

***North Georgia Environmental
Database Compilation for Cumulative
Impact Assessments of Reservoirs***

*Presented by
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Purpose

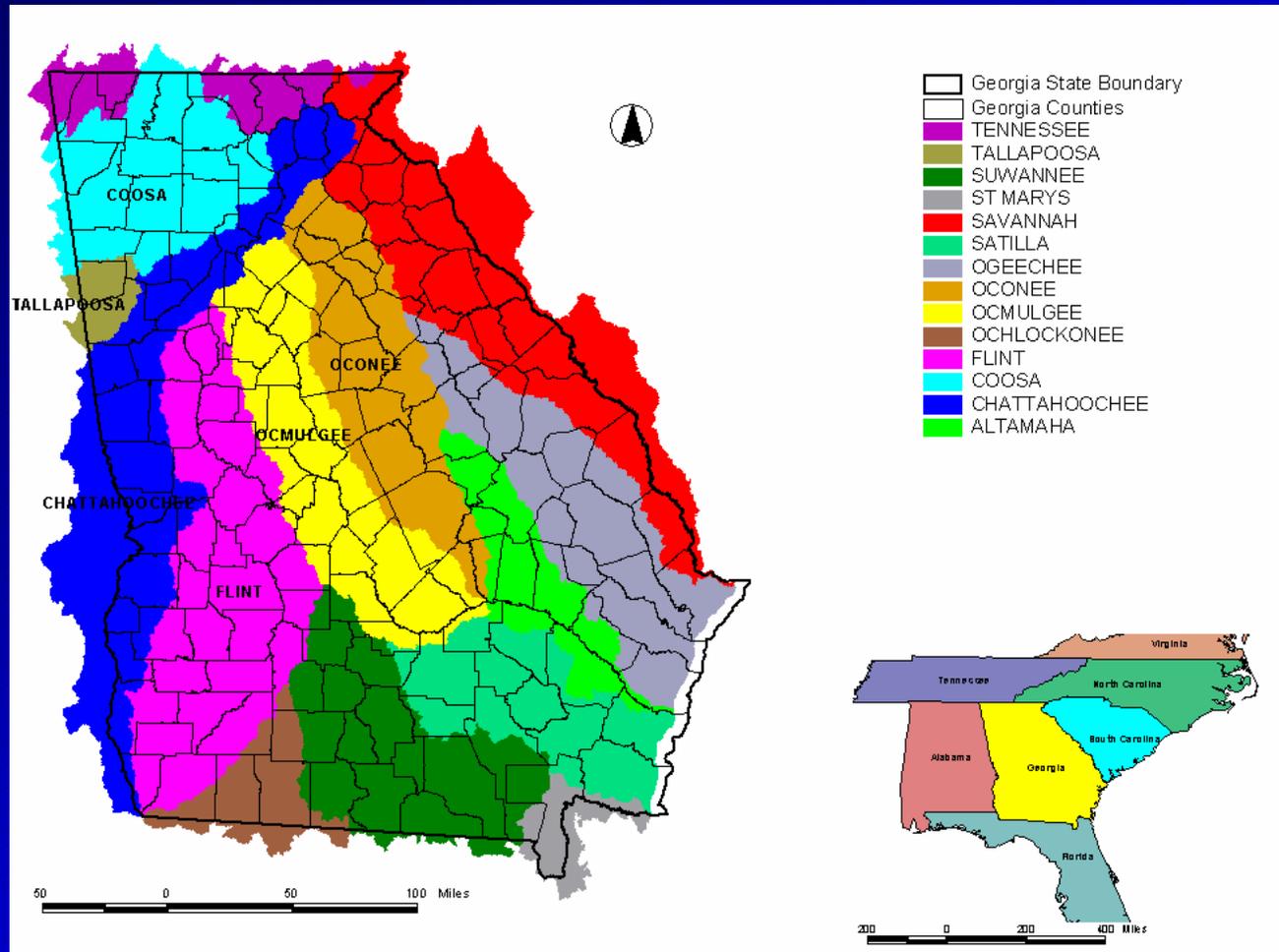
Savannah District

Project Goals:

- ◆ **Produce an end-user product with accessible data in a geographic and temporal format in conjunction with a query or trends analyses database.**
- ◆ **Evaluate potential for a given project proposal to result in direct, indirect, or cumulative impacts.**
- ◆ **Assist USACE in processing permit applications and analyzing studies uniformly and with scientific basis.**

Watersheds Within the Project Area

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Participants

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- ◆ **Georgia Department of Natural Resources, Environmental Protection Division**
- ◆ **Georgia's State Natural Heritage Program**
- ◆ **U.S. Geological Survey**
- ◆ **U.S. Environmental Protection Agency**
- ◆ **U.S. Fish and Wildlife Service**
- ◆ **Federal Emergency Management Agency**
- ◆ **U.S. Department of Agriculture, Natural Resources Conservation Service**

Participants (cont.)

