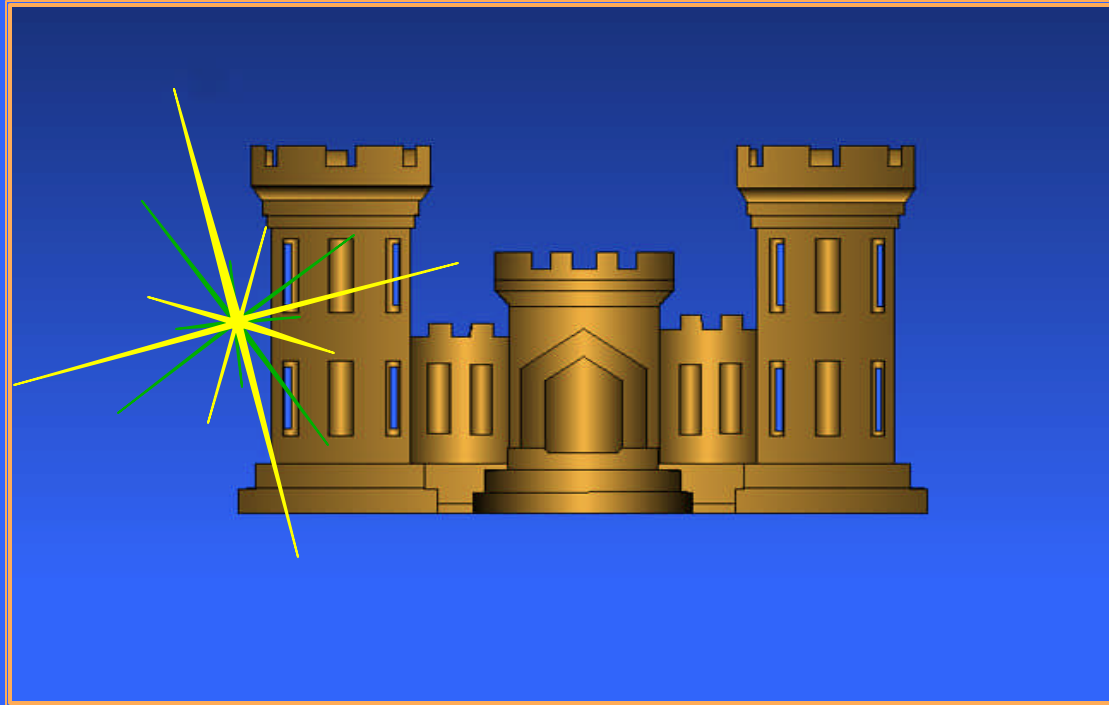


CORPS OF ENGINEERS



Lake Allatoona NEPA Considerations



National Environmental Policy Act

Applies to all federal agencies and to every major action taken by the agencies that significantly affects the quality of the human environment.



National Environmental Policy Act

Requires federal agencies to prepare environmental analyses, with input from state and local governments, Indian tribes, the interested public, and other federal agencies, when considering a proposal for a major federal action



NEPA Acronyms

- a. **EA** – Environmental Assessment
- b. **FONSI** – Finding of No Significant Impact
- c. **EIS** – Environmental Impact Statement
- d. **ROD** – Record of Decision



NEPA – Environmental Assessment

“Brief document to provide sufficient information to the district commander on potential environmental effects of the proposed action and, if appropriate, its alternatives, for determining whether to prepare an EIS or a FONSI.” (40 CFR 1508.9)



NEPA – Environmental Impact Statement

A detailed written document to provide more indepth technical analyses and display of reasonable alternatives. More lengthy document with recommended format and prescribed public/agency review periods.



NEPA Document Components

- a. Scoping Process
- b. Purpose and Need for Action
- c. Alternatives (Including No Action)
- d. Affected Environment
- e. Environmental Consequences
- f. Coordination



Current Status of Lake Allatoona NEPA

- Project EIS completed in 1974
- Current lake levels are specifically addressed
- New NEPA document (EA or EIS) required for revision



