



August 19, 2025  
Mr. Harold Brady  
Water Supply Planning Branch  
N.C. Division of Water Resources  
1611 Mail Service Center  
Raleigh, North Carolina 27699-1611

Subject: IBT Report for 2024

Dear Mr. Brady,

The Charlotte Water Interbasin Transfer (IBT) Certificate requires reporting of the maximum daily IBT amount per calendar year. Attached is our calendar year 2024 IBT Annual Report. The report follows the format of earlier reports and includes a narrative section with background and program progress updates.

For calendar year 2024, we experienced a maximum day IBT into the Rocky River basin in July. This was an IBT amount of 27.91 mgd. Of our authorized 33 mgd IBT, this value was 84.6%. The IBT based on an average calendar day was 21.63 mgd, approximately 65.5% of authorized IBT. Charlotte Water did issue a Notice of Intent (NOI) for potential IBT modification and is currently evaluating options and alternatives to address future IBT needs. Additionally, Charlotte Water activated a pump station (NC DEQ Permit No. WQ0044016) that assists with transferring wastewater back to the Catawba Basin.

Other certificate conditions are included in the report. Mecklenburg County continues to complete work related to the Surface Water Improvement and Management Program. Charlotte Water continues to serve as a member of the Catawba Wateree Water Management Group and respond to Catawba Basin Low Inflow Protocols and other measures as required by the Charlotte Water Water Shortage Response Plan.

Please, let me know if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "Bhavana Swayampakala".

Bhavana Swayampakala, PE  
Division Manager – Engineering Planning

Attachment: 2024 IBT Report



*Charlotte Water*  
*Annual Report on Interbasin Transfer*  
*Calendar Year 2024*

## **INTRODUCTION**

An interbasin transfer (IBT) Certificate was issued on March 14, 2002, that authorizes Charlotte Water (CLTWater) to transfer up to 33 million gallons per day (mgd) between the Catawba River Basin and Rocky River Basin.

The IBT Certificate requires CLTWater to report maximum daily IBT amounts annually to the North Carolina Division of Water Resources (NC DWR).

## **SYSTEM OVERVIEW**

CLTWater operates the water and wastewater systems that serve Charlotte, Cornelius, Davidson, Huntersville, Mint Hill, Matthews, Pineville, and much of the unincorporated areas of Mecklenburg County. This system is divided between two river basins designated by NC General Statutes for regulation of IBT water. The western portion of the system is within the Catawba River Basin and the eastern portion is within the Rocky River Basin. Water transferred from the Catawba River Basin to the Rocky River Basin that is not returned to the Catawba river basin is regulated IBT.

Water for distribution to CLTWater's customers is withdrawn from the Catawba River basin at two locations. An intake at Lake Norman sends water to the Lee S. Dukes Water Treatment Plant. A second intake at Mountain Island Lake sends water to the Walter M. Franklin Water Treatment Plant and to the Vest Water Treatment Plant. Potable water from these three plants is delivered through an interconnected distribution system to retail customers throughout CLTWater's service area in Mecklenburg County and in small areas of Iredell, Cabarrus, and Union Counties. CLTWater also provides wholesale water to municipal systems for resale including: City of Concord (NC), Town of Harrisburg (NC), Union County (NC), Lancaster County Water and Sewer District (SC), and York County (SC).

CLTWater treats wastewater at five advanced water resource recovery facilities (WRRF's) and one package plant that discharge into streams in Mecklenburg County. Four of the streams are tributary to the Catawba River Basin and two (Mallard Creek) and the package plant (Ashe Plantation) are tributary to the Rocky River Basin. CLTWater also conveys wastewater generated in portions of Mecklenburg County to the Rocky River Regional Wastewater Treatment Plant (RRRWTP) operated by the Water and Sewer Authority of Cabarrus County (WSACC). The RRRWTP discharges treated effluent to the Rocky River Basin.

To help reduce future IBT, CLTWater constructed a lift station with a permitted pumping capacity of 1 mgd transferring wastewater from Rocky River Basin back into the Catawba Basin. This pump station came online December 2024 (NC DEQ Permit No. WQ0044016).



## **IBT MONITORING**

Water supplied to CLTWater's retail customers in the Rocky River Basin, that is not returned to the Catawba Basin, is included in the reported IBT amounts. Water provided to municipalities with service areas in the Rocky River Basin includes the City of Concord and the Town of Harrisburg.

CLTWater can transfer treated potable water to the City of Concord through four metered connections to their water system. All of Concord's service area is within the Rocky River Basin; therefore, any water purchased becomes an IBT. Water service is only provided as an emergency back-up to Concord's routine supply, which consist of Lake Howell and several smaller reservoirs. CLTWater's agreement with Concord is that water will be supplied subject to availability and regulatory constraints including IBT and Federal Energy Regulatory Commission (FERC) limitations.

Concord received an IBT Certificate in January 2007 for the transfer of up to 10 mgd from the Catawba River Basin to the Rocky River Basin. NC DWR advised CLTWater that water sold to Concord should not be applied to CLTWater's IBT amount. For calendar year 2024, Concord purchased 0.6 MG (annual cumulative consumption).

CLTWater can transfer treated potable water to the Town of Harrisburg through three metered connections to their water system. Harrisburg's service area is entirely within the Rocky River Basin, and water sales to Harrisburg are included in CLTWater's IBT amounts. For 2024 CLTWater sold 44.5 MG to Harrisburg (annual cumulative consumption).

Table 1 summarizes reported IBT amounts for calendar years 2002 through 2024. The table considers the daily amounts of water transferred from the Catawba River Basin to customers within the Rocky River Basin that is not returned to the Catawba River Basin.

