



DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, MOBILE DISTRICT
P.O. BOX 2288
MOBILE, ALABAMA 36628-0001

REPLY TO
ATTENTION OF:

South Mississippi Branch
Regulatory Division

September 4, 2015

**JOINT PUBLIC NOTICE SAM-2014-00653-MBM
U.S. ARMY CORPS OF ENGINEERS**

**MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF POLLUTION CONTROL**

MISSISSIPPI DEPARTMENT OF MARINE RESOURCES

**REQUEST TO CONSTRUCT TWO CONNECTED WATER SUPPLY LAKES FOR
MAINTAINING PASCAGOULA RIVER FLOW RESILIENCY DURING PROLONGED
SEVERE DROUGHTS, GEORGE AND JACKSON COUNTY, MISSISSIPPI**

TO WHOM IT MAY CONCERN:

This District has received an application for a Department of the Army permit pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) and Section 404 of the Clean Water Act (33 USC 1344). Please communicate this information to interested parties.

**APPLICANT: Pat Harrison Waterway District
Attention: Mr. Hiram Boone, Executive Director
6081 U.S. Highway 49
Hattiesburg, Mississippi 39401**

**IN COOPERATION WITH: George County Board of Supervisors
Jackson County Board of Supervisors**

**AGENT: Pickering Firm, Inc.
Attention: Mr. Jeff Ballweber
2001 Airport Road, Suite 201
Flowood, Mississippi 39232**

N 3000 acres

LOCATION: The applicant is proposing to construct two lakes, a 1,715-acre Upper Lake on Little Cedar Creek, and a 1,153-acre Lower Lake on Big Cedar Creek below the confluence with Little Cedar Creek. The lakes would be located north of Wade, in both George and Jackson County, Mississippi.

WORK: The applicant is proposing to place fill in jurisdictional wetlands and streams for the purpose of constructing two earthen dams to create two lakes. The earthen dam for the Lower Lake is projected to be 2,821.5 feet long, 250 feet wide at the base, with a height of 40 feet. The earthen dam for the Upper Lake is projected to be 4,232.3 feet long, 351 feet wide at the base, with a height of 60 feet. It is anticipated that the Lower Lake's dam/spillway footprint

will be approximately 16.19 acres, with the estimates for the Upper Lake's dam/spillway footprint approximately 34.12 acres. Depending on final approved designs the two earthen dams/spillways will require a total of 1 to 3 million cubic yards of suitable fill that will be acquired onsite. As a result of the dam construction, the upper dam will impound water to create a 1,715-acre lake while the lower dam will impound water to create a 1,153-acre lake.

The Pat Harrison Waterway District (PHWD) operates a water park, campground and recreational facilities on Okatibbee Reservoir and six smaller reservoirs on Pascagoula River tributaries. The PHWD proposes one or possibly two public recreational water park(s) adjoining the Upper and/or Lower Lake(s). The water parks will be patterned after the PHWD's current water parks and include cabins, recreational vehicle and primitive camping sites, water slides, boat launches, shelters and lodge halls, nature trails, etc. An economic impact and feasibility study will be used to determine the size, number and mix of amenities which the water park(s) will include.

EXISTING CONDITIONS: Within the footprint of the two-lake project, preliminary wetland delineations conducted by the agent have identified approximately 1,201.7 acres of wetlands, 219,506.63 linear feet (41.6 miles) of stream channels, and 24.77 acres of open water. The wetland habitats were primarily forested bayhead and bottomland hardwood wetlands. A small area of wet pine flatwoods was observed within the lower lake footprint only. These determinations and amounts have not been verified by the US Army Corps of Engineers (USACE) at this time.

