of Directors volunteers from ten counties grass roots concept





THE RIVERS

Choctawhatchee River

- One of the longest free-flowing rivers remaining in Alabama
- East and West forks originate in Barbour County
- Forks merge at Ozark and flow 48 miles to Geneva

Pea River

- Originates in Bullock County
- Flows 68 miles to Elba then 30 miles to Geneva where it joins the Choctawhatchee

Yellow River

- Originates in Crenshaw County
- Flows through Coffee and Covington Counties

Accomplishments.....

The CPYRWMA has adhered to a systematic approach of water data collection and interpretation of scientific data which has resulted in understanding water issues from an information and data perspective.

The agency has co-sponsored detailed hydrological studies that have identified and evaluated all the water resources in the watersheds and have produced basic geographic, cultural, and scientific data.

It has completed basin-wide water resource assessments and collected an unprecedented amount of data for the watersheds in the southeastern area of the state.

Some of these are...

- Hydrologic Characterization of Water Resources of the Choctawhatchee-Pea Watershed
- Implementation Assessment for Water Resource Availability, Protection, and Utilization of the Choctawhatchee, Pea and Yellow Rivers Watersheds
- Surface Water Assessment of the Yellow River Watershed
- Agricultural Water Demand and Wetlands Assessment
- Isotopic and Geochemical Assessment of Water from the Aquifers of the Cretaceous Age
- Assessment of Aquifer Recharge, Ground Water Production Impacts and Future Ground Water Development in Southeast Alabama
- Monitoring and Analysis of Water Quality and Biological Resources of the Little Choctawhatchee River
- Major Rehabilitation of Elba and Geneva Levees and Construction of Interior Flood Storage Basin at Elba Levee
- Operates and Maintains the <u>only</u> basin-wide Flood Warning System in the State of Alabama with 21 rain/river gauges in eight counties

NEXT STEP

For more than two decades, the CPYRWMA, which is the only watershed management authority existing as a state agency in Alabama, has commissioned and funded scientific assessments, assisted local entities with water resource issues and initiatives, and has provided educational assistance to local governments and citizens.

As the next step in watershed management, the CPYRWMA, along with state and federal partners, initiated the development of a comprehensive watershed management plan designed to consolidate watershed natural resource issues, available scientific data, and future management options for the watershed.

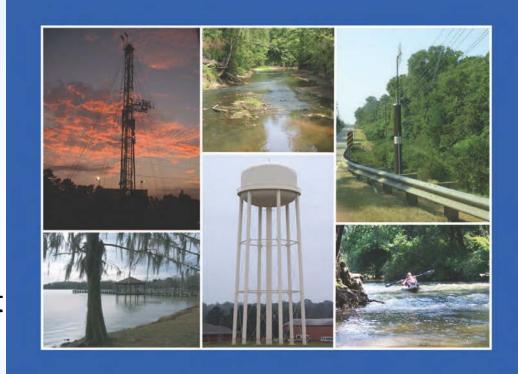
The Plan.....

CHOCTAWHATCHEE, PEA AND YELLOW RIVERS WATERSHED MANAGEMENT PLAN

GSA Information Series

Printed for CPYRWMA distribution

Available in digital format





*PURPOSES OF THE PLAN

- * 1. A comprehensive reference document
 - * 32 major information categories
 - * More than 300 cited references
 - * 119 graphics
 - * 51 data tables
- * 2. A management plan for the CPYRWMA, Municipal, and County Governments
 - * Reference information and data
 - * Recommended action items
 - Potential policy initiatives

MAJOR TOPICS

- Vision for Future Local/Regional Water Resource Planning and Management
- * Watershed Issues and Recommendations
- * Description of Watersheds
- * Water Resources
- * Surface Water Resources
- Watersheds
- Surface Water Availability
- Surface Water Quantity
- Use and Demand
- Surface Water Monitoring
- Surface Water Quality

- * Groundwater Resources
- * -Aquifers
- Groundwater Availability
- * -NPPI Maps
- Groundwater Quantity
- * -Use and Demand
- Groundwater Monitoring
- Groundwater Quality
- * Ecosystem Resources
- * Agricultural Issues
- * Recreational Issues
- * Forestry Issues
- * Flood Control
- * Education

Example Recommendations and Policy Implications

Irrigation

The CPYRWMA should work with GSA, AOWR, NRCS, and Soil and Water Conservation Districts, and the Irrigation Association of Alabama to identify sources of irrigation, encourage more acreage under sustainable irrigation, and to monitor potential water quantity and quality impacts.

A state implemented water management plan should address irrigation needs and developments and address competition for limited water sources.

Education

Education initiatives should include development of a water conservation guide, enhanced website design, legislative delegation briefings, school watershed education initiatives, workshops for the CPYRWMA Board of Directors, development and hosting conferences and symposia, coordinating interagency efforts, and providing an information distribution plan.

Additional legislative funding should be requested by the CPYRWMA for assistance with the cost of educational issues.

A state implemented water management plan should include educational components including water availability and conservation to be implemented on the local level.

Economic Impacts

An economic development program should be developed for the CPYRW.

The CPYRWMA should coordinate with the Southeast Alabama Regional Planning Commission, Alabama Department of Commerce, and the Alabama Department of Economic and Community Affairs to ensure that water resource and other economic development information for the CPYRW is available and considered for economic development strategies.

A state implemented water management plan and associated regulations should be developed and implemented with assistance and support of the CPYRWMA, to promote water source development and equitable water distribution and conservation.

Climate Change and Resource Resiliency

Monitoring short and long-term climatic conditions and water resource availability should include monitoring systems and methodologies for water use, precipitation, temperature, surface water discharge, and groundwater levels.

The CPYRW flood warning system and levees at Elba and Geneva should be properly maintained in perpetuity.

Coordination between AWOR, ADAI, NRCS, USACE and local governments and water supply systems is imperative, and should also include stakeholders whose interests are susceptible to climatic changes.

Water conservation policies should be developed and enforced by public water suppliers.

A state implemented water management plan and associated regulations should be developed for equitable water resource distribution and conservation.

The Choctawhatchee, Pea and Yellow Rivers Watershed Management Authority Watershed Management Plan is a guide for future initiatives of the Authority to manage and protect the natural resources of the watershed while assisting with the economic growth and quality of life improvements for the citizens of the Wiregrass Region of Alabama.