The maximum daily IBT in the Rocky River basin for calendar year 2024 was 27.91 mgd in July, which was 84.6% of the authorized IBT of 33 mgd. The average IBT for 2024 was 21.63 mgd, 65.5% of the authorized IBT.



*Table 1: Actual IBT Summary*

<b>Calendar Year</b>	<b>Avg. Annual IBT (mgd)</b>	<b>Max. Day IBT (mgd)</b>
2002	6.74	11.97
2003	6.91	9.82
2004	7.79	12.56
2005	8.66	13.79
2006	9.56	14.35
2007	9.96	17.22
2008	11.39	17.42
2009	12.04	16.00
2010	13.33	18.33
2011	13.11	18.82
2012	12.18	17.67
2013	12.99	16.80
2014	15.02	21.44
2015	16.59	24.19
2016	17.32	22.39
2017	16.27	21.97
2018	19.13	25.81
2019	18.06	25.26
2020	17.74	23.66
2021	20.28	25.57
2022	20.39	28.32
2023	20.42	26.24
<b>2024</b>	21.63	27.91

## **COMPLIANCE WITH CERTIFICATE CONDITIONS**

### ***Condition 1: S.W.I.M. Program Summary***

Mecklenburg County is required to annually summarize progress in implementation of watershed management approaches of the Surface Water Improvement and Management (S.W.I.M.) Program. Provided below is the summary of progress made during calendar year (CY) 2024. The NC DWR shall have the authority to approve modifications and need for continued reporting as necessary.



During CY2024, watershed management approaches continued to be implemented by Charlotte-Mecklenburg Storm Water Services (CMSWS) as part of Mecklenburg County's S.W.I.M. Program. Efforts continued to focus on McDowell and Goose Creeks, as initiated in 2007, as well as on the West Branch of the Rocky River in Davidson that began in 2009. During calendar year 2024, the following work was completed in the three (3) watersheds by CMSWS:

*McDowell Creek (including the Torrence Creek Tributary to McDowell Creek)*

1. CMSWS in partnership with the Town of Cornelius conducted on-going design on the restoration of a portion of upper McDowell Creek West of I-77.
2. CMSWS is in the planning stage of a stream restoration project on McDowell Creek from the confluence with Torrence Creek downstream to Beatties Ford Road.

*Goose Creek (including the Stevens Creek Tributary to Goose Creek)*

1. Ongoing monitoring and inspection of the Stevens Creek Stream Restoration project, including evaluation of reintroduced freshwater mussels into the project area.

*Rocky River*

1. Construction completed on the restoration of approximately 1.5 miles of the West Branch of the Rocky River and tributary.
2. Construction contract signed on the restoration of approximately 0.5 miles of the West Branch of the Rocky River.

***Condition 2: Stakeholder Process (Completed)***

A stakeholder process is required to investigate, develop, adopt, and implement storm water ordinances that control water quantity from single-family development and water quality for all development until completed. The requirements of Condition 2 were completed in 2007.

***Condition 3: Goose Creek Subbasin (Completed)***

The IBT Certificate removed the Goose Creek subbasin from the area to be served by the IBT, and imposed a moratorium on the installation of new IBT water lines (water lines crossing the ridgeline) into Goose Creek subbasin until the impacts of additional growth on the endangered species were fully evaluated.

*CLTWater submitted the final Environmental Assessment of new development in the Goose Creek Basin (Mint Hill area) to the NC Division of Water Resources (DWR) in February of 2013. The Environmental Management Commission approved the Environmental Assessment in May of 2013 and has removed the requirements under Condition 3.*



#### ***Condition 4: Environmental Management Commission***

The IBT Certificate provides that the Environmental Management Commission may reopen the Certificate under certain circumstances. This did not occur in 2023.

#### ***Condition 5: Compliance and Monitoring Plan***

The IBT Certificate requires CLTWater to develop a compliance and monitoring plan for reporting maximum daily transfer amounts, compliance with certificate conditions, and progress on mitigation measures, and drought management activities. CLTWater's monitoring plan and reporting format were approved in June of 2006 by NC DWR and continue to be used for 2024. CLTWater operated under Stage Zero drought conditions from October 2023 through January 2024.

*Charlotte Water monitored water treatment plant pump rates, streamflow and lake storage indicators, the US Drought Monitor, and other factors in accordance with the CLTWater Water Shortage Response Plan. Measurements were assessed monthly to identify designated triggers that could indicate developing drought conditions. All appropriate planning, communication and preparation were in place to respond as needed to changing conditions.*

*In coordination with 17 other utilities in the Catawba-Wateree river basin, CLTWater participated in regional drought response planning and response activities as directed by the Catawba Basin Low Inflow Protocol.*

### **SUMMARY**

The Charlotte Water IBT Certificate requires reporting of the maximum daily IBT amount per calendar year. The actual maximum day amount of water transferred from the Catawba River Basin to the Rocky River Basin was 27.91 mgd, which was 84.6% of the authorized maximum day value of 33 mgd. Mecklenburg County continues to complete work related to the Surface Water Improvement and Management Program. Charlotte Water continues to serve as a member of the Catawba Wateree Water Management Group and respond to Catawba Basin Low Inflow Protocols and other measures as required by the Utility's Water Shortage Response Plan.

Charlotte Water has issued its Notice of Intent (NOI) for a potential IBT modification and is currently evaluating options and alternatives to address future IBT needs.

CLTWater was in full compliance with IBT authorizations and compliance conditions for calendar year 2024.