



Georgia's
State Water Plan

Surface Water Availability

Middle Chattahoochee Council

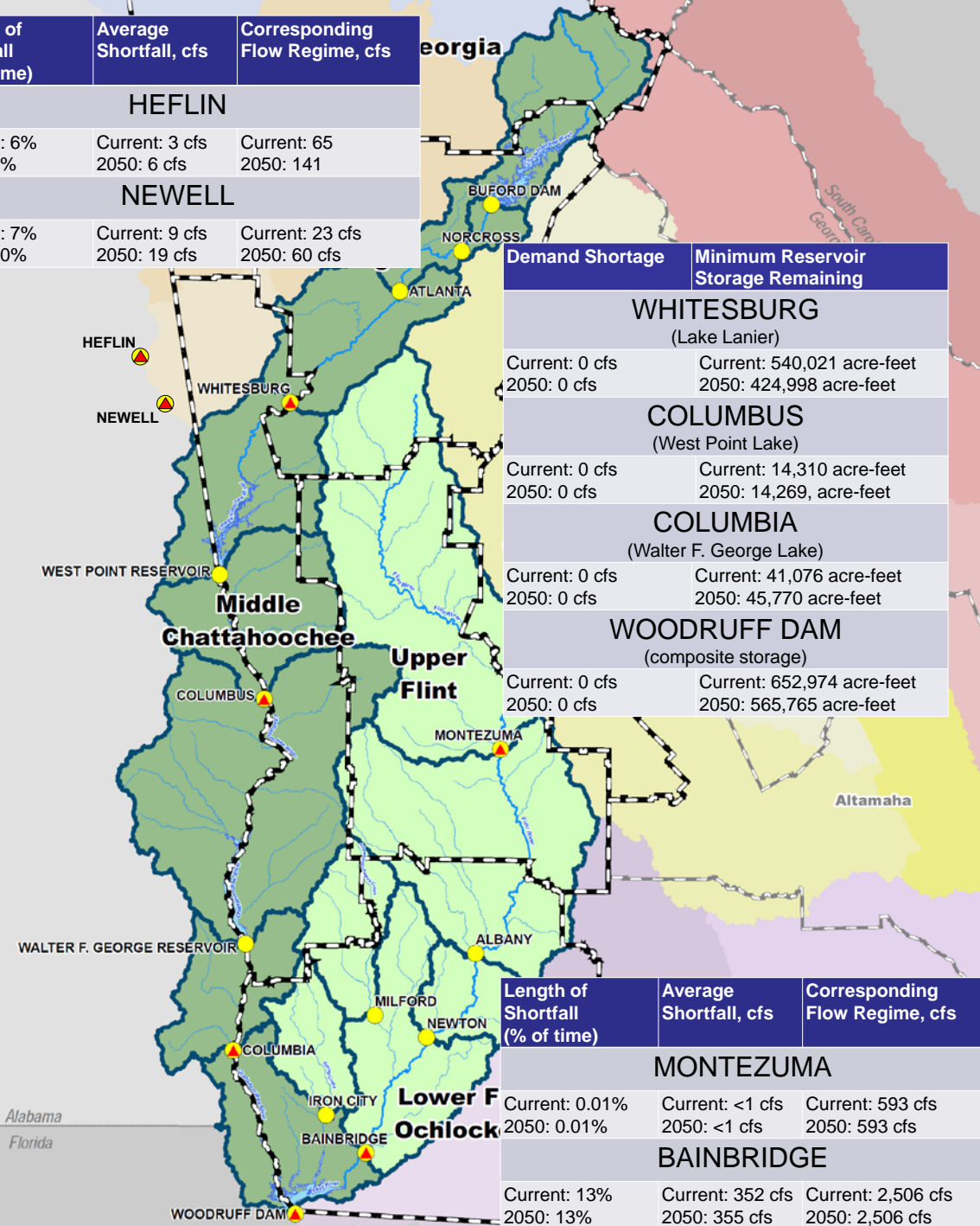
CM 7 September 14, 2010

www.georgiawaterplanning.org

Length of Shortfall (% of time)	Average Shortfall, cfs	Corresponding Flow Regime, cfs
HEFLIN		
Current: 6% 2050: 6%	Current: 3 cfs 2050: 6 cfs	Current: 65 2050: 141
NEWELL		
Current: 7% 2050: 10%	Current: 9 cfs 2050: 19 cfs	Current: 23 cfs 2050: 60 cfs

