



GEORGIA

DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

2019 Triennial Review Designated Use Meeting

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Water Quality Standards Coordinator

02/02/2021



Welcome to this Stakeholder meeting

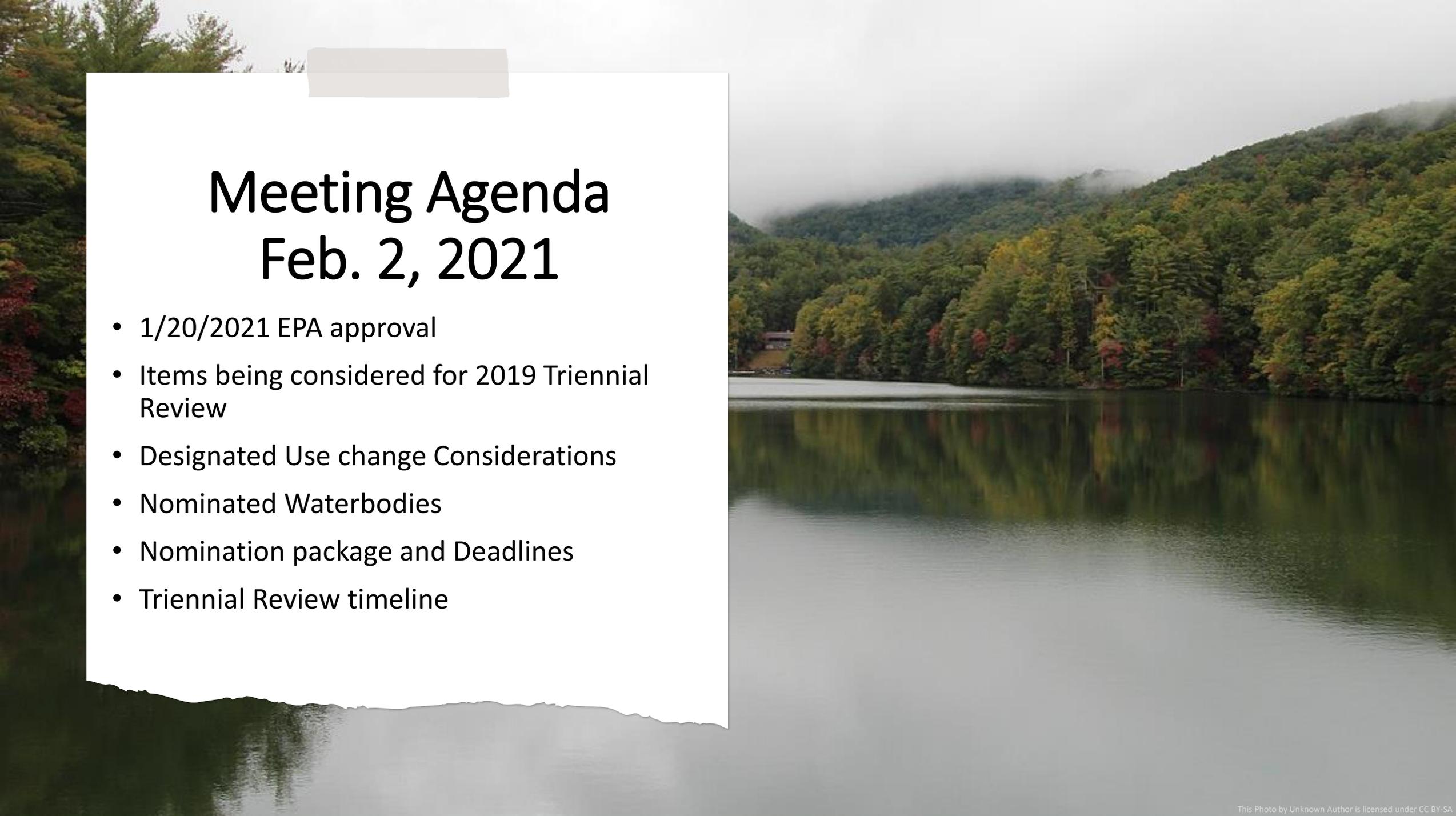


- Please note that everyone is entering the meeting with their microphones muted.
- Please **keep your microphones muted** except when you are speaking. This will help us minimize background noise and feedback.
- Please take a moment to **open the Participants list and rename yourself** to show your full name and affiliation, so we have that for our records. You should see a “Rename” option next to your name (or click on “More” to find this option).
- **This meeting is being recorded** to document any questions or comments received during our time together.
- To make a comment or ask a question, please either:
 - Indicate you would like to make a comment using the Chat feature.
 - In the “Reactions” menu, select the “raise hand” option. The host will call on you to ask your question or make your comment.



