



Georgia 2010 Water Quality Standard Triennial Review



Water Quality Standard Triennial Review

- 40 CFR 131.20 requires Georgia to review and revise water quality standards from time to time, but at least once every three years
- Georgia's water quality standards are given in Chapter 391-3-6-.03 of the Georgia Rules and Regulations for Water Quality Control
- Water quality standards include
 - Designated Uses
 - Criteria, either numeric or narrative
 - Antidegradation policy



Purpose of Meeting

- Inform the public that Georgia has entered the Triennial Review Period and solicit public stakeholder input
- Inform the public of changes to the standards that EPD is currently considering



Changes Under Consideration

- Remove the minimum hardness value in the equations to calculate aquatic life criteria for metals
- Amend the numeric human health toxic priority pollutant criteria for 2,3,7,8 tetrachlorodibenzo-p-dioxin (TCDD)
- Amend Lake Allatoona chlorophyll *a* and nutrient (Total Phosphorus and Nitrogen) criteria
- Update and amend designated uses for waterbodies of the State
- Clarifying language where shellfish bacteria criteria apply and updating the name of the shellfish sanitation program manual
- Clarifying the definition of “waters generally supporting shellfish”
- Correct various typographical, grammatical, and formatting errors



Minimum Hardness and Priority Pollutant

- Some metals criteria (cadmium, chromium III, copper, lead, nickel, and zinc) are hardness dependent
 - Current equation has a minimum cutoff of 25 mg/L (as calcium carbonate) hardness
 - New criteria will have no hardness cutoff based on EPA's National Recommended Water Quality Criteria

- Priority Pollutant 2,3,7,8 tetrachlorodibenzo-p-dioxin (TCDD) will be amended based on EPA's National Recommended Water Quality Criteria
 - Current criteria 0.0000012 µg/L
 - New criteria 0.0000000059 µg/L



Lake Allatoona Criteria

- Criteria are being updated based on recent modeling of the watershed and lake due to TMDL requirements
- Modeling indicates nutrient sources due to:
 - Urbanization and agricultural (non-point sources)
 - Nutrient sediment fluxes from lake
 - Point sources
- With urban and agricultural influences removed from the model, the chlorophyll and nutrient criteria are still being violated; original criteria set too low
 - Revise Shoal Creek annual Total Phosphorus loading
 - Revise Allatoona Creek chlorophyll *a* criteria
- Modeling and Algal Growth Potential tests indicate the lake is phosphorus limited; nitrogen controls to meet current standard unnecessary and may result in economic hardship
 - Revise total nitrogen standard



Other Impounded Tributaries to an Elevation of 840 Feet Mean Sea Level (Lake Allatoona Normal Pool Elevation)

Shoal Creek Phosphorus Load = 9200 lbs/year

Etowah River at GA Highway 5

Etowah River 12 ug/L

Dam Forebay 10 ug/L

Little River at GA Highway 754 (GA Highway 5)