Allatoona Lake NEPA

Scoping



Draft EA



Public Review



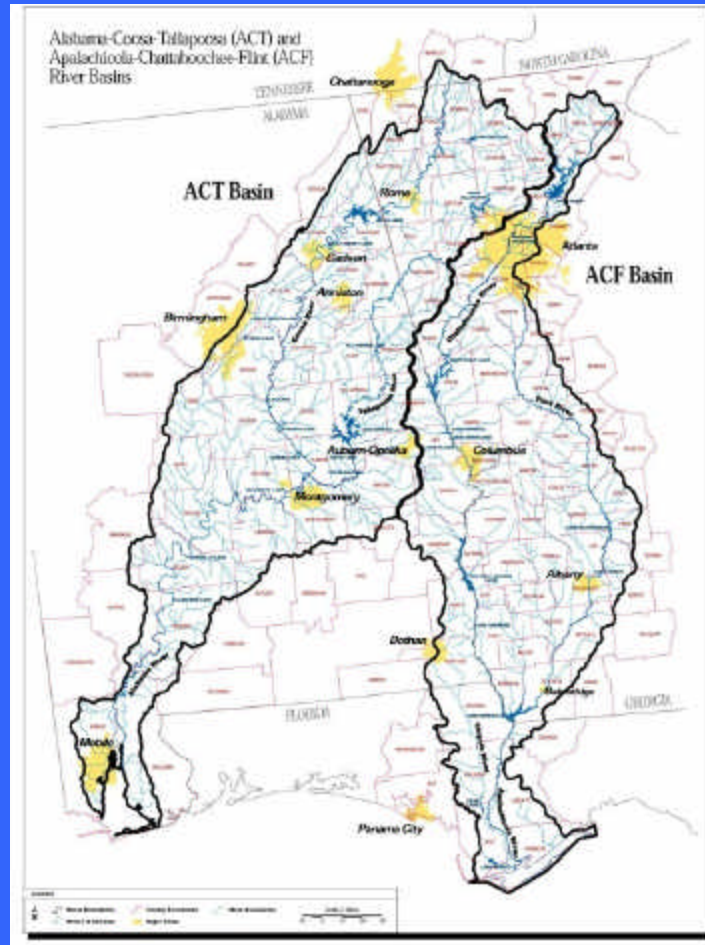
Final EA/FONSI



EIS



Water Management in ACT Basin



ACT River System

APC Weiss Dam

Flood Control

APC

Logan Martin Dam

Flood Control

APC Jordan Dam

Flood Control

R.F. Henry

Hydroelectric Power

Navigation

Recreation

Fish/Wildlife

Water Quality

Millers Ferry

Hydroelectric Power

Navigation

Recreation

Fish/Wildlife

Water Quality

Carters Lake

Recreation

Flood Control

Navigation

Fish/Wildlife

Water Quality

Hydroelectric Power

Water Supply

Lake Allatoona

Hydroelectric Power

Navigation

Recreation

Flood Control

Water Supply

Fish/Wildlife

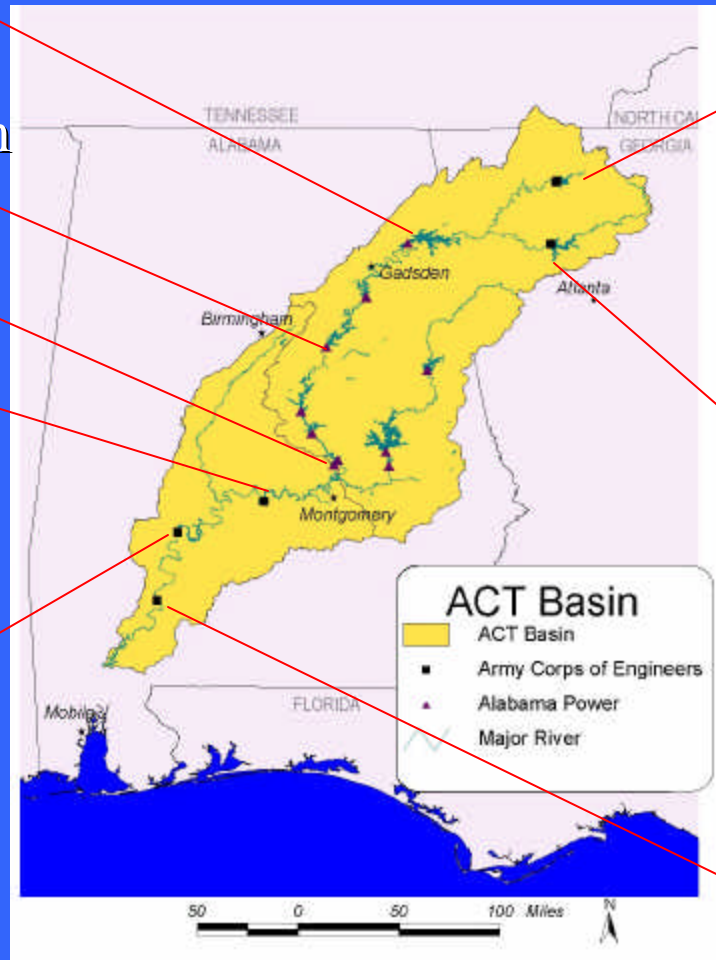
Water Quality

Claiborne

