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# Interbasin Transfer Certificate 2023 Annual Report

Prepared for  
Town of Cary  
Town of Apex

Submitted to  
North Carolina  
Division of Water Resources

April 2024

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SECTION 1

# Introduction

On March 12, 2015, the North Carolina Environmental Management Commission (EMC) granted an interbasin transfer (IBT) certificate modification to the Towns of Cary and Apex (Towns) with transfer limits of 31 million gallons per day (mgd) from the Haw River basin to the Neuse River basin, and 2 mgd from the Haw River basin to the Cape Fear River basin, calculated as a daily average of a calendar month.

This 2023 Annual Report is specified in the Compliance and Monitoring Plan (Plan) approved by the North Carolina Division of Water Resources (NCDWR) on July 14, 2015 and revised March 9, 2018. The schedule for reporting on IBT certificate compliance is provided in the Plan and repeated below.

TABLE 1-1  
Interbasin Transfer Compliance Monitoring and Reporting

Description <sup>a</sup>		Comments
IBT Limits	Daily average of a calendar month:	Daily average IBT is calculated daily and reported in the Annual IBT Report.
	- 31 mgd Haw to Neuse	IBT calculated as the daily average of a calendar month reported on the Town of Cary website quarterly and in the Annual IBT Report.
	- 2 mgd Haw to Cape Fear	The percentages of water use in each basin, summarized historically, and set for calculating daily IBT for the next year will be reported in the Annual IBT Report.
Condition 1	Water Conservation Plan	Initial submittal to NCDWR by June 10, 2015, and then revised as needed to obtain NCDWR approval. Updates, if necessary, will be provided to NCDWR in the Towns' respective Secondary and Cumulative Impacts Master Management Plan biennial updates.  Water Conservation Plan will always be available on the Town of Cary website. Status of the plan will be included in the Annual IBT Report.
Condition 2	Drought Management Plan	Initial submittal to NCDWR by June 10, 2015, and then revised as needed to obtain NCDWR approval. Updates will be provided to NCDWR as needed.  Drought Management Plan will always be available on the Town of Cary website. Status of the plan will be included in the Annual IBT Report.
Condition 3	IBT Compliance and Monitoring Plan	Initial submittal to NCDWR by June 10, 2015, and then revised as needed to obtain NCDWR approval. A revised submittal on March 9, 2018, following the modification of the 2015 IBT certificate, added condition 9. IBT Compliance and Monitoring Plan will always be available on the Town of Cary website.  Status of the plan will be included in the Annual IBT Report.
Condition 4	EMC Consideration of Alternative Sources	No reporting necessary.
Condition 5	EMC Consideration of Future Water Demand	No reporting necessary.
Condition 6	Resale of Transferred Water	Included in the Annual IBT Report.
Condition 7	EMC Consideration of Impacts	No reporting necessary.
Condition 8	Intake Access	Included in the Annual IBT Report.
Condition 9	Required Discharge	Included in the Annual IBT Report

<sup>a</sup> Certificate conditions are described in Section 4.

To meet the annual reporting requirements of the Plan, the following sections of this 2023 Annual Report include:

- Status of compliance with IBT certificate limits.
- Summary of historical water withdrawals, reclaimed water usage, wastewater discharges and IBT for the January to December calendar years beginning with 2015.
- Table of calculated daily average of calendar month IBT amounts for the 2023 reporting year.
- Summary of amount of water used during 2015 to 2023 by customers in the Neuse River, Haw River, and Cape Fear River basins for use in determining the distribution of consumptive uses among the basins. Based on the amount of water used in each basin for the previous year, the distribution of consumptive use by basin in the following calendar year will be determined and documented.
- Discharge Report, documenting Required Discharge and Actual Discharge.
- Status of compliance with IBT certificate conditions.

Appendix A is a table of daily Jordan Lake water supply allocation raw water withdrawals for Cary/Apex, Morrisville and Wake County/RTP South for January 1 to December 31 of the 2023 reporting year.

Appendix B is a table of calculated daily IBT amounts for January 1 to December 31 of the 2023 reporting year.

Appendix C is a table of monthly billed water use for Cary/Apex for the 2023 reporting year from the Towns' billing database.

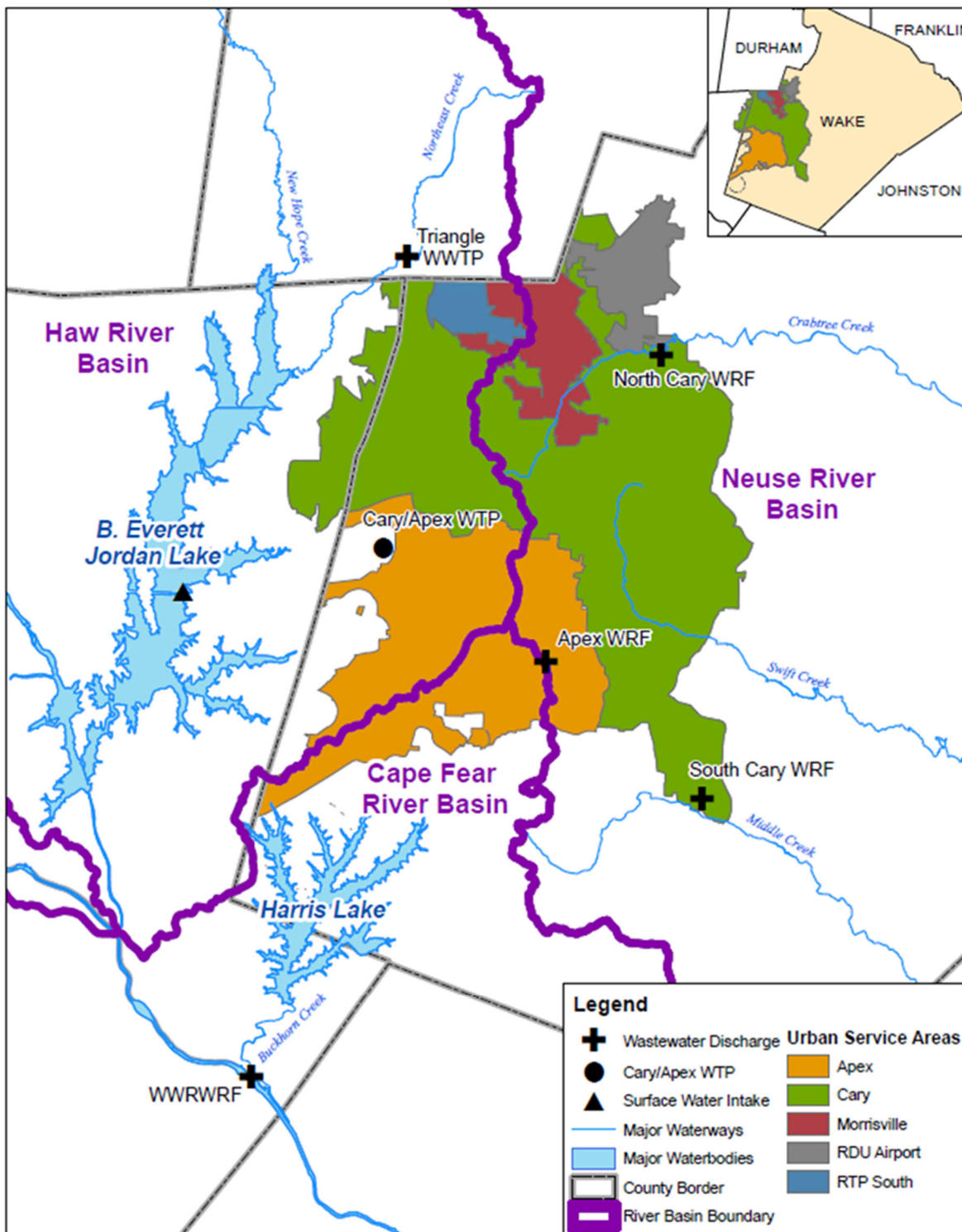
Appendix D is the performance indicator and water balance output from the Town of Cary's AWWA M36 Water Audit analysis performed for fiscal year 2023. The percentage non-revenue water is used in the discharge report to determine Neuse Demand.

Appendix E is a table of the actual discharge to the Cape Fear River Basin from Western Wake Regional Water Reclamation Facility (WWRWRF) and other discharges such as the Durham County Triangle Wastewater Treatment Plant for January 1 to December 31 of the 2023 reporting year.

SECTION 2

# Withdrawals, Discharges and Interbasin Transfers

The Towns' service areas include Cary, Apex, Morrisville, RDU Airport and RTP South (the Wake County portion of Research Triangle Park). Because the Towns' water system service areas straddle the ridge lines between interbasin transfer (IBT) basins, water is transferred via wastewater discharge, potable water consumptive use, or reclaimed water consumptive use. The combined IBT amount from the communities served is calculated on a daily basis.



## 2.1 IBT Certificate Limits

The Towns' IBT certificate limits transfers to 31 million gallons per day (mgd) from the Haw River basin to the Neuse River basin, and to 2 mgd from the Haw River basin to the Cape Fear River basin, calculated as a daily average of a calendar month.

During calendar year 2023, the Towns were in compliance with the monthly IBT certificate limits. The peak month transfer from the Haw River basin to the Neuse River basin was 16.6 mgd (54% of certificate limit) which occurred during August 2023. The peak month transfer from the Haw River basin to the Cape Fear River basin was 0.12 mgd (6% of certificate limit) which occurred during August 2023.

Daily IBT estimates for the Towns are found in Appendix B. Monthly average daily IBT estimates are found in section 2.3.

## 2.2 Summary of Water Withdrawals, Discharges and IBT

The Towns of Cary and Apex are co-owners of the Cary/Apex Water Treatment Facility which has its raw water intake in Jordan Lake. Cary/Apex, Morrisville and Wake County (for the portion of RTP within that county) each hold allocations of Jordan Lake water supply storage. Daily tracking of raw water withdrawals from Jordan Lake for the allocation holders for the period January 1, 2023 through December 31, 2023 is found in Appendix A.

The average daily withdrawal for the Towns was 26.9 mgd during 2023 (Table 2-1). Raw water withdrawals for Cary (including Morrisville and RTP South) and Apex by calendar year beginning with 2015 are summarized in Table 2-1. The withdrawals in Table 2-1 do not include withdrawals for intake access. The City of Durham accessed its Jordan Lake water allocation through the Cary/Apex Water Treatment Facility for 0 days during calendar year 2023.

<b>Year</b>	<b>Average Annual Withdrawal (mgd)</b>
2015	21.2
2016	22.3
2017	22.9
2018	23.0
2019	24.0
2020	24.0
2021	26.1
2022	26.4
2023	26.9

1. Withdrawals from Jordan Lake at the Cary/Apex raw water intake. Includes water use by Apex, Cary, Morrisville and RTP South. Does not include water use by Durham.

The Town of Cary owns and operates the North Cary and South Cary Water Reclamation Facilities (NCWRF and SCWRF) which discharge to Crabtree Creek and Middle Creek, respectively. The Town of Apex owns and operates the Apex Water Reclamation Facility (AWRF) which discharges to Middle Creek. The Towns co-own the Western Wake Regional Water Reclamation Facility (WWRWRF) which discharges to the Cape Fear River. Process water from the CAWTF is discharged to a tributary of Jordan Lake. The Town of Cary also has the ability to discharge wastewater to the Durham County Triangle Wastewater Treatment Plant (Durham Co.) which discharges to a tributary of Jordan Lake. The Town utilized this ability for 11 days in 2023.

Average annual wastewater discharges for Cary and Apex beginning with 2015, identified by receiving basin, are summarized in Table 2-2.



Year	CAWTF Discharge (mgd)	Wastewater Conveyed to Durham Co. WWTP (mgd)	WWRWRF Discharge (mgd)	NCWRF Discharge (mgd)	SCWRF Discharge (mgd)	AWRF Discharge (mgd)	Total (mgd)
	Haw	Haw	Cape Fear	Neuse	Neuse	Neuse	
2015	3.3	0.02	4.6	6.0	5.3	1.2	20.4
2016	4.0	0	4.9	5.7	5.4	1.1	21.1
2017	3.8	0.48	4.5	5.9	4.7	1.1	20.5
2018	3.2	0.01	5.5	6.3	5.0	1.3	21.3
2019	3.0	0.00	5.6	6.2	5.1	1.3	21.2
2020	3.4	0.09	6.3	6.2	5.3	1.3	22.6
2021	3.9	0	6.7	6.2	5.4	1.2	23.4
2022	3.7	0	6.6	6.1	5.0	1.2	22.6
2023	3.7	0.09	6.9	6.1	5.2	1.3	23.3

The NCWRF and SCWRF produce reclaimed water which is used at each plant, pumped through distribution systems to customers and dispensed in bulk. The WWRWRF produces reclaimed water which is used at the plant and dispensed in bulk. The Town of Cary purchases reclaimed water from the Durham Co. TWWTP for distribution to customers in its western service area.

Reclaimed water flows for Cary and Apex for calendar years beginning with 2015 are summarized in Table 2-3.

Year	NCWRF <sup>1</sup> Reclaimed Water (mgd)	SCWRF <sup>1</sup> Reclaimed Water (mgd)	WWRWRF <sup>2</sup> Reclaimed Water (mgd)	Reclaimed Water Purchased from Durham Co. TWWTP (mgd)
2015	0.58	0.44	0.55	0.18
2016	0.57	0.38	0.85	0.20
2017	0.57	0.40	0.97	0.24
2018	0.52	0.38	0.83	0.23
2019	0.52	0.39	0.83	0.20
2020	0.49	0.29	1.00	0.27
2021	0.49	0.14	1.17	0.27
2022	0.47	0.26	1.26	0.28
2023	0.56	0.21	1.26	0.28

<sup>1</sup> includes distributed, bulk, and plant use  
<sup>2</sup> includes bulk and plant use

Interbasin transfers for Cary and Apex for each calendar year beginning with 2015 are summarized in Table 2-4. Annual average day withdrawals from the Haw Basin are quantified as (1) returned to Haw subbasin, (2) transferred to Neuse subbasin, (3) returned to Cape Fear subbasin or (4) transferred to Cape Fear subbasin.

Year	Haw Basin Withdrawal (mgd)	Haw to Neuse		Haw to Cape Fear	
		Return to Haw Basin (mgd)	Haw-to-Neuse Interbasin Transfer (mgd)	Return to Cape Fear Basin (mgd)	Haw-to-Cape Fear Interbasin Transfer (mgd)
2015	21.2	4.3	12.9	4.0	0.03
2016	22.3	4.9	12.9	4.5	0
2017	22.9	5.4	13.2	4.2	0.05
2018	23.0	4.5	13.5	5.0	0.04
2019	24.0	4.5	14.3	5.2	0.06
2020	24.0	4.7	13.5	5.8	0.04
2021	26.1	5.6	14.3	6.2	0.05
2022	26.4	5.7	14.4	6.3	0.06
2023	26.9	5.6	14.7	6.6	0.06

## 2.3 Monthly IBT

Daily IBT is calculated based on a combination of meter data and assumptions, as defined in Section 2 of the Compliance and Monitoring Plan. Daily IBT data are then used to calculate the IBT certificate compliance metric – IBT calculated as the daily average of a calendar month.

Table 2-5 provides daily average interbasin transfers for each calendar month in 2023.