Review and Revision of Water Quality Standards

- [40 CFR § 131.20](#) **State review and revision of water quality standards.**
- **(a) State review.** The State shall from time to time, but at least once every 3 years, hold public hearings for the purpose of reviewing applicable water quality standards adopted pursuant to §§ 131.10 through 131.15 and Federally promulgated water quality standards and, as appropriate, modifying and adopting standards.
- **(b) Public participation.** The State shall hold one or more public hearings for the purpose of reviewing water quality standards as well as when revising water quality standards, in accordance with provisions of State law and EPA's public participation regulation (40 CFR part 25). The proposed water quality standards revision and supporting analyses shall be made available to the public prior to the hearing.

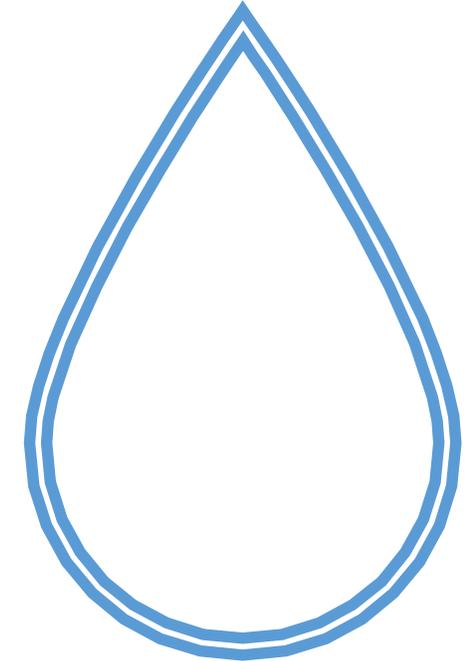
A scenic landscape featuring a calm lake in the foreground, reflecting the surrounding forested hills. The hills are covered in dense trees with some autumnal colors. A layer of mist or fog hangs over the top of the hills, creating a soft, atmospheric effect. The sky is overcast and grey. The overall scene is peaceful and natural.

Meeting Agenda Feb. 2, 2021

- 1/20/2021 EPA approval
- Items being considered for 2019 Triennial Review
- Designated Use change Considerations
- Nominated Waterbodies
- Nomination package and Deadlines
- Triennial Review timeline

EPA Approval of Items from 2016 Triennial Review

- 12/6/2018: EPD submitted completed 2016 Triennial Review package to EPA
- 1/20/2021: EPA approved a portion of the 2016 revisions, including:
 - Antidegradation rule and definition of practicable alternatives
 - Paragraph allowing Compliance Schedules
 - Add pH to the definition of Natural Conditions
 - Clarify estuarine waters definition
 - Adopt EPA recommended Cadmium criteria
 - Revise use designation of 13-mile segment of “Chattahoochee River from Snake Creek to Yellow Dirt Creek” to “Recreation”
- EPA did not address:
 - Secondary contact recreation bacteria criteria
 - Lakes Oconee and Sinclair water quality criteria
 - 2018 Narrative Criteria revisions submitted separately from the Triennial Review Package



Items Being Considered for 2019 Triennial Review

Recommended by EPA after 2019 kickoff hearing

- 2009 EPA Acrolein Aquatic Life Criteria
 - Biocide
 - CAS RN 1107-025-2
 - Freshwater criteria 3.0 mg/L
- 2012 EPA Carbaryl Aquatic Life Criteria
 - Insecticide
 - CAS RN 163-25-2
 - Freshwater criteria 2.1 mg/L
 - Coastal and Estuarine Waters criteria 1.6 mg/L