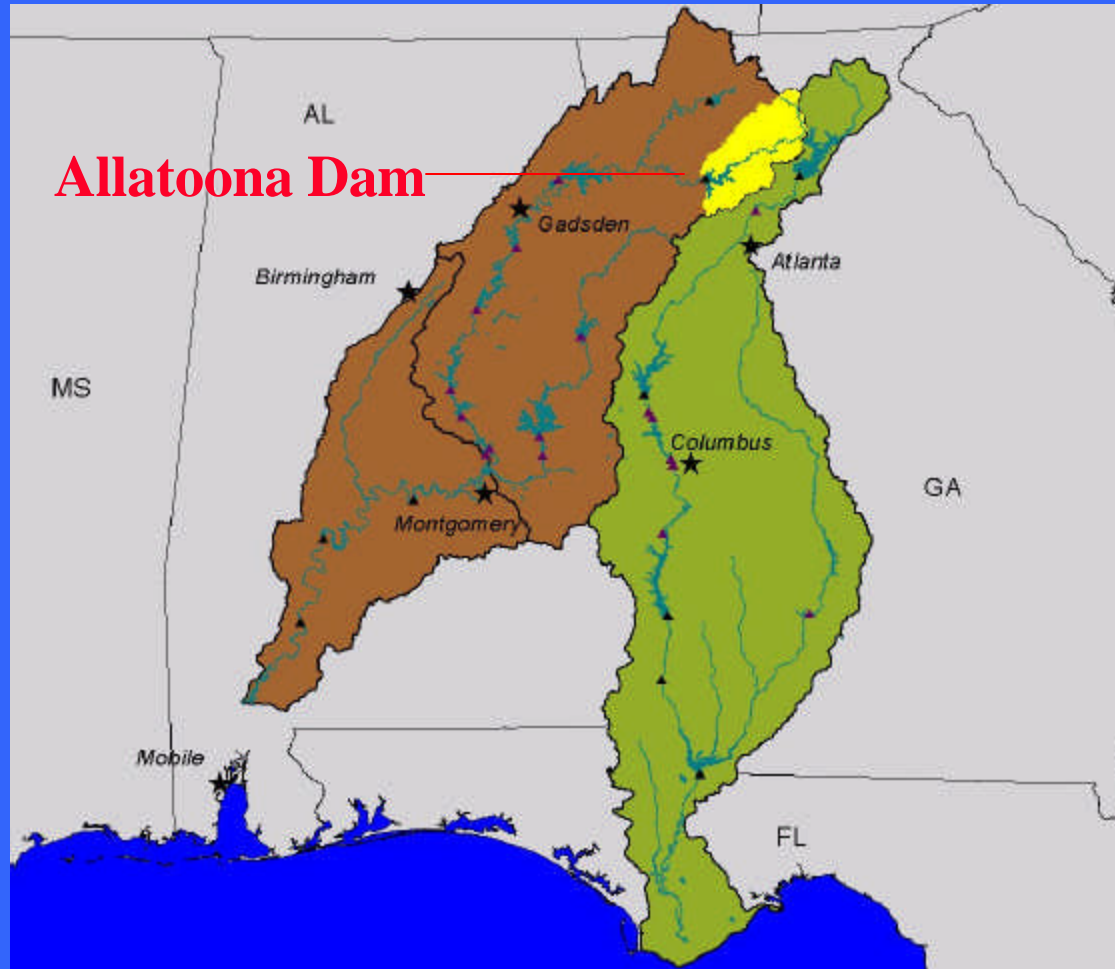
Navigation Recreation

Fish/Wildlife

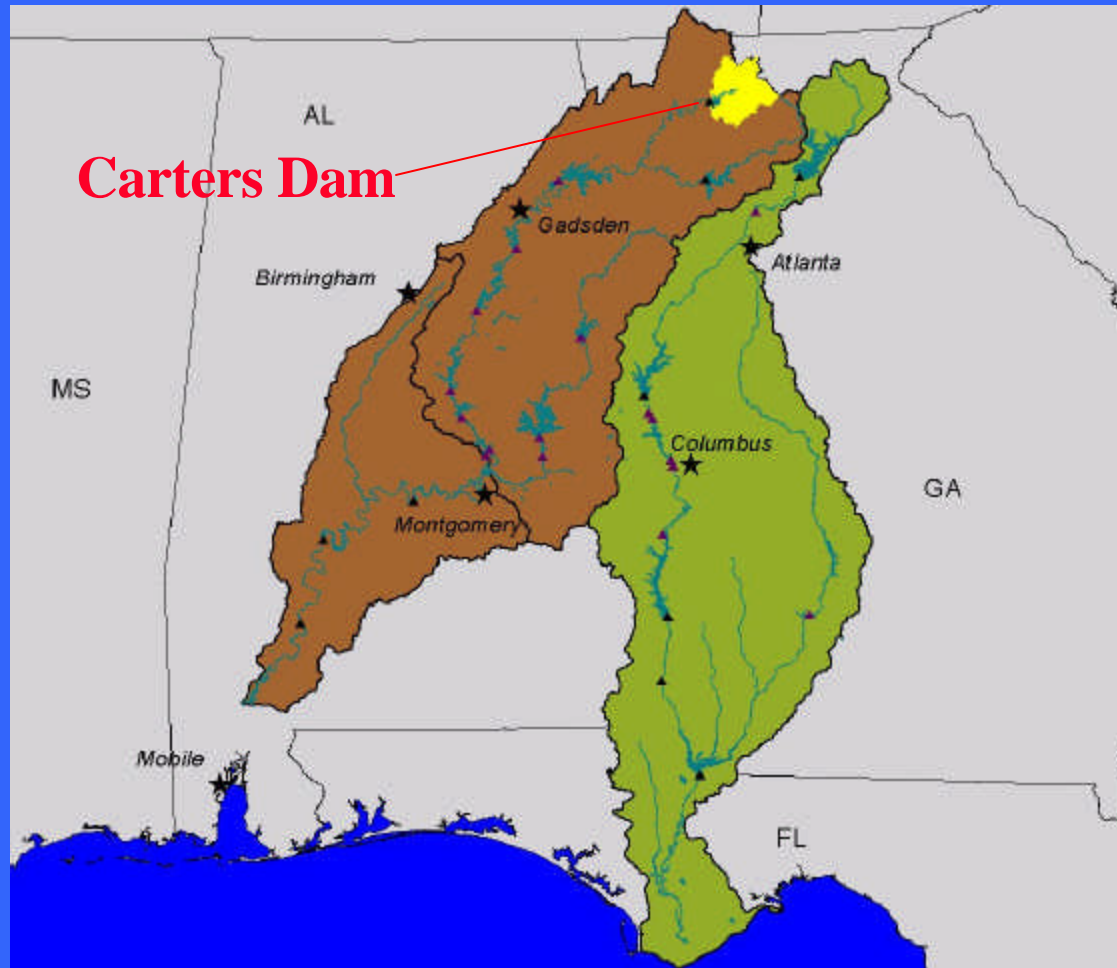
Water Quality



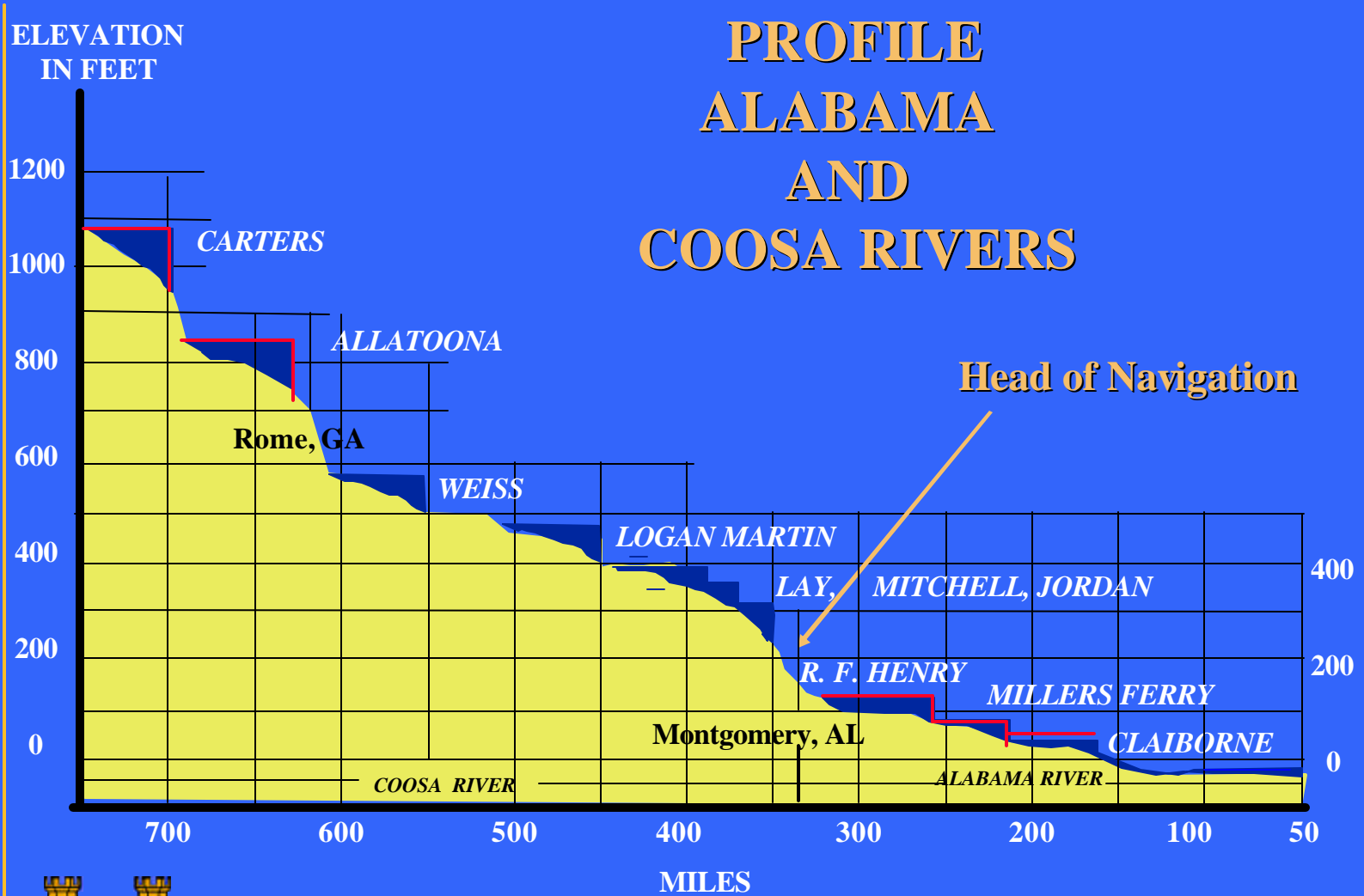
Allatoona Drainage Basin



Carters Drainage Basin



PROFILE ALABAMA AND COOSA RIVERS



- **Water Management**
- **Operational Scenarios**



System Management

APC Weiss Dam

Flood Control

APC

Logan Martin Dam

Flood Control

APC Jordan Dam

Flood Control

R.F. Henry

Hydroelectric Power

Navigation

Recreation

Fish/Wildlife

Water Quality

Millers Ferry

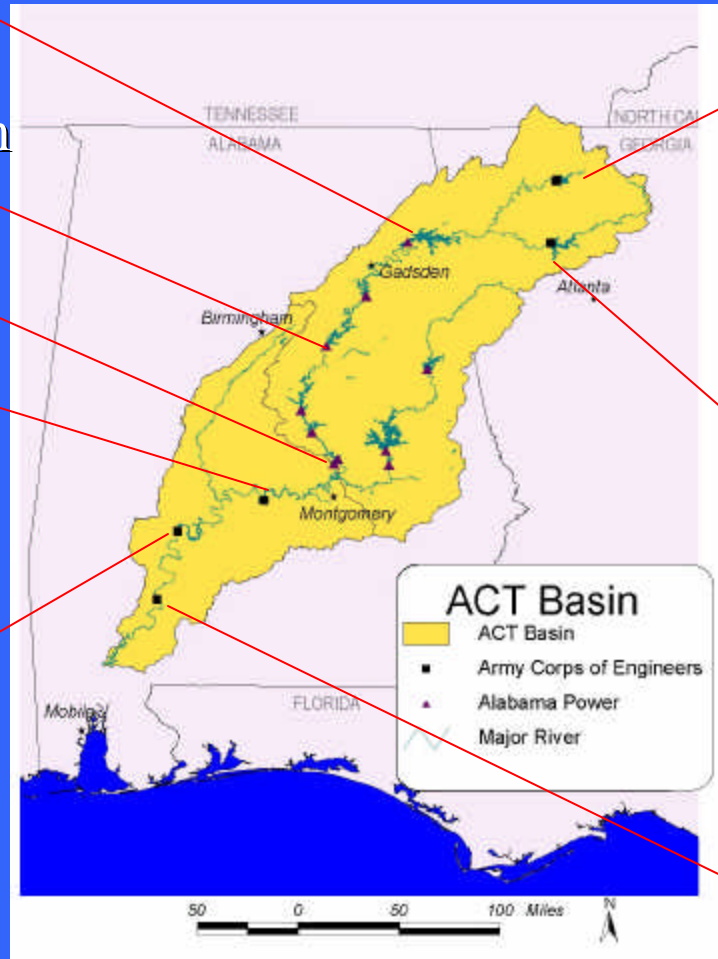
Hydroelectric Power

Navigation

Recreation

Fish/Wildlife

Water Quality



Carters Lake

Recreation

Flood Control

Navigation

Fish/Wildlife

Water Quality

Hydroelectric Power

Water Supply