Month	Average Daily IBT from Haw to Neuse (mgd)	Average Daily IBT from Haw to Cape Fear (mgd)
January	13.1	0.02
February	13.1	0.02
March	13.4	0.02
April	13.9	0.02
May	15.2	0.06
June	16.4	0.09
July	16.2	0.09
August	16.6	0.12
September	16.0	0.10
October	15.4	0.09
November	13.8	0.06
December	13.0	0.02
<b>Certificate Limit</b>	<b>31.0</b>	<b>2.00</b>
<b>Max Month</b>	August	August
<b>Max Month IBT</b>	16.6	0.12
<b>Maximum % of Limit</b>	<b>54%</b>	<b>6%</b>

SECTION 3

# Consumptive Use by Basin

The average daily consumptive use was 17.9% for the period January 1, 2023 through December 31, 2023. Consumptive use has ranged between 10% and 23.5% since 2000. Historical consumptive use for each calendar year beginning with 2015 is shown in Table 3-1.

<b>Table 3-1</b>			
Historical Consumptive Use for Cary and Apex			
<b>Year</b>	<b>Average Daily Finished Water Demand (mgd)</b>	<b>Average Daily Consumptive Use (mgd)</b>	<b>% Consumptive Use</b>
2015	18.0	2.6	14.4%
2016	18.7	2.5	13.3%
2017	19.5	3.4	17.2%
2018	20.0	3.0	15.0%
2019	21.2	4.0	18.9%
2020	20.9	2.6	12.6%
2021	20.6	1.2	16.7%
2022	23.0	4.1	18.1%
2023	23.3	4.2	17.9%

Cary and Apex track historical use by assigning a subbasin to each customer. The distribution of consumptive uses between the Haw, Cape Fear, and Neuse River subbasins for 2023 was estimated based on the previous year’s water use in each basin as determined by billing records for Cary and Apex.

During 2023, based on 2022 billing records, it was assumed that 37.8% of water use occurred in the Haw subbasin, 1.4% of water use occurred in the Cape Fear subbasin, and 60.8% of water use occurred in the Neuse River subbasin. During 2024, based on 2023 billing records, it will be assumed that 38.6% of their water use will occur in the Haw subbasin, 1.5% of their water use will occur in the Cape Fear subbasin, and 59.9% of water use will occur in the Neuse River subbasin.

Table 3-2 shows the combined water use for Cary (including Morrisville and RTP South) and Apex, and the percentage water use in the Haw, Cape Fear, and Neuse River subbasins. The table also shows the Haw and Cape Fear use percentages that will be used for 2023 calculations.

<b>Table 3-2</b>							
Historic Water Use by Subbasin for Cary (including Morrisville and RTP South) and Apex (Annual Average Day)							
<b>Year</b>	<b>Total Billed Water Use (mgd)</b>	<b>Haw Subbasin</b>		<b>Cape Fear Subbasin</b>		<b>Neuse Subbasin</b>	
		<b>Billed Water Use (mgd)</b>	<b>Percent Use</b>	<b>Billed Water Use (mgd)</b>	<b>Percent Use</b>	<b>Billed Water Use (mgd)</b>	<b>Percent Use</b>
2014	14.57	4.27	29.3%	0.17	1.2%	10.13	69.5%
2015	15.06	4.47	29.7%	0.21	1.4%	10.38	68.9%
2016	15.24	4.52	29.7%	0.25	1.6%	10.47	68.7%
2017	16.93	5.52	32.6%	0.23	1.4%	11.18	66.0%
2018	16.94	5.70	33.6%	0.23	1.4%	11.01	65.0%
2019	18.16	6.32	34.8%	0.24	1.3%	11.60	63.9%
2020	17.51	6.49	37.0%	0.25	1.4%	10.78	61.6%
2021	18.69	7.09	37.9%	0.25	1.4%	11.35	60.7%
2022	18.99	7.18	37.8%	0.26	1.4%	11.54	60.8%
2023	19.43	7.49	38.6%	0.3	1.5%	11.64	59.9%
Percentages to be used for 2024 IBT calculations			38.6%		1.5%		

# Discharge Report

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The following is addressed in this section as required by Condition 9 of the 2015 IBT certificate modified by the North Carolina EMC in March 2018, and as defined by the Compliance and Monitoring Plan revised in March 2018:

- Required Discharge
- Actual Discharge
- Compliance Evaluation

Data supporting the computation of Neuse Basin Demand, Required Discharge and Actual Discharge are outlined in the following sections. If mitigation measures are required, they would be included in this section as well.

## 4.1 Neuse Basin Demand and Required Discharge

Neuse Basin Demand is the three-year running annual average daily amount of all finished water supplied from sources within the Haw River (2-1) and Cape Fear River (2-3) Basins, for the three preceding calendar years. Neuse Basin Demand is the sum of both billed and unbilled use by the Towns in the Neuse River Basin (10-1).

Billed potable water use is quantified from the Town of Apex and Town of Cary water meter and billing databases. Unbilled amounts of finished water are quantified as a percentage of billed water use. The percentage of non-revenue water is calculated on a system-wide basis for the Towns on a yearly basis using procedures detailed in AWWA's M36 Water Audits and Loss Control Programs publication.

Table 4-1 is a summary of the Neuse Basin demand and required discharge calculations. The total Neuse Basin demand value for 2016 was stipulated in the IBT certificate, modified by the EMC on March 8, 2018. Appendix C is a summary of the monthly billed water use for Cary and Apex. Appendix D is the output of Town of Cary's AWWA M36 Water audit for calendar year 2023. The non-revenue water percentage in Appendix D is assumed representative of both Cary and Apex systems. The Neuse Basin treated water purchases summarized in Table 4-1 are identified on a daily basis in Appendix B.

<b>Table 4-1</b>							
<b>Neuse Basin Demand Calculation Table and Required Discharge</b>							
	<b>Cary Billed Neuse Basin Water Use (mgd)<sup>1</sup></b>	<b>Apex Billed Neuse Basin Water Use (mgd)<sup>1</sup></b>	<b>Total Neuse Basin Billed Water Use (mgd)</b>	<b>Water Audit Unbilled Water %<sup>2</sup></b>	<b>Neuse Basin Usage, with unbilled use (mgd)<sup>3</sup></b>	<b>Neuse Basin Purchases (mgd)<sup>4</sup></b>	<b>Total Neuse Basin Demand (mgd)<sup>5</sup></b>
<b>2016</b>	-	-	-	-	-	-	<b>11.10</b>
<b>2017</b>	10.16	1.02	11.18	10.2 %	12.32	0.35	<b>11.98</b>
<b>2018</b>	9.98	1.03	11.01	13.0%	12.44	0.24	<b>12.21</b>
<b>2019</b>	10.05	1.10	11.15	15.9%	12.92	0.20	<b>12.72</b>
<b>2020</b>	9.65	1.12	10.78	13.6%	12.24	0.27	<b>11.97</b>
<b>2021</b>	10.14	1.21	11.35	16.5%	13.23	0.27	<b>12.96</b>
<b>2022</b>	10.28	1.26	11.54	18.2%	13.65	0.31	<b>13.34</b>
<b>2023</b>	10.35	1.29	11.64	16.3%	13.54	0.20	<b>13.34</b>
<b>3 year Running Average of Neuse Basin Demand</b>							<b>13.21</b>
<b>Required Discharge (3 year Running Average of Neuse Basin Demand – 9.756)</b>							<b>3.45</b>

<sup>1</sup> From monthly billed water use (Appendix C)

<sup>2</sup> From AWWA M36 Water Audit (Appendix D)

<sup>3</sup> Neuse Basin Usage = Neuse Billed Water Use + (System-wide Non-Revenue Water % \* Neuse Billed Water Use)

<sup>4</sup> From Appendix B columns (2), (3) and (4) which includes Durham County reclaimed water and purchases from Durham or Raleigh

<sup>5</sup> Neuse Basin Demand = Neuse Basin Usage – Neuse Purchases

## 4.2 Actual Discharge

“Actual Discharge” is the three-year running annual average daily amount (in mgd) for the three preceding calendar years of treated wastewater that the Towns of Cary and Apex actually discharge to the Haw River Basin and Cape Fear River Basin receiving waters, without regard to which Town of Cary or Apex treatment facilities (whether by ownership or third-party contract) from which the treated wastewater is discharged.

In 2023 the Towns of Cary and Apex discharged highly-treated wastewater effluent to the Cape Fear River Basin via the Western Wake Regional WRF (WWRWRF). Treated wastewater discharges to Durham County did occur in 2023.

Figure 4-1 below shows the Towns' daily Cape Fear River Basin discharges from WWRWF for 2023. Supporting data is found in Appendix E.

**Figure 4-1**  
Cape Fear River Basin Actual Treated Wastewater Discharges

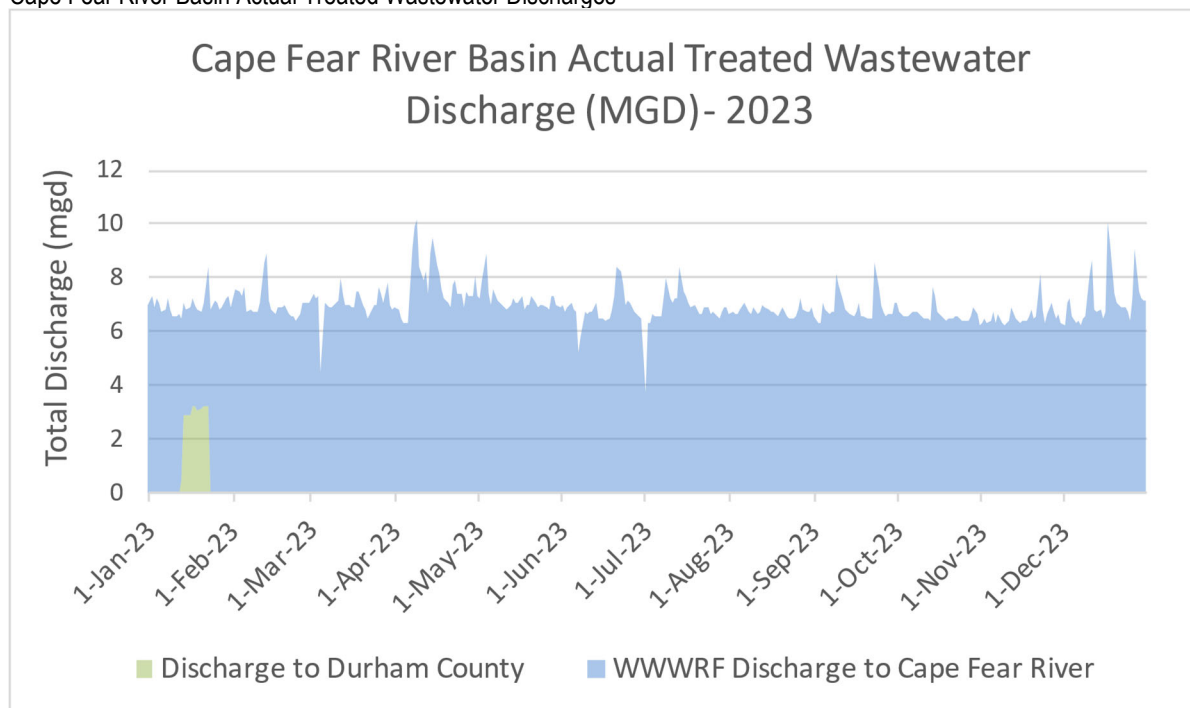


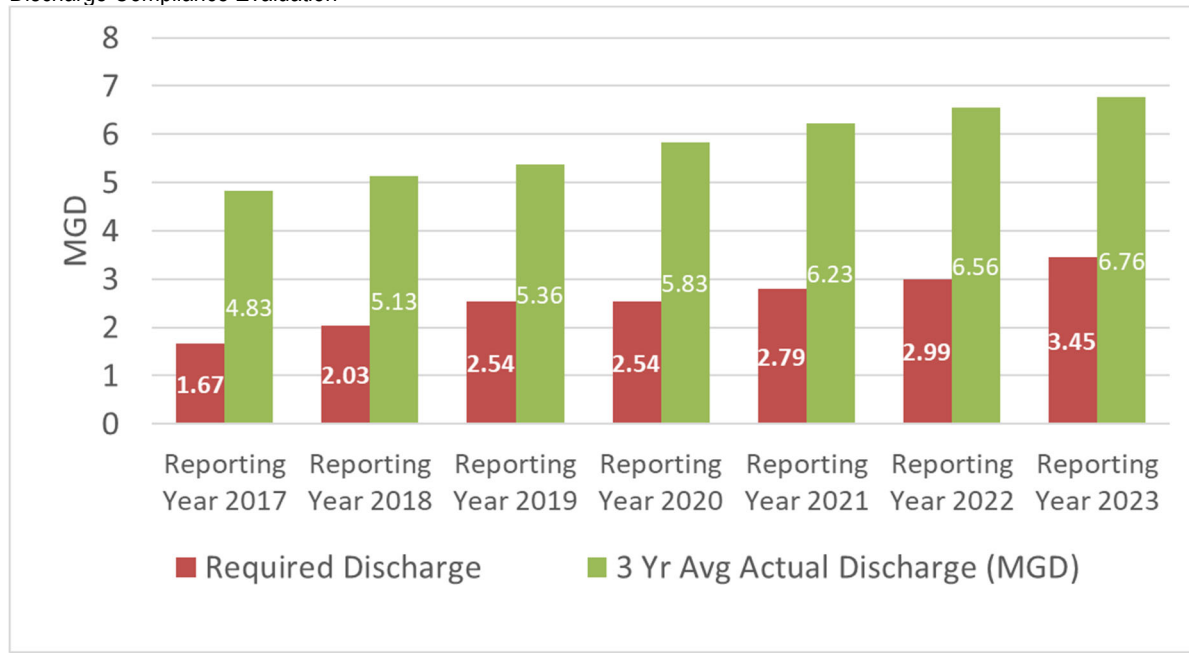
Table 4-2 shows the Towns' discharges to the Cape Fear River Basin beginning with 2016 and the 3-year running average for the reporting year 2023 which is compared to the required discharge to determine compliance.

<b>Table 4-2</b>			
Actual Discharge Calculation Table - Cape Fear River Basin			
	<b>Western Wake Regional WRF (Average Day Discharge)</b>	<b>Other Treated Wastewater Discharges</b>	<b>Total Actual Discharge (mgd)</b>
<b>2016</b>	4.9	0.00	4.90
<b>2017</b>	4.5	0.48	4.98
<b>2018</b>	5.5	0.01	5.51
<b>2019</b>	5.6	0	5.60
<b>2020</b>	6.3	0.09	6.39
<b>2021</b>	6.7	0	6.7
<b>2022</b>	6.6	0	6.6
<b>2023</b>	6.9	0.09	6.99
<b>3 year running average</b>			<b>6.76</b>

## 4.3 Compliance Evaluation

For 2023, Cary and Apex's 3-year running average of actual discharge to the Cape Fear (6.76 mgd) exceeded the required discharge (3.45 mgd) by 3.31 mgd. Figure 4-2 shows the compliance evaluation starting with reporting year 2017.

**Figure 4-2**  
Discharge Compliance Evaluation



The Towns are in compliance with condition 9 of the 2015 IBT certificate modified by the North Carolina EMC in March 2018. The Towns will continue to monitor required discharge and will comply with reporting requirements.

If required in a future year, this section would discuss mitigation measures and temporary compliance solutions undertaken by the Towns of Cary and Apex in the prior calendar year, the estimated impact of each such measure, and all data supporting each estimated impact.



SECTION 5

# Interbasin Transfer Certificate Conditions

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In accordance with the Compliance and Monitoring Plan, the status of the additional eight conditions that the Towns must meet in order to maintain compliance with the IBT certificate are reported annually. The IBT certificate conditions and their status during the 2023 calendar year are as follows.

1. **Water Conservation Plan** – Within 90 days of receipt of the IBT certificate, the Towns are required to submit a water conservation plan subject to approval by the North Carolina Division of Water Resources (NCDWR) that specifies the water conservation measures that will be implemented by the Towns to ensure the efficient use of the transferred water.

