

PERMIT NO. 022-1302-08

ISSUANCE DATE: Nov 02, 2021



# GEORGIA

DEPARTMENT OF NATURAL RESOURCES

## ENVIRONMENTAL PROTECTION DIVISION

### PERMIT TO WITHDRAW, DIVERT OR IMPOUND SURFACE WATER

PERMIT HOLDER'S NAME **Carroll County Water Authority**  
PERMIT HOLDER'S ADDRESS **P.O. Box 739 Carrollton, Georgia 30112**  
COUNTY: **Carroll County**

In accordance with the provisions of the Georgia Water Quality Control Act, (O.C.G.A. § 12-5-20 et seq.) as amended, and the Rules and Regulations for Water Quality Control, Chapter 391-3-6, promulgated pursuant thereto, this permit is issued to withdraw surface water from the (source) Indian Creek Reservoir in the Tallapoosa River Basin for the purpose of municipal water supply.

**Carroll County Water Authority (Permittee)** must comply with the following limitations:

- (1) Maximum 24 hour: Withdrawal 2.6 MGD; Impoundment \_\_\_\_ MGD; Diversion \_\_\_\_ MGD
- (2) Not to exceed a monthly average of 2.3 MGD
- (3) Not to exceed an annual average of 1.6 MGD

This Permit is conditioned upon the permit holder complying with the attached **Standard Conditions** (1 through 5) and the additional **Special Conditions** (11 through 24) which are hereby made a part of this Permit.

In accordance with the application dated 2/14/2019 and in conformity with the statements and supporting data entered therein or attached thereto, all of which are filed with the Environmental Protection Division of the Department of Natural Resources and are hereby made part of this Permit.

This Permit is effective from the date first above written and is subject to revocation pursuant to the Georgia Water Quality Control Act, as amended, O.C.G.A. § 12-5-31 (k).

Absent prior revocation in accordance with the above language, this Permit will expire **ten (10) years** from the issuance date on this permit.



Richard E. Dunn, Director  
Environmental Protection Division

This permit is conditioned upon the permittee complying with the provisions of the Water Quality Control Act, as amended, or any of the Rules and Regulations promulgated thereto;

**STANDARD CONDITIONS**

1) GENERAL PERMIT CHARACTERISTICS

- a) The use of surface water is limited to the quantities and purposes as specified herein;
- b) Water associated with this Permit must not be withdrawn by, released for, or otherwise utilized by any other entity or for any other purpose without first modifying this Permit.
- c) This permit must not be transferred except with the approval of the Division;
- d) This permit supersedes any and all previous permits of the same permit number.

2) PERMIT RENEWAL

All permittees desiring to renew a permit shall submit an application for renewal to the Director within six (6) months prior to its expiration.

3) PERMIT MODIFICATION

- a) The permittee may seek modification of any of the terms of an unexpired permit upon written request to the Director.
- b) The Georgia EPD has the authority to modify any surface water withdrawal permit at any time.

4) MONITORING AND REPORTING

- a) The permittee must submit annually to the Division, within 30 days of completion of the calendar year, a report listing for each month of the previous year:
  - 1. The gallons per day withdrawn, based on an average of the daily withdrawals for the month;
  - 2. The maximum 24-hour withdrawal;
- b) In addition to Condition 4a, the permittee must submit to the Environmental Protection Division (EPD) within 10 days of completion of the calendar month, a monthly Surface Water Withdrawal Report for the previous month showing daily raw water withdrawals associated with this Permit.

5) WATER PLANNING REQUIREMENTS

- a) The permittee must abide by all applicable water conservation requirements, which may include but are not limited to submission of a Water Conservation Plan for EPD approval and submission of a five-year Water Conservation Progress Report in accordance with 391-3-6-.07. The Progress Report must include all actions and improvements made to conserve water and reduce water loss and shall be submitted for EPD review no later than July 15, 2026.
- b) The permittee must abide by all applicable drought response requirements, which include but are not limited to the Georgia Drought Management Rule (391-3-30) and the permittee's Drought Contingency Plan.
- c) The permittee must maintain ongoing compliance with applicable "Middle Chattahoochee Regional Water Plan" requirements.