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- ◆ **Atlanta Regional Commission**
- ◆ **Georgia's Regional Development Centers**
- ◆ **University of Georgia**
- ◆ **Georgia Institute of Technology**
- ◆ **Tetra Tech**
- ◆ **CH2M Hill**

Database Parameters

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- ◆ **Permitted wetland losses/ and required mitigation**
- ◆ **Estimated wetland and stream loss due to construction**
- ◆ **Historical (pre-1970) wetlands and stream loss data (to enable trends analyses)**
- ◆ **Areas with degraded water quality, and the limiting degradation factor**

Database Parameters (cont.)

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- ◆ Existing water intakes along with outfalls and quality data for the outfalls.
- ◆ Proposed water intakes, reservoirs, or other proposed water resource related projects
- ◆ Aquatic areas containing threatened, endangered, or special status species, critical spawning habitats, and designated trout waters
- ◆ Locations of Federally or State-listed threatened, endangered, or special status terrestrial species

Database Parameters(cont.)

Savannah District

- ◆ **Delineations of Federal and State-owned lands, as well as conservation lands**
- ◆ **Areas of high population growth**
- ◆ **Cities, counties, or municipalities with water conservation ordinances**
- ◆ **Groundwater yield data by county**
- ◆ **Average flow and low flow data from stream gauges**

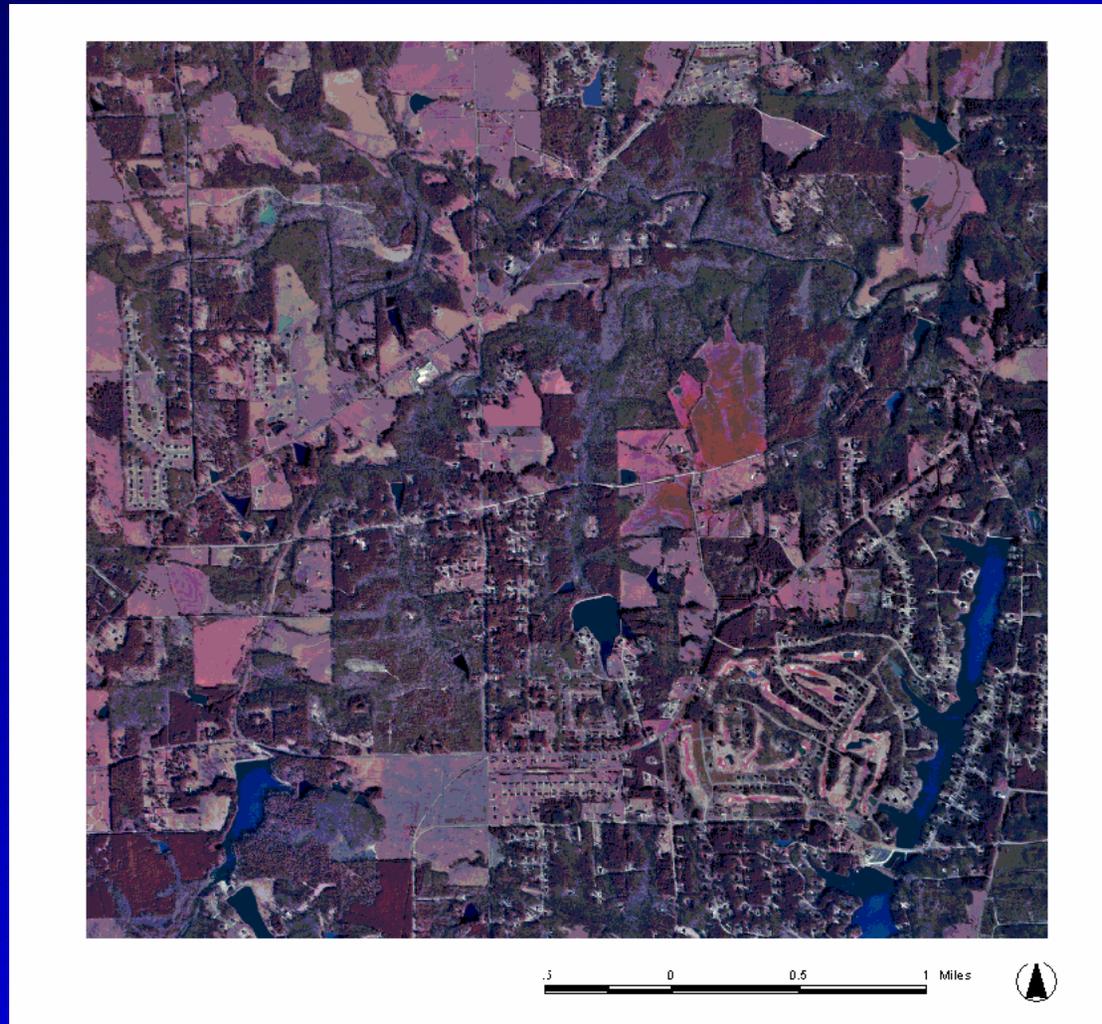
Database Parameters(cont.)