Items Being Considered for 2019 Triennial Review

- 2015 EPA Human Health Ambient Water Quality Criteria Updates
 - (94 chemicals)
 - Criteria based on national body weight, fish and water consumption, and other data
 - Looking into basing criteria on Georgia specific data
- 2016 EPA Selenium Criteria
 - Current criteria based on 1999 EPA recommendation: 5 µg/L
 - 2016 Update Recommendation: criteria for Se in fish egg/ovary, fish muscle/body tissue, and water column, plus an intermittent criteria
 - Water column criteria
 - 1.5 µg/L in lentic aquatic systems
 - 3.1 µg/L in lotic aquatic systems
 - Muscle tissue criteria 11.3 mg/kg dry weight
 - EPD detection limit for water column data (EPA test method 200.8) is higher than the recommended criteria
 - May not adopt Se criteria at this time



Items Being Considered for 2019 Triennial Review

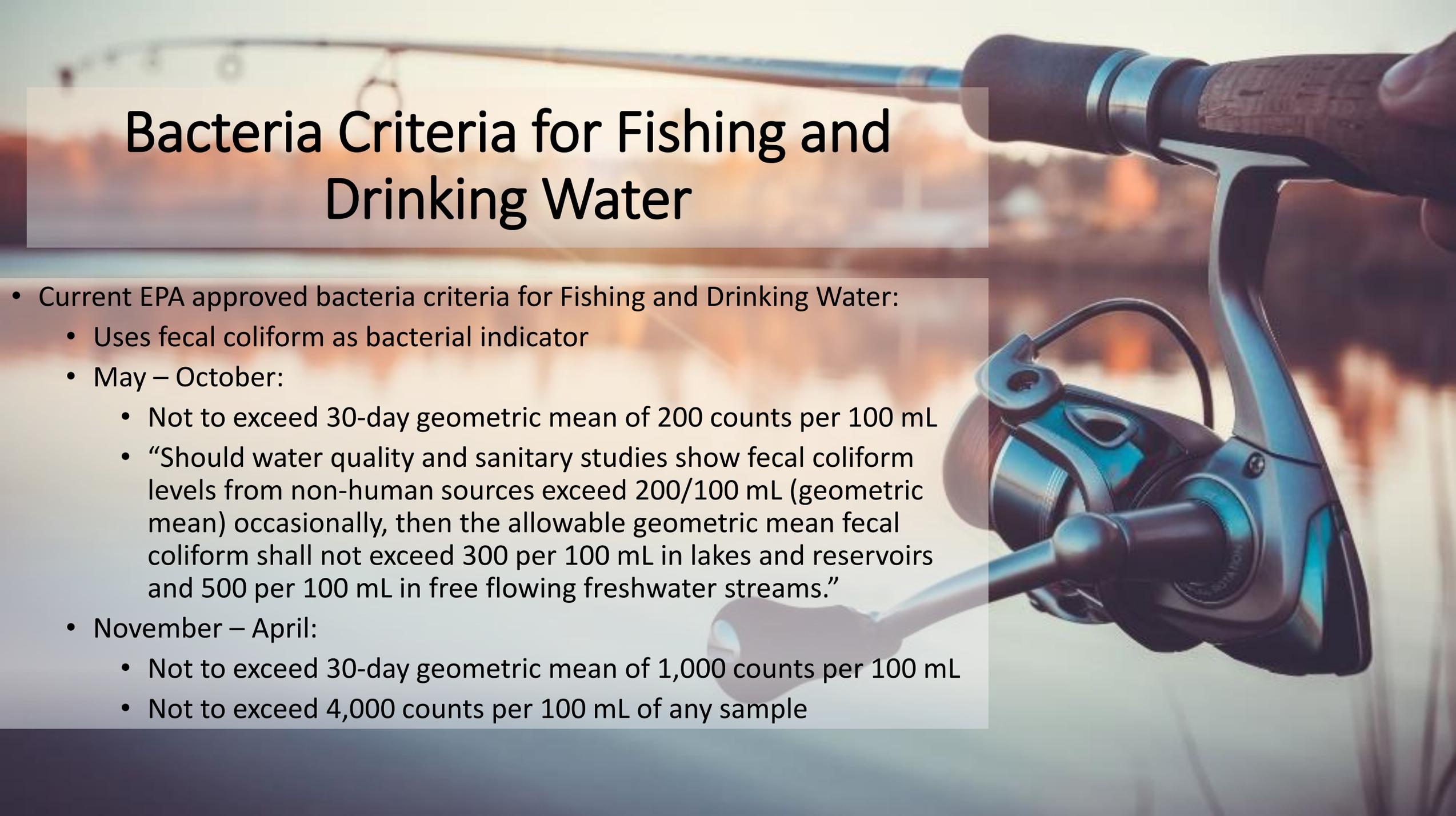


- 2018 EPA Aluminum Aquatic Life Criteria
 - GA has a lot of naturally occurring aluminum, not all bioavailable
 - EPA recently approved use of an alternate analytical method in Oregon rules for testing for bioavailable Al
 - Waiting on EPA approval of bioavailable analytical method
 - May not adopt Al criteria at this time.
