





Quarterly Compliance and Monitoring Plan

2017 Interbasin Transfer Certificate

Yadkin River Water Supply

Union County, NC Town of Wingate, NC

Submitted to: NC Division of Water Resources

October 2018

Introduction

In a letter dated May 25, 2017, Union County (the County) and the Town of Wingate (Applicants) were notified that at their May 11, 2017 meeting the Environmental Management Commission (EMC) granted an Interbasin Transfer (IBT) Certificate to transfer 23.0 million gallons per day (MGD) from the Yadkin River IBT Basin to the Rocky River IBT Basin.

The Union County Water System currently serves customers in both the Catawba River IBT Basin and the Rocky River IBT Basin, which is a sub-basin of the Yadkin River. The ridgeline between the Catawba River Basin and Yadkin River Basin divides the County, with neither of these two major rivers flowing within the County boundaries.

The County currently holds a 5 MGD authorized transfer (i.e., a grandfathered IBT amount) of water from the Catawba River IBT Basin to the Rocky River IBT Basin. This value is based upon the definition of a grandfathered IBT as stipulated in North Carolina Administrative Code 15A NCAC 02E .0401(d) where "a certificate is not required to transfer water from one river basin to another up to the full capacity of a facility to transfer water from one basin to another if the facility was existing or under construction on July 1, 1993. The full capacity of a facility to transfer water shall be determined as the capacity of the combined system of withdrawal, treatment, transmission, and discharge of water, limited by the element of this system with the least capacity as existing or under construction on July 1, 1993."

The County's 5 MGD authorized transfer from the Catawba River IBT Basin to the Rocky River IBT Basin is based upon the capacity of the water transfer infrastructure which was in place within the County as of July 1, 1993, as documented in the County's Grandfathered IBT Worksheet prepared by CH2MHill on behalf of the County and submitted to the North Carolina Division of Water Resources (DWR) on October 19, 2000.

To maintain compliance with the Catawba River IBT Basin grandfathered IBT, the County currently returns a portion of the transferred water back into the Catawba River IBT Basin via the Poplin Road wastewater pumping station. The County also has plans to build scalping infrastructure to allow the capability to return additional water to the Catawba River IBT Basin via the Crooked Creek Wastewater Treatment Plant. Additionally, the County currently holds a water purchase agreement (which will be automatically renewed in 2019, based on the 12-month notification deadline having passed) with Anson County for 4 MGD of water supply that is utilized in the County's Yadkin River Basin Service Area. The County is not required to have an IBT Certificate for this purchase since Anson County is the entity moving the water



from the Yadkin River IBT Basin to the Rocky River IBT Basin and they have secured a grandfathered IBT for this transfer.

As a condition of the most recent IBT Certificate granted, and pursuant to N.C.G.S. § 143-215.22L(n)(3) and (6), the Applicants are required to provide a quarterly compliance and monitoring plan that "shall include methodologies and reporting schedules for reporting the following information: daily transfer amount, calculated as the daily average of the calendar month; compliance with Certificate conditions; progress on mitigation measures; drought management; and reporting." "Each quarterly compliance and monitoring report shall be submitted to the Commission no later than 30 days after the end of the quarter. Union County shall employ any methods or install and operate any devices needed to measure the amount of water that is transferred during each calendar quarter, calculated as a daily average of a calendar month."

IBT Certificate Compliance

Union County and Town of Wingate will review all conditions of the IBT issued May 11, 2017 for compliance quarterly. These conditions include:

Condition 1

Pursuant to N.C.G.S. § 143-215.22L(n)(1), within 90 days of receipt of this IBT Certificate, each Applicant shall prepare and submit a water conservation plan, subject to approval by the Division, that specifies the water conservation measures, including a rate pricing structure that will be implemented by the Applicant in the receiving river basin [Rocky River IBT Basin (18-4)] to ensure the efficient use of the transferred water. The Applicants are encouraged to consult with reservoir operators and other water users in the Yadkin River IBT Basin (18-1) and to incorporate appropriate input from these operators and users during development of the water conservation plans prior to submittal to the Division. Except in circumstances of technical or economic infeasibility or adverse environmental impact, each water conservation plan shall provide for the mandatory implementation of water conservation measures by each Applicant that equal or exceed the most stringent water conservation plan implemented by a public water system that withdraws water from the source river basin [Yadkin River IBT Basin (18-1)].