Lake Allatoona

Hydroelectric Power

Navigation

Recreation

Flood Control

Water Supply

Fish/Wildlife

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Claiborne

Navigation Recreation

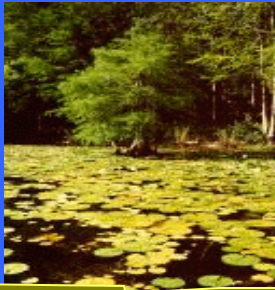
Fish/Wildlife

Water Quality



Water Management of Multiple Purposes

Water Quality



Flood Control



Hydropower



Navigation



Recreation

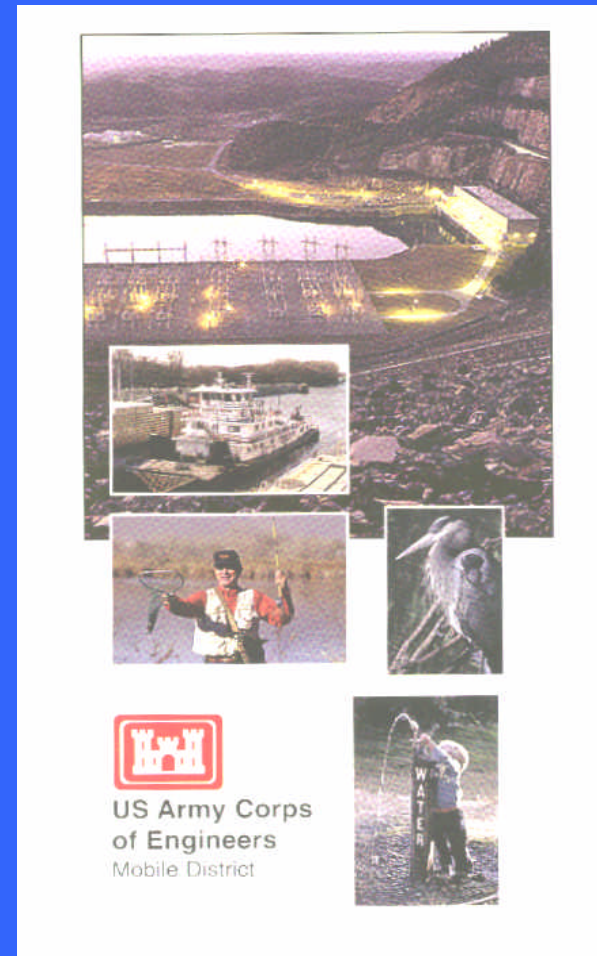


Municipal & Industrial



Water Management of Water Resources

- ◆ Conduct water management activities
- ◆ Supervise flood control
- ◆ Technical assistance
- ◆ Coordinate with National Weather Service and provide information to District elements
- ◆ Operation of rainfall and river reporting network
- ◆ Maintain reservoir data