- 2019 EPA Recommended Criteria or Swimming Advisories for Cyanotoxins
 - Continue to work with Lake managers on swim advisories

Items Being Considered for 2019 Triennial Review

- Adding definitions for primary and secondary recreation
- Replacing “water use classifications” and “legitimate uses” with “designated uses.”
- Remove non-human source clause from Fishing and Drinking Water bacteria criteria
- Changes to Designated Uses based on public comments provided
- Revision to narrative criteria amendment made in 2018
- Revisions to items included in the 2016 Triennial Review period:
 - Lakes Oconee and Sinclair criteria
 - Bacteria criteria for Fishing and Drinking Waters that include protections of secondary contact recreation



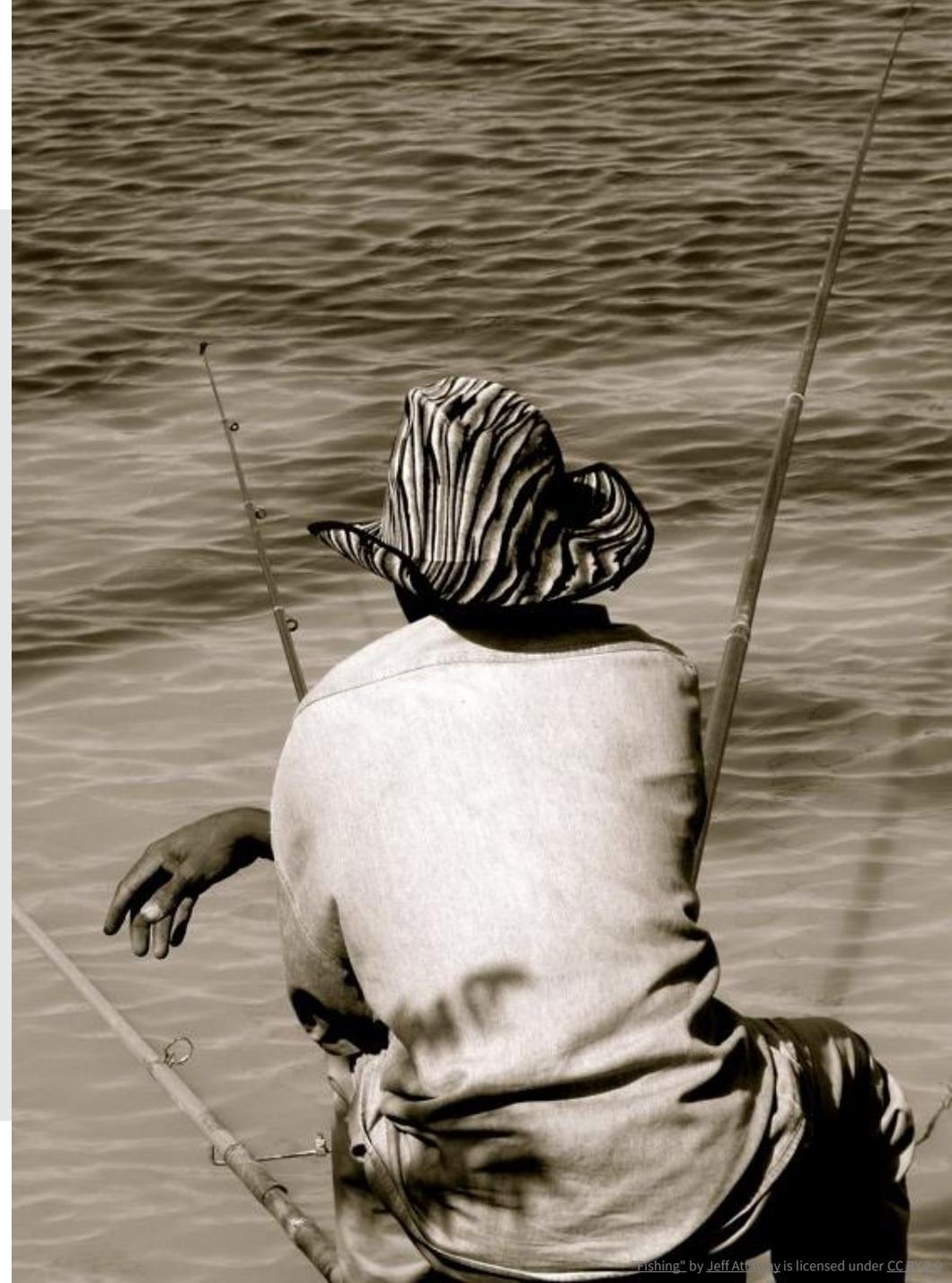
A close-up photograph of a fishing rod and reel. The rod is held by a hand, and the reel is a blue and black spinning reel. The background is a soft, out-of-focus sunset or sunrise over water, with warm orange and yellow tones. The fishing rod is positioned diagonally across the frame, from the top left towards the bottom right. The reel is in the foreground, showing its intricate details and the handle.

