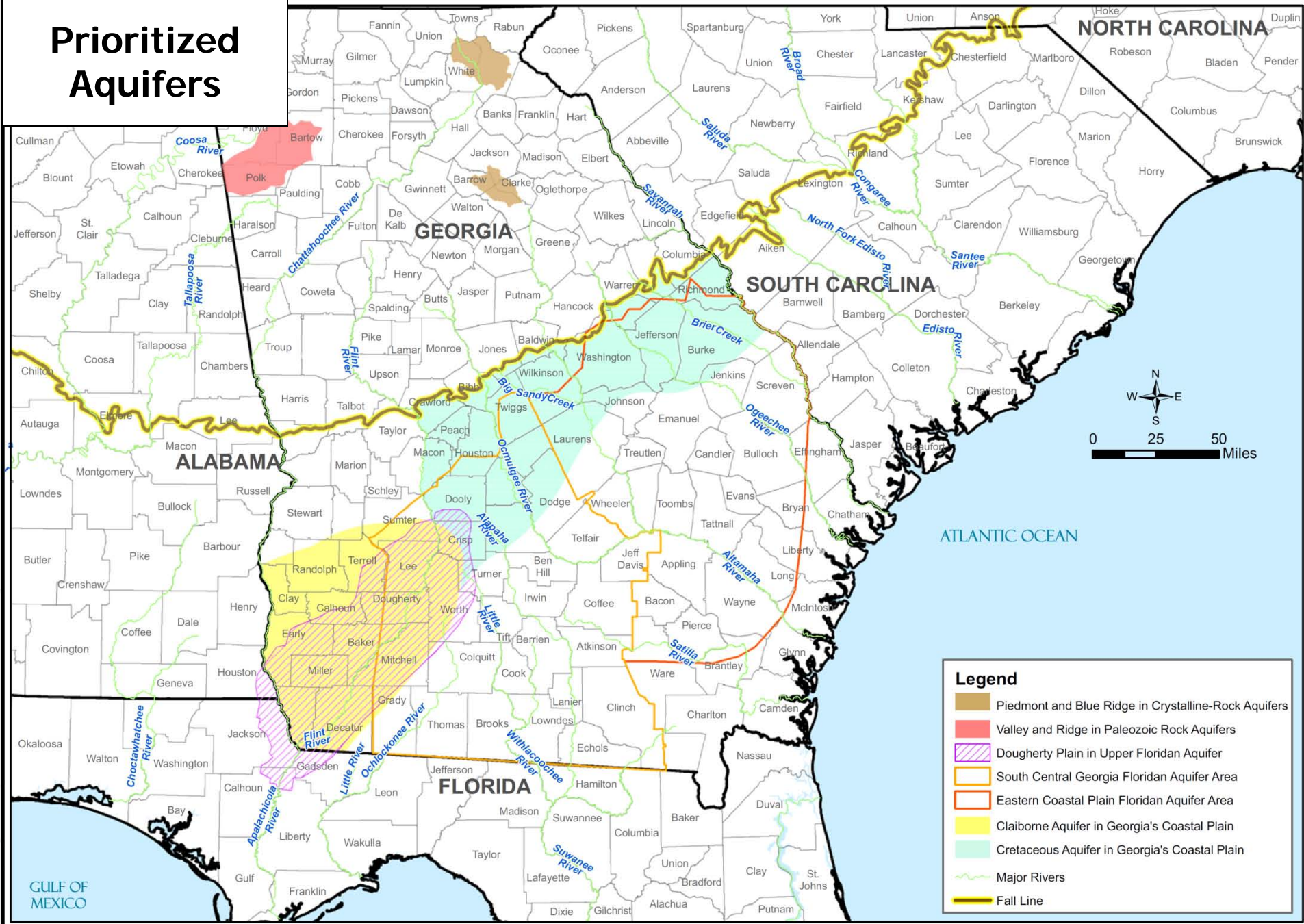




Groundwater Availability: Summary of Modeling Results

Prioritized Aquifers



Sustainable Yield Metrics

- Drawdowns of groundwater levels in the pumped aquifer do not exceed 30 feet between pumping wells;
- Recharge from surface water sources were constrained to 40 percent of baseflow in order to maintain opportunities for surface water use;
- Reduction in aquifer storage does not go beyond a new base level;
- Groundwater levels are not lowered below the top of a confined aquifer; and
- The ability of the aquifer to recover to baseline groundwater levels between periods of higher pumping during droughts is not exceeded.