Navigation



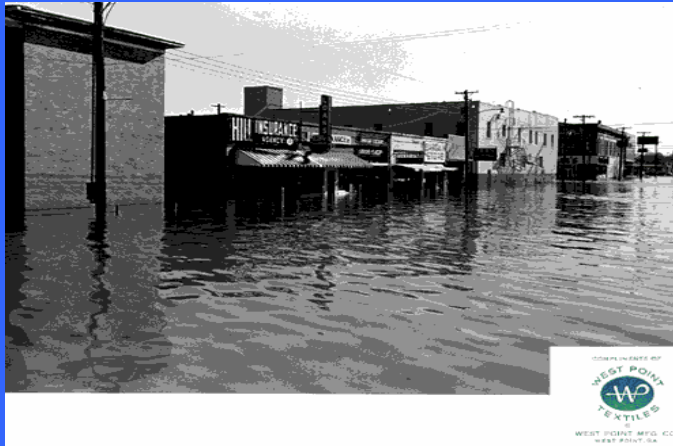
- ◆ Make releases to maintain the specified channel depth for commercial navigation.



- ◆ When dry conditions occur use water from storage to support limited navigation.



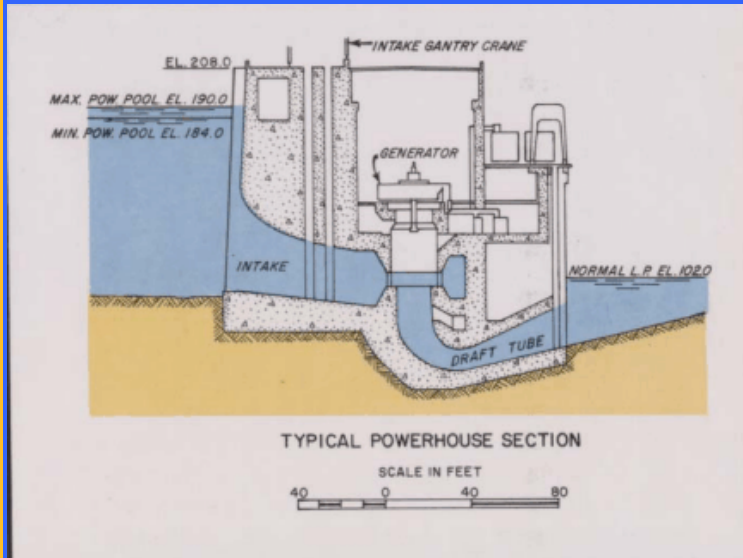
Flood Control



- ◆ Winter drawdown of lakes to prepare for flood season.
- ◆ Store water in lake during flood event
- ◆ Monitor downstream points for impacts of flooding.
- ◆ Evacuate water as quickly as practicable when downstream conditions allow to prepare for next event.



Hydropower



- ◆ Determine weekly generation based on monthly contract requirements and current project storage.
- ◆ Southeastern Power Administration (SEPA) makes actual daily generation schedule.
- ◆ Generation incidental benefit when releases made for other purposes.



Recreation



- ◆ Maintain lakes as full as possible according to Water Control Plan
- ◆ Adjust water levels to accommodate special activities on the lakes.
- ◆ Make special releases for recreational activities downstream.

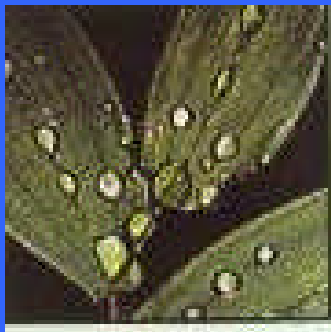


Environmental & Water Quality



- ◆ Support for fish spawning and other fish and wildlife conservation measures.

- ◆ Coordinate releases and levels to enhance water quality and environmental needs.



- ◆ Provide releases to meet downstream water quality targets.



Municipal and Industrial



- ◆ Provide water supply for industries and municipalities.
- ◆ Provide water for wastewater dilution.



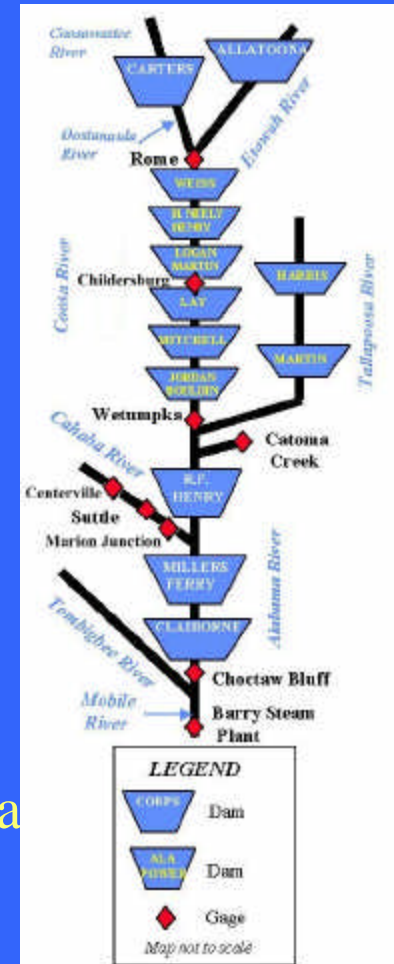
Meteorological & Forecast Information

- Meteorologist on Water Mgt. staff
- National Weather Service
- River Forecast Center
- Other Weather Products



Data Collection/ Dissemination

- ◆ Data collected from stream and rainfall gages and dams daily, hourly
- ◆ Rainfall and forecast data received from NWS
- ◆ Project and gage data sent to other agencies
- ◆ Data posted to Water Management's web page
- ◆ Other data and information provided to public via interactive voice system, e-mail, fax, and phone