**SYSTEM INFORMATION**

- 6) Water withdrawn under this permit is pumped from the Indian Creek Reservoir to the Indian Creek Water Treatment Plant (WTP) for municipal water supply in Carroll County.
- 7) The Indian Creek Reservoir is located on Indian Creek approximately four miles upstream of the confluence of Indian Creek and Turkey Creek. Indian Creek is a tributary of the Little Tallapoosa River and provides natural inflow to the Indian Creek Reservoir. When local inflow into the Indian Creek Reservoir is not sufficient to maintain reservoir levels, water is pumped from the Little Tallapoosa River into the reservoir under Permit No. 022-1302-07. A system schematic map is included as Figure 1. This figure also shows locations of required instream water quality monitoring required in Condition #12 of this permit and Conditions #13 and 14 of Permit No. 022-1302-07.
- 8) The safe yield of the Indian Creek Reservoir was calculated by a model independently developed by the EPD. The model calculated a safe yield of 8.8 MGD for the Indian Creek Reservoir using flow data available from 1939-2015 and concluded the 2007-2009 critical period to be the drought of record.
- 9) The permittee is approved for an annual average water supply need of up to 6.0 MGD by the year 2065 as established in the EPD Certification of Need Letter dated January 28, 2016. The withdrawal limits in this permit reflect water supply needs over a ten-year period from the date of permit issuance.
- 10) In addition to the permits associated with the Indian Creek Reservoir system, the Carroll County Water Authority also holds 1 surface water withdrawal permit (Permit # 022-1217-01) and 1 groundwater withdrawal permit (Permit # 022-0001).

**SPECIAL CONDITIONS**

- 11) The Indian Creek Reservoir is located on Indian Creek approximately four miles upstream of the confluence of Indian Creek and Turkey Creek. The permittee’s intake structure is located near Thompson Road and Teague Road in the Indian Creek Reservoir. All water withdrawn must be metered at or immediately upon leaving the intake structure.
- 12) The permittee must establish a new continuous streamflow and water quality monitoring station just upstream of Teague Road, approximately 0.25 miles downstream of the Indian Creek Reservoir dam discharge. This station must monitor streamflow, dissolved oxygen (DO), temperature, and pH, and operate for at least two years prior to land disturbance for project construction. The details of the new monitoring installed, including gage type and location, must be submitted to EPD at least two years prior to land disturbance for project construction.
- 13) Water quality and biological monitoring must occur in accordance with the 401 Water Quality Certification issued by EPD on August 5, 2020.
- 14) The water quality monitoring results obtained via the monitoring required in Condition #12 shall be made available online and evaluated for compliance with water quality standards only during periods of measurable stream flow. This monitoring must continue for at least 10 years after the start of the project construction phase or for three years after the reservoir has filled and reservoir operation has begun, whichever term is greater. EPD will re-evaluate the need for the water quality monitoring at that time.
- 15) The permittee must pass the lesser of natural streamflow or the non-depletable flows shown in Table 1 below the Indian Creek Reservoir Dam at all times. The gage referenced in Condition #12 serves as the compliance point for this requirement.

*Table 1. Low Flow Protection Thresholds at Indian Creek Reservoir Dam*

<b>Month</b>	<b>Low Flow Protection Threshold at Dam (cfs)</b>
January	2.52
February	3.03
March	3.93
April	3.54
May	2.21
June	1.04
July	1.12
August	0.62
September	0.40
October	0.60
November	0.98
December	2.02

- 16) The permittee must establish biological monitoring in accordance with the following conditions:
  - a) Biological monitoring must occur annually at two locations associated with this permit: 1) just upstream of Teague Road and downstream of the Indian Creek Reservoir dam discharge, and 2) another location selected along Indian Creek between the Lovvorn Mill

Road crossing and the confluence of Indian Creek with Turkey Creek, with potential locations to include the Lovvorn Mill Road crossing, the Smithfield Road crossing, or any other accessible site situated above the Turkey Creek confluence.

- b) Monitoring must consist in-situ water quality sampling during all sampling events and the biological parameters outlined in Table 2.