Sustainable Yield

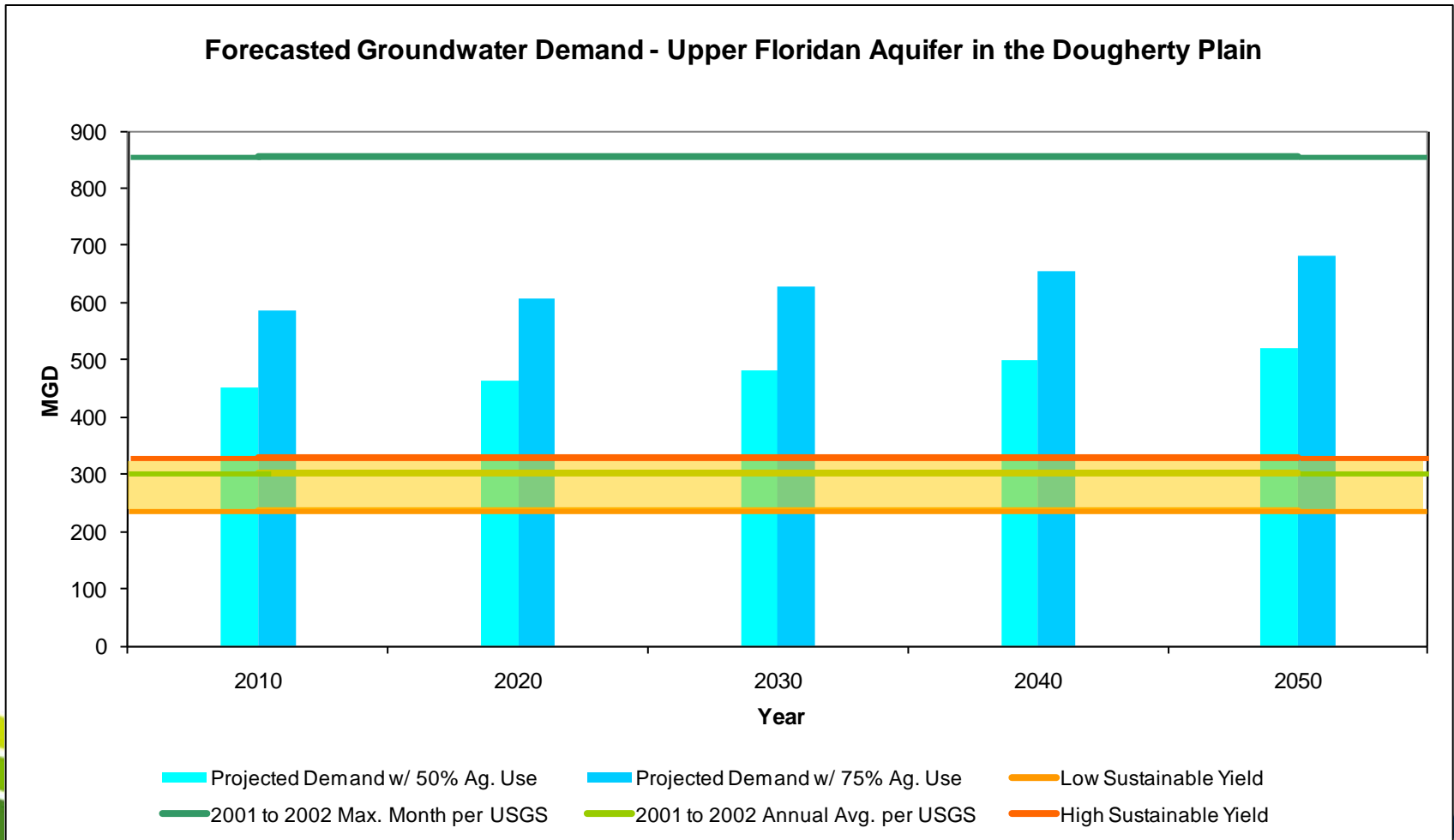
Prioritized Aquifer	Minimum Sustainable Yield, MGD	Maximum Sustainable Yield, MGD
Upper Floridan Aquifer in Dougherty Plain	237	328
Upper Floridan Aquifer in South-Central Georgia	622	836
Upper Floridan Aquifer in South-Central Georgia & Eastern Coastal Plain	868	982
Claiborne Aquifer	100	250
Cretaceous Aquifer	198	201
South-Central Georgia & Eastern Coastal Plain Upper Floridan, Claiborne, & Cretaceous Withdrawing Together	1,066	1,229
Paleozoic-rock Aquifer	27	70
Crystalline Rock Aquifer (Piedmont)	1.6	7.9
Crystalline Rock Aquifer (Blue Ridge)	19.9	99.5