Data Dissemination

Welcome to the US Army Corps of Engineers
Mobile District
Water Management Section

Monday, February 05, 2001

[Index](#) [News](#)

This website provides water resources information for river systems in the Mobile District. Find out more in our [mission statement](#).
Information is provided "as is" with no warranty to be error free.

by RIVER BASIN	by SUBJECT AREA
Apalachicola-Chattahoochee-Flint (ACF) Lanier, West Point, W.F. George, Andrews, Woodruff	Today's Project Data Readings for today at Locks and Dams. ACE ACT BWT Tenn-Tom
Alabama-Coosa-Tallahoosa (ACT) Allatoona, Carters, R.F. Henry, Millers Ferry, Claiborne	River Stage Forecasts and Weather Information - NWS River Forecast Center rainfall and river stage reports for selected sites
Black Warrior-Tombigbee (BWT) Bankhead, Holt, Oliver, Selden, Demopolis, Coffeeville	NEW Drought Information - Drought information for lakes in Southeast.
Tennessee-Tombigbee (Tenn-Tom) River Basin Whitten, Montgomery, Rankin, Fulton, Wilkins, Amory, Aberdeen, Stennis, Beville, Heflin	River Bulletin - Water level readings at dams and gages for the last four days. Help reading bulletin
Other River Basins (Pascagoula, Escambia) Okatibbee	Weekly Basin Report - Weekly summary of activities on the river systems. Updated every Wednesday.
ACT & ACF EIS Home Page - The Environmental Impact Statement (EIS) process for the Comprehensive Study.	Historical Project Data - Historical data by year in tabular format. ACE ACT BWT Tenn-Tom
ACF Basin Map ACT Basin Map	

Document: Done



<http://water.sam.usace.army.mil>

Rainfall Information

5-Day & 10-Day Precipitation Forecasts



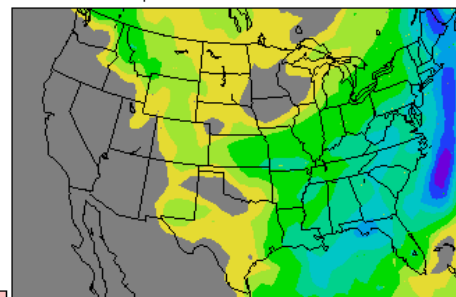
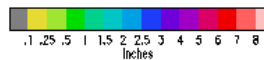
Precipitation Forecast

Precipitation (inches)
during the 5-day period:

Wed, 27 FEB 2002 at 00Z

-to-

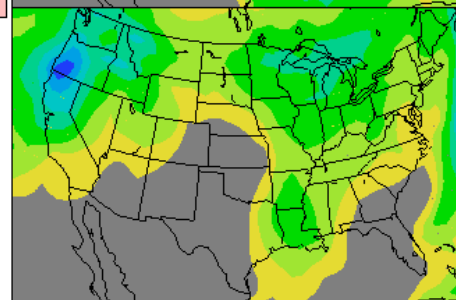
Mon, 04 MAR 2002 at 00Z



Mon, 04 MAR 2002 at 00Z

-to-

Sat, 09 MAR 2002 at 00Z

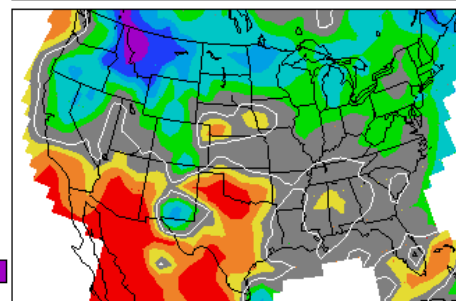
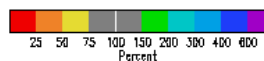


Precipitation (percent of normal)
during the 10-day period:

Wed, 27 FEB 2002 at 00Z

-to-

Sat, 09 MAR 2002 at 00Z



Precipitation forecasts from the NCEP Medium-Range Forecast (MRF) model.
Normal rainfall derived from blended GAO Climate Anomaly Monitoring System (CAMS) station data for 1961-1990.

GrADS: COLA/IGES

Data Exchange Among Agencies

- **National Weather Service (NWS)**
- **South East River Forecast Center (SERFC)**
- **Alabama Power Company**
- **Southeastern Power Administration (SEPA)**
- **State & County Emergency Management Offices**
- **U.S. Geological Survey (USGS)**