STATUS: The Water Conservation Plan was approved by NCDWR on July 14, 2015 and is available on the Town of Cary website (<http://www.townofcary.org/home/showdocument?id=9609>) . There were no updates during calendar year 2023.

2. **Drought Management Plan** – Within 90 days of receipt of the IBT certificate, the Towns are required to submit a drought management plan subject to approval by the NCDWR that specifies how the transfer will be managed to protect the source river basin (Haw River basin) during drought conditions or other emergencies that occur within the source river basin.

STATUS: The Drought Management Plan was approved by NCDWR on July 14, 2015 and is available on the Town of Cary website (<http://www.townofcary.org/home/showdocument?id=9607>). An update was approved by NCDWR on August 17, 2015 to update the Town of Cary’s approved Water Shortage Response Plan. Those minor updates were to make the Water Shortage Response Plan consistent with changes in the Town’s organizational structure, changes in Town Council procedures, and changes in utility billing procedures. There were no updates during calendar year 2023.

3. **Compliance and Monitoring Plan** – Within 90 days of receipt of the IBT certificate, the Towns are required to submit a quarterly compliance and monitoring plan subject to approval by the NCDWR.

STATUS: The Compliance and Monitoring Plan was approved by NCDWR on July 14, 2015. The plan was revised on March 9, 2018 following the modification of the 2015 IBT certificate to add condition 9. The current plan is available on the Town of Cary website. (<http://www.townofcary.org/home/showdocument?id=19727>).

4. **EMC Consideration of Alternative Sources** – The EMC may reopen and amend the maximum amount of the IBT authorized if it appears that an alternative source of water is available to the Towns within the receiving basin (Neuse River basin).

STATUS: No reporting is necessary.

5. **EMC Consideration of Future Water Demands** – The EMC may reopen and amend the certificate if it is determined that the Towns’ actual future water needs are significantly less than the projected water needs at the time the certificate was granted.

STATUS: No reporting is necessary.

6. **Resale of Transferred Water** – The Towns shall not resell the water that would be transferred pursuant to the IBT certificate to another public water system.

STATUS: There were no resales of transferred water by the Towns during calendar year 2023

7. **EMC Consideration of Impacts** – The EMC may reopen the certificate and amend existing or require new conditions to ensure detrimental impacts are mitigated if environmental impacts are found to be substantially different from those on which the EMC’s Findings of Fact were based.

STATUS: No reporting is necessary.

8. **Intake Access** – The Towns shall be required to provide access at their existing intake site to other Jordan Lake water allocation holders that need access to utilize their allocations to the extent that this additional use is determined to be feasible by the NCDWR.

STATUS: The Town of Cary has continued to provide retail water service to RTP South and the Town of Morrisville. Chatham County has continued to access its allocation through the Cary/Apex raw water intake. The City of Durham accessed its Jordan Lake water allocation through the Cary/Apex Water Treatment Facility for 0 days during calendar year 2022.

9. **Required Discharge** – The Towns shall discharge to the Cape Fear River Basin and Haw River Basin receiving waters a calendar year average daily treated wastewater discharge (“Required Discharge”) calculated as:

$$\text{Required Discharge} = \text{Neuse Basin Demand} - 9.756 \text{ million gallons per day (mgd)}$$

Neuse Basin Demand is defined as the 3-year running annual average daily amount for the 3 preceding calendar years of all finished water supplied from sources within the Haw River and Cape Fear River Basins, including both billed and unbilled amounts, expressed in mgd, used by the Towns of Cary and Apex in the Neuse River Basin. Unbilled amounts of finished water use are to be quantified following the procedures of AWWA’s Manual of Practice M36, *Water Audits and Loss Control Programs*.

“Actual Discharge” is the three-year running annual average daily amount (in mgd) for the three preceding calendar years of treated wastewater that the Towns of Cary and Apex actually discharge to the Haw River Basin and Cape Fear River Basin receiving waters, without regard to which Town of Cary or Apex treatment facilities (whether by ownership or third-party contract) from which the treated wastewater is discharged.

STATUS: The Towns of Cary and Apex “Actual Discharge” was greater than the “Required Discharge” for the reporting year 2023.

# Appendices

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- A Daily Jordan Lake Water Supply Raw Water Withdrawals
- B Daily IBT Amounts
- C Monthly Billed Water Use
- D AWWA M36 Water Audit Summary
- E Cape Fear River Basin Discharge



**APPENDIX A - Daily Jordan Lake Water Supply Raw Water Withdrawals**  
**Jordan Lake Water Supply Storage Allocation Tracking**  
**Cary/Apex, Morrisville, and Wake County/RTP South COMBINED**

Date	Reservoir Level (ft)	Cary/Apex/Morrisville/RTP Water Supply (mgd)	Cary/Apex/Morrisville/RTP Water Supply (cfs)	Inflow to Cary/Apex/Morrisville/RTP (cfs)	Cary/Apex/Morrisville/RTP Storage Level (ac-ft)	Cary/Apex/Morrisville/RTP Storage Level (%)
1/1/2023	216.42	23.85	36.90	1,638.8	21,160	100.00%
1/2/2023	216.52	23.90	36.97	1,699.5	21,160	100.00%
1/3/2023	216.46	25.37	39.24	1,691.1	21,160	100.00%
1/4/2023	216.36	22.37	34.61	1,489.8	21,160	100.00%
1/5/2023	216.36	25.94	40.13	1,491.8	21,160	100.00%
1/6/2023	216.62	23.62	36.54	1,699.1	21,160	100.00%
1/7/2023	216.61	23.94	37.04	1,699.6	21,160	100.00%
1/8/2023	216.57	23.49	36.34	1,698.9	21,160	100.00%
1/9/2023	216.43	23.19	35.87	1,605.9	21,160	100.00%
1/10/2023	216.34	24.96	38.61	1,489.4	21,160	100.00%
1/11/2023	216.27	24.67	38.16	1,338.2	21,160	100.00%
1/12/2023	216.28	22.12	34.22	1,326.3	21,160	100.00%
1/13/2023	216.44	22.46	34.75	1,697.3	21,160	100.00%
1/14/2023	216.63	23.43	36.25	1,698.8	21,160	100.00%
1/15/2023	216.63	22.21	34.36	1,696.9	21,160	100.00%
1/16/2023	216.54	23.67	36.62	1,699.1	21,160	100.00%
1/17/2023	216.37	23.52	36.39	1,567.2	21,160	100.00%
1/18/2023	216.25	22.31	34.51	1,320.6	21,160	100.00%
1/19/2023	216.23	21.72	33.60	1,296.6	21,160	100.00%
1/20/2023	216.27	23.75	36.74	1,333.4	21,160	100.00%
1/21/2023	216.32	22.38	34.62	1,328.9	21,160	100.00%
1/22/2023	216.44	22.21	34.36	1,696.9	21,160	100.00%
1/23/2023	216.72	23.37	36.15	1,698.7	21,160	100.00%
1/24/2023	216.72	21.73	33.62	1,696.1	21,160	100.00%
1/25/2023	216.41	24.11	37.30	1,699.8	21,160	100.00%
1/26/2023	216.95	22.47	34.76	1,337.9	21,160	100.00%
1/27/2023	216.94	22.18	34.31	1,696.8	21,160	100.00%
1/28/2023	216.85	22.67	35.07	1,697.6	21,160	100.00%
1/29/2023	216.67	24.36	37.68	1,700.2	21,160	100.00%
1/30/2023	216.38	23.63	36.56	1,699.1	21,160	100.00%
1/31/2023	216.24	23.56	36.45	1,542.3	21,160	100.00%
2/1/2023	216.22	21.22	32.83	1,466.4	21,160	100.00%
2/2/2023	216.33	22.06	34.13	1,696.6	21,160	100.00%
2/3/2023	216.52	22.25	34.42	1,696.9	21,160	100.00%
2/4/2023	216.36	23.23	35.94	1,698.5	21,160	100.00%
2/5/2023	216.09	22.89	35.41	1,186.6	21,160	100.00%
2/6/2023	216.07	23.18	35.86	1,092.8	21,160	100.00%
2/7/2023	216.15	22.28	34.47	1,119.7	21,160	100.00%
2/8/2023	216.23	24.64	38.12	881.8	21,160	100.00%
2/9/2023	216.25	22.40	34.65	1,231.6	21,160	100.00%
2/10/2023	216.34	22.79	35.26	1,482.7	21,160	100.00%
2/11/2023	216.38	22.96	35.52	1,462.4	21,160	100.00%
2/12/2023	217.23	23.76	36.76	1,699.3	21,160	100.00%
2/13/2023	218.66	23.54	36.42	1,510.4	21,160	100.00%
2/14/2023	219.11	22.75	35.19	1,697.7	21,160	100.00%
2/15/2023	218.90	21.87	33.83	1,696.3	21,160	100.00%

**APPENDIX A - Daily Jordan Lake Water Supply Raw Water Withdrawals**  
**Jordan Lake Water Supply Storage Allocation Tracking**  
**Cary/Apex, Morrisville, and Wake County/RTP South COMBINED**

Date	Reservoir Level (ft)	Cary/Apex/Morrisville/RTP Water Supply (mgd)	Cary/Apex/Morrisville/RTP Water Supply (cfs)	Inflow to Cary/Apex/Morrisville/RTP (cfs)	Cary/Apex/Morrisville/RTP Storage Level (ac-ft)	Cary/Apex/Morrisville/RTP Storage Level (%)
2/16/2023	218.05	23.43	36.25	1,698.8	21,160	100.00%
2/17/2023	217.40	23.49	36.34	1,698.9	21,160	100.00%
2/18/2023	217.17	22.61	34.98	1,697.5	21,160	100.00%
2/19/2023	216.84	22.50	34.81	1,697.3	21,160	100.00%
2/20/2023	216.45	23.62	36.54	1,699.1	21,160	100.00%
2/21/2023	216.29	23.75	36.74	1,533.3	21,160	100.00%
2/22/2023	216.27	23.64	36.57	1,400.8	21,160	100.00%
2/23/2023	216.29	24.38	37.72	1,428.9	21,160	100.00%
2/24/2023	216.31	23.00	35.58	1,383.8	21,160	100.00%
2/25/2023	216.31	22.18	34.31	1,376.6	21,160	100.00%
2/26/2023	216.29	23.39	36.18	1,326.3	21,160	100.00%
2/27/2023	216.26	25.71	39.77	1,265.7	21,160	100.00%
2/28/2023	216.24	25.15	38.91	1,232.0	21,160	100.00%
3/1/2023	216.21	24.50	37.90	1,048.4	21,160	100.00%
3/2/2023	216.43	25.15	38.91	1,701.4	21,160	100.00%
3/3/2023	216.72	24.00	37.13	1,699.6	21,160	100.00%
3/4/2023	216.62	23.00	35.58	1,698.1	21,160	100.00%
3/5/2023	216.43	24.41	37.76	1,700.3	21,160	100.00%
3/6/2023	216.27	26.08	40.35	1,406.0	21,160	100.00%
3/7/2023	216.26	24.19	37.42	1,404.5	21,160	100.00%
3/8/2023	216.18	26.40	40.84	1,046.3	21,160	100.00%
3/9/2023	216.18	24.66	38.15	996.4	21,160	100.00%
3/10/2023	216.25	22.28	34.47	1,249.2	21,160	100.00%
3/11/2023	216.36	23.76	36.76	1,481.8	21,160	100.00%
3/12/2023	216.47	22.72	35.15	1,697.7	21,160	100.00%
3/13/2023	216.43	21.50	33.26	1,648.2	21,160	100.00%
3/14/2023	216.28	24.16	37.38	1,363.8	21,160	100.00%
3/15/2023	216.22	24.81	38.38	1,125.1	21,160	100.00%
3/16/2023	216.22	25.83	39.96	1,125.5	21,160	100.00%
3/17/2023	216.31	25.40	39.29	1,396.5	21,160	100.00%
3/18/2023	216.45	23.69	36.65	1,699.2	21,160	100.00%
3/19/2023	216.65	23.78	36.79	1,699.3	21,160	100.00%
3/20/2023	216.52	24.75	38.29	1,700.8	21,160	100.00%
3/21/2023	216.27	24.75	38.29	1,305.3	21,160	100.00%
3/22/2023	216.19	25.36	39.23	986.7	21,160	100.00%
3/23/2023	216.20	24.43	37.79	1,096.6	21,160	100.00%
3/24/2023	216.28	25.97	40.18	1,331.2	21,160	100.00%
3/25/2023	216.33	23.73	36.71	1,338.7	21,160	100.00%
3/26/2023	216.44	23.86	36.91	1,630.6	21,160	100.00%
3/27/2023	216.58	26.36	40.78	1,703.3	21,160	100.00%
3/28/2023	216.45	24.02	37.16	1,699.7	21,160	100.00%
3/29/2023	216.28	25.56	39.54	1,506.8	21,160	100.00%
3/30/2023	216.29	26.36	40.78	1,456.8	21,160	100.00%
3/31/2023	216.28	25.09	38.81	1,354.8	21,160	100.00%
4/1/2023	216.36	23.69	36.65	1,509.1	21,160	100.00%
4/2/2023	216.39	23.88	36.94	1,472.8	21,160	100.00%

**APPENDIX A - Daily Jordan Lake Water Supply Raw Water Withdrawals**  
**Jordan Lake Water Supply Storage Allocation Tracking**  
**Cary/Apex, Morrisville, and Wake County/RTP South COMBINED**

Date	Reservoir Level (ft)	Cary/Apex/Morrisville/RTP Water Supply (mgd)	Cary/Apex/Morrisville/RTP Water Supply (cfs)	Inflow to Cary/Apex/Morrisville/RTP (cfs)	Cary/Apex/Morrisville/RTP Storage Level (ac-ft)	Cary/Apex/Morrisville/RTP Storage Level (%)
4/3/2023	216.44	24.43	37.79	1,644.6	21,160	100.00%
4/4/2023	216.42	24.03	37.17	1,482.1	21,160	100.00%
4/5/2023	216.40	25.88	40.04	1,439.4	21,160	100.00%
4/6/2023	216.39	25.00	38.68	1,428.5	21,160	100.00%
4/7/2023	217.82	22.61	34.98	1,486.1	21,160	100.00%
4/8/2023	220.78	21.31	32.97	1,695.5	21,160	100.00%
4/9/2023	223.07	25.95	40.14	1,702.7	21,160	100.00%
4/10/2023	223.77	25.18	38.95	1,701.5	21,160	100.00%
4/11/2023	223.55	24.87	38.47	1,701.0	21,160	100.00%
4/12/2023	222.78	28.23	43.68	1,706.2	21,160	100.00%
4/13/2023	221.93	25.03	38.72	1,617.4	21,160	100.00%
4/14/2023	221.27	24.99	38.66	1,701.2	21,160	100.00%
4/15/2023	220.93	25.13	38.88	1,701.4	21,160	100.00%
4/16/2023	220.25	25.92	40.10	1,702.6	21,160	100.00%
4/17/2023	219.33	25.73	39.80	1,702.3	21,160	100.00%
4/18/2023	218.45	26.00	40.22	1,702.7	21,160	100.00%
4/19/2023	217.75	26.60	41.15	1,703.7	21,160	100.00%
4/20/2023	217.24	26.41	40.86	1,703.4	21,160	100.00%
4/21/2023	216.78	26.90	41.61	1,704.1	21,160	100.00%
4/22/2023	216.61	24.09	37.27	1,699.8	21,160	100.00%
4/23/2023	216.53	25.53	39.49	1,702.0	21,160	100.00%
4/24/2023	216.37	25.82	39.94	1,498.5	21,160	100.00%
4/25/2023	216.28	27.78	42.98	1,345.5	21,160	100.00%
4/26/2023	216.23	23.18	35.86	1,162.7	21,160	100.00%
4/27/2023	216.23	25.10	38.83	1,099.9	21,160	100.00%
4/28/2023	216.34	24.42	37.78	1,537.7	21,160	100.00%
4/29/2023	216.95	25.37	39.25	1,701.8	21,160	100.00%
4/30/2023	217.82	23.94	37.04	1,699.6	21,160	100.00%
5/1/2023	218.73	24.78	38.33	1,700.9	21,160	100.00%
5/2/2023	218.69	24.99	38.66	1,701.2	21,160	100.00%
5/3/2023	218.10	27.51	42.56	1,705.1	21,160	100.00%
5/4/2023	217.56	25.56	39.54	1,702.1	21,160	100.00%
5/5/2023	217.27	26.15	40.45	1,703.0	21,160	100.00%
5/6/2023	217.05	27.00	41.77	1,704.3	21,160	100.00%
5/7/2023	216.68	27.62	42.73	1,705.2	21,160	100.00%
5/8/2023	216.45	27.10	41.92	1,536.3	21,160	100.00%
5/9/2023	216.40	28.20	43.63	1,449.1	21,160	100.00%
5/10/2023	216.29	28.74	44.46	962.5	21,160	100.00%
5/11/2023	216.25	29.99	46.39	964.8	21,160	100.00%
5/12/2023	216.21	29.93	46.30	829.4	21,160	100.00%
5/13/2023	216.23	28.65	44.32	1,073.5	21,160	100.00%
5/14/2023	216.25	28.53	44.14	1,167.4	21,160	100.00%
5/15/2023	216.22	29.44	45.54	956.1	21,160	100.00%
5/16/2023	216.26	29.08	44.99	1,255.0	21,160	100.00%
5/17/2023	216.29	28.51	44.10	1,331.5	21,160	100.00%
5/18/2023	216.25	28.05	43.39	1,001.6	21,160	100.00%