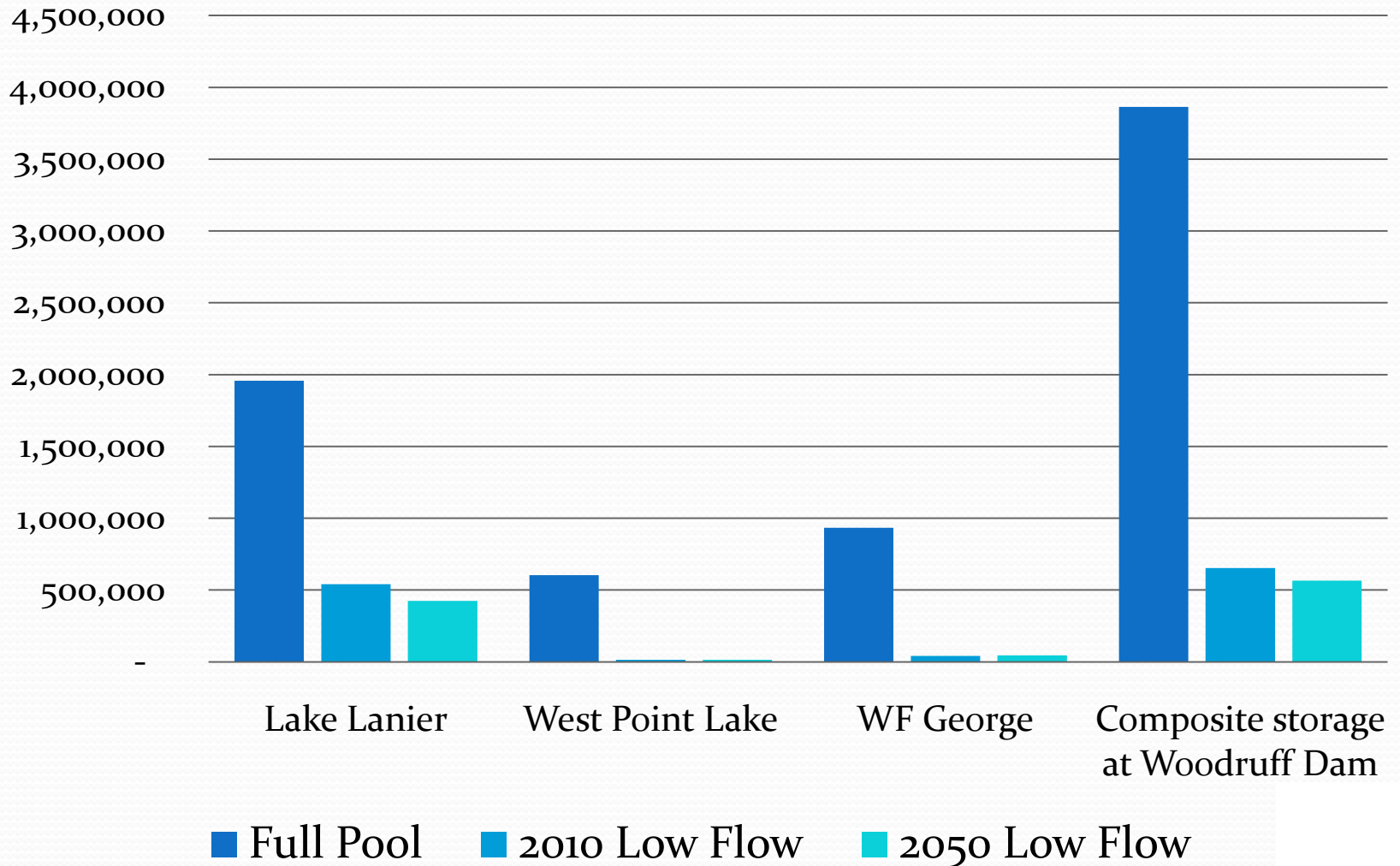
Demand Shortage	Minimum Reservoir Storage Remaining
WHITESBURG (Lake Lanier)	
Current: 0 cfs 2050: 0 cfs	Current: 540,021 acre-feet 2050: 424,998 acre-feet
COLUMBUS (West Point Lake)	
Current: 0 cfs 2050: 0 cfs	Current: 14,310 acre-feet 2050: 14,269, acre-feet
COLUMBIA (Walter F. George Lake)	
Current: 0 cfs 2050: 0 cfs	Current: 41,076 acre-feet 2050: 45,770 acre-feet
WOODRUFF DAM (composite storage)	
Current: 0 cfs 2050: 0 cfs	Current: 652,974 acre-feet 2050: 565,765 acre-feet