Savannah District

- ◆ **Hazardous waste sites**
- ◆ **Watershed percent impervious surface**
- ◆ **Contiguous forest loss**
- ◆ **Biological sampling and monitoring stream quality assessments**

Color Infra-red digital Ortho Quarter Quandrangles

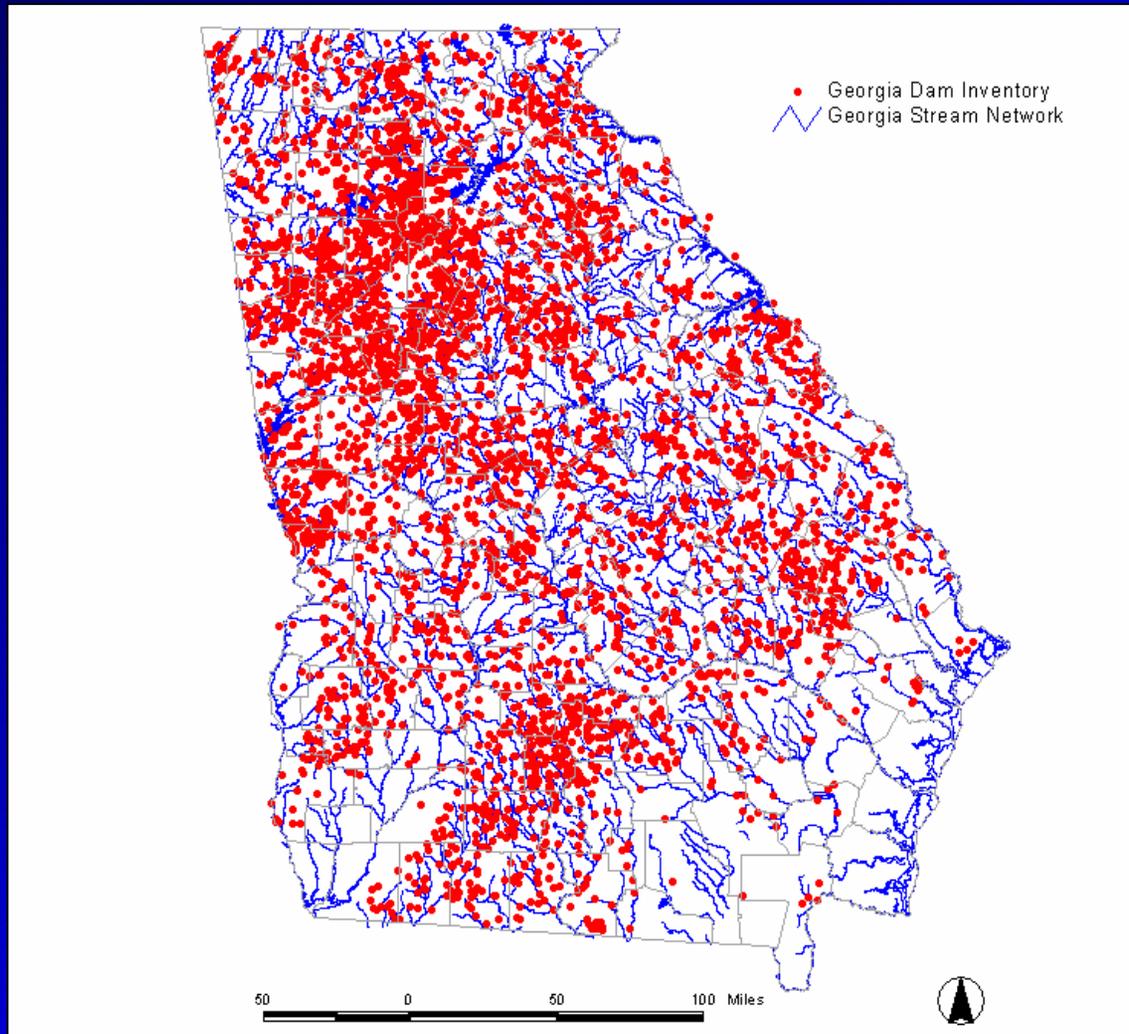
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Henry County, Georgia