**APPENDIX A - Daily Jordan Lake Water Supply Raw Water Withdrawals**  
**Jordan Lake Water Supply Storage Allocation Tracking**  
**Cary/Apex, Morrisville, and Wake County/RTP South COMBINED**

Date	Reservoir Level (ft)	Cary/Apex/Morrisville/RTP Water Supply (mgd)	Cary/Apex/Morrisville/RTP Water Supply (cfs)	Inflow to Cary/Apex/Morrisville/RTP (cfs)	Cary/Apex/Morrisville/RTP Storage Level (ac-ft)	Cary/Apex/Morrisville/RTP Storage Level (%)
5/19/2023	216.23	25.90	40.07	995.6	21,160	100.00%
5/20/2023	216.20	27.16	42.02	888.7	21,160	100.00%
5/21/2023	216.20	26.30	40.69	888.4	21,160	100.00%
5/22/2023	216.15	29.19	45.16	636.2	21,160	100.00%
5/23/2023	216.12	30.48	47.15	423.2	21,160	100.00%
5/24/2023	216.09	32.14	49.72	293.4	21,160	100.00%
5/25/2023	216.08	30.29	46.86	297.1	21,160	100.00%
5/26/2023	216.06	29.12	45.05	173.4	21,160	100.00%
5/27/2023	216.05	25.94	40.13	171.3	21,160	100.00%
5/28/2023	216.05	23.60	36.51	209.9	21,160	100.00%
5/29/2023	216.07	24.42	37.78	395.2	21,160	100.00%
5/30/2023	216.19	27.20	42.08	1,219.9	21,160	100.00%
5/31/2023	216.25	26.18	40.50	1,193.2	21,160	100.00%
6/1/2023	216.31	27.09	41.91	1,348.6	21,160	100.00%
6/2/2023	216.36	28.71	44.41	1,398.5	21,160	100.00%
6/3/2023	216.40	28.49	44.07	1,428.5	21,160	100.00%
6/4/2023	216.38	28.50	44.09	1,268.9	21,160	100.00%
6/5/2023	216.37	28.81	44.57	1,257.0	21,160	100.00%
6/6/2023	216.34	31.53	48.78	1,122.4	21,160	100.00%
6/7/2023	216.32	29.60	45.79	1,074.3	21,160	100.00%
6/8/2023	216.30	28.86	44.65	996.9	21,160	100.00%
6/9/2023	216.25	29.88	46.22	742.9	21,160	100.00%
6/10/2023	216.21	32.24	49.88	645.3	21,160	100.00%
6/11/2023	216.15	30.95	47.88	350.3	21,160	100.00%
6/12/2023	216.13	27.10	41.92	426.3	21,160	100.00%
6/13/2023	216.06	32.57	50.39	22.1	21,160	100.00%
6/14/2023	215.99	31.73	49.09	0.0	21,062	99.54%
6/15/2023	215.95	33.49	51.81	29.1	21,017	99.33%
6/16/2023	215.95	34.01	52.61	70.0	21,052	99.49%
6/17/2023	215.84	32.49	50.26	0.0	20,952	99.02%
6/18/2023	215.77	33.12	51.24	0.0	20,850	98.54%
6/19/2023	215.75	30.20	46.72	47.0	20,851	98.54%
6/20/2023	215.99	27.87	43.11	306.2	21,160	100.00%
6/21/2023	216.28	28.55	44.17	1,392.6	21,160	100.00%
6/22/2023	216.54	26.53	41.04	1,703.6	21,160	100.00%
6/23/2023	217.38	27.72	42.88	1,705.4	21,160	100.00%
6/24/2023	218.07	26.02	40.25	1,702.8	21,160	100.00%
6/25/2023	218.10	27.39	42.37	1,704.9	21,160	100.00%
6/26/2023	217.85	27.62	42.73	1,705.2	21,160	100.00%
6/27/2023	217.29	29.09	45.00	1,707.5	21,160	100.00%
6/28/2023	216.90	31.18	48.24	1,710.8	21,160	100.00%
6/29/2023	216.69	30.66	47.43	1,709.9	21,160	100.00%
6/30/2023	216.74	31.71	49.06	1,711.6	21,160	100.00%
7/1/2023	217.12	26.57	41.10	1,703.6	21,160	100.00%
7/2/2023	217.39	27.04	41.83	1,704.3	21,160	100.00%
7/3/2023	217.36	27.04	41.83	1,704.3	21,160	100.00%



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**Cary/Apex, Morrisville, and Wake County/RTP South COMBINED**

Date	Reservoir Level (ft)	Cary/Apex/Morrisville/RTP Water Supply (mgd)	Cary/Apex/Morrisville/RTP Water Supply (cfs)	Inflow to Cary/Apex/Morrisville/RTP (cfs)	Cary/Apex/Morrisville/RTP Storage Level (ac-ft)	Cary/Apex/Morrisville/RTP Storage Level (%)
7/4/2023	217.13	28.68	44.37	1,706.9	21,160	100.00%
7/5/2023	216.90	28.97	44.82	1,707.3	21,160	100.00%
7/6/2023	216.90	30.37	46.98	1,709.5	21,160	100.00%
7/7/2023	216.90	30.39	47.01	1,709.5	21,160	100.00%
7/8/2023	216.90	27.58	42.67	1,705.2	21,160	100.00%
7/9/2023	217.11	25.86	40.01	1,702.5	21,160	100.00%
7/10/2023	217.49	25.95	40.14	1,702.7	21,160	100.00%
7/11/2023	217.28	28.75	44.48	1,707.0	21,160	100.00%
7/12/2023	216.97	32.94	50.96	1,713.5	21,160	100.00%
7/13/2023	216.72	29.31	45.34	1,707.9	21,160	100.00%
7/14/2023	217.07	29.68	45.91	1,708.4	21,160	100.00%
7/15/2023	217.21	25.61	39.62	1,702.1	21,160	100.00%
7/16/2023	217.13	29.42	45.51	1,708.0	21,160	100.00%
7/17/2023	216.98	28.41	43.95	1,706.5	21,160	100.00%
7/18/2023	216.79	30.84	47.71	1,710.2	21,160	100.00%
7/19/2023	216.67	29.67	45.90	1,708.4	21,160	100.00%
7/20/2023	216.59	29.31	45.34	1,707.9	21,160	100.00%
7/21/2023	216.59	30.45	47.11	1,639.1	21,160	100.00%
7/22/2023	216.40	30.40	47.03	1,190.0	21,160	100.00%
7/23/2023	216.39	29.89	46.24	1,371.2	21,160	100.00%
7/24/2023	216.29	30.45	47.11	828.5	21,160	100.00%
7/25/2023	216.23	30.36	46.97	652.5	21,160	100.00%
7/26/2023	216.17	32.78	50.71	421.5	21,160	100.00%
7/27/2023	216.10	32.73	50.63	163.7	21,160	100.00%
7/28/2023	216.04	34.21	52.92	2.6	21,160	100.00%
7/29/2023	215.99	30.36	46.97	14.7	21,096	99.70%
7/30/2023	215.93	30.93	47.85	5.9	21,012	99.30%
7/31/2023	215.87	30.73	47.54	5.6	20,929	98.91%
8/1/2023	215.88	30.40	47.03	78.5	20,992	99.21%
8/2/2023	215.75	30.58	47.31	0.0	20,898	98.76%
8/3/2023	215.75	29.65	45.87	0.0	20,807	98.33%
8/4/2023	215.64	29.70	45.95	36.4	20,788	98.24%
8/5/2023	215.57	28.27	43.73	1.7	20,704	97.85%
8/6/2023	215.52	30.96	47.90	30.0	20,669	97.68%
8/7/2023	215.46	29.76	46.04	18.5	20,614	97.42%
8/8/2023	215.47	27.44	42.45	83.4	20,696	97.81%
8/9/2023	215.44	30.35	46.95	44.3	20,690	97.78%
8/10/2023	215.43	30.60	47.34	64.0	20,724	97.94%
8/11/2023	215.40	28.96	44.80	44.0	20,722	97.93%
8/12/2023	215.38	31.06	48.05	50.6	20,727	97.96%
8/13/2023	215.34	32.72	50.62	29.9	20,686	97.76%
8/14/2023	215.34	30.69	47.48	0.0	20,592	97.32%
8/15/2023	215.34	30.86	47.74	0.0	20,497	96.87%
8/16/2023	215.17	29.00	44.86	4.6	20,417	96.49%
8/17/2023	215.11	32.17	49.77	5.0	20,328	96.07%
8/18/2023	215.05	31.24	48.33	9.8	20,252	95.71%

**APPENDIX A - Daily Jordan Lake Water Supply Raw Water Withdrawals**  
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**Cary/Apex, Morrisville, and Wake County/RTP South COMBINED**

Date	Reservoir Level (ft)	Cary/Apex/Morrisville/RTP Water Supply (mgd)	Cary/Apex/Morrisville/RTP Water Supply (cfs)	Inflow to Cary/Apex/Morrisville/RTP (cfs)	Cary/Apex/Morrisville/RTP Storage Level (ac-ft)	Cary/Apex/Morrisville/RTP Storage Level (%)
8/19/2023	215.05	31.63	48.93	70.3	20,294	95.91%
8/20/2023	214.96	31.44	48.64	0.0	20,198	95.45%
8/21/2023	214.90	32.87	50.85	15.4	20,127	95.12%
8/22/2023	214.87	34.34	53.12	46.0	20,113	95.06%
8/23/2023	214.72	33.32	51.55	0.0	20,011	94.57%
8/24/2023	214.32	32.56	50.37	0.0	19,911	94.10%
8/25/2023	214.26	35.49	54.90	18.4	19,839	93.76%
8/26/2023	214.25	32.97	51.00	92.3	19,921	94.15%
8/27/2023	214.25	32.19	49.80	91.2	20,003	94.53%
8/28/2023	214.33	28.54	44.15	132.9	20,179	95.37%
8/29/2023	214.36	30.10	46.56	63.1	20,212	95.52%
8/30/2023	214.42	30.31	46.89	91.0	20,299	95.93%
8/31/2023	214.44	24.75	38.29	52.7	20,328	96.07%
9/1/2023	214.43	31.43	48.62	26.4	20,284	95.86%
9/2/2023	214.41	28.47	44.04	16.4	20,229	95.60%
9/3/2023	214.39	29.76	46.04	16.8	20,171	95.33%
9/4/2023	214.34	29.33	45.37	2.7	20,087	94.93%
9/5/2023	214.27	34.59	53.51	0.0	19,980	94.43%
9/6/2023	214.19	33.53	51.87	0.0	19,878	93.94%
9/7/2023	214.12	34.40	53.22	0.0	19,772	93.44%
9/8/2023	214.05	33.62	52.01	0.0	19,669	92.95%
9/9/2023	214.23	30.19	46.70	233.0	20,038	94.70%
9/10/2023	214.38	27.68	42.82	199.9	20,350	96.17%
9/11/2023	214.44	28.88	44.68	117.4	20,494	96.86%
9/12/2023	214.47	28.88	44.68	89.9	20,584	97.28%
9/13/2023	214.44	31.20	48.27	35.2	20,558	97.16%
9/14/2023	214.61	30.72	47.52	202.4	20,865	98.61%
9/15/2023	214.52	31.35	48.50	13.0	20,795	98.28%
9/16/2023	214.46	30.13	46.61	7.1	20,717	97.91%
9/17/2023	214.43	29.30	45.33	35.3	20,697	97.81%
9/18/2023	214.38	30.41	47.04	16.6	20,637	97.53%
9/19/2023	214.31	29.84	46.16	0.0	20,545	97.10%
9/20/2023	214.25	31.94	49.41	7.6	20,462	96.70%
9/21/2023	214.20	30.41	47.04	17.0	20,402	96.42%
9/22/2023	214.25	30.18	46.69	108.8	20,526	97.00%
9/23/2023	214.25	25.31	39.15	108.1	20,662	97.65%
9/24/2023	214.38	28.69	44.38	190.5	20,952	99.02%
9/25/2023	214.42	28.61	44.26	98.6	21,060	99.53%
9/26/2023	214.41	30.85	47.72	53.5	21,072	99.58%
9/27/2023	214.36	30.27	46.83	16.3	21,011	99.30%
9/28/2023	214.29	30.27	46.83	0.0	20,918	98.86%
9/29/2023	214.23	30.28	46.84	2.4	20,830	98.44%
9/30/2023	214.17	28.44	44.00	6.7	20,756	98.09%
10/1/2023	214.10	29.64	45.85	-3.0	20,659	97.63%
10/2/2023	214.03	29.66	45.88	-2.9	20,562	97.18%
10/3/2023	213.97	33.30	51.52	4.2	20,469	96.73%