Bacteria Criteria for Fishing and Drinking Water

- Current EPA approved bacteria criteria for Fishing and Drinking Water:
 - Uses fecal coliform as bacterial indicator
 - May – October:
 - Not to exceed 30-day geometric mean of 200 counts per 100 mL
 - “Should water quality and sanitary studies show fecal coliform levels from non-human sources exceed 200/100 mL (geometric mean) occasionally, then the allowable geometric mean fecal coliform shall not exceed 300 per 100 mL in lakes and reservoirs and 500 per 100 mL in free flowing freshwater streams.”
 - November – April:
 - Not to exceed 30-day geometric mean of 1,000 counts per 100 mL
 - Not to exceed 4,000 counts per 100 mL of any sample

Bacteria Criteria

- Add definitions of primary and secondary recreation
 - “Primary contact recreation” is full immersion contact with water where there is significant risk of ingestion that includes, but is not limited to, swimming, diving, water skiing, and surfing.
 - “Secondary contact recreation” is incidental contact with the water not involving a significant risk of water ingestion such as canoeing, fishing, kayaking, motor boating, rowing, splashing, wading, and occasional swimming.
- Definitions based on likelihood of water ingestion by activity from Dorevitch et al. (2011) and Dufour et al. (2017) studies.
- Working with EPA on winter bacteria criteria that will be protective of secondary contact recreation according to 2019 update to EPA’s [Exposure Factors Handbook](#)
- Removing non-human source clause from bacteria criteria



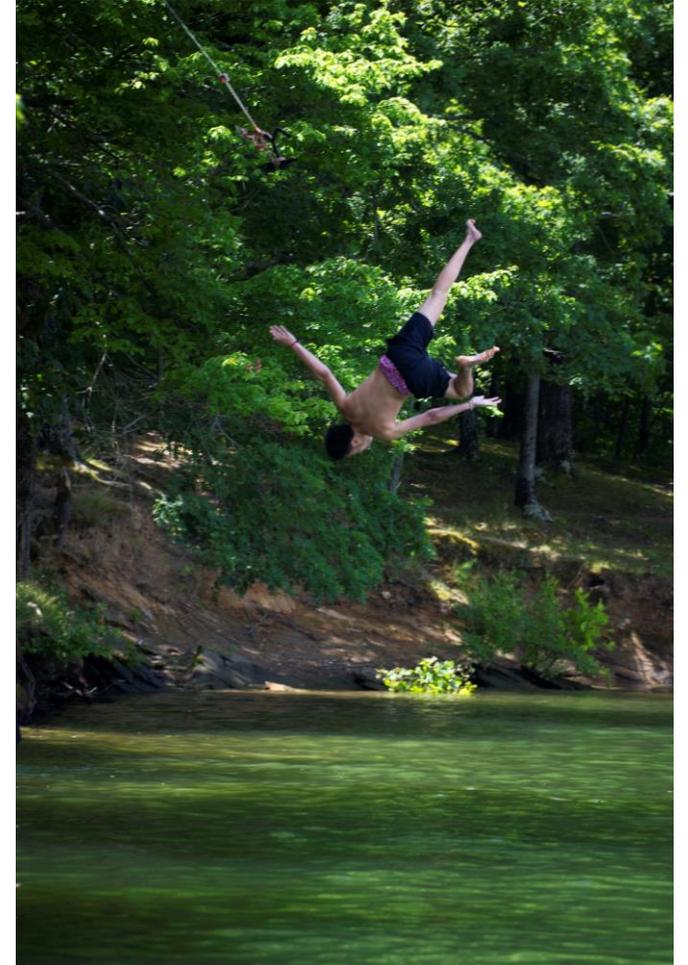
Designated Uses: Recreation vs. Fishing/Drinking Water