PROJECT PURPOSE: The applicant's stated purpose for the lakes is that they are to provide secondary water source to sustain the Pascagoula River at the state mandated minimum flow of 917 cubic feet per second (CFS) during extreme prolonged drought conditions which could occur in the future due to climate change. Severe prolonged droughts occurred in 1936 and most recently in 2000. However in 2007 the Pascagoula River fell below 917 CFS in mid-November. In 2010 the Pascagoula hovered close to and periodically fell below 917 CFS from mid-October till early December. In 2011 the Pascagoula approached 917 CFS in mid-June and fell below 917 CFS for a brief time in early September. The Okatibbee Reservoir was not used to augment flows during the post-2000 low flow events. Water releases from the Upper to the Lower Lake would be coordinated to sustain the target 917 CFS flows in the Pascagoula River during prolonged severe droughts, while also striving to sustain recreational uses on both lakes to the greatest extent possible.

AVOIDANCE & MINIMIZATION: Initially, the Lower Lake, positioned below the confluence of Big and Little Cedar Creeks was anticipated to have a maximum pool elevation of 65 feet. At that elevation, the Lower Lake would have covered approximately 1,750 acres, with 1,227 acres of it in south George County and 523 acres in north Jackson County. In late 2014, modeling results showed that the projected water storage capacity achieved by the original two lake scenario slightly exceeded the projected long-term needs. Additional modeling reduced the Lower Lake's pool elevation to 60 feet and reduced the lake footprint by approximately 523 acres.

MITIGATION: The applicant has provided a conceptual mitigation procedure to address compensation for unavoidable impacts to bayhead and bottom hardwood wetlands, as well as stream impacts. The applicant states they would initially request mitigation credits for protecting downstream wetlands, including coastal wetlands, and streams from the impacts of climate variability. Secondly they will be proposing on-site mitigation by restoring, enhancing, or preserving wetlands and streams adjacent to the lakes. Thirdly, after all practicable adjacent on-site wetlands and stream mitigation is exhausted, they are proposing mitigation on off-site public lands, possibly using the 428.07 acres adjacent to Lake Bogue Homa purchased by the Mississippi Department of Wildlife, Fisheries and Parks for wetland and stream mitigation. Finally, after exhausting all practicable applicant-provided mitigation opportunities, the applicant will consider purchasing mitigation credits from an approved mitigation bank. Final compensatory mitigation will be evaluated by the USACE and cooperating resource agencies to ensure compliance with current mitigation regulations and regional requirements.

The applicant has applied for certification from the State of Mississippi in accordance with Section 401(a)(1) of the Clean Water Act and upon completion of the required advertising; a determination relative to certification will be made.

The applicant has applied for coastal zone consistency from the State of Mississippi Department of Marine Resources in accordance with Section 57-15-6 of the Mississippi Code Annotated. (DMR-150158).

This public notice is being distributed to all known interested persons in order to assist in developing facts on which a decision by the USACE can be based. For accuracy and completeness of the record, all data in support of or in opposition to the proposed work should be submitted in writing setting forth sufficient detail to furnish a clear understanding of the reasons for support or opposition. The decision whether to issue a permit will be based on an evaluation of the probable impact, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources.

The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors, which may be relevant to the proposal, will be considered, including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, protected species, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production and in general, the needs and welfare of the people.

The USACE is soliciting comments from the public; Federal, State and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the USACE to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects and the other public interest factors listed above.

Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act.

Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity. Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held for consideration of this application. Requests for public hearings shall state with particularity, the reasons for holding a public hearing.

Evaluation of the probable impacts involving deposits of dredged or fill material into waters of the United States will include the application of guidelines established by the Administrator of the U.S. Environmental Protection Agency.

In accordance with Section 106 of the National Historic Preservation Act, and Appendix C of 33 CFR 325, the undertaking defined in this notice is being considered for the potential to effect cultural and historic properties within the permit area. In accordance with Appendix C of 33 CFR Part 325, the USACE has determined that the permit area is the full area of the dams, lakes, and adjacent park amenities. A firm hired by the applicant has developed and implemented a Phase I archaeological research design and sampling protocol for the project area. The National Park Service, National Register of Historic Places (NRHP) database has been consulted. We are seeking comment from the State Historic Preservation Officer, Federally-recognized American Indian tribes, local historical societies, museums, universities, the National Park Service, and the general public regarding the known existence or the potential for existence of significant cultural and historic properties which may be affected by the work. The applicant is currently coordinating the Phase I study findings with the USACE and State Historic Preservation Officer to evaluate and determine if resources exist that are eligible for inclusion on the National Register of Historic Places (NRHP) in accordance with Section 106 of the National Historic Preservation Act.