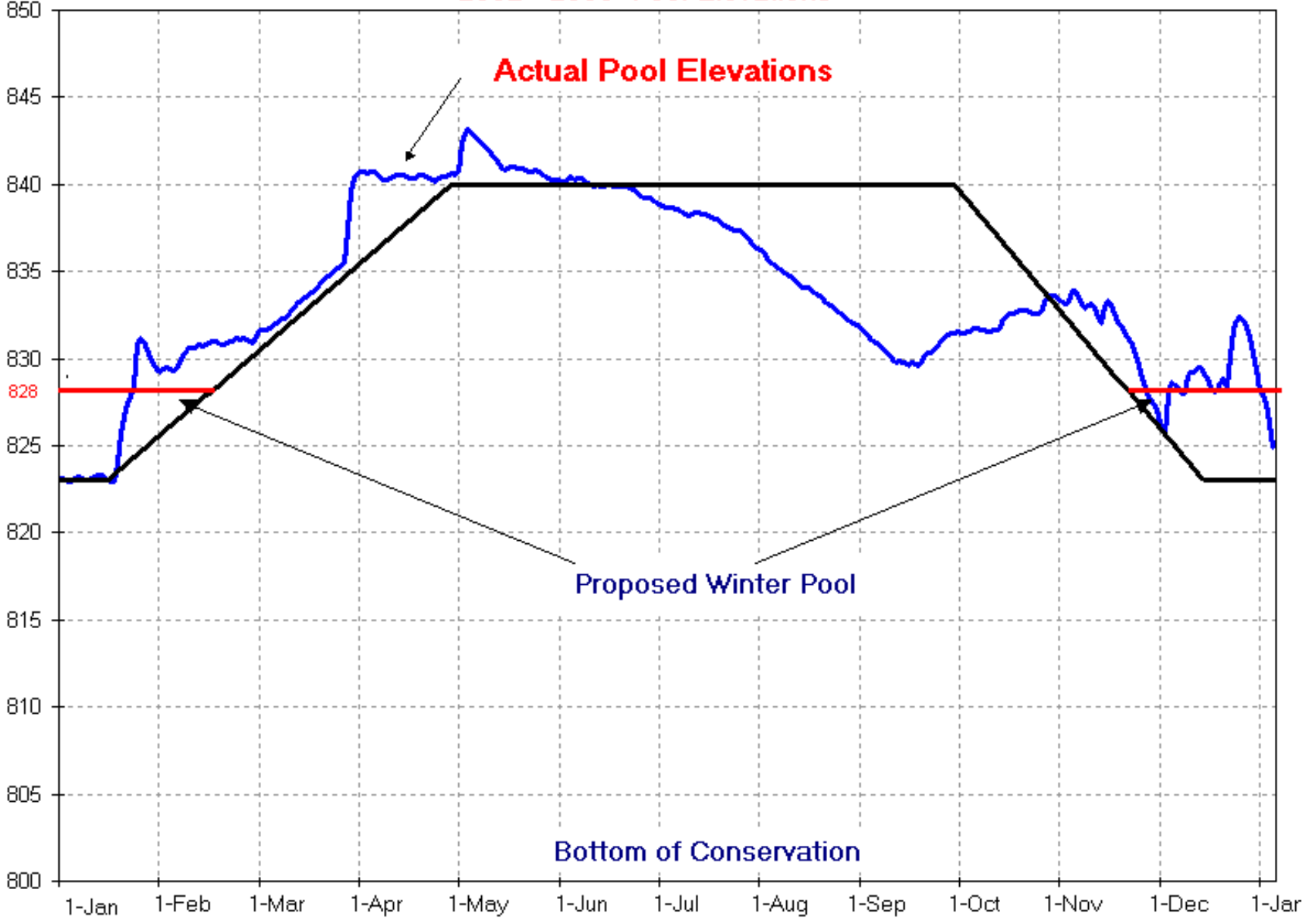
Operational Scenarios

- Floods

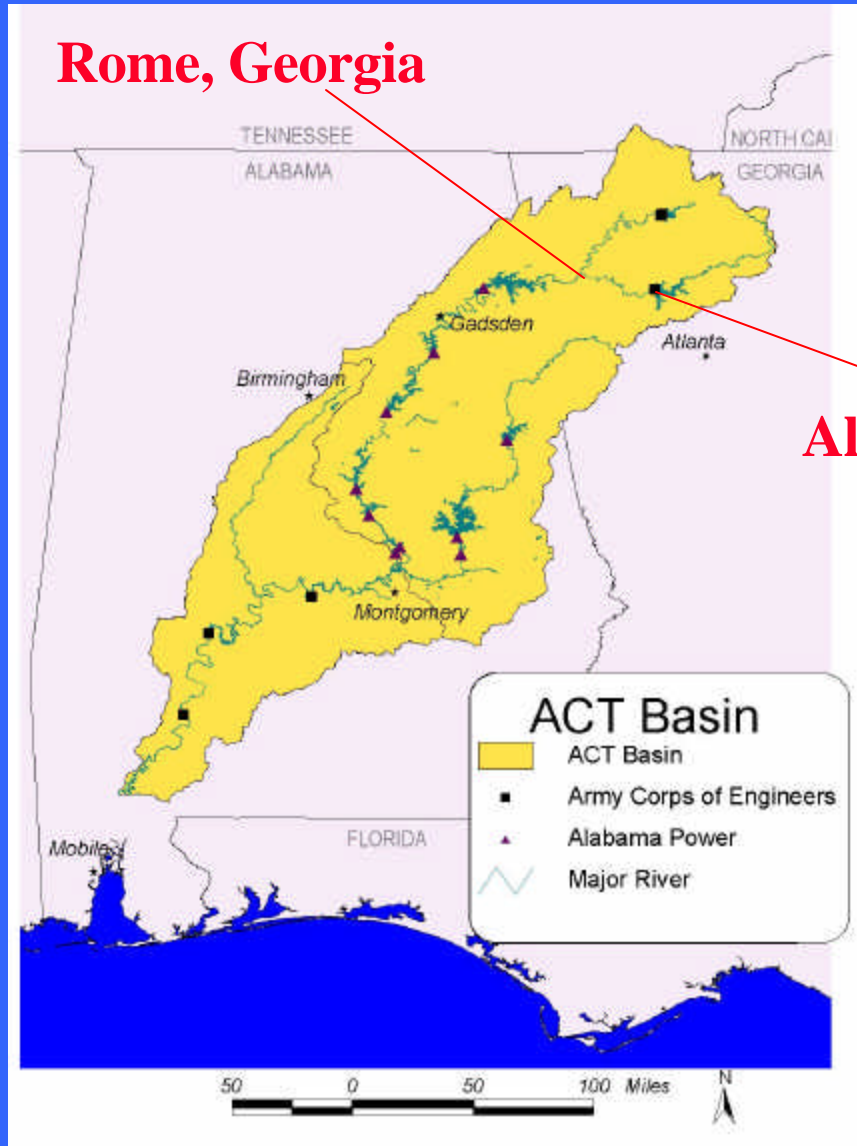
- Droughts



2002 -2003 Pool Elevations



Rome, Georgia



Allatoona Dam



Operations During Flood Conditions

- Weather forecasts and conditions monitored
- Project data received via computer & phone
- River gages monitored
- Data provided to River Forecast Center
- Releases and generation curtailed at projects when downstream gages indicate flooding
- Forecasts received from River Forecast Center
- Notification & flood reports provided to State and Federal emergency management offices
- Rivers crest and begin to recede