Little River 15 ug/L

Mid Lake 10 ug/L

Nitrogen Standard = 4.0 mg/L

Allatoona Creek 10 ug/L

Barlow

Cobb

Cherokee

Cobb

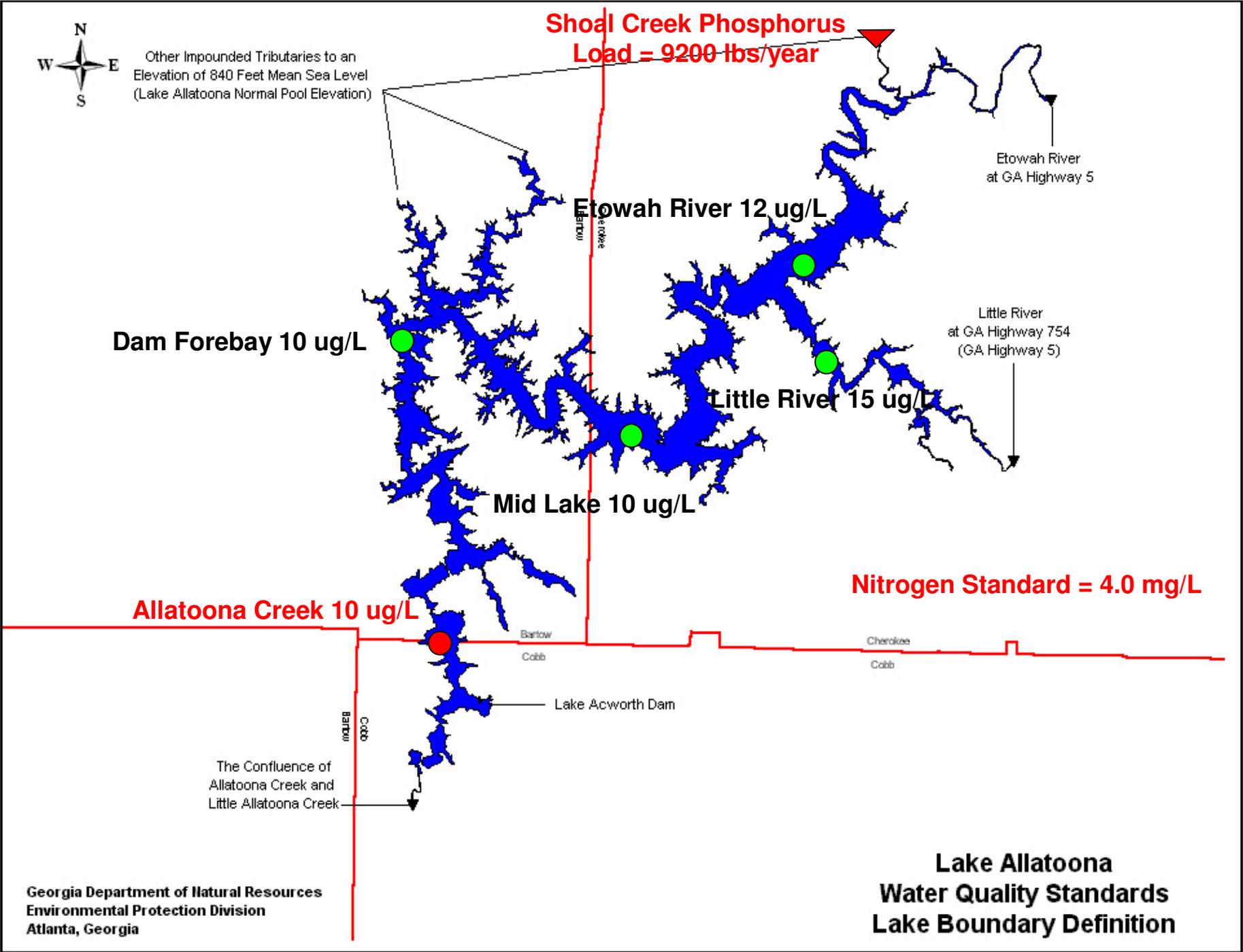
Lake Acworth Dam

The Confluence of Allatoona Creek and Little Allatoona Creek

Barlow
Cobb

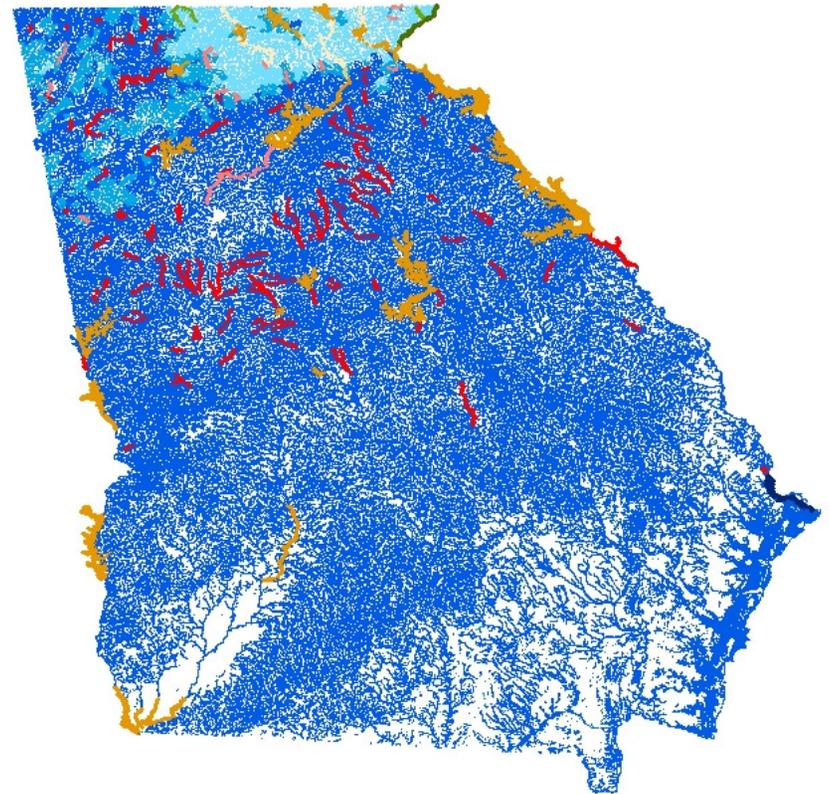
Georgia Department of Natural Resources
Environmental Protection Division
Atlanta, Georgia

**Lake Allatoona
Water Quality Standards
Lake Boundary Definition**



Designated Uses

- Updating designated uses of waters
 - Numerous drinking water intakes added since uses originally designated
 - Adding recreation uses to some reservoirs