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Date	Reservoir Level (ft)	Cary/Apex/Morrisville/RTP Water Supply (mgd)	Cary/Apex/Morrisville/RTP Water Supply (cfs)	Inflow to Cary/Apex/Morrisville/RTP (cfs)	Cary/Apex/Morrisville/RTP Storage Level (ac-ft)	Cary/Apex/Morrisville/RTP Storage Level (%)
10/4/2023	213.91	30.79	47.63	-0.8	20,373	96.28%
10/5/2023	213.86	29.72	45.98	8.5	20,298	95.93%
10/6/2023	213.77	30.31	46.89	-26.2	20,153	95.24%
10/7/2023	213.69	28.40	43.93	-15.2	20,036	94.69%
10/8/2023	213.62	31.63	48.93	-5.0	19,929	94.18%
10/9/2023	213.54	28.31	43.80	-15.2	19,812	93.63%
10/10/2023	213.47	33.42	51.70	-4.5	19,700	93.10%
10/11/2023	213.41	31.38	48.54	4.4	19,613	92.69%
10/12/2023	213.34	30.02	46.44	-5.6	19,509	92.20%
10/13/2023	213.27	30.46	47.12	-5.4	19,405	91.71%
10/14/2023	213.37	27.26	42.17	155.8	19,631	92.77%
10/15/2023	213.45	27.79	42.99	132.9	19,809	93.62%
10/16/2023	213.48	27.13	41.97	83.4	19,891	94.01%
10/17/2023	213.44	28.22	43.66	21.7	19,848	93.80%
10/18/2023	213.39	28.22	43.66	13.3	19,787	93.51%
10/19/2023	213.33	28.17	43.58	3.6	19,708	93.14%
10/20/2023	213.29	28.56	44.18	22.1	19,664	92.93%
10/21/2023	213.23	25.92	40.10	3.0	19,591	92.59%
10/22/2023	213.22	28.36	43.87	48.6	19,600	92.63%
10/23/2023	213.16	29.21	45.19	3.8	19,518	92.24%
10/24/2023	213.09	28.96	44.80	-5.7	19,418	91.77%
10/25/2023	213.04	29.52	45.67	13.3	19,354	91.46%
10/26/2023	212.99	27.78	42.98	13.5	19,295	91.19%
10/27/2023	212.93	31.64	48.95	7.4	19,213	90.80%
10/28/2023	212.86	29.34	45.39	-2.3	19,118	90.35%
10/29/2023	212.80	28.77	44.51	9.1	19,048	90.02%
10/30/2023	212.77	30.33	46.92	34.0	19,022	89.90%
10/31/2023	212.66	28.02	43.35	-38.7	18,859	89.13%
11/1/2023	212.61	27.69	42.84	15.4	18,805	88.87%
11/2/2023	212.52	28.59	44.23	-23.5	18,671	88.24%
11/3/2023	212.48	25.79	39.90	16.4	18,624	88.02%
11/4/2023	212.42	25.82	39.94	-4.1	18,537	87.60%
11/5/2023	212.37	29.58	45.76	5.9	18,458	87.23%
11/6/2023	212.32	27.43	42.43	5.4	18,384	86.88%
11/7/2023	212.27	30.46	47.12	6.0	18,303	86.50%
11/8/2023	212.24	27.15	42.00	23.2	18,265	86.32%
11/9/2023	212.18	25.83	39.96	-4.1	18,178	85.91%
11/10/2023	212.13	27.47	42.50	5.3	18,104	85.56%
11/11/2023	212.09	25.43	39.34	13.9	18,054	85.32%
11/12/2023	212.03	27.17	42.03	-3.9	17,963	84.89%
11/13/2023	211.98	25.86	40.01	-1.1	17,881	84.51%
11/14/2023	211.93	25.15	38.91	-1.4	17,801	84.13%
11/15/2023	211.88	26.52	41.03	1.8	17,724	83.76%
11/16/2023	211.85	25.81	39.93	18.9	17,682	83.56%
11/17/2023	211.80	25.97	40.18	1.7	17,606	83.20%
11/18/2023	211.77	24.63	38.10	18.6	17,567	83.02%

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Date	Reservoir Level (ft)	Cary/Apex/Morrisville/RTP Water Supply (mgd)	Cary/Apex/Morrisville/RTP Water Supply (cfs)	Inflow to Cary/Apex/Morrisville/RTP (cfs)	Cary/Apex/Morrisville/RTP Storage Level (ac-ft)	Cary/Apex/Morrisville/RTP Storage Level (%)
11/19/2023	211.71	26.46	40.93	-6.6	17,473	82.58%
11/20/2023	211.69	27.09	41.91	27.7	17,444	82.44%
11/21/2023	211.67	23.63	36.56	26.9	17,425	82.35%
11/22/2023	211.91	24.16	37.38	230.9	17,809	84.17%
11/23/2023	212.13	24.05	37.21	208.9	18,150	85.77%
11/24/2023	212.24	23.35	36.12	120.7	18,317	86.57%
11/25/2023	212.29	22.47	34.76	70.2	18,388	86.90%
11/26/2023	212.27	24.34	37.65	12.2	18,337	86.66%
11/27/2023	212.30	24.76	38.30	54.1	18,368	86.81%
11/28/2023	212.29	23.09	35.72	20.3	18,338	86.66%
11/29/2023	212.18	24.98	38.64	-4.5	18,252	86.26%
11/30/2023	212.18	23.21	35.91	32.5	18,245	86.23%
12/1/2023	212.17	23.94	37.04	24.8	18,221	86.11%
12/2/2023	212.16	21.23	32.84	24.0	18,203	86.03%
12/3/2023	212.15	22.56	34.90	24.4	18,183	85.93%
12/4/2023	212.13	25.40	39.29	16.7	18,138	85.72%
12/5/2023	212.14	22.63	35.01	41.2	18,150	85.78%
12/6/2023	212.11	22.13	34.24	7.5	18,097	85.53%
12/7/2023	212.11	23.30	36.05	32.9	18,091	85.50%
12/8/2023	212.08	22.95	35.50	7.7	18,036	85.24%
12/9/2023	212.06	22.46	34.75	15.9	17,998	85.06%
12/10/2023	212.26	20.62	31.90	199.4	18,331	86.63%
12/11/2023	213.02	23.64	36.57	668.3	19,584	92.55%
12/12/2023	213.55	22.87	35.38	500.8	20,507	96.92%
12/13/2023	213.75	23.18	35.86	209.5	20,851	98.54%
12/14/2023	213.87	23.87	36.93	139.2	21,054	99.50%
12/15/2023	213.95	23.33	36.09	103.8	21,160	100.00%
12/16/2023	214.00	23.38	36.17	77.1	21,160	100.00%
12/17/2023	215.08	21.77	33.68	1,020.6	21,160	100.00%
12/18/2023	218.02	23.82	36.85	1,811.7	21,160	100.00%
12/19/2023	218.59	23.08	35.70	1,698.2	21,160	100.00%
12/20/2023	218.33	22.68	35.09	1,697.6	21,160	100.00%
12/21/2023	217.90	23.19	35.87	1,698.4	21,160	100.00%
12/22/2023	217.61	24.09	37.27	1,699.8	21,160	100.00%
12/23/2023	217.47	22.41	34.67	1,697.2	21,160	100.00%
12/24/2023	217.29	22.19	34.33	1,696.8	21,160	100.00%
12/25/2023	217.11	21.97	33.99	1,696.5	21,160	100.00%
12/26/2023	217.02	19.74	30.54	1,693.1	21,160	100.00%
12/27/2023	218.38	21.94	33.94	1,623.0	21,160	100.00%
12/28/2023	219.29	22.77	35.23	1,433.0	21,160	100.00%
12/29/2023	219.55	20.66	31.96	1,694.5	21,160	100.00%
12/30/2023	219.55	20.24	31.31	1,693.8	21,160	100.00%
12/31/2023	219.39	23.73	36.71	1,699.2	21,160	100.00%

APPENDIX B – DAILY IBT AMOUNTS

	(1)	(2)	(3)	(4)	(5)=1+2 +3+4	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)=6+7+1 2+13	(17)=8+9+ 14	(18)=10+ 11+15	(19)=16+1 7+18	(20)=8+9	(21)=18- 2-3-4
	Water Withdrawal/Purchase (mgd)				Consumptive Use (mgd)							Water Use Discharged as Wastewater (mgd)				Total Returned/Used in Each Basin (mgd)				Interbasin Transfer (mgd)	
	Jordan Lake Withdrawal	Neuse Basin Purchase			Total System Use	Haw		Cape Fear		Neuse		Haw		Cape Fear	Neuse	Haw	Cape Fear	Neuse	Total for All Basins	Haw to Cape Fear	Haw to Neuse
	Haw	Raleigh	Durham	Durham Co. Reclaimed		Potable	WRF Reuse	Potable	WRF Reuse	Potable	WRF Reuse	WTP Process Water	WRF	WRF	Total WRFs						
1/1/2023	23.85	0.05	0.00	0.165	24.07	0.893	0.165	0.033	0.000	1.436	0.197	2.16	0.00	6.95	12.23	3.22	6.98	13.87	24.07	0.033	13.65
1/2/2023	23.90	0.05	0.00	0.118	24.07	0.398	0.118	0.015	0.000	0.639	0.196	3.04	0.00	7.06	12.60	3.55	7.08	13.44	24.07	0.015	13.27
1/3/2023	25.37	0.05	0.00	0.121	25.54	0.701	0.121	0.026	0.000	1.127	0.216	3.65	0.00	6.86	12.84	4.48	6.88	14.18	25.54	0.026	14.01
1/4/2023	22.37	0.00	0.00	0.127	22.50	0.381	0.127	0.014	0.000	0.613	0.217	2.32	0.00	6.39	12.43	2.83	6.40	13.26	22.50	0.014	13.14
1/5/2023	25.94	0.00	0.00	0.116	26.06	0.704	0.116	0.026	0.000	1.132	0.210	3.75	0.00	7.03	13.09	4.57	7.06	14.43	26.06	0.026	14.31
1/6/2023	23.62	0.00	0.00	0.116	23.74	0.881	0.116	0.032	0.000	1.417	0.195	2.34	0.00	6.70	12.06	3.34	6.73	13.67	23.74	0.032	13.55
1/7/2023	23.94	0.00	0.00	0.119	24.06	0.589	0.119	0.022	0.000	0.948	0.200	3.05	0.00	6.81	12.32	3.76	6.83	13.47	24.06	0.022	13.35
1/8/2023	23.49	0.00	0.00	0.173	23.66	0.422	0.173	0.016	0.000	0.679	0.204	2.39	0.00	7.19	12.59	2.99	7.20	13.47	23.66	0.016	13.30
1/9/2023	23.19	0.00	0.00	0.118	23.31	0.394	0.118	0.015	0.000	0.633	0.203	2.49	0.00	6.80	12.65	3.00	6.82	13.49	23.31	0.015	13.37
1/10/2023	24.96	0.00	0.00	0.110	25.07	0.566	0.110	0.021	0.000	0.909	0.200	4.44	0.00	6.55	12.27	5.12	6.57	13.38	25.07	0.021	13.27
1/11/2023	24.67	0.00	0.00	0.098	24.77	1.025	0.098	0.038	0.000	1.649	0.210	2.70	0.00	6.54	12.51	3.82	6.57	14.37	24.77	0.038	14.27
1/12/2023	22.12	0.00	0.00	0.124	22.24	0.370	0.124	0.014	0.000	0.594	0.203	2.69	0.00	6.31	11.94	3.18	6.32	12.74	22.24	0.014	12.62
1/13/2023	22.46	0.00	0.00	0.126	22.59	0.384	0.126	0.014	0.000	0.618	0.200	2.25	0.44	5.80	12.76	3.20	5.81	13.58	22.59	0.014	13.45
1/14/2023	23.43	0.00	0.00	0.091	23.52	0.373	0.091	0.014	0.000	0.599	0.201	3.80	2.76	3.90	11.78	7.03	3.92	12.58	23.52	0.014	12.49
1/15/2023	22.21	0.00	0.00	0.130	22.34	0.369	0.130	0.014	0.000	0.593	0.199	2.82	2.88	3.82	11.52	6.20	3.83	12.31	22.34	0.014	12.18
1/16/2023	23.67	0.00	0.00	0.127	23.80	1.196	0.127	0.044	0.000	1.923	0.196	1.62	2.90	3.99	11.80	5.84	4.04	13.92	23.80	0.044	13.79
1/17/2023	23.52	0.00	0.00	0.089	23.61	0.401	0.089	0.015	0.000	0.644	0.195	2.42	3.22	3.99	12.63	6.13	4.01	13.47	23.61	0.015	13.38
1/18/2023	22.31	0.00	0.00	0.065	22.38	0.383	0.065	0.014	0.000	0.615	0.204	2.14	3.10	3.60	12.25	5.69	3.61	13.07	22.38	0.014	13.01
1/19/2023	21.72	0.00	0.00	0.076	21.80	0.356	0.076	0.013	0.000	0.573	0.212	2.96	2.78	3.45	11.37	6.17	3.46	12.16	21.80	0.013	12.08
1/20/2023	23.75	0.00	0.00	0.088	23.84	0.926	0.088	0.034	0.000	1.489	0.198	3.10	3.09	3.62	11.29	7.20	3.66	12.98	23.84	0.034	12.89
1/21/2023	22.38	0.00	0.00	0.079	22.46	0.468	0.079	0.017	0.000	0.753	0.202	2.50	3.18	3.82	11.44	6.23	3.84	12.39	22.46	0.017	12.31
1/22/2023	22.21	0.00	0.00	0.267	22.48	0.374	0.267	0.014	0.000	0.601	0.200	2.70	2.69	3.83	11.79	6.04	3.85	12.59	22.48	0.014	12.33
1/23/2023	23.37	0.00	0.00	0.329	23.70	0.393	0.329	0.014	0.000	0.632	0.208	2.90	2.62	4.27	12.33	6.24	4.28	13.17	23.70	0.014	12.84
1/24/2023	21.73	0.00	0.00	0.059	21.79	0.355	0.059	0.013	0.000	0.571	0.206	3.00	0.00	6.05	11.53	3.41	6.06	12.31	21.79	0.013	12.25
1/25/2023	24.11	0.00	0.00	0.055	24.17	0.392	0.055	0.014	0.000	0.630	0.206	3.43	0.00	6.36	13.07	3.88	6.38	13.91	24.17	0.014	13.85
1/26/2023	22.47	0.00	0.00	0.063	22.53	0.369	0.063	0.014	0.000	0.594	0.201	3.00	0.00	6.15	12.14	3.43	6.16	12.94	22.53	0.014	12.88
1/27/2023	22.18	0.00	0.00	0.066	22.25	0.365	0.066	0.013	0.000	0.586	0.202	2.96	0.00	6.29	11.76	3.39	6.30	12.55	22.25	0.013	12.49
1/28/2023	22.67	0.00	0.00	0.059	22.73	0.383	0.059	0.014	0.000	0.615	0.204	2.49	0.00	6.71	12.26	2.93	6.72	13.08	22.73	0.014	13.02
1/29/2023	24.36	0.00	0.00	0.049	24.41	0.366	0.049	0.013	0.000	0.589	0.201	5.04	0.00	6.46	11.69	5.46	6.47	12.48	24.41	0.013	12.43
1/30/2023	23.63	0.00	0.00	0.035	23.67	0.393	0.035	0.014	0.000	0.632	0.194	2.87	0.00	6.73	12.80	3.30	6.74	13.63	23.67	0.014	13.59
1/31/2023	23.56	0.00	0.00	0.052	23.61	0.361	0.052	0.013	0.000	0.580	0.196	4.54	0.00	6.02	11.86	4.95	6.03	12.63	23.61	0.013	12.58
2/1/2023	21.22	0.00	0.00	0.035	21.26	0.379	0.035	0.014	0.000	0.610	0.208	1.20	0.00	6.12	12.69	1.61	6.13	13.51	21.26	0.014	13.47
2/2/2023	22.06	0.00	0.00	0.041	22.10	0.349	0.041	0.013	0.000	0.562	0.197	3.62	0.00	5.68	11.64	4.01	5.69	12.40	22.10	0.013	12.36
2/3/2023	22.25	0.00	0.00	0.043	22.29	0.386	0.043	0.014	0.000	0.621	0.196	1.87	0.00	6.42	12.74	2.30	6.44	13.56	22.29	0.014	13.51
2/4/2023	23.23	0.00	0.00	0.033	23.26	0.367	0.033	0.014	0.000	0.590	0.201	3.85	0.00	6.43	11.78	4.25	6.44	12.57	23.26	0.014	12.54
2/5/2023	22.89	0.00	0.00	0.045	22.94	0.379	0.045	0.014	0.000	0.610	0.202	2.88	0.00	6.64	12.16	3.30	6.66	12.97	22.94	0.014	12.93
2/6/2023	23.18	0.00	0.00	0.052	23.23	0.382	0.052	0.014	0.000	0.614	0.199	3.02	0.00	6.41	12.54	3.45	6.42	13.36	23.23	0.014	13.31