Upper Floridan Aquifer in Dougherty Plain

- Existing USGS model utilized
 - Sustainable yield criteria includes impact criteria for base flow reductions of the overlying river systems
 - Calibrated to drought conditions (October 1999)
 - Modeled withdrawal increases performed for each overlying HUC watershed; upper end withdrawal multiplier established
 - Cumulative impacts of all watersheds modeled simultaneously; withdrawal multipliers reduced until stream flows observed above the impact level
 - Range of sustainable yield reflects inclusion or exclusion of the total watershed area crossing state lines (AL & FL) (HUC 03130004 in Chattahoochee River Basin)



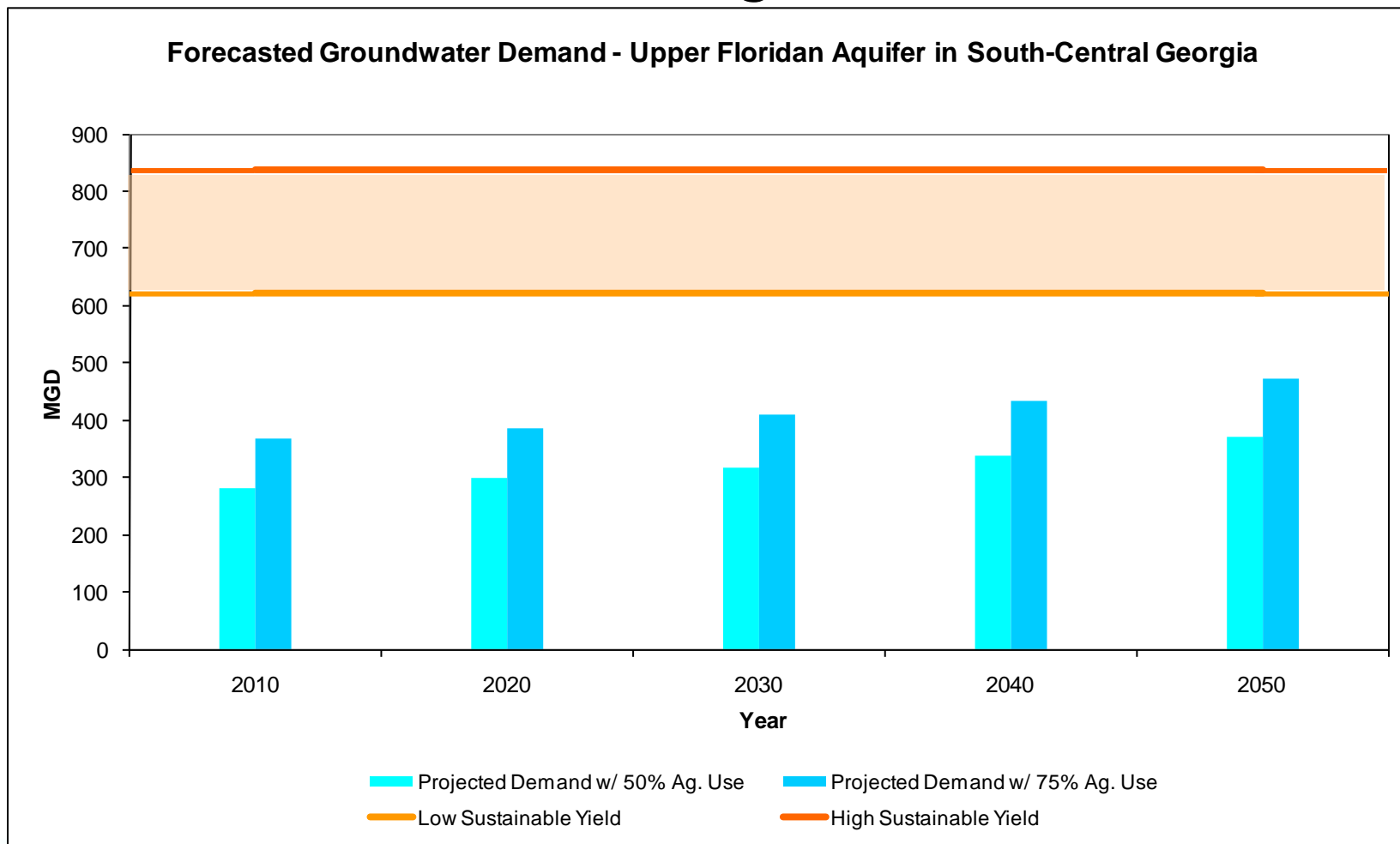
Upper Floridan Aquifer in Dougherty Plain