*Table 2. Biological Monitoring Parameters and Frequencies*

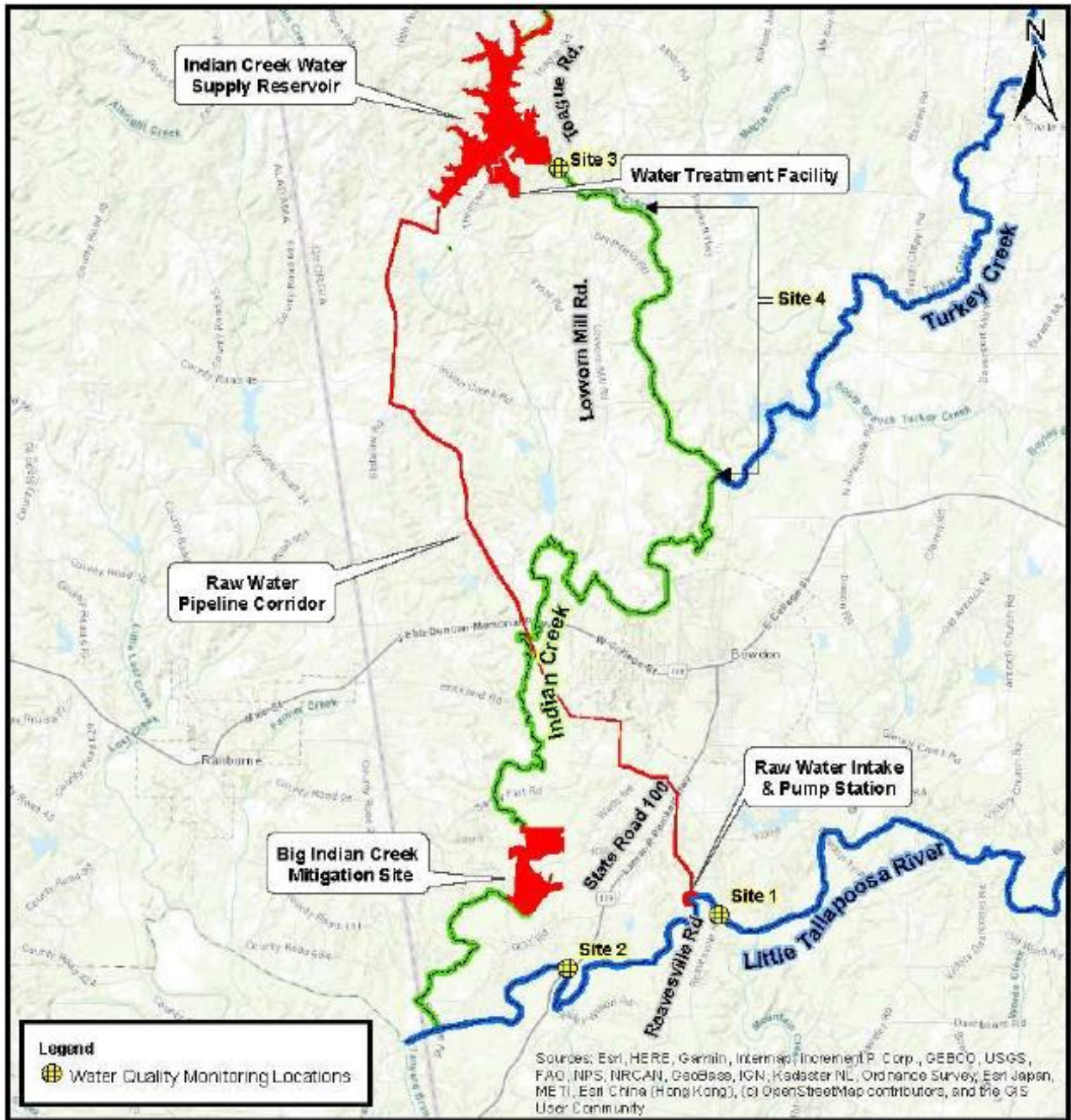
<b>Parameter</b>	<b>Monitoring Timeframe</b>
Fish	May – October
Benthic Macroinvertebrates	October - February
Periphyton	May – October
Physical Habitat	October - February
Temperature	In-Situ
Dissolved Oxygen	In-Situ
pH	In-Situ
Turbidity	In-Situ
Specific Conductance	In-Situ

- c) Biological monitoring must begin at least two years prior to land disturbance for project construction and continue for at least 10 years after the start of the project construction phase or for three years after the reservoir has filled and reservoir operation has begun, whichever term is greater. Georgia EPD will re-evaluate the need for biological monitoring at that time.
- d) Biological monitoring must occur in accordance with Environmental Protection Agency (USEPA) Rapid Bioassessment, Georgia Environmental Protection Division (EPD) macroinvertebrate protocol, and Georgia Wildlife Resources Division (WRD) protocols. Monitoring must include periphyton, macroinvertebrates, fish, and habitat and occur annually during the proper index period stated in each protocol. These sampling records must be kept on file at the water treatment plant and be submitted annually to EPD by March 31 of each calendar year.
- 17) The permittee must act promptly to address any violations of water quality standards (chemical or biological) indicated by the monitoring results provided in Conditions #12 and 16 that are caused by or related to the operation of the Indian Creek Reservoir system and promptly notify EPD and consult with EPD to investigate and resolve any associated issues.
- 18) If water quality studies or biological monitoring show that different minimum instream flows or flow characteristics may be necessary to meet the Indian Creek or Little Tallapoosa River water quality standards and designated uses [Georgia Department of Natural Resources (EPD and WRD), United States Environmental Protection Agency, United States Army Corps of Engineers, and United States Fish and Wildlife Service all concurring], then the permittee must adjust reservoir operations by altering the rate and/or depth of the discharge from the reservoir, adjust pumping operations, or work with EPD and WRD to reevaluate minimum instream flows as needed to avoid water quality standards violations.