APPENDIX B – DAILY IBT AMOUNTS

	(1)	(2)	(3)	(4)	(5)=1+2 +3+4	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)=6+7+1 2+13	(17)=8+9+ 14	(18)=10+ 11+15	(19)=16+1 7+18	(20)=8+9	(21)=18- 2-3-4
	Water Withdrawal/Purchase (mgd)				Consumptive Use (mgd)							Water Use Discharged as Wastewater (mgd)				Total Returned/Used in Each Basin (mgd)				Interbasin Transfer (mgd)	
	Jordan Lake Withdrawal	Neuse Basin Purchase			Total System Use	Haw		Cape Fear		Neuse		Haw		Cape Fear	Neuse	Haw	Cape Fear	Neuse	Total for All Basins	Haw to Cape Fear	Haw to Neuse
	Haw	Raleigh	Durham	Durham Co. Reclaimed		Potable	WRF Reuse	Potable	WRF Reuse	Potable	WRF Reuse	WTP Process Water	WRF	WRF	Total WRFs						
2/7/2023	22.28	0.00	0.00	0.056	22.34	0.351	0.056	0.013	0.000	0.565	0.205	3.76	0.00	5.97	11.42	4.17	5.98	12.19	22.34	0.013	12.13
2/8/2023	24.64	0.00	0.00	0.060	24.70	0.526	0.060	0.019	0.000	0.846	0.206	3.14	0.00	6.69	13.21	3.73	6.71	14.26	24.70	0.019	14.20
2/9/2023	22.40	0.00	0.00	0.084	22.48	0.367	0.084	0.014	0.000	0.591	0.209	3.05	0.00	6.21	11.96	3.50	6.22	12.76	22.48	0.014	12.68
2/10/2023	22.79	0.00	0.00	0.203	22.99	0.376	0.203	0.014	0.000	0.604	0.550	3.12	0.00	6.35	11.78	3.70	6.36	12.93	22.99	0.014	12.73
2/11/2023	22.96	0.00	0.00	0.178	23.14	0.360	0.178	0.013	0.000	0.579	0.814	4.09	0.00	6.25	10.85	4.63	6.26	12.25	23.14	0.013	12.07
2/12/2023	23.76	0.00	0.00	0.178	23.94	0.397	0.178	0.015	0.000	0.638	0.829	2.96	0.00	5.96	12.96	3.53	5.98	14.43	23.94	0.015	14.25
2/13/2023	23.54	0.00	0.00	0.000	23.54	0.400	0.000	0.015	0.000	0.643	0.274	2.38	0.00	7.02	12.81	2.78	7.03	13.73	23.54	0.015	13.73
2/14/2023	22.75	0.00	0.00	0.000	22.75	0.362	0.000	0.013	0.000	0.582	0.000	3.60	0.00	6.08	12.11	3.96	6.10	12.69	22.75	0.013	12.69
2/15/2023	21.87	0.00	0.00	0.000	21.87	0.367	0.000	0.014	0.000	0.590	0.000	2.45	0.00	6.10	12.35	2.82	6.12	12.94	21.87	0.014	12.94
2/16/2023	23.43	0.00	0.00	0.000	23.43	0.366	0.000	0.013	0.000	0.588	0.000	4.08	0.00	6.16	12.22	4.45	6.17	12.81	23.43	0.014	12.81
2/17/2023	23.49	0.00	0.00	0.000	23.49	0.388	0.000	0.014	0.000	0.623	0.000	2.99	0.00	6.65	12.82	3.38	6.67	13.45	23.49	0.014	13.45
2/18/2023	22.61	0.00	0.00	0.000	22.61	0.371	0.000	0.014	0.000	0.597	0.000	2.97	0.00	6.47	12.19	3.34	6.48	12.78	22.61	0.014	12.78
2/19/2023	22.50	0.00	0.00	0.000	22.50	0.361	0.000	0.013	0.000	0.580	0.000	3.43	0.00	6.33	11.78	3.79	6.35	12.36	22.50	0.013	12.36
2/20/2023	23.62	0.00	0.00	0.000	23.62	0.392	0.000	0.014	0.000	0.630	0.110	2.91	0.00	6.94	12.63	3.30	6.95	13.37	23.62	0.015	13.37
2/21/2023	23.75	0.00	0.00	0.000	23.75	0.367	0.000	0.014	0.000	0.590	0.166	4.34	0.00	6.27	12.00	4.71	6.29	12.76	23.75	0.014	12.76
2/22/2023	23.64	0.00	0.00	0.000	23.64	0.540	0.000	0.020	0.000	0.869	0.171	2.57	0.00	6.56	12.91	3.11	6.58	13.95	23.64	0.020	13.95
2/23/2023	24.38	0.00	0.00	0.000	24.38	0.387	0.000	0.014	0.000	0.623	0.301	3.89	0.00	6.42	12.75	4.28	6.43	13.67	24.38	0.014	13.67
2/24/2023	23.00	0.00	0.00	0.000	23.00	0.385	0.000	0.014	0.000	0.618	0.287	3.39	0.00	6.40	11.91	3.77	6.41	12.81	23.00	0.014	12.81
2/25/2023	22.18	0.00	0.00	0.000	22.18	0.353	0.000	0.013	0.000	0.568	0.298	3.50	0.00	6.11	11.34	3.85	6.12	12.21	22.18	0.013	12.21
2/26/2023	23.39	0.00	0.00	0.000	23.39	0.387	0.000	0.014	0.000	0.623	0.289	2.91	0.00	6.87	12.30	3.30	6.88	13.21	23.39	0.014	13.21
2/27/2023	25.71	0.00	0.00	0.281	25.99	0.749	0.281	0.028	0.000	1.205	0.289	4.22	0.00	6.99	12.23	5.25	7.02	13.73	25.99	0.028	13.44
2/28/2023	25.15	0.00	0.00	0.240	25.39	0.576	0.240	0.021	0.000	0.926	0.298	3.90	0.00	7.00	12.42	4.72	7.02	13.65	25.39	0.021	13.41
3/1/2023	24.50	0.00	0.00	0.236	24.74	0.398	0.236	0.015	0.000	0.639	0.292	3.70	0.00	7.00	12.46	4.33	7.01	13.39	24.74	0.015	13.16
3/2/2023	25.15	0.00	0.00	0.228	25.38	0.415	0.228	0.015	0.000	0.667	0.296	3.43	0.00	6.99	13.33	4.07	7.01	14.30	25.38	0.015	14.07
3/3/2023	24.00	0.00	0.00	0.222	24.22	0.391	0.222	0.014	0.000	0.628	0.305	3.56	0.00	6.53	12.58	4.17	6.54	13.51	24.22	0.015	13.29
3/4/2023	23.00	0.00	0.00	0.217	23.22	1.107	0.217	0.041	0.000	1.780	0.287	2.30	0.00	7.23	10.25	3.62	7.27	12.32	23.22	0.041	12.11
3/5/2023	24.41	0.00	0.00	0.210	24.62	0.982	0.210	0.036	0.000	1.579	0.286	4.28	0.00	4.45	12.80	5.47	4.48	14.67	24.62	0.036	14.46
3/6/2023	26.08	0.00	0.00	0.210	26.29	0.988	0.210	0.036	0.000	1.588	0.296	3.84	0.00	6.97	12.36	5.04	7.01	14.24	26.29	0.037	14.03
3/7/2023	24.19	0.00	0.00	0.221	24.41	0.391	0.221	0.014	0.000	0.629	0.410	3.73	0.00	6.86	12.16	4.34	6.88	13.19	24.41	0.015	12.97
3/8/2023	26.40	0.00	0.00	0.211	26.61	1.117	0.211	0.041	0.000	1.796	0.296	3.96	0.00	6.84	12.34	5.29	6.89	14.44	26.61	0.041	14.23
3/9/2023	24.66	0.00	0.00	0.206	24.87	0.663	0.206	0.024	0.000	1.066	0.316	3.22	0.00	6.82	12.55	4.09	6.84	13.93	24.87	0.025	13.73
3/10/2023	22.28	0.00	0.00	0.213	22.49	0.355	0.213	0.013	0.000	0.570	0.290	3.73	0.00	6.08	11.24	4.30	6.10	12.10	22.49	0.013	11.89
3/11/2023	23.76	0.00	0.00	0.223	23.98	0.504	0.223	0.019	0.000	0.810	0.291	3.14	0.00	7.07	11.93	3.87	7.09	13.03	23.98	0.019	12.81
3/12/2023	22.72	0.00	0.00	0.218	22.94	0.362	0.218	0.013	0.000	0.582	0.276	3.80	0.00	6.75	10.94	4.38	6.76	11.79	22.94	0.013	11.58
3/13/2023	21.50	0.00	0.00	0.226	21.73	0.406	0.226	0.015	0.000	0.653	0.288	0.26	0.00	7.03	12.85	0.89	7.04	13.79	21.73	0.015	13.57
3/14/2023	24.16	0.00	0.00	0.226	24.39	0.394	0.226	0.015	0.000	0.633	0.310	3.56	0.00	6.82	12.43	4.18	6.84	13.37	24.39	0.015	13.14
3/15/2023	24.81	0.00	0.00	0.226	25.04	0.400	0.226	0.015	0.000	0.644	0.340	3.86	0.00	6.76	12.80	4.49	6.77	13.78	25.04	0.015	13.55

APPENDIX B – DAILY IBT AMOUNTS

	(1)	(2)	(3)	(4)	(5)=1+2 +3+4	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)=6+7+1 2+13	(17)=8+9+ 14	(18)=10+ 11+15	(19)=16+1 7+18	(20)=8+9	(21)=18- 2-3-4
	Water Withdrawal/Purchase (mgd)					Consumptive Use (mgd)						Water Use Discharged as Wastewater (mgd)				Total Returned/Used in Each Basin (mgd)				Interbasin Transfer (mgd)	
	Jordan Lake Withdrawal	Neuse Basin Purchase			Total System Use	Haw		Cape Fear		Neuse		Haw		Cape Fear	Neuse	Haw	Cape Fear	Neuse	Total for All Basins	Haw to Cape Fear	Haw to Neuse
	Haw	Raleigh	Durham	Durham Co. Reclaimed		Potable	WRF Reuse	Potable	WRF Reuse	Potable	WRF Reuse	WTP Process Water	WRF	WRF	Total WRFs						
3/16/2023	25.83	0.00	0.00	0.220	26.05	0.656	0.220	0.024	0.000	1.055	0.329	4.42	0.00	6.81	12.53	5.30	6.84	13.92	26.05	0.024	13.70
3/17/2023	25.40	0.00	0.00	0.225	25.63	0.770	0.225	0.028	0.000	1.238	0.316	4.05	0.00	6.85	12.15	5.04	6.88	13.70	25.63	0.028	13.48
3/18/2023	23.69	0.00	0.00	0.251	23.94	0.390	0.251	0.014	0.000	0.628	0.298	3.29	0.00	6.91	12.16	3.93	6.92	13.09	23.94	0.014	12.83
3/19/2023	23.78	0.00	0.00	0.254	24.03	0.393	0.254	0.015	0.000	0.633	0.310	3.22	0.00	7.09	12.12	3.87	7.10	13.06	24.03	0.015	12.81
3/20/2023	24.75	0.00	0.00	0.244	24.99	0.715	0.244	0.026	0.000	1.150	0.307	3.39	0.00	6.87	12.29	4.35	6.90	13.75	24.99	0.026	13.50
3/21/2023	24.75	0.00	0.00	0.232	24.98	0.393	0.232	0.014	0.000	0.632	0.316	4.20	0.00	6.67	12.53	4.82	6.68	13.48	24.98	0.014	13.24
3/22/2023	25.36	0.00	0.00	0.236	25.60	0.561	0.236	0.021	0.000	0.902	0.420	3.67	0.00	6.44	13.34	4.47	6.46	14.67	25.60	0.021	14.43
3/23/2023	24.43	0.00	0.00	0.234	24.66	0.493	0.234	0.018	0.000	0.792	0.333	3.16	0.00	6.58	13.05	3.89	6.60	14.18	24.66	0.018	13.94
3/24/2023	25.97	0.00	0.00	0.227	26.20	0.641	0.227	0.024	0.000	1.031	0.326	4.80	0.00	6.89	12.26	5.67	6.91	13.62	26.20	0.024	13.39
3/25/2023	23.73	0.00	0.00	0.213	23.94	0.389	0.213	0.014	0.000	0.625	0.319	3.38	0.00	6.87	12.13	3.98	6.89	13.07	23.94	0.014	12.86
3/26/2023	23.86	0.00	0.00	0.211	24.07	0.385	0.211	0.014	0.000	0.620	0.303	3.69	0.00	7.12	11.73	4.29	7.13	12.65	24.07	0.014	12.44
3/27/2023	26.36	0.00	0.00	0.209	26.57	0.488	0.209	0.018	0.000	0.785	0.302	3.66	0.00	7.36	13.75	4.36	7.38	14.84	26.57	0.018	14.63
3/28/2023	24.02	0.00	0.00	0.202	24.22	0.391	0.202	0.014	0.000	0.629	0.301	3.54	0.00	6.77	12.37	4.13	6.79	13.30	24.22	0.014	13.10
3/29/2023	25.56	0.00	0.00	0.201	25.76	0.411	0.201	0.015	0.000	0.661	0.313	4.01	0.00	6.94	13.21	4.62	6.95	14.19	25.76	0.015	13.99
3/30/2023	26.36	0.00	0.00	0.202	26.56	0.822	0.202	0.030	0.000	1.321	0.307	4.19	0.00	6.88	12.81	5.21	6.91	14.44	26.56	0.030	14.24
3/31/2023	25.09	0.00	0.00	0.204	25.29	0.575	0.204	0.021	0.000	0.924	0.308	4.35	0.00	6.78	12.14	5.13	6.80	13.37	25.29	0.021	13.16
4/1/2023	23.69	0.00	0.00	0.201	23.89	0.382	0.201	0.014	0.000	0.613	0.313	3.71	0.00	6.55	12.11	4.29	6.56	13.04	23.89	0.014	12.84
4/2/2023	23.88	0.00	0.00	0.197	24.08	0.386	0.197	0.014	0.000	0.621	0.313	3.63	0.00	6.75	12.16	4.22	6.76	13.10	24.08	0.014	12.90
4/3/2023	24.43	0.00	0.00	0.203	24.63	0.950	0.203	0.035	0.000	1.527	0.342	2.87	0.00	6.46	12.25	4.02	6.49	14.12	24.63	0.035	13.91
4/4/2023	24.03	0.00	0.00	0.196	24.23	0.369	0.196	0.014	0.000	0.594	0.357	4.69	0.00	6.16	11.85	5.26	6.17	12.80	24.23	0.014	12.60
4/5/2023	25.88	0.00	0.00	0.193	26.07	1.311	0.193	0.048	0.000	2.108	0.374	3.42	0.00	6.25	12.37	4.92	6.29	14.86	26.07	0.048	14.66
4/6/2023	25.00	0.00	0.00	0.181	25.18	0.820	0.181	0.030	0.000	1.318	0.336	4.40	0.00	6.30	11.80	5.40	6.33	13.45	25.18	0.030	13.27
4/7/2023	22.61	0.00	0.00	0.179	22.79	0.373	0.179	0.014	0.000	0.600	0.292	3.06	0.00	6.26	12.01	3.61	6.27	12.91	22.79	0.014	12.73
4/8/2023	21.31	0.00	0.00	0.180	21.49	0.347	0.180	0.013	0.000	0.557	0.280	3.16	0.00	5.52	11.44	3.69	5.53	12.28	21.49	0.013	12.10
4/9/2023	25.95	0.00	0.00	0.185	26.14	0.403	0.185	0.015	0.000	0.649	0.253	4.80	0.00	6.56	13.27	5.39	6.58	14.17	26.14	0.015	13.98
4/10/2023	25.18	0.00	0.00	0.191	25.37	0.406	0.191	0.015	0.000	0.653	0.313	3.89	0.00	6.95	12.95	4.49	6.97	13.92	25.37	0.015	13.73
4/11/2023	24.87	0.00	0.00	0.193	25.06	0.431	0.193	0.016	0.000	0.694	0.109	2.24	0.00	7.29	14.09	2.86	7.31	14.89	25.06	0.016	14.70
4/12/2023	28.23	0.00	0.00	0.190	28.42	0.437	0.190	0.016	0.000	0.703	0.343	5.29	0.00	7.55	13.89	5.92	7.56	14.94	28.42	0.016	14.75
4/13/2023	25.03	0.00	0.00	0.183	25.21	0.402	0.183	0.015	0.000	0.647	0.353	3.93	0.00	6.83	12.85	4.52	6.85	13.85	25.21	0.015	13.67
4/14/2023	24.99	0.00	0.00	0.174	25.16	0.414	0.174	0.015	0.000	0.666	0.315	3.27	0.00	6.78	13.53	3.86	6.80	14.51	25.16	0.015	14.33
4/15/2023	25.13	0.00	0.00	0.176	25.31	0.413	0.176	0.015	0.000	0.664	0.348	3.46	0.00	6.58	13.65	4.05	6.60	14.66	25.31	0.015	14.48
4/16/2023	25.92	0.00	0.00	0.168	26.09	0.411	0.168	0.015	0.000	0.660	0.324	4.37	0.00	6.90	13.24	4.95	6.91	14.23	26.09	0.015	14.06
4/17/2023	25.73	0.00	0.00	0.181	25.91	0.419	0.181	0.015	0.000	0.673	0.461	3.77	0.00	7.35	13.04	4.37	7.37	14.17	25.91	0.015	13.99
4/18/2023	26.00	0.00	0.00	0.184	26.18	0.410	0.184	0.015	0.000	0.659	0.460	4.49	0.00	7.06	12.91	5.08	7.07	14.03	26.18	0.015	13.84
4/19/2023	26.60	0.00	0.00	0.186	26.79	0.688	0.186	0.025	0.000	1.106	0.432	3.39	0.00	7.19	13.77	4.26	7.21	15.31	26.79	0.025	15.12
4/20/2023	26.41	0.00	0.00	0.173	26.58	0.855	0.173	0.032	0.000	1.375	0.465	3.36	0.00	7.05	13.27	4.39	7.08	15.11	26.58	0.032	14.94
4/21/2023	26.90	0.00	0.00	0.166	27.07	1.032	0.166	0.038	0.000	1.660	0.434	4.14	0.00	6.87	12.72	5.34	6.91	14.82	27.07	0.038	14.65