Coastal Plain Model

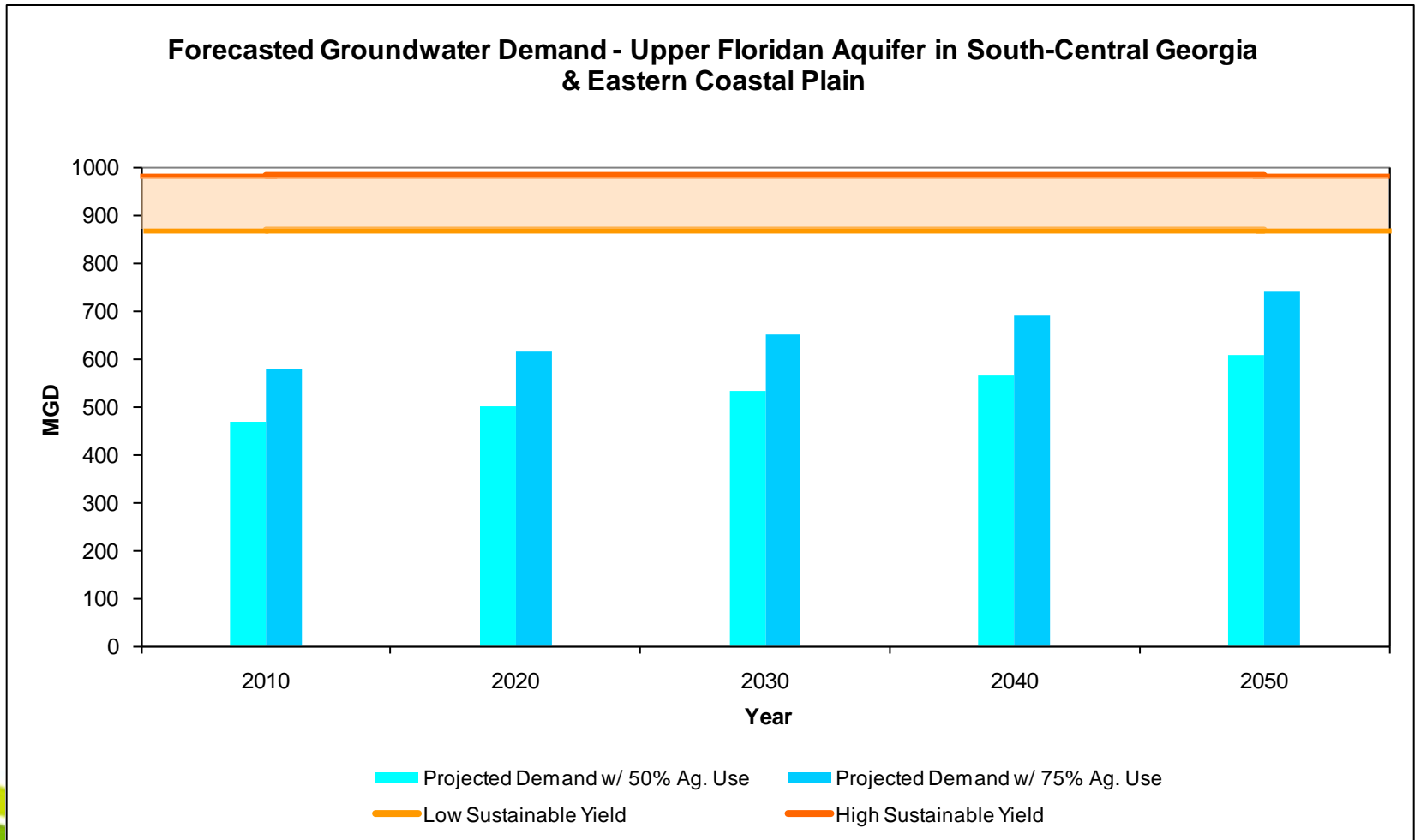
- Updated USGS Coastal Plain Clastic Aquifer System model utilized
- Ranges of sustainable yield determined by uniformly increasing withdrawals from existing wells versus non-uniform increases over the prioritized aquifer area
- Withdrawal increased for prioritized aquifers modeled individually then system-wide