- 19) The permittee must obtain source water approval and a Permit to Operate a Public Water System from Georgia EPD before supplying any amount of water withdrawn under this permit to the public drinking water distribution system.
- 20) The permittee must submit annually to EPD, before March 1 of the calendar year for the previous year, a report for an annual average estimate of all water transferred out of or into the Tallapoosa River Basin (in million gallons per day). The estimate should include the following:
  - a. Water that originates in the Tallapoosa River Basin, but is transferred by the permit holder, or an entity that purchases water from the permit holder, into another river basin and discharged or consumed, broken down by the individual recipient of the transferred water and the river basin into which it is transferred.
  - b. Water that is returned to the Tallapoosa River Basin by the permit holder, or an entity that purchases water from the permittee, broken down by individual who returned the transferred water.
  - c. Water that does not originate in the Tallapoosa River Basin but is transferred into and consumed and/or discharged within the Tallapoosa River Basin by the permittee, broken down by individual supplier of the transferred water and the river basin in which the water originates.
- 21) The permittee must operate in accordance with all criteria for Water Supply Watersheds as outlined in 391-3-16-.01, including the applicable Water Supply Watershed Protection Plan.
- 22) The permittee must submit a finalized Reservoir Management Plan to EPD within six months of issuance of this permit.
- 23) In accordance with 391-3-33-.05, any future renewal or modification of this permit is conditioned upon the demonstration of progress towards improved water efficiency. The permittee must submit an annual Water Audit by March 1 of each year and maintain ongoing compliance with the following:
  - a) Establishment of a Water Loss Control Program and associated goals to set measures of water supply efficiency; and
  - b) Demonstration of progress toward improved water efficiency using the measures established; or
  - c) Demonstration that the permittee has reached its Economic Level of Leakage (ELL), and that the ELL is being maintained.
- 24) To ensure compliance with all provisions of 391-3-33, the permittee must provide the following documentation:
  - a) Within six months of the issuance date of this permit, a Water Loss Control Program designed to address priorities identified in the permittee's water loss audits and any other issues believed to contribute to current NRW levels. These include, but are not limited to,

- “Volume From Own Sources,” “Customer Metering Inaccuracies,” and “Variable Production Cost (Applied to Real Losses).” The Water Loss Control Program must contain concrete actions to increase water efficiency and deadlines will become enforceable through this permit.
- b) A progress report every year starting one (1) year from this permit issuance date, on the permittee’s Water Loss Control Plan, on efforts made to reduce Water Loss within the permits system. The progress report must provide a description of implemented measures and how the implemented measures have reduced the system’s NRW. This annual report must continue to be submitted every year to ensure increasing water efficiency.

Figure 1. System Schematic and Stream Monitoring Locations







ENVIRONMENTAL PROTECTION DIVISION

**Richard E. Dunn, Director**

**Watershed Protection Branch**

2 Martin Luther King, Jr. Drive  
Suite 1152, East Tower  
Atlanta, Georgia 30334  
404-463-1511

Nov 02, 2021

Mr. Matt Windom  
Carroll County Water Authority  
P O Box 739  
Carrollton, GA 30112

RE: Surface Water Withdrawal Permit Application (New)  
Permit # 022-1302-08, Carroll County in the Tallapoosa River Basin  
Source: Indian Creek Reservoir  
Current Permit Limits: 2.6 mgd max 24-hr day/ 2.3 mgd monthly average/ 1.6 mgd annual average

Dear Mr. Windom:

In accordance with the Georgia Water Quality Control Act, as amended, the above referenced permit to withdraw surface water from the Indian Creek Reservoir has been issued by the Division and is hereby enclosed. The conditions of compliance are provided on pages 2 and 3 of this permit. Standard Condition number (4b) requires the permit holder to submit to the Division within the first 10 days of the calendar month, a monthly Surface Water Withdrawal Report for the previous month, showing daily raw water withdrawals associated with this permit. A copy of this reporting form is included.

Exceeding the maximum 24-hour or monthly average withdrawal limitations is a Permit violation and must be reported to the Water Protection Branch by telephone (404) 463-1511 within 48 hours and confirmed in writing within 10 days. Failure to comply with any of the provisions of the Permit may make the permit holder liable for civil penalties as provided by the Act.

If you have any questions, please do not hesitate to contact me or write me at (470) 251-4897 or [wei.zeng@dnr.ga.gov](mailto:wei.zeng@dnr.ga.gov).

Sincerely,

*Wei Zeng*

Wei Zeng, Ph.D., Professional Hydrologist  
Manager, Water Supply Program  
Watershed Protection Branch