Preliminary review of this application and the U.S. Department of the Interior List of Endangered and Threatened Wildlife and Plants indicated the following species may be present at or near the project location: gopher tortoise (*Gopherus polyphemus*), black pinesnake (*Pituophis melanoleucus* spp. *lodingi*), yellow-blotched map turtle (*Graptemys flavimaculata*), and Louisiana quillwort (*Isoetes louisianensis*). In addition, the Pascagoula watershed provides critical habitat for four threatened or endangered fish species: Gulf sturgeon (*Acipenser oxyrinchus desotoi*), peal darter (*Percina aurora*), saltmarsh topminnow (*Fundulus jenkinsi*), and Alabama shad (*Alosa alabamae*). The agent performed a survey of the project site(s) and noted that only the gopher tortoise was observed within the footprint of the proposed project. Because of the nature of the project, the proposed project would have direct and indirect adverse effects on the gopher tortoise population. Conservation measures such as avoidance, translocation, and/or habitat management could reduce the adverse impacts and could benefit the gopher tortoise population. No other listed species was observed during our survey of the review area. The findings and resulting determination are being coordinated with the U.S. Fish and Wildlife Service.

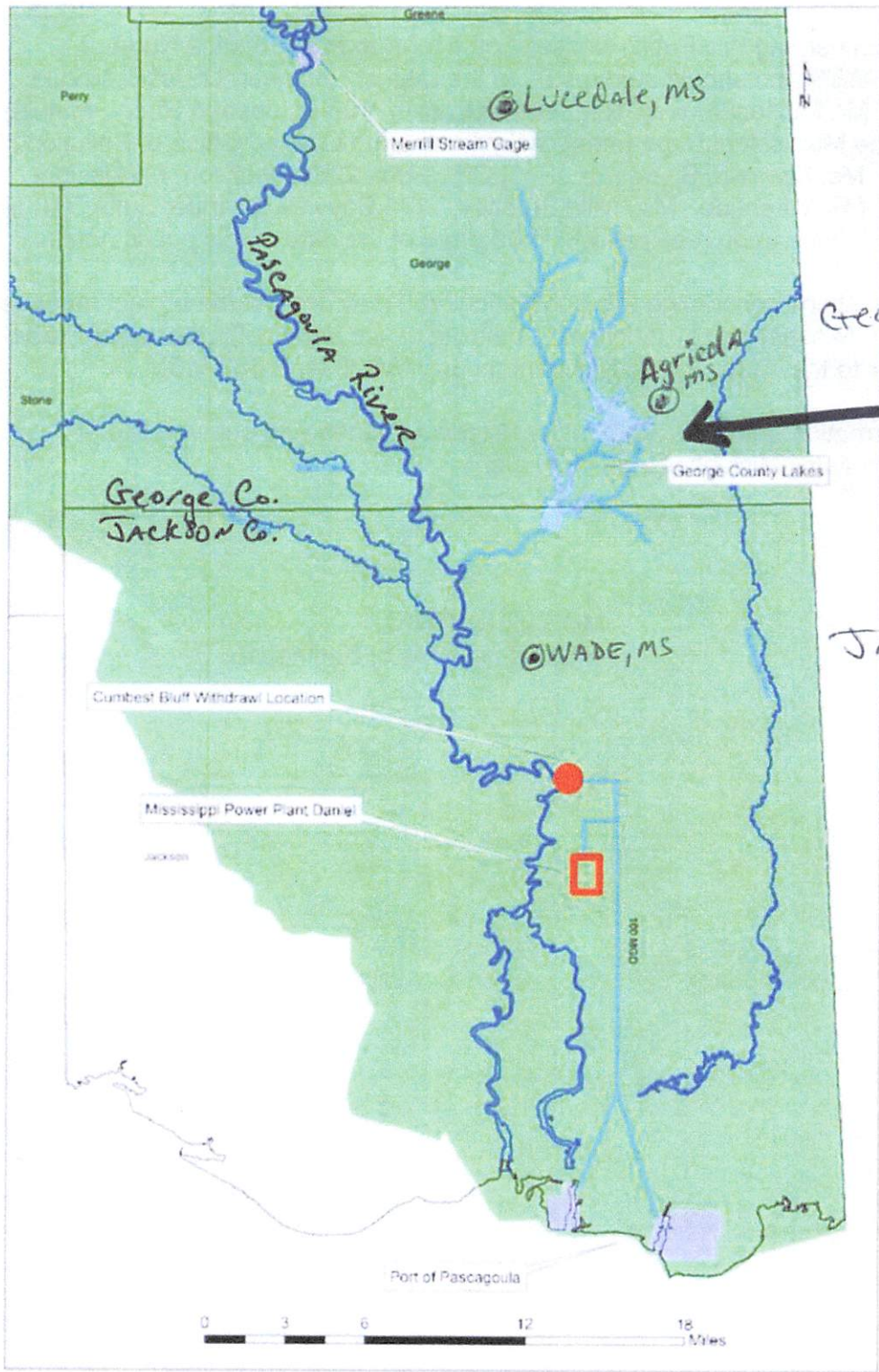
Correspondence concerning this Public Notice should refer to Public Notice Number **SAM-2014-00653-MBM** and should be directed to the District Engineer, USACE, Mobile District, Attention: Mr. Michael Moxey, Regulatory Division, 109 St. Joseph Street, Mobile, Alabama 36602, the Mississippi Department of Environmental Quality, Office of Pollution Control, Attention: Ms. Florance Bass, P.E., Post Office Box 2261, Jackson, Mississippi 39225, and the MDMR, Attention: Ms. Willa Brantley, 1141 Bayview Avenue, Suite 501, Biloxi, Mississippi 39530, in time to be received within **30 days** of the date of this public notice.