Upper Floridan Aquifer South-Central Georgia



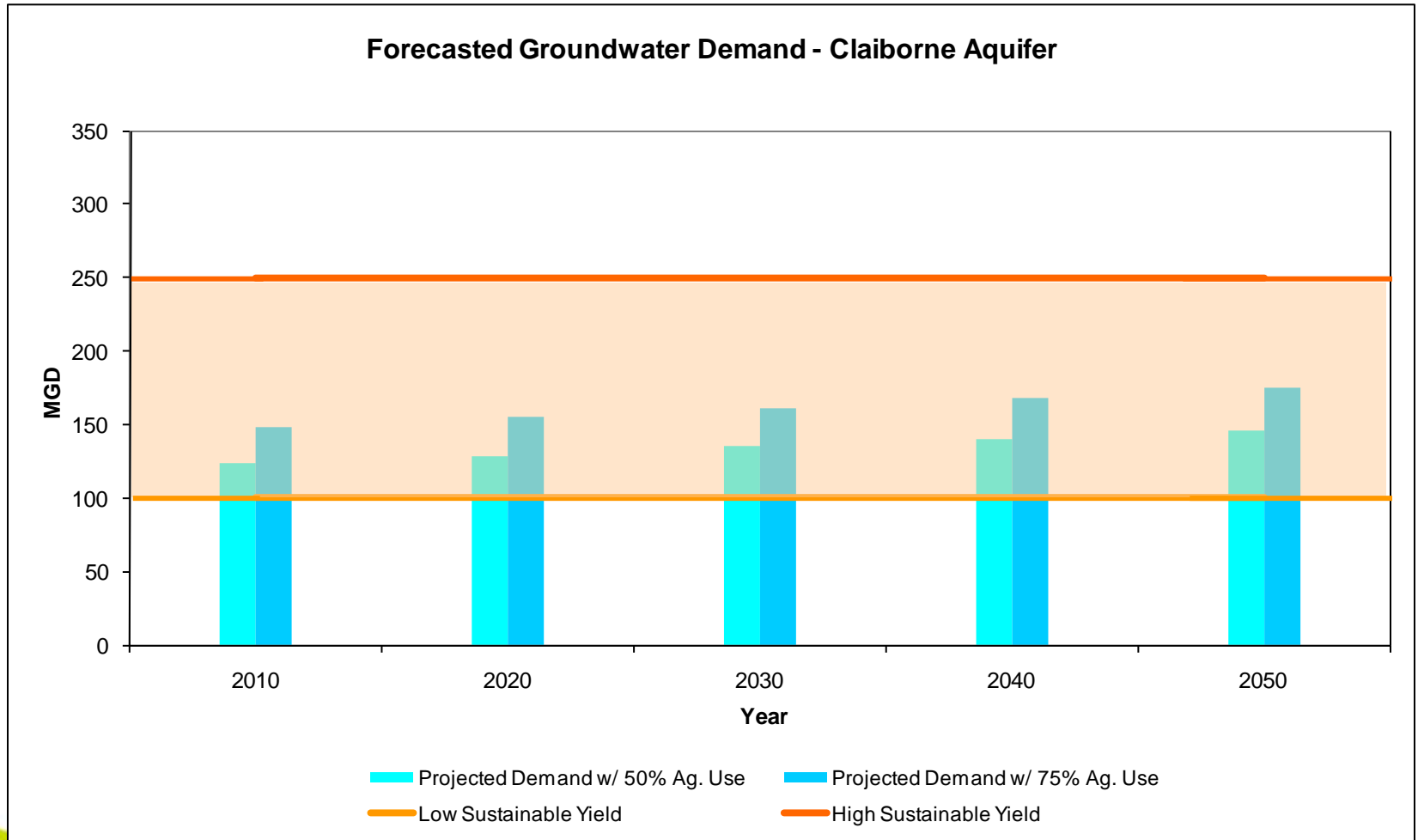
Sustainable yield represented assumes all other coastal plain prioritized aquifer withdrawals held constant at baseline levels.