APPENDIX B – DAILY IBT AMOUNTS

	(1)	(2)	(3)	(4)	(5)=1+2 +3+4	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)=6+7+1 2+13	(17)=8+9+ 14	(18)=10+ 11+15	(19)=16+1 7+18	(20)=8+9	(21)=18- 2-3-4
	Water Withdrawal/Purchase (mgd)					Consumptive Use (mgd)						Water Use Discharged as Wastewater (mgd)				Total Returned/Used in Each Basin (mgd)				Interbasin Transfer (mgd)	
	Jordan Lake Withdrawal	Neuse Basin Purchase			Total System Use	Haw		Cape Fear		Neuse		Haw		Cape Fear	Neuse	Haw	Cape Fear	Neuse	Total for All Basins	Haw to Cape Fear	Haw to Neuse
	Haw	Raleigh	Durham	Durham Co. Reclaimed		Potable	WRF Reuse	Potable	WRF Reuse	Potable	WRF Reuse	WTP Process Water	WRF	WRF	Total WRFs						
4/22/2023	24.09	0.00	0.00	0.159	24.25	0.402	0.159	0.015	0.000	0.647	0.412	2.98	0.00	6.85	12.79	3.54	6.86	13.85	24.25	0.015	13.69
4/23/2023	25.53	0.00	0.00	0.162	25.69	0.417	0.162	0.015	0.000	0.670	0.360	3.66	0.00	7.35	13.06	4.24	7.37	14.09	25.69	0.015	13.92
4/24/2023	25.82	0.00	0.00	0.164	25.98	0.605	0.164	0.022	0.000	0.972	0.382	3.69	0.00	7.33	12.82	4.46	7.35	14.17	25.98	0.022	14.01
4/25/2023	27.78	0.00	0.00	0.174	27.95	0.593	0.174	0.022	0.000	0.953	0.416	5.65	0.00	7.38	12.77	6.42	7.40	14.14	27.95	0.022	13.97
4/26/2023	23.18	0.00	0.00	0.167	23.35	0.560	0.167	0.021	0.000	0.901	0.427	1.15	0.00	6.86	13.26	1.88	6.88	14.59	23.35	0.021	14.42
4/27/2023	25.10	0.00	0.00	0.170	25.27	0.482	0.170	0.018	0.000	0.776	0.376	3.33	0.00	7.40	12.72	3.98	7.42	13.87	25.27	0.018	13.70
4/28/2023	24.42	0.00	0.00	0.166	24.59	0.398	0.166	0.015	0.000	0.639	0.372	3.55	0.00	6.92	12.53	4.11	6.93	13.54	24.59	0.015	13.38
4/29/2023	25.37	0.00	0.00	0.167	25.54	0.847	0.167	0.031	0.000	1.362	0.476	3.32	0.00	7.23	12.11	4.33	7.26	13.94	25.54	0.031	13.78
4/30/2023	23.94	0.00	0.00	0.160	24.10	0.402	0.160	0.015	0.000	0.646	0.475	2.86	0.00	6.38	13.16	3.42	6.40	14.28	24.10	0.015	14.12
5/1/2023	24.78	0.00	0.00	0.157	24.94	0.398	0.157	0.015	0.000	0.641	0.392	3.86	0.00	5.87	13.61	4.42	5.88	14.64	24.94	0.015	14.48
5/2/2023	24.99	0.00	0.00	0.149	25.14	0.403	0.149	0.015	0.001	0.648	0.378	3.82	0.00	6.40	13.32	4.37	6.42	14.35	25.14	0.016	14.20
5/3/2023	27.51	0.00	0.00	0.151	27.66	0.436	0.151	0.016	0.001	0.700	0.395	4.62	0.00	7.67	13.67	5.21	7.69	14.77	27.66	0.017	14.62
5/4/2023	25.56	0.00	0.00	0.115	25.68	0.425	0.115	0.016	0.000	0.683	0.386	3.20	0.00	8.29	12.56	3.74	8.30	13.63	25.68	0.016	13.52
5/5/2023	26.15	0.00	0.00	0.119	26.27	0.904	0.119	0.033	0.000	1.454	0.407	3.46	0.00	7.35	12.54	4.48	7.38	14.41	26.27	0.034	14.29
5/6/2023	27.00	0.00	0.00	0.113	27.11	1.157	0.113	0.043	0.000	1.860	0.397	4.16	0.00	6.92	12.46	5.43	6.96	14.72	27.11	0.043	14.61
5/7/2023	27.62	0.00	0.00	0.110	27.73	1.227	0.110	0.045	0.000	1.973	0.350	3.64	0.00	7.52	12.87	4.98	7.56	15.19	27.73	0.045	15.08
5/8/2023	27.10	0.00	0.00	0.121	27.22	1.517	0.121	0.056	0.000	2.439	0.401	3.33	0.00	7.14	12.22	4.97	7.19	15.06	27.22	0.056	14.94
5/9/2023	28.20	0.00	0.00	0.155	28.36	1.532	0.155	0.056	0.000	2.463	0.486	4.08	0.00	6.99	12.59	5.77	7.05	15.54	28.36	0.056	15.38
5/10/2023	28.74	0.00	0.00	0.132	28.87	1.918	0.132	0.071	0.001	3.083	0.483	3.55	0.00	6.90	12.73	5.60	6.97	16.30	28.87	0.071	16.17
5/11/2023	29.99	0.00	0.00	0.125	30.12	2.851	0.125	0.105	0.000	4.584	0.474	3.23	0.00	6.87	11.87	6.21	6.98	16.93	30.12	0.105	16.80
5/12/2023	29.93	0.00	0.00	0.118	30.05	2.667	0.118	0.098	0.001	4.288	0.544	3.77	0.00	6.77	11.79	6.55	6.87	16.63	30.05	0.099	16.51
5/13/2023	28.65	0.00	0.00	0.102	28.75	2.027	0.102	0.075	0.000	3.259	0.547	3.82	0.00	6.95	11.97	5.95	7.03	15.78	28.75	0.075	15.67
5/14/2023	28.53	0.00	0.00	0.103	28.63	1.835	0.103	0.068	0.000	2.951	0.596	3.96	0.00	7.19	11.93	5.90	7.26	15.48	28.63	0.068	15.37
5/15/2023	29.44	0.00	0.00	0.115	29.56	1.901	0.115	0.070	0.001	3.056	0.589	4.59	0.00	7.02	12.21	6.61	7.09	15.86	29.56	0.071	15.75
5/16/2023	29.08	0.00	0.00	0.115	29.20	2.063	0.115	0.076	0.000	3.317	0.563	3.48	0.00	7.04	12.54	5.66	7.11	16.42	29.20	0.076	16.31
5/17/2023	28.51	0.00	0.00	0.121	28.63	1.026	0.121	0.038	0.000	1.649	0.462	4.21	0.00	7.32	13.81	5.36	7.36	15.92	28.63	0.038	15.80
5/18/2023	28.05	0.00	0.00	0.122	28.17	2.137	0.122	0.079	0.000	3.436	0.488	2.80	0.00	6.81	12.30	5.06	6.89	16.23	28.17	0.079	16.11
5/19/2023	25.90	0.00	0.00	0.101	26.00	0.831	0.101	0.031	0.000	1.337	0.440	4.03	0.00	6.98	12.25	4.96	7.01	14.02	26.00	0.031	13.92
5/20/2023	27.16	0.00	0.00	0.101	27.26	1.404	0.101	0.052	0.000	2.258	0.423	4.14	0.00	6.96	11.92	5.65	7.01	14.60	27.26	0.052	14.50
5/21/2023	26.30	0.00	0.00	0.109	26.41	1.306	0.109	0.048	0.000	2.100	0.423	3.13	0.00	7.25	12.04	4.55	7.30	14.57	26.41	0.048	14.46
5/22/2023	29.19	0.00	0.00	0.104	29.29	1.858	0.104	0.068	0.000	2.988	0.474	4.92	0.00	7.02	11.86	6.88	7.09	15.32	29.29	0.069	15.22
5/23/2023	30.48	0.00	0.00	0.131	30.61	2.779	0.131	0.102	0.002	4.469	0.556	3.92	0.00	6.85	11.80	6.83	6.96	16.82	30.61	0.104	16.69
5/24/2023	32.14	0.00	0.00	0.133	32.27	3.382	0.133	0.125	0.001	5.437	0.395	3.68	0.00	6.98	12.14	7.19	7.11	17.97	32.27	0.125	17.84
5/25/2023	30.29	0.00	0.00	0.136	30.43	2.295	0.136	0.085	0.001	3.690	0.389	4.64	0.00	6.93	12.26	7.07	7.02	16.34	30.43	0.085	16.20
5/26/2023	29.12	0.00	0.00	0.116	29.24	2.810	0.116	0.104	0.001	4.518	0.490	3.62	0.00	6.84	10.73	6.55	6.95	15.74	29.24	0.104	15.63
5/27/2023	25.94	0.00	0.00	0.087	26.03	1.257	0.087	0.046	0.001	2.021	0.405	3.66	0.00	6.77	11.78	5.00	6.82	14.21	26.03	0.047	14.12
5/28/2023	23.60	0.00	0.00	0.114	23.71	0.390	0.114	0.014	0.001	0.627	0.366	3.10	0.00	7.20	11.90	3.60	7.22	12.89	23.71	0.015	12.78