Length of Shortfall (% of time)	Average Shortfall, cfs	Corresponding Flow Regime, cfs
MONTEZUMA		
Current: 0.01% 2050: 0.01%	Current: <1 cfs 2050: <1 cfs	Current: 593 cfs 2050: 593 cfs
BAINBRIDGE		
Current: 13% 2050: 13%	Current: 352 cfs 2050: 355 cfs	Current: 2,506 cfs 2050: 2,506 cfs

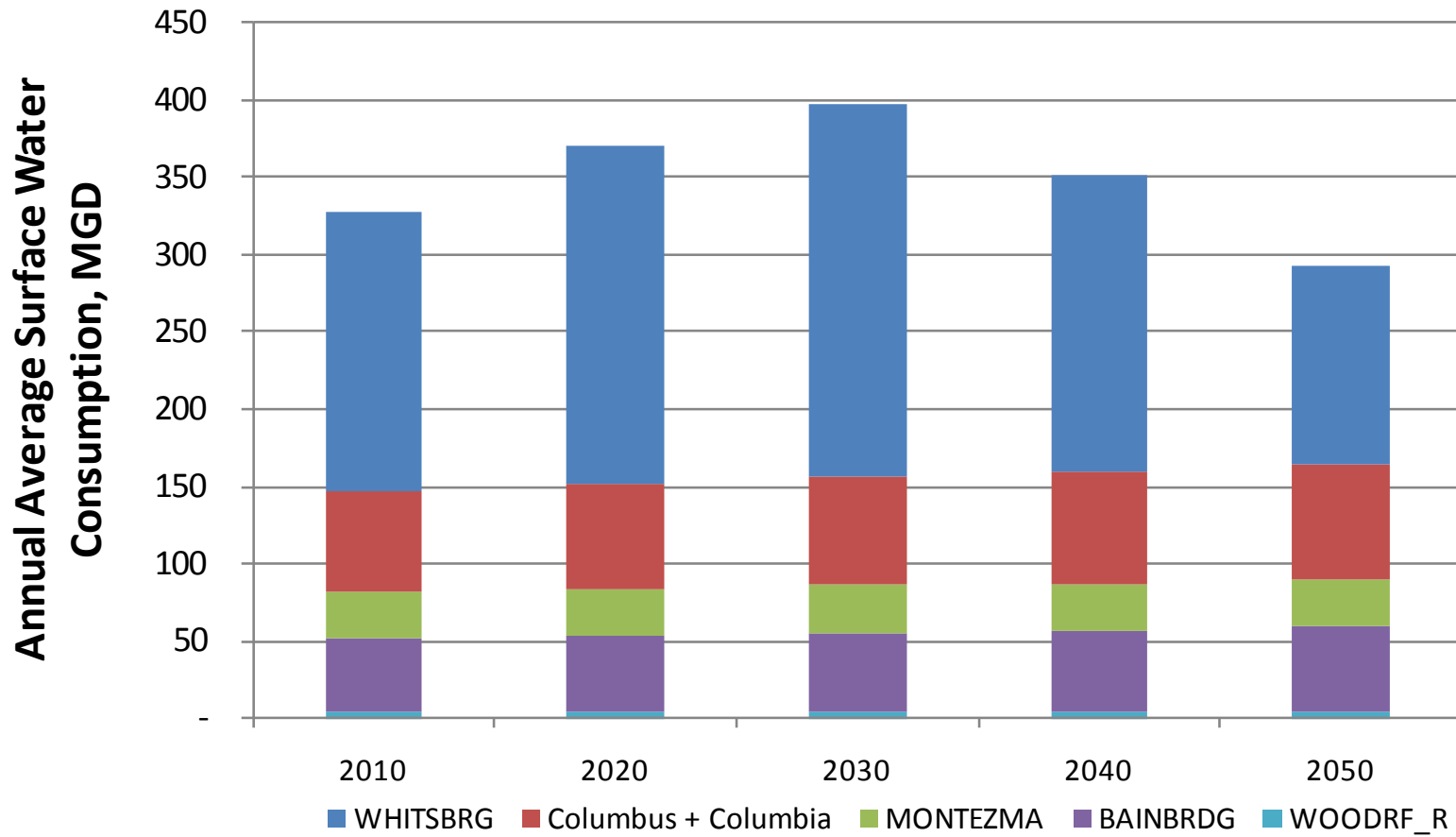


Reservoir Storage

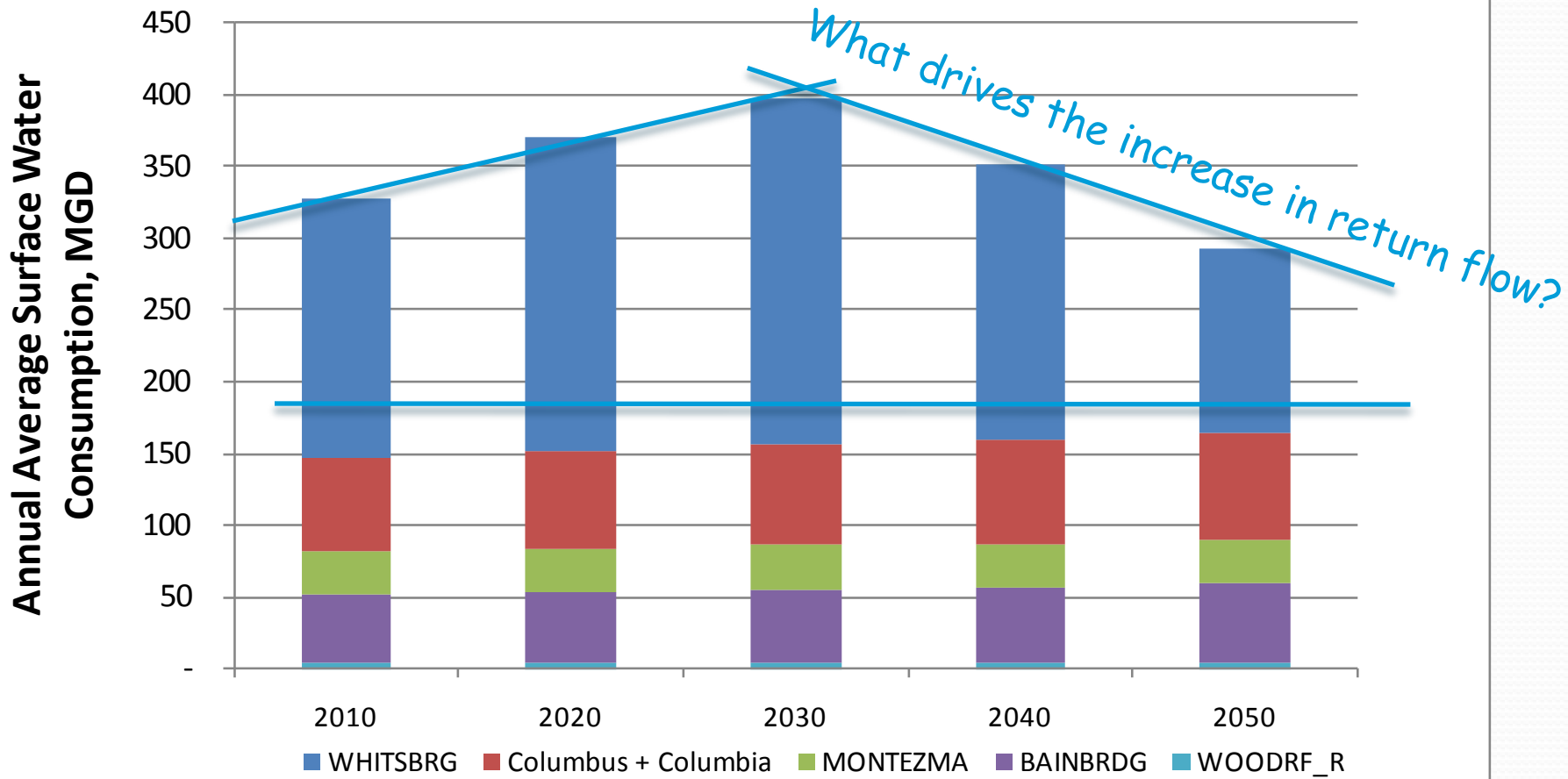
(storage in acre feet)