If you have any questions concerning this publication, you may contact the project manager for this application, Mr. Michael Moxey (Michael.b.moxey@usace.army.mil), phone (251) 694-3771. Please refer to the above Public Notice number SAM-2014-00653-MBM.

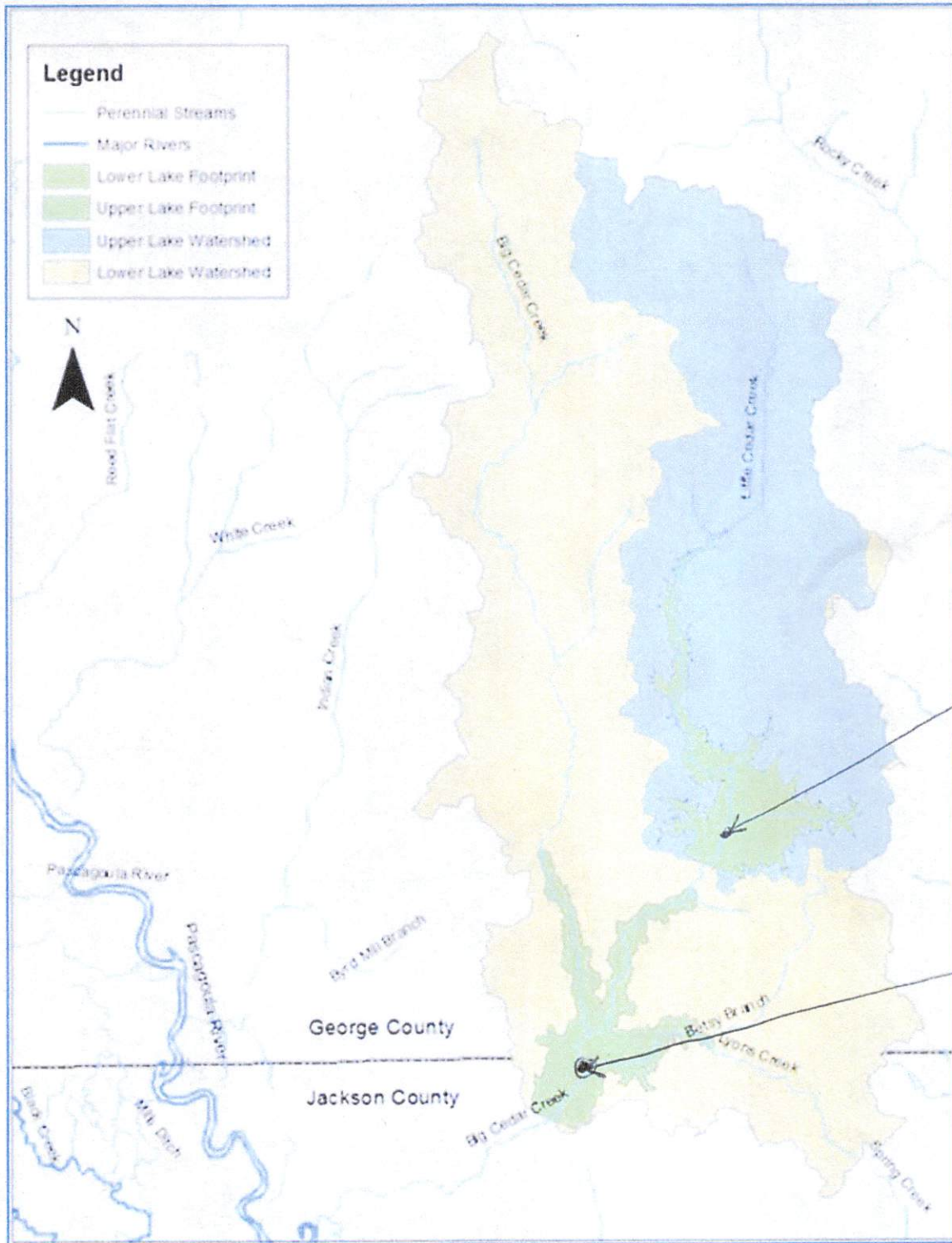
For additional information about our Regulatory Program, please visit our web site at www.sam.usace.army.mil/Missions/Regulatory.aspx.