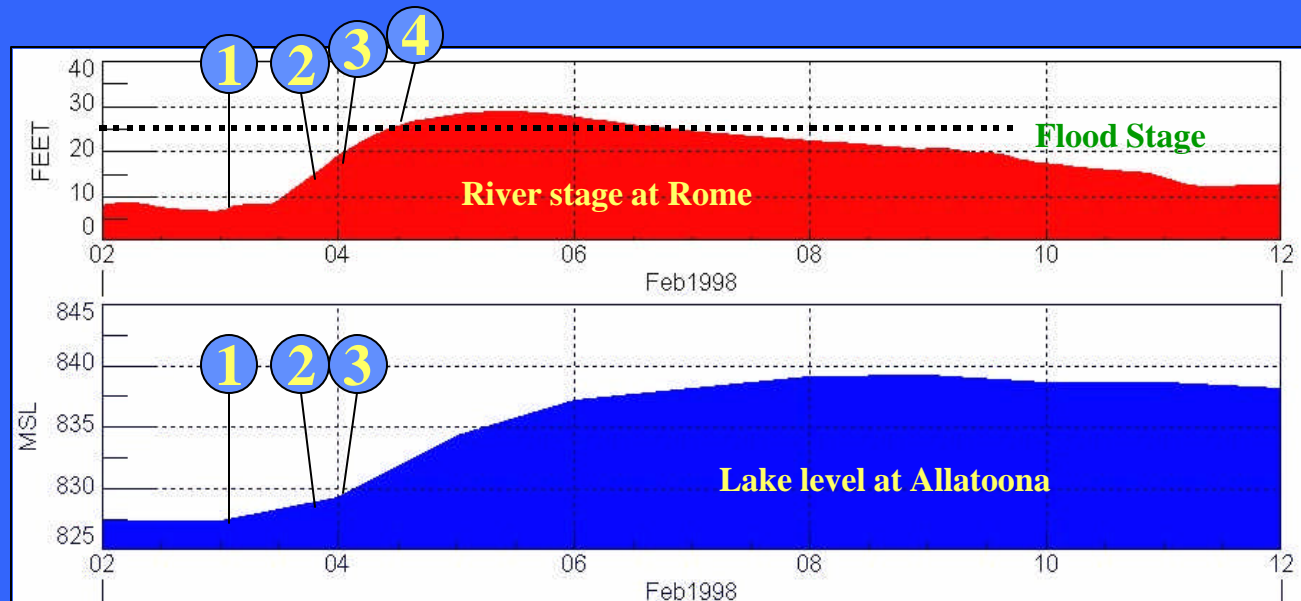
Operations During Flood Conditions (continued)

- Releases resume once river drops below flood stage
- Dam stores excess water to reduce flooding downstream
- Flood waters evacuated from project at rate not exceeding bankfull capacity
- Operations return to normal
- Follow-up flood reports prepared



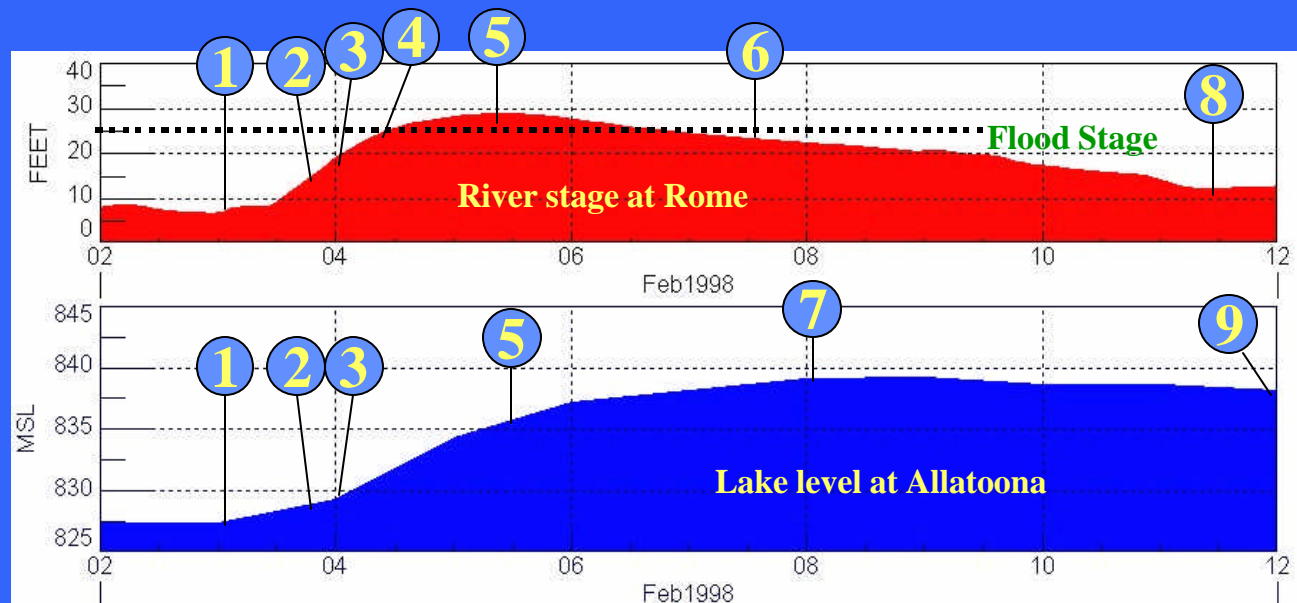
Example Flood Scenario

1. Rainfall forecasts from National Weather Service indicate 3"-4" expected in basin for 24 hour period ending on Feb 4.
2. Data received from project shows inflows increasing and gage at Rome indicates stage rising rapidly. River Forecast Center (RFC) predicts stage will reach flood stage.
3. SEPA notified to curtail generation at Allatoona until further notification. Stage at Rome nearing flood stage.
4. Stage at Rome reaches flood stage. Rainfall event ending.



Example Flood Scenario continued

5. Stage at Rome peaks. Rainfall event over. Lake continues to rise.
6. RFC provides updated forecast. Stage recedes below flood stage.
7. SEPA notified to resume generation at rate not to exceed bankfull capacity. Generates 24 hours per day.
8. Stage at Rome returns to normal range. Lake level continues to fall.
9. Lake continues to fall. Another rainfall event occurs on Feb 16



Operations During Drought Conditions

- Lake levels fall due to declining inflows in basin
- Rainfall forecasts indicate dry conditions ahead
- Discharges are reduced according to Water Control Plan
- Navigation reduced and curtailed as conditions worsen
- Lakes and basin inflows continue to decline
- Releases specifically for hydropower reduced
- State, Federal, local agencies, and stakeholders notified of drought
- Press releases issued to public periodically
- Coordination made with fishery agencies to facilitate fish spawn operations during low water periods



Operations During Drought Conditions (continued)

- Releases from dams made to support water supply and water quality (WS/WQ)
- Releases for WS/WQ made through turbines providing limited hydropower
- SEPA may purchase replacement energy to fulfill contract
- Flow reduced from lower basin projects to meet minimum flow requirements
- Water to meet minimum flow draws from storage in upstream projects thus lowering lake levels