- 391-3-6-.03 (5): General Criteria that apply to all waters (all designated uses) waters
 - “Free from” narrative criteria
 - Aquatic life criteria for metals and organic chemicals
 - Human Health criteria for priority pollutants
- 391-3-6-.03 (6): Specific Criteria for Classified Water Use
 - Fishing, Drinking Water, and Recreation have the same criteria for:
 - pH: 6.0 – 8.5
 - Dissolved Oxygen
 - Trout Streams: Daily avg. 6.0 mg/L, no less than 5.0 mg/L at all times
 - Warm water: Daily avg. 5.0 mg/L, no less than 4.0 mg/L at all times
 - Temperature: not to exceed 90°F
 - Receiving Waters not to be increased more than:
 - Estuarine waters: 1.5°F
 - Primary trout streams: no increase
 - Secondary trout streams: 2°F
 - All other waters: 5°F

Designated Uses: Recreation vs. Fishing/Drinking Water

- Recreation: year-round primary contact recreation criteria
 - Enterococci (estuarine waters):
 - Not to exceed 30-day geometric mean of **35** counts per 100 mL
 - No more than 10% excursion STV of **130** counts per 100 mL in same 30-day interval
 - E. coli (all other waters – freshwater):
 - Not to exceed 30-day geometric mean of **126** counts per 100 mL
 - No more than 10% excursion STV of **410** counts per 100mL in same 30-day interval



A group of teens use a rope swing to splash into Lake Lanier on Sunday, June 30, 2019, near Wahoo Creek Park.

by Scott Rogers

Designated Uses: Recreation vs. Fishing/Drinking Water

- Fishing and Drinking Water: seasonal bacteria criteria
 - May – October (primary contact recreation criteria):
 - Same criteria as Recreation Designated Use
 - November – April (secondary contact recreation criteria):
 - Enterococci (estuarine waters):
 - Not to exceed 30-day geometric mean of ~~175~~ **98*** counts per 100 mL
 - 10% excursion STV of ~~650~~ **364*** counts per 100 mL in same 30-day interval
 - E. coli (all other waters – freshwater):
 - Not to exceed 30 day geometric mean of ~~630~~ **353*** counts per 100 mL
 - 10% excursion STV of ~~2050~~ **1148*** counts per 100mL in same 30-day interval



* Estimated criterion; collaborating with EPA on final criteria values

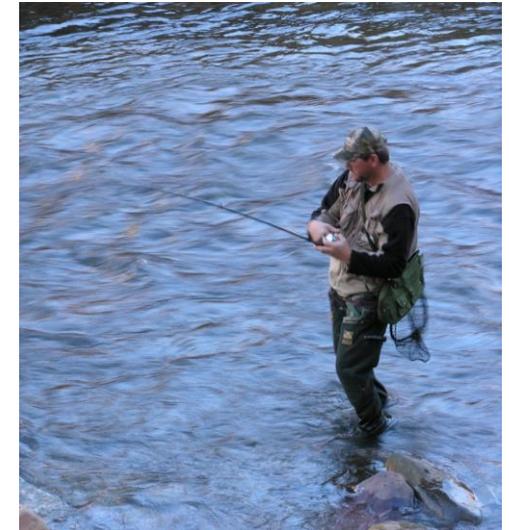
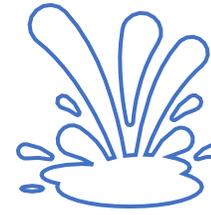
Bacteria Criteria