This condition has been met with the submission of the Water Conservation Plan first submitted in August 2017. In each quarterly report, this condition will be acknowledged as satisfied.



Condition 2

Pursuant to N.C.G.S. § 143-215.22L(n)(2), within 90 days of receipt of this IBT Certificate, each Applicant shall prepare and submit a drought management plan, subject to approval by the Division, that specifies how the water transfer shall be managed to protect the source river basin [Yadkin River IBT Basin (18-1)] during drought conditions or other emergencies that occur within the source river basin. The Applicants are encouraged to consult with reservoir operators and other water users in the Yadkin River IBT Basin (18-1) and to incorporate appropriate input from these operators and users during development of the drought management plan prior to submittal to the Division. Except in circumstances of technical or economic infeasibility or adverse environmental impact, this drought management plan shall include mandatory reductions in the permitted amount of the transfer based on the severity and duration of a drought occurring within the source river basin [Yadkin River IBT Basin (18-1)] and shall provide for the mandatory implementation of a drought management plan by each Applicant that equals or exceeds the most stringent drought management plan implemented by a public water system that withdraws water from the source river basin [Yadkin River IBT Basin (18-1)].

This condition has been met with the submission of the Drought Management Plan first submitted in August 2017. In each quarterly report, this condition will be acknowledged as satisfied.

Condition 3

Pursuant to N.C.G.S. § 143-215.22L(n)(3) and (6), within 90 days of receipt of the IBT Certificate, the Certificate Holders shall submit a quarterly compliance and monitoring plan subject to approval by the Division. The plan shall include methodologies and reporting schedules for reporting the following information: daily transfer amount, calculated as the daily average of the calendar month; compliance with Certificate conditions; progress on mitigation measures; drought management; and reporting. A copy of the approved plan shall be kept on file with the Division for public inspection. The Division shall have the authority to make modifications to the compliance and monitoring plan as necessary to assess compliance with this Certificate. The Division will monitor the transfer from the Yadkin River IBT Basin (18-1) to the Rocky River IBT Basin (18-4), as regulated by the IBT Certificate, as well as the transfer from the Catawba River IBT Basin (3-1) to the Rocky River IT Basin (18-4), as allowed by the existing grandfathered transfer of 5.0 MGD on a maximum day basis. Each quarterly compliance and monitoring report shall be submitted to the Commission no later than 30 days after the end of the quarter. Union County shall employ any methods or install and operate any devices needed to measure



the amount of water that is transferred during each calendar quarter, calculated as a daily average of a calendar month.

A portion of this condition has been met with the first submission of this Compliance and Monitoring Plan submitted in August 2017. The specifics of the quarterly compliance and monitoring reports are discussed in the following sections. Submission of each quarterly compliance and monitoring report pursuant to this Compliance and Monitoring Plan, beginning with the first quarter that water is withdrawn via this IBT Certificate, shall satisfy the remainder of this condition.

Condition 4

Pursuant to N.C.G.S. § 143-215.22L(n)(4), the Commission may amend this IBT Certificate to reduce the maximum amount of water authorized to be transferred whenever it appears that an alternative source of water is available to the Certificate holders from within the receiving river basin [Rocky River IBT Basin (18-4)], including, but not limited to, the purchase of water from another water supplier within the receiving river basin [Rocky River IBT Basin (18-4)] or the transfer of water from another sub-basin within the receiving river basin [Rocky River IBT Basin (18-4)].

This condition will be considered in each quarterly compliance and monitoring report. It is not anticipated that there will be additional supply available from within the existing Rocky River IBT Basin, as it is a small IBT Basin with very limited supply.

Condition 5

Pursuant to N.C.G.S. § 143-215.22L(n)(5), the Commission shall amend this IBT Certificate to reduce the maximum amount of water authorized to be transferred if the Commission finds that the Applicants' current projected water needs are significantly less than the Applicants' projected water needs at the time the IBT Certificate was granted.