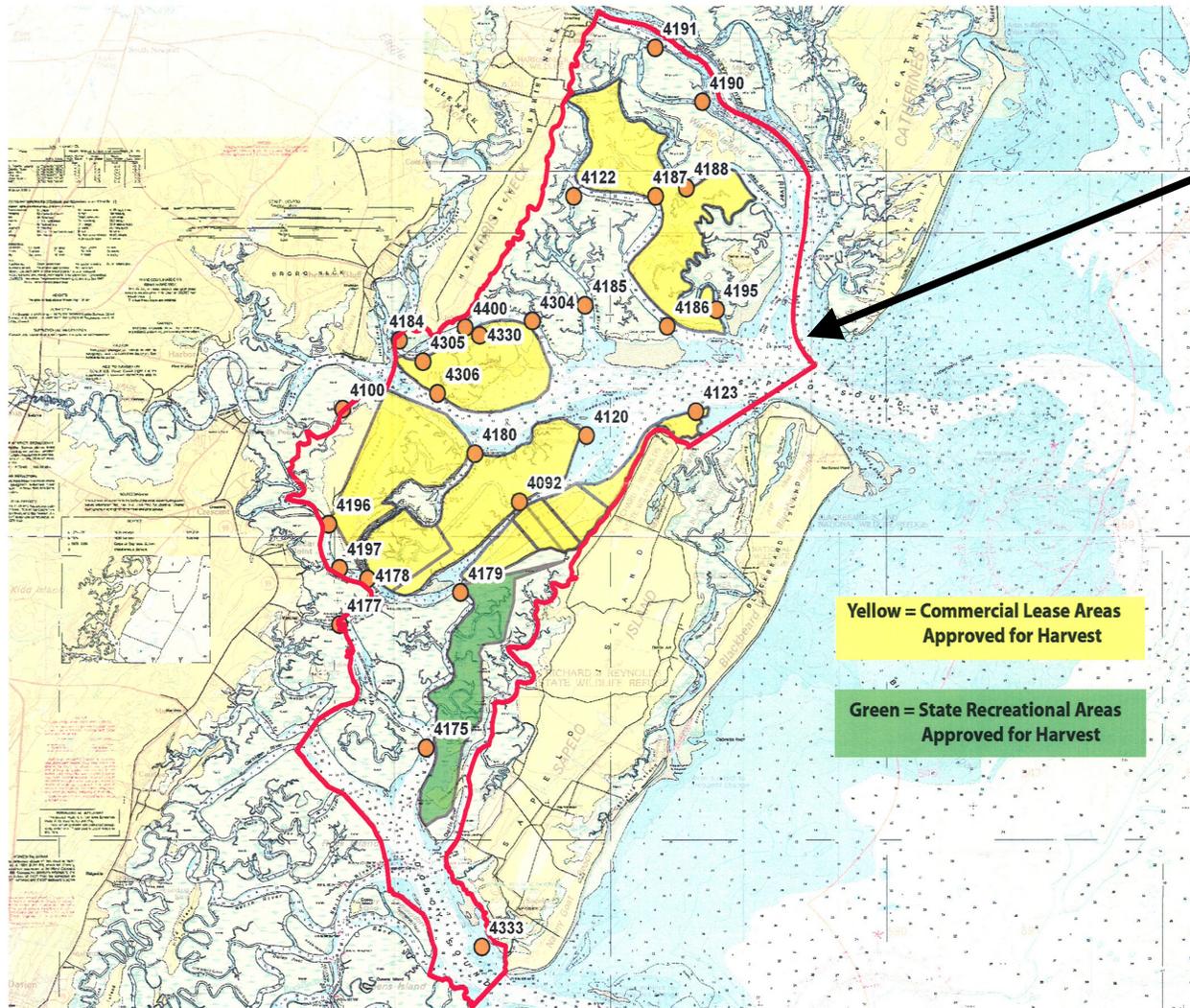




Shellfish Areas and Bacteria Criteria

- Currently:
 - Language states that the bacteria criteria for shellfish applies to waters designated as “approved shellfish harvesting waters”
 - “Approved shellfish harvesting waters” are designated within shellfish growing areas based on bacteria criteria being met
- The term “approved shellfish harvesting waters” is being changed to “shellfish growing area”
- This will allow further protection of shellfish for human consumption by having the bacteria criteria apply to all shellfish growing areas
- Shellfish sanitation reference manual is being updated to most recent version

**MCINTOSH COUNTY
SHELLFISH GROWING AREA
(Delineated with Red Polygon)**



“Shellfish Growing Area”

**Yellow = Commercial Lease Areas
Approved for Harvest**

**Green = State Recreational Areas
Approved for Harvest**



Waters Generally Supporting Shellfish

- Waters listed in section 391-3-6-.03(16) are being proposed for amendment by changing language to indicate that they either support or have the potential to support shellfish, but this does not necessarily mean that it is legal to harvest shellfish from these areas
- For a current list of approved waters for harvesting, the Coastal Resources Division will need to be contacted



Minor Corrections

- Alphabetizing designated use list by river basin
- Alphabetizing trout stream list by county
- Correcting typos, grammar, and formatting errors



2010 Schedule

- Public Meetings on July 20th and 22nd
- Brief the DNR Board in August
- 45-day Public Notice period starting late August
- Public Hearings mid-late October
- Final Presentation to the DNR Board in December
- Submit to EPA for approval
- EPA approves revisions within 60 days or disapproves revisions within 90 days