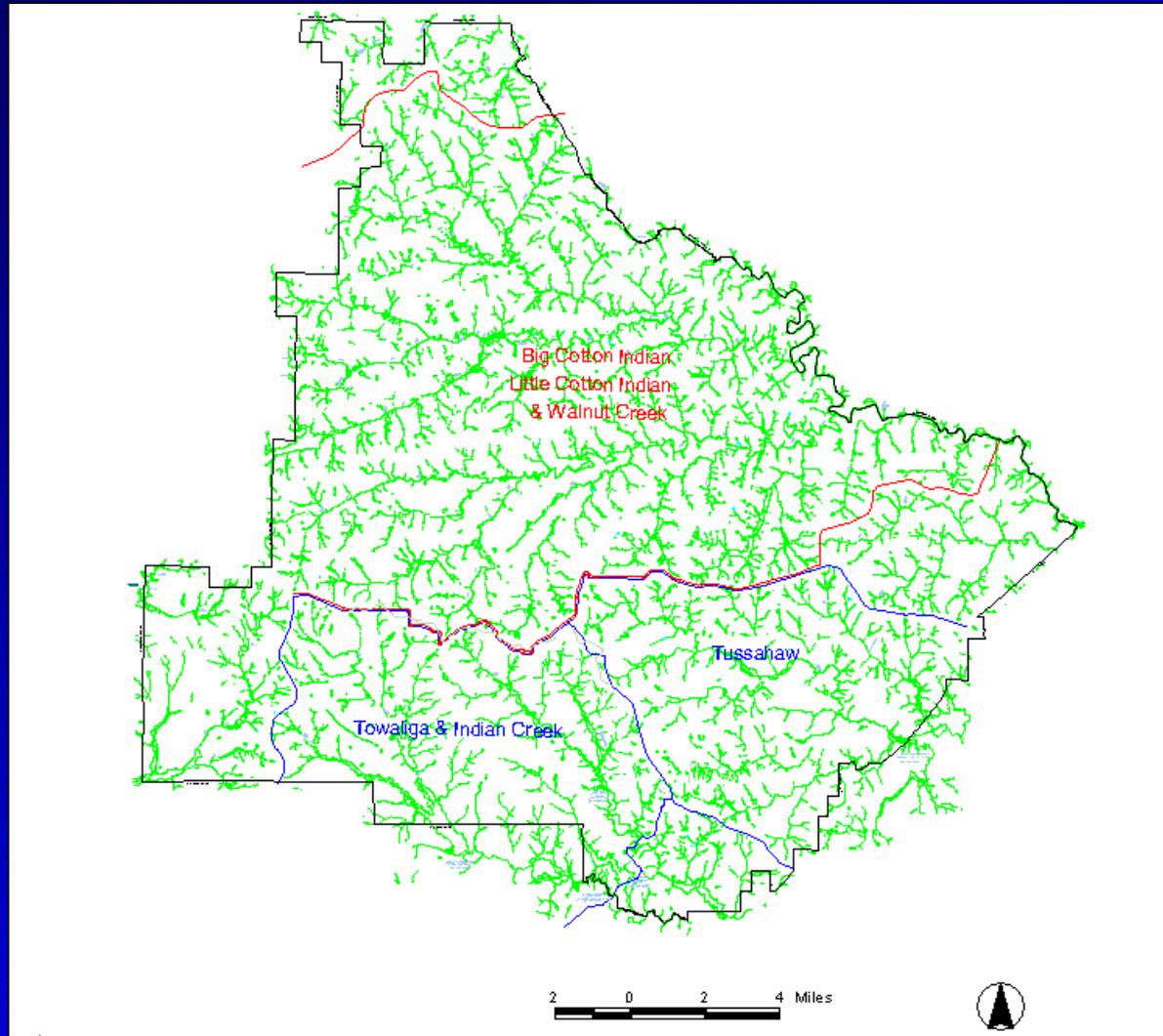
Georgia Dam Inventory

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Henry County, Georgia Detailed Hydrology

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Where do we go from here?

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- ◆ **Collaborate to obtain Land Use/Land Cover historical aerials from UGA**
- ◆ **Continue gathering relevant data layers**
- ◆ **Collaborate with participants to continue data gathering for future applications**

Conclusions

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- ◆ **Analytical tool for regulatory and planning processes**
- ◆ **End product will create the ability to conduct more comprehensive cumulative impact analysis**