- 391-3-6-.03 (12): Bacteria Criteria
- The criteria for bacteria provide the regulatory framework to support the USEPA requirement that States protect all waters for primary contact recreation use. The bacterial indicators for recreation waters are E. coli and enterococci. The bacterial indicator for secondary contact recreational waters is fecal coliform, E. coli or enterococci.
 - (a) Fecal coliform, E. coli and enterococci bacteria live in the intestinal tract of warm blooded animals including man. These organisms are excreted in extremely high numbers. Pathogenic bacteria also originate in the fecal material of diseased persons. Therefore, waters with high levels of bacteria represent potential problem areas for swimming. Scientific studies indicate there is a positive correlation between E. coli and enterococci counts and gastrointestinal illness. However, there is no positive scientific evidence correlating elevated fecal coliform counts with transmission of enteric diseases. In addition, these bacteria can originate from any warm blooded animal or from the soil.
 - (b) Monitoring programs have documented bacterial levels in excess of the criteria in many streams and rivers in urban areas, agricultural areas, and even in areas not extensively impacted by man such as national forest areas. This is not a unique situation to Georgia as similar levels of bacteria have been documented in streams across the nation.

Additional Considerations

- **391-3-6-.03 (6)(a) and (c) - Drinking Water and Fishing**
 - “The State does not encourage swimming in these surface waters since a number of factors which are beyond the control of any State regulatory agency contribute to elevated levels of bacteria.”
- **391-3-6-.03 (6)(b) - Recreation**
 - “(Recreation) criteria are not to be interpreted as encouraging water contact sports in proximity to sewage or industrial waste discharges regardless of treatment requirements.”
- **391-3-6-.05 (3)(d)**
 - “The Division and the owner of a POTW will provide notice of a major spill within 24- hours of becoming aware of the major spill to every county, municipality or other public agency whose public water supply is within a distance of 20 miles downstream and to any others which could potentially be affected by the major spill.”



Waterbodies Under Consideration for Recreation Use

- Alapaha River
- Altamaha River
- Augusta Canal Water Trail
- Banks Lake
- Big Indian Creek Water Trail
- Broad River Water Trail
- Chattahoochee River
 - Peachtree Creek to New River
 - North Highlands Dam in Columbus to Bull Creek
 - Tributaries: Proctor Creek, Peachtree Creek, Tanyard Creek, Clear Creek
- Chattooga River (Coosa Basin)
- Chattooga River (Savannah Basin)
- Conasauga Canoe Trail
- Coosa River Water Trail
- Etowah River
- Flint River
- Georgia Saltwater Paddling Trail
- Grand Bay
- Ichawaynochaway Creek
- Kinchafoonee Creek
- Lake Irma
- Little Ohooppee Blue Trail
- Little River
- Muckalee Creek
- Ochlockonee River
- Ocmulgee River
- Oconee River
- Okefenokee Swamp
- Oostanaula River Water Trail
- Satilla River
- South Chickamauga Creek Blueway
- South River
- Spring Creek
- St. Mary's River
- Suwanee River
- Tallapoosa River
- Toccoa River
- Tugaloo River Water Trail
- West Chickamauga Creek Blueway
- Withlacoochee River
- Yellow River