Upper Floridan Aquifer South Central Georgia & Eastern Coastal Plain



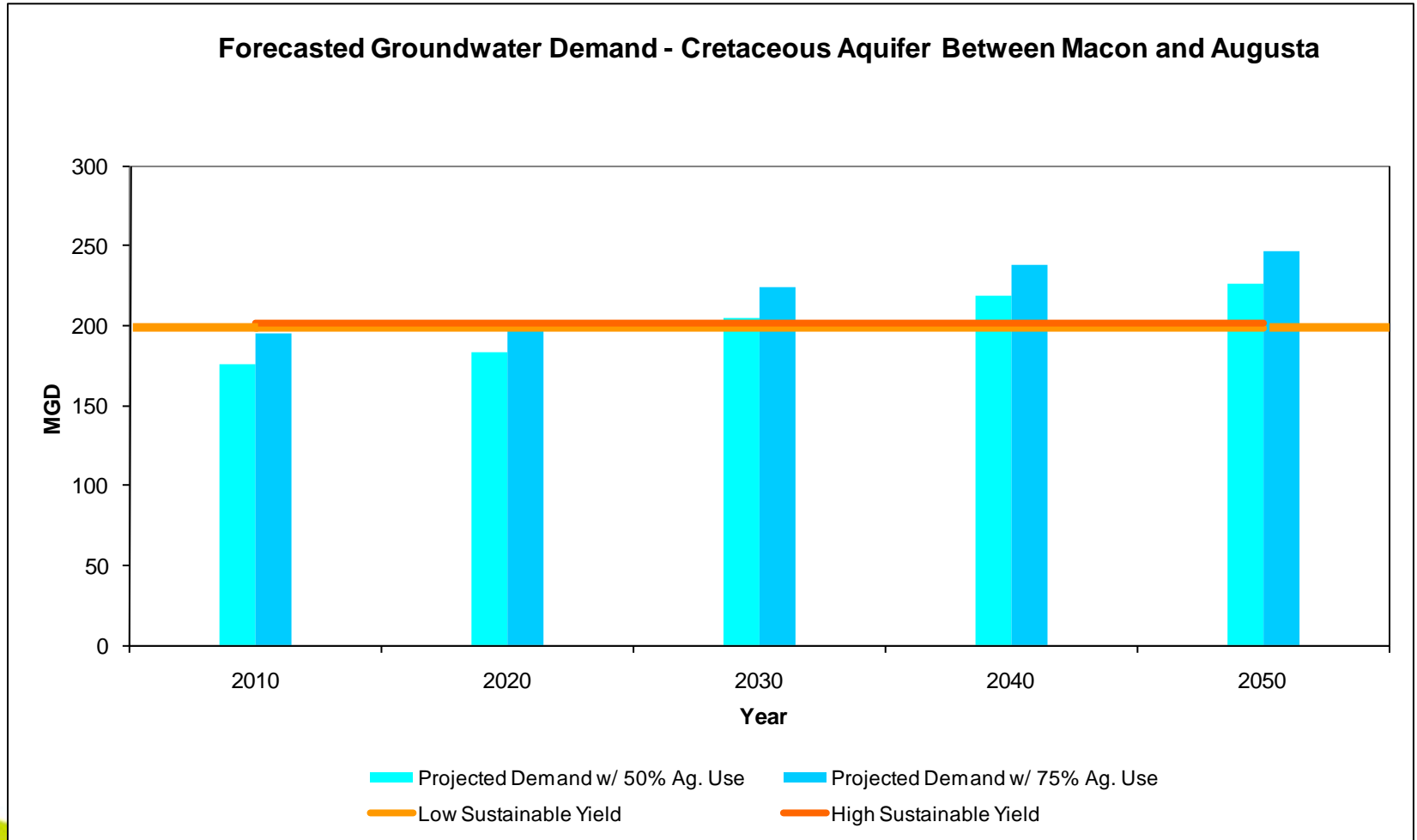
South Central and Eastern Coastal Plain aquifer withdrawal increases modeled simultaneously; All other Coastal Plain aquifer withdrawals assumed to be held constant at baseline.