Encls

**MOBILE DISTRICT
U.S. Army Corps of Engineers**



- Pascagoula River Surface Water Infrastructure



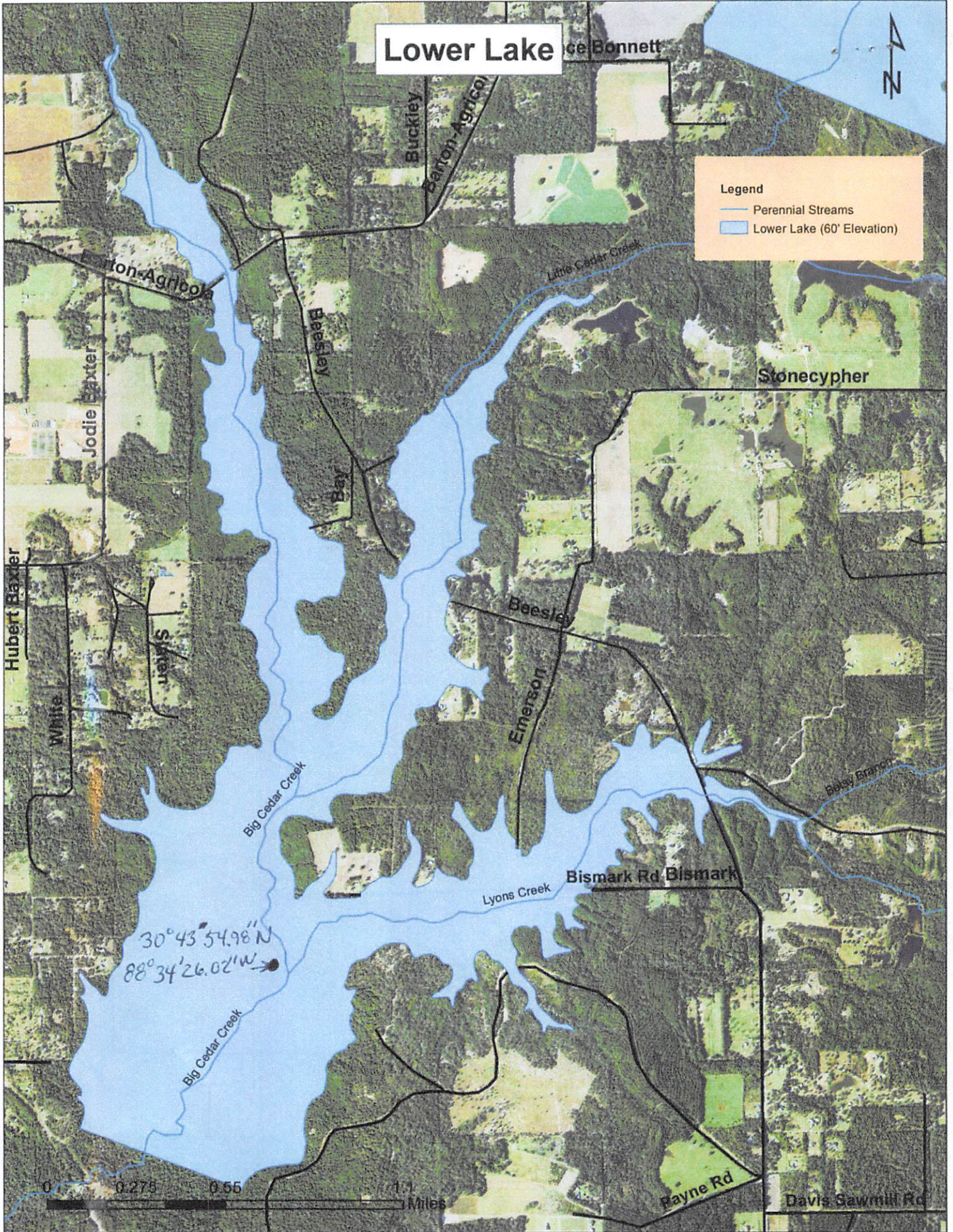
Proposed Upper and Lower Lakes with Watersheds

Lower Lake



Legend

- Perennial Streams
- Lower Lake (60' Elevation)



30°43'54.98" N