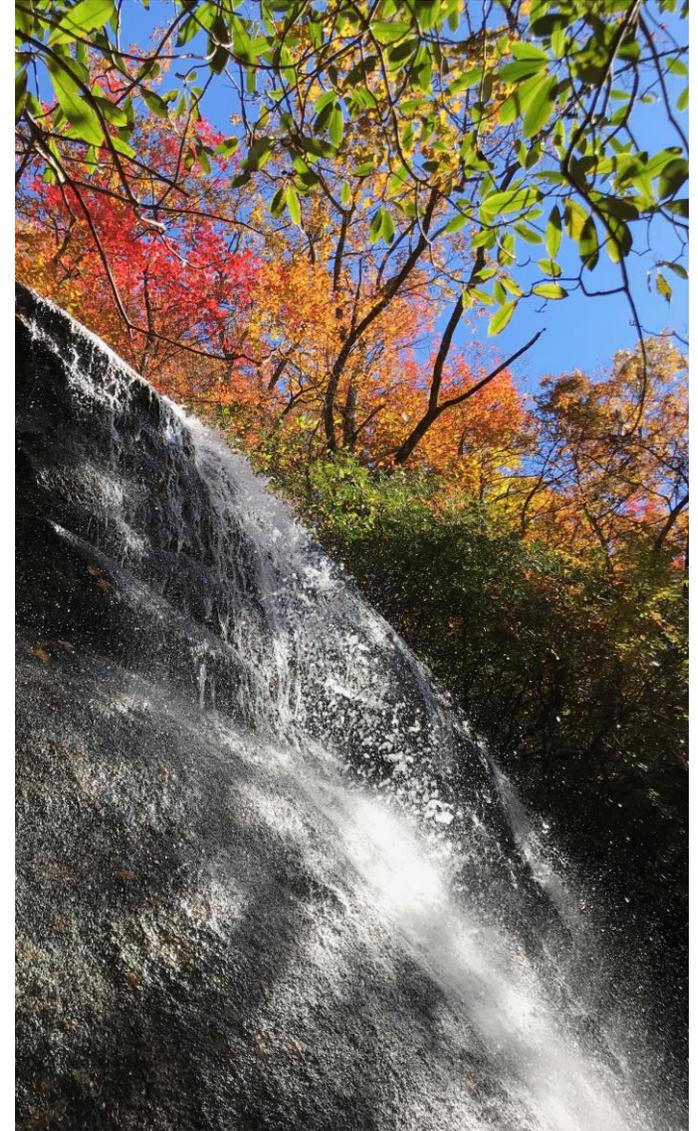
Nomination Package Details/Deadlines

- A nomination package should contain:
 1. Name of the waterbody. ✓
 2. Waterbody length. ✓
 3. Location of the reach, shown on a map. ✓
 4. Any 305(b)/303(d) impairment(s) &/or TMDL(s)
 5. Current users of the waterbody, including but not limited to dischargers, intakes, businesses, or industries.
 6. **Current activities that occur in or on the waterbody, broken down by season.** Provide supporting data including boat ramps, beaches, outfitters, parks within the waterbody and watershed, and any “blue trails”.*
 - ***For Primary contact recreation, we are specifically looking for swimming/diving holes, rope swings, jumping rocks, infrastructure supporting swimming/diving/full body immersion**
 7. Investments, both completed and pending, for improved use of the waterbody such as boat ramps, parks, trails, or drinking water systems. Include the amount of the investment, as well as who funded the project(s) and for what purpose.
 8. Letters of support and/or opposition from municipalities, County Board of Commissioners, other affected governmental bodies, businesses, and other interested stakeholders who live in the watershed of the reach.
 9. **Letters of support and/or opposition from dischargers, domestic and industrial, and intakes.**
- June 30th 2021 deadline for nomination package

• [GUIDANCE FOR RECOMMENDING A CHANGE IN DESIGNATED USE](#)

2019 Triennial Review Timeline

- February 2, 2021: Designated Use Meeting
- February 17, 2021: Public meeting
- March/April 2021: Additional public meetings and stakeholder meetings
- Mid-August 2021: Final public meeting
- Late-August 2021: Final package due to Board
- September: propose package to Board at September Board Meeting
- September (after Board Meeting): 45 day public notice for public hearing
- Mid-November: Public Hearing
- December: Board Adoption



Comments, Contacts, and WQS Webpage

- If you would like to submit official comments for any of the materials in this presentation, please send them in an email to:
epd.comments@dnr.ga.gov with the subject of 2019 Triennial Review
- Questions regarding Water Quality Standards and the Triennial Review Process can be sent to Gillian Gilbert-Wason at:
Gillian.Wason@dnr.ga.gov
- The EPD webpage dedicated to Water Quality Standards can be found at: <https://epd.georgia.gov/watershed-protection-branch/georgia-water-quality-standards>