This condition will be considered in each quarterly compliance and monitoring report. It is not anticipated that any significant reduction in water needs will be noticeable in the short-term. The Applicants will provide the latest demand projection data from any master plans or local water supply plans as it becomes available.

Condition 6

Pursuant to N.C.G.S. § 143-215.22L(n)(7), the Applicants will not resell the water that would be transferred pursuant to the Certificate to another public water system. Even though the



City of Monroe owns water transmission infrastructure in the Rocky River IBT Basin (18-4), any water provided by Union County to the City of Monroe will be transferred as part of an existing contract agreement to provide no more than 2.0 MGD of water from Union County's Catawba River Water Treatment Plant to an interconnection point located within the Catawba River IBT Basin (3-1). This IBT Certificate does not authorize Union County to sell to the City of Monroe water that is transferred from the Yadkin River IBT Basin (18-1).

The Applicants will not make any additional regular connections to the City of Monroe on the Rocky River IBT Basin side of the City nor sell water transferred from the Yadkin River IBT Basin to any other water systems. All regular water provided to the City of Monroe will be exclusively supplied from the Catawba River. Due to close the proximity of the Applicants' and the City of Monroe's systems, there are currently numerous emergency interconnections used only during a major service disruption to customers on one side or the other. Due to the continued expansion of the water systems, additional emergency-only interconnections with the City of Monroe or others may be installed in new areas. This condition will be reported on during each quarterly compliance and monitoring report.

Condition 7

Pursuant to N.C.G.S. § 143-215.22L(n), the Commission may reopen and modify or revoke this Certificate to ensure continued compliance with N.C.G.S. Chapter 143, Article 21, Part 2A if the Commission determines that information in the record relied upon in making its Findings of Fact, pursuant to N.C.G.S. § 143-215.22L(k), was erroneous, incomplete, or otherwise contained material misrepresentations, misstatements, or misinterpretations.

The Applicants will reaffirm in each quarterly compliance and monitoring report that the information provided to the Environmental Management Commission was truthful and complete.

Interbasin Transfer Tracking

As cited above in Condition 3:

The plan shall include methodologies and reporting schedules for reporting the following information: daily transfer amount, calculated as the daily average of the calendar month.



The IBT will be measured by metering and logging the flow through the raw water pipeline from the Yadkin River IBT Basin to the Rocky River IBT Basin. The flow from the transfer will be entered as a daily average flow by month. To ensure proper tracking of the IBT from the Yadkin River IBT Basin (23.0 MGD) to the Rocky River IBT Basin, a tracking spreadsheet has been developed to be provided with each quarterly compliance and monitoring report. A sample of the tracking spreadsheet has been provided in Appendix A.

Mitigation Measures

As there are no mitigation measures included in this IBT Certificate, this section will not be included in quarterly compliance and monitoring reports.

Drought Management

As cited above in Condition 3:

The plan shall include methodologies and reporting schedules for reporting the following information: ... drought management.

The Applicants will report on the implementation of the drought management plan as a part of the quarterly compliance and monitoring report.

Reporting Schedule

Per the requirements of the IBT Certificate, the Applicants intend to submit the quarterly compliance and monitoring report on a quarterly basis no later than 30 days following the end of the quarter, beginning with the first quarter that water is withdrawn via this IBT Certificate. The Applicants will follow a calendar quarter basis as shown in the table below.



Compliance and Monitoring Reporting Schedule

Quarter #	Period	Latest Submission Date
1	January 1 - March 31	April 30
2	April 1 - June 30	July 30
3	July 1 - September 30	October 30
4	October 1 - December 31	January 30





Appendix A

Sample IBT Tracking
Document

Conditions of IBT Permit (May 11, 2017)

IBT From Yadkin River Basin

23.00 MGD

A	В	С	D
	Yadkin to Rocky River Raw Water Supply	Interbasin Transfer vs. Transfer Limit	
Date	(MGD)	Yadkin to Rocky River IBT	% of Permitted Monthly Average Day Transfer
January 2017 Average Daily	0.00	0.00	0.0%
February 2017 Average Daily	0.00	0.00	0.0%
March 2017 Average Daily	0.00	0.00	0.0%