Claiborne Aquifer



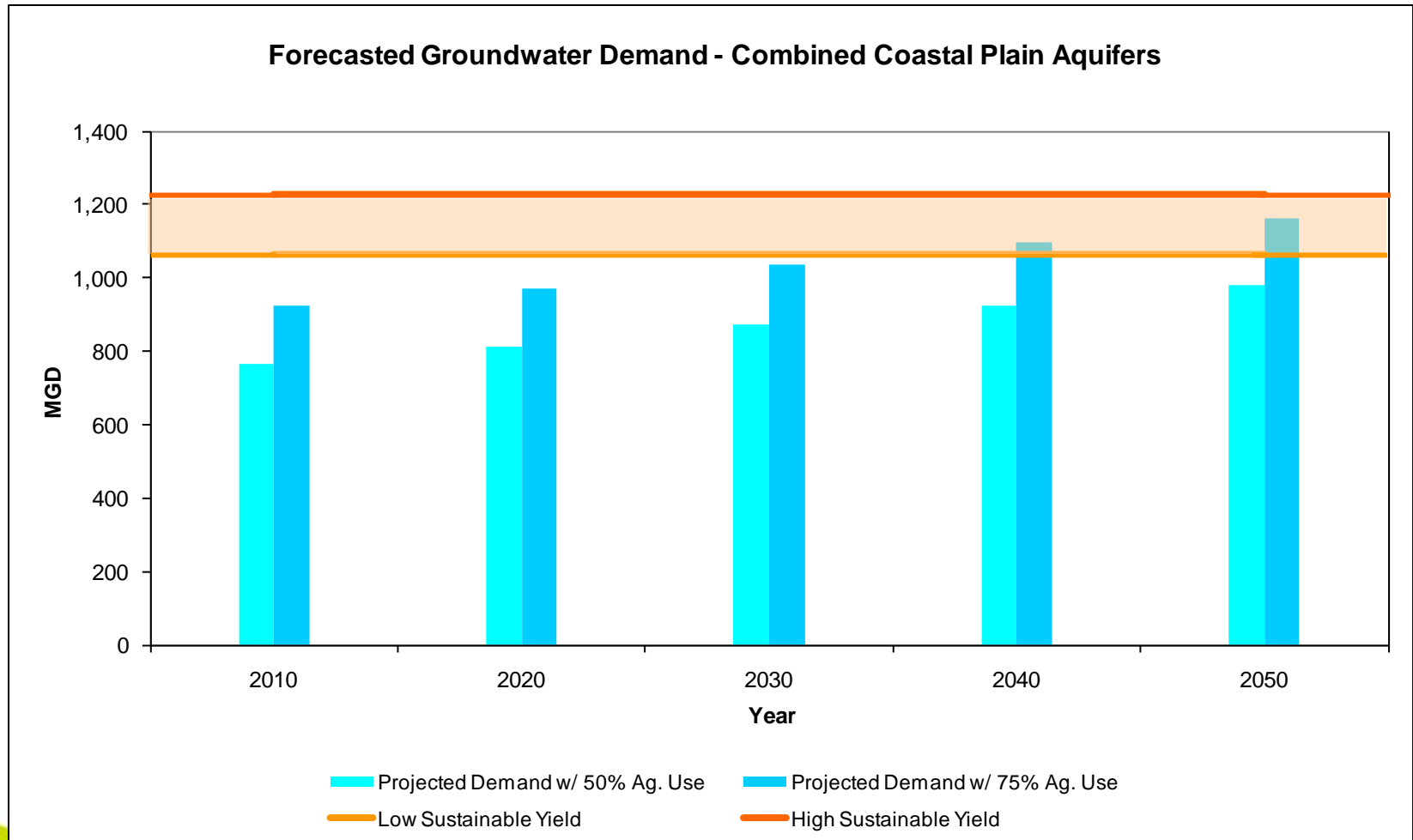
Sustainable yield represented assumes all other coastal plain prioritized aquifer withdrawals held constant at baseline.

Cretaceous Aquifer



Sustainable yield represented assumes all other coastal plain prioritized aquifer withdrawals held constant at baseline

Combined Coastal Plain Aquifers



Sustainable yield is based on South-Central Georgia & Eastern Coastal Plain Upper Floridan, Claiborne, & Cretaceous aquifer withdrawals increasing simultaneously