88°34'26.02" W



Upper Lake

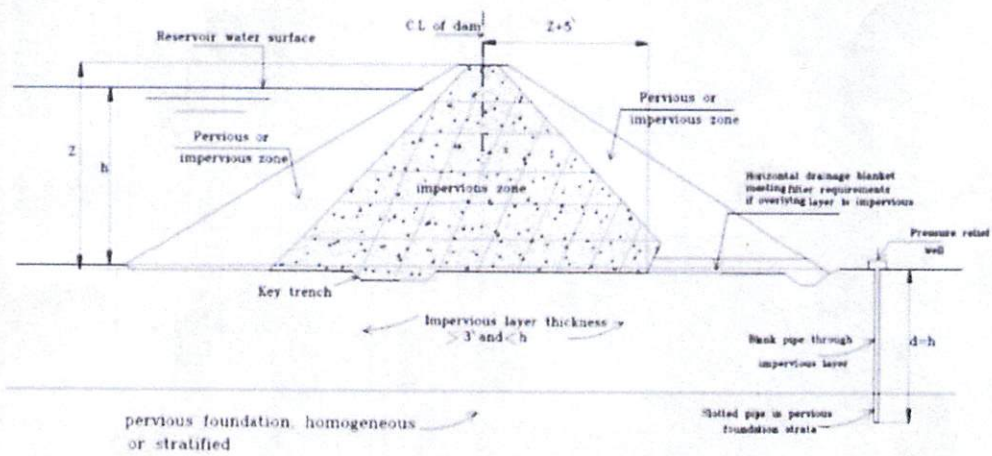
Highway 612

Legend
— Perennial Streams
— Lower Lake (60' Elevation)

$30^{\circ}46' 35.47''N$
 $88^{\circ}32' 26.60''W$

0 0.375 0.75 1.5 Miles





Zoned Earth - fill Dam

Treatment of Seepage Flow through Permeable Strata