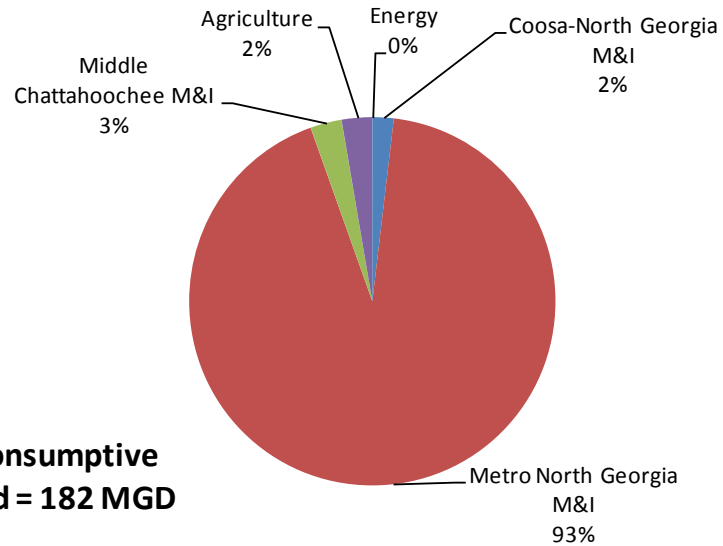
ACF Basin Consumptive Surface Water Use Projections



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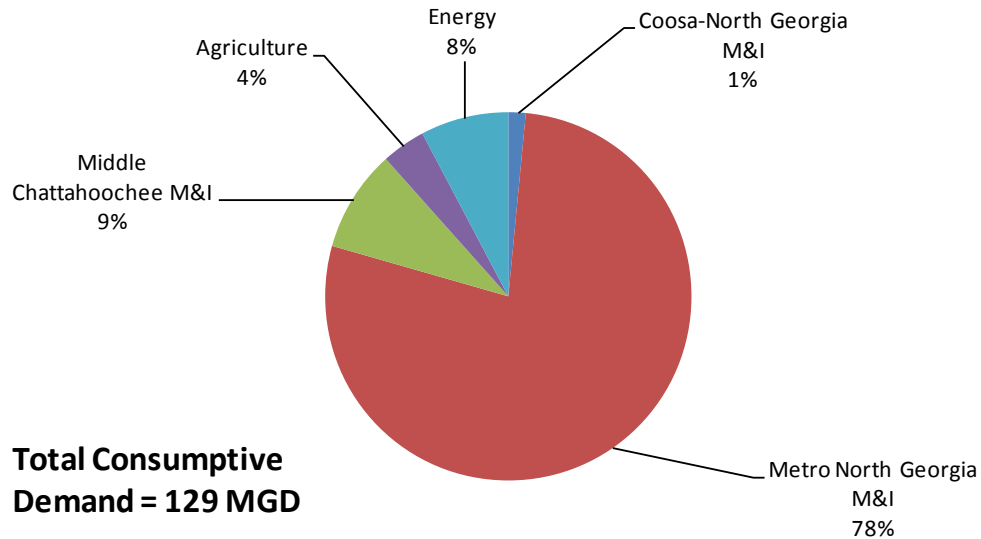


% Consumptive Water Use - 2010 Cumulative Demand to Whitesburg



Total Consumptive Demand = 182 MGD

% Consumptive Water Use - 2050 Cumulative Demand to Whitesburg



Total Consumptive Demand = 129 MGD

ACF Summary

Initial Model Run of Surface Water Quantity Assessment

Under drought conditions:

- Shortfalls in the Flint are compensated by the Chattahoochee at Woodruff Dam*
- Severe impacts on West Point Lake recreation, fish & wildlife
- Regime flow (environmental flows) not maintained at Columbus or Columbia
- TNTC ...Work Group comments about the '89 WCP

* *Estimated storage required to close the gap at Bainbridge = 162,000 acre feet*

Tallapoosa Summary

Initial Model Run of Surface Water Quantity Assessment

Under drought conditions:

- Significant demand gaps at Newell & Heflin nodes
- Storage needed

(Estimates of offsetting storage are approx. 32,000 acre-feet.)