APPENDIX B – DAILY IBT AMOUNTS

	(1)	(2)	(3)	(4)	(5)=1+2 +3+4	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)=6+7+1 2+13	(17)=8+9+ 14	(18)=10+ 11+15	(19)=16+1 7+18	(20)=8+9	(21)=18- 2-3-4
	Water Withdrawal/Purchase (mgd)				Consumptive Use (mgd)							Water Use Discharged as Wastewater (mgd)				Total Returned/Used in Each Basin (mgd)				Interbasin Transfer (mgd)	
	Jordan Lake Withdrawal	Neuse Basin Purchase			Total System Use	Haw		Cape Fear		Neuse		Haw		Cape Fear	Neuse	Haw	Cape Fear	Neuse	Total for All Basins	Haw to Cape Fear	Haw to Neuse
	Haw	Raleigh	Durham	Durham Co. Reclaimed		Potable	WRF Reuse	Potable	WRF Reuse	Potable	WRF Reuse	WTP Process Water	WRF	WRF	Total WRFs						
5/29/2023	24.42	0.00	0.00	0.091	24.51	0.591	0.091	0.022	0.001	0.951	0.401	3.04	0.00	7.31	12.11	3.72	7.33	13.46	24.51	0.023	13.37
5/30/2023	27.20	0.00	0.00	0.124	27.32	1.178	0.124	0.043	0.000	1.895	0.405	4.01	0.00	6.98	12.69	5.31	7.02	14.99	27.32	0.043	14.87
5/31/2023	26.18	0.00	0.00	0.118	26.30	0.819	0.118	0.030	0.000	1.316	0.420	3.85	0.00	6.89	12.86	4.79	6.92	14.59	26.30	0.030	14.47
6/1/2023	27.09	0.00	0.00	0.127	27.22	1.680	0.127	0.062	0.000	2.701	0.450	2.99	0.00	6.98	12.22	4.80	7.05	15.37	27.22	0.062	15.25
6/2/2023	28.71	0.00	0.00	0.113	28.82	1.978	0.113	0.073	0.000	3.181	0.544	4.07	0.00	6.68	12.18	6.16	6.75	15.91	28.82	0.073	15.80
6/3/2023	28.49	0.00	0.00	0.117	28.61	2.004	0.117	0.074	0.000	3.223	0.519	4.03	0.00	6.87	11.77	6.15	6.94	15.51	28.61	0.074	15.40
6/4/2023	28.50	0.00	0.00	0.123	28.62	2.238	0.123	0.083	0.000	3.599	0.494	3.60	0.00	6.99	11.49	5.96	7.08	15.59	28.62	0.083	15.46
6/5/2023	28.81	0.00	0.00	0.143	28.95	2.164	0.143	0.080	0.000	3.479	0.541	3.70	0.00	6.78	12.07	6.01	6.86	16.09	28.95	0.080	15.95
6/6/2023	31.53	0.00	0.00	0.139	31.67	2.721	0.139	0.100	0.001	4.375	0.553	5.27	0.00	6.69	11.82	8.13	6.79	16.75	31.67	0.101	16.61
6/7/2023	29.60	0.00	0.00	0.111	29.71	2.952	0.111	0.109	0.000	4.747	0.526	3.98	0.00	5.20	12.09	7.04	5.31	17.36	29.71	0.109	17.25
6/8/2023	28.86	0.00	0.00	0.166	29.03	2.484	0.166	0.092	0.000	3.994	0.527	4.35	0.00	5.78	11.63	7.00	5.88	16.15	29.03	0.092	15.98
6/9/2023	29.88	0.00	0.00	0.143	30.02	3.226	0.143	0.119	0.001	5.188	0.562	3.20	0.00	6.68	10.91	6.57	6.80	16.66	30.02	0.120	16.51
6/10/2023	32.24	0.00	0.00	0.140	32.38	3.527	0.140	0.130	0.001	5.671	0.622	4.68	0.00	6.59	11.02	8.35	6.72	17.31	32.38	0.131	17.17
6/11/2023	30.95	0.00	0.00	0.129	31.08	3.631	0.129	0.134	0.001	5.839	0.553	3.03	0.00	6.67	11.09	6.79	6.81	17.48	31.08	0.135	17.35
6/12/2023	27.10	0.00	0.00	0.152	27.25	1.985	0.152	0.073	0.001	3.192	0.596	2.95	0.00	6.72	11.58	5.09	6.80	15.37	27.25	0.075	15.21
6/13/2023	32.57	0.00	0.00	0.140	32.71	3.481	0.140	0.128	0.000	5.597	0.617	4.71	0.00	7.00	11.04	8.33	7.12	17.26	32.71	0.128	17.12
6/14/2023	31.73	0.00	0.00	0.176	31.91	3.633	0.176	0.134	0.000	5.842	0.636	3.28	0.00	6.45	11.76	7.09	6.58	18.24	31.91	0.134	18.06
6/15/2023	33.49	0.00	0.00	0.197	33.69	4.267	0.197	0.157	0.000	6.861	0.715	4.05	0.00	6.46	10.98	8.51	6.61	18.56	33.69	0.157	18.36
6/16/2023	34.01	0.00	0.00	0.210	34.22	4.668	0.210	0.172	0.000	7.506	0.719	3.69	0.00	6.42	10.83	8.57	6.59	19.06	34.22	0.172	18.85
6/17/2023	32.49	0.00	0.00	0.230	32.72	4.285	0.230	0.158	0.000	6.890	0.581	3.62	0.00	6.29	10.66	8.13	6.45	18.13	32.72	0.158	17.90
6/18/2023	33.12	0.00	0.00	0.225	33.35	4.257	0.225	0.157	0.000	6.846	0.619	4.38	0.00	6.41	10.45	8.86	6.57	17.91	33.35	0.157	17.69
6/19/2023	30.20	0.00	0.00	0.198	30.40	3.018	0.198	0.111	0.000	4.852	0.593	3.84	0.00	6.74	11.05	7.06	6.85	16.50	30.40	0.111	16.30
6/20/2023	27.87	0.00	0.00	0.189	28.06	0.900	0.189	0.033	0.000	1.447	0.480	2.88	0.00	7.30	14.83	3.97	7.33	16.76	28.06	0.033	16.57
6/21/2023	28.55	0.00	0.00	0.168	28.72	0.837	0.168	0.031	0.000	1.345	0.460	4.62	0.00	8.33	12.92	5.62	8.37	14.73	28.72	0.031	14.56
6/22/2023	26.53	0.00	0.00	0.174	26.70	0.453	0.174	0.017	0.000	0.728	0.454	2.75	0.00	8.04	14.09	3.38	8.06	15.27	26.70	0.017	15.09
6/23/2023	27.72	0.00	0.00	0.168	27.89	0.448	0.168	0.017	0.002	0.721	0.459	4.18	0.00	7.43	14.46	4.80	7.45	15.64	27.89	0.018	15.47
6/24/2023	26.02	0.00	0.00	0.226	26.25	0.799	0.226	0.029	0.000	1.285	0.459	3.40	0.00	6.94	13.11	4.43	6.97	14.85	26.25	0.029	14.62
6/25/2023	27.39	0.00	0.00	0.208	27.60	1.745	0.208	0.064	0.000	2.806	0.486	3.00	0.00	7.10	12.19	4.95	7.17	15.48	27.60	0.064	15.27
6/26/2023	27.62	0.00	0.00	0.205	27.83	1.300	0.205	0.048	0.000	2.091	0.549	4.50	0.00	6.99	12.15	6.01	7.03	14.79	27.83	0.048	14.58
6/27/2023	29.09	0.00	0.00	0.251	29.34	1.898	0.251	0.070	0.000	3.052	0.581	4.51	0.00	6.62	12.36	6.66	6.69	15.99	29.34	0.070	15.74
6/28/2023	31.18	0.00	0.00	0.223	31.40	3.136	0.223	0.116	0.000	5.043	0.586	3.39	0.00	6.55	12.36	6.75	6.67	17.99	31.40	0.116	17.76
6/29/2023	30.66	0.00	0.00	0.277	30.94	3.031	0.277	0.112	0.000	4.874	0.630	3.66	0.00	6.48	11.87	6.97	6.59	17.37	30.94	0.112	17.10
6/30/2023	31.71	0.00	0.00	0.264	31.97	3.299	0.264	0.122	0.000	5.305	0.603	4.29	0.00	6.40	11.69	7.85	6.52	17.60	31.97	0.122	17.34
7/1/2023	26.57	0.00	0.00	0.232	26.80	2.014	0.232	0.074	0.000	3.239	0.538	2.34	0.00	6.66	11.71	4.59	6.73	15.49	26.80	0.074	15.25
7/2/2023	27.04	0.00	0.00	0.264	27.30	2.053	0.264	0.076	0.000	3.301	0.521	3.96	0.00	6.25	10.88	6.28	6.33	14.70	27.30	0.076	14.43
7/3/2023	27.04	0.00	0.00	0.261	27.30	1.762	0.261	0.065	0.000	2.833	1.690	3.64	0.00	6.23	10.82	5.66	6.30	15.34	27.30	0.065	15.08
7/4/2023	28.68	0.00	0.00	0.310	28.99	2.902	0.310	0.107	0.000	4.666	0.634	3.24	0.00	6.51	10.62	6.45	6.62	15.92	28.99	0.107	15.61

APPENDIX B – DAILY IBT AMOUNTS

	(1)	(2)	(3)	(4)	(5)=1+2 +3+4	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)=6+7+1 2+13	(17)=8+9+ 14	(18)=10+ 11+15	(19)=16+1 7+18	(20)=8+9	(21)=18- 2-3-4
	Water Withdrawal/Purchase (mgd)					Consumptive Use (mgd)						Water Use Discharged as Wastewater (mgd)				Total Returned/Used in Each Basin (mgd)				Interbasin Transfer (mgd)	
	Jordan Lake Withdrawal	Neuse Basin Purchase			Total System Use	Haw		Cape Fear		Neuse		Haw		Cape Fear	Neuse	Haw	Cape Fear	Neuse	Total for All Basins	Haw to Cape Fear	Haw to Neuse
	Haw	Raleigh	Durham	Durham Co. Reclaimed		Potable	WRF Reuse	Potable	WRF Reuse	Potable	WRF Reuse	WTP Process Water	WRF	WRF	Total WRFs						
7/5/2023	28.97	0.00	0.00	0.294	29.26	2.406	0.294	0.089	0.000	3.869	0.583	3.88	0.00	6.46	11.69	6.58	6.54	16.14	29.26	0.089	15.85
7/6/2023	30.37	0.00	0.00	0.305	30.68	2.937	0.305	0.108	0.000	4.723	0.500	4.13	0.00	6.46	11.51	7.37	6.57	16.73	30.68	0.108	16.43
7/7/2023	30.39	0.00	0.00	0.312	30.70	3.074	0.312	0.113	0.000	4.943	0.558	3.57	0.00	6.47	11.66	6.96	6.58	17.16	30.70	0.114	16.85
7/8/2023	27.58	0.00	0.00	0.327	27.91	1.675	0.327	0.062	0.000	2.693	0.461	3.29	0.00	7.09	12.31	5.29	7.15	15.46	27.91	0.062	15.14
7/9/2023	25.86	0.00	0.00	0.310	26.17	0.590	0.310	0.022	0.000	0.949	0.438	2.48	0.00	7.86	13.53	3.38	7.88	14.91	26.17	0.022	14.60
7/10/2023	25.95	0.00	0.00	0.283	26.23	0.792	0.283	0.029	0.000	1.274	0.459	3.88	0.00	7.10	12.42	4.96	7.13	14.15	26.23	0.029	13.87
7/11/2023	28.75	0.00	0.00	0.373	29.12	2.098	0.373	0.077	0.000	3.374	0.529	3.55	0.00	6.97	12.15	6.02	7.05	16.05	29.12	0.077	15.68
7/12/2023	32.94	0.00	0.00	0.326	33.27	3.018	0.326	0.111	0.000	4.854	0.557	5.19	0.00	7.11	12.10	8.53	7.22	17.51	33.27	0.111	17.18
7/13/2023	29.31	0.00	0.00	0.337	29.65	2.766	0.337	0.102	0.000	4.447	0.609	2.56	0.00	7.13	11.69	5.66	7.23	16.75	29.65	0.102	16.41
7/14/2023	29.68	0.00	0.00	0.306	29.99	0.632	0.306	0.023	0.000	1.016	0.576	5.28	0.00	8.27	13.89	6.22	8.29	15.48	29.99	0.023	15.17
7/15/2023	25.61	0.00	0.00	0.319	25.93	0.900	0.319	0.033	0.000	1.448	0.509	2.47	0.00	7.35	12.90	3.69	7.39	14.85	25.93	0.033	14.53
7/16/2023	29.42	0.00	0.00	0.407	29.83	1.975	0.407	0.073	0.000	3.176	0.607	4.19	0.00	7.20	12.20	6.57	7.27	15.98	29.83	0.073	15.58
7/17/2023	28.41	0.00	0.00	0.334	28.74	2.543	0.334	0.094	0.000	4.089	0.626	3.30	0.00	6.93	10.83	6.18	7.02	15.54	28.74	0.094	15.21
7/18/2023	30.84	0.00	0.00	0.389	31.23	2.819	0.389	0.104	0.001	4.533	0.696	4.16	0.00	6.75	11.78	7.37	6.85	17.01	31.23	0.105	16.62
7/19/2023	29.67	0.00	0.00	0.312	29.98	2.134	0.312	0.079	0.000	3.431	0.610	3.51	0.00	6.89	13.01	5.96	6.97	17.06	29.98	0.079	16.74
7/20/2023	29.31	0.00	0.00	0.356	29.67	2.796	0.356	0.103	0.000	4.496	0.539	2.56	0.00	6.71	12.10	5.71	6.82	17.14	29.67	0.103	16.78
7/21/2023	30.45	0.00	0.00	0.403	30.85	3.177	0.403	0.117	0.000	5.109	0.610	3.55	0.00	6.53	11.35	7.13	6.65	17.07	30.85	0.117	16.67
7/22/2023	30.40	0.00	0.00	0.369	30.77	3.069	0.369	0.113	0.000	4.934	0.626	3.99	0.00	6.51	11.15	7.43	6.63	16.71	30.77	0.113	16.35
7/23/2023	29.89	0.00	0.00	0.361	30.25	2.847	0.361	0.105	0.000	4.578	0.601	3.57	0.00	6.77	11.42	6.78	6.87	16.60	30.25	0.105	16.24
7/24/2023	30.45	0.00	0.00	0.322	30.77	2.941	0.322	0.108	0.000	4.729	0.516	3.55	0.00	6.80	11.80	6.81	6.91	17.05	30.77	0.109	16.73
7/25/2023	30.36	0.00	0.00	0.377	30.74	2.919	0.377	0.108	0.000	4.694	0.639	3.68	0.00	6.53	11.79	6.98	6.63	17.13	30.74	0.108	16.75
7/26/2023	32.78	0.00	0.00	0.352	33.13	3.741	0.352	0.138	0.000	6.015	0.685	3.73	0.00	6.62	11.85	7.82	6.76	18.55	33.13	0.138	18.20
7/27/2023	32.73	0.00	0.00	0.413	33.14	3.519	0.413	0.130	0.000	5.658	0.689	4.04	0.00	6.55	12.15	7.97	6.68	18.50	33.14	0.130	18.08
7/28/2023	34.21	0.00	0.00	0.400	34.61	4.275	0.400	0.158	0.000	6.874	0.678	4.57	0.00	6.35	11.31	9.25	6.50	18.86	34.61	0.158	18.46
7/29/2023	30.36	0.00	0.00	0.438	30.80	3.379	0.438	0.125	0.000	5.433	0.632	2.94	0.00	6.58	11.27	6.76	6.70	17.34	30.80	0.125	16.90
7/30/2023	30.93	0.00	0.00	0.438	31.37	3.420	0.438	0.126	0.000	5.500	0.676	3.07	0.00	6.73	11.41	6.93	6.85	17.59	31.37	0.126	17.15
7/31/2023	30.73	0.00	0.00	0.329	31.06	3.244	0.329	0.120	0.001	5.216	0.582	3.73	0.00	6.77	11.07	7.30	6.89	16.87	31.06	0.120	16.54
8/1/2023	30.40	0.00	0.00	0.366	30.77	2.217	0.366	0.082	0.000	3.565	0.501	4.82	0.00	6.53	12.69	7.40	6.61	16.76	30.77	0.082	16.39
8/2/2023	30.58	0.00	0.00	0.322	30.90	2.908	0.322	0.107	0.000	4.676	0.608	2.98	0.00	6.67	12.63	6.21	6.78	17.92	30.90	0.108	17.59
8/3/2023	29.65	0.00	0.00	0.336	29.99	3.094	0.336	0.114	0.000	4.975	0.585	2.97	0.00	6.57	11.35	6.40	6.68	16.90	29.99	0.114	16.57
8/4/2023	29.70	0.00	0.00	0.288	29.99	2.365	0.288	0.087	0.000	3.803	2.036	3.43	0.00	6.57	11.40	6.08	6.66	17.24	29.99	0.087	16.96
8/5/2023	28.27	0.00	0.00	0.364	28.63	2.616	0.364	0.096	0.000	4.206	0.633	2.89	0.00	6.70	11.13	5.87	6.80	15.96	28.63	0.096	15.60
8/6/2023	30.96	0.00	0.00	0.385	31.35	3.525	0.385	0.130	0.000	5.668	0.652	2.98	0.00	6.90	11.10	6.89	7.03	17.42	31.35	0.130	17.04
8/7/2023	29.76	0.00	0.00	0.301	30.06	2.383	0.301	0.088	0.000	3.832	0.613	4.21	0.00	6.82	11.81	6.89	6.91	16.26	30.06	0.088	15.96
8/8/2023	27.44	0.00	0.00	0.348	27.79	1.918	0.348	0.071	0.000	3.084	0.571	3.84	0.00	6.57	11.38	6.11	6.64	15.04	27.79	0.071	14.69
8/9/2023	30.35	0.00	0.00	0.335	30.69	3.305	0.335	0.122	0.000	5.314	0.650	2.85	0.00	6.54	11.57	6.49	6.66	17.53	30.69	0.122	17.20
8/10/2023	30.60	0.00	0.00	0.301	30.90	2.665	0.301	0.098	0.000	4.284	0.566	4.60	0.00	6.80	11.59	7.57	6.90	16.44	30.90	0.098	16.14

APPENDIX B – DAILY IBT AMOUNTS

	(1)	(2)	(3)	(4)	(5)=1+2 +3+4	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)=6+7+1 2+13	(17)=8+9+ 14	(18)=10+ 11+15	(19)=16+1 7+18	(20)=8+9	(21)=18- 2-3-4
	Water Withdrawal/Purchase (mgd)					Consumptive Use (mgd)						Water Use Discharged as Wastewater (mgd)				Total Returned/Used in Each Basin (mgd)				Interbasin Transfer (mgd)	
	Jordan Lake Withdrawal	Neuse Basin Purchase			Total System Use	Haw		Cape Fear		Neuse		Haw		Cape Fear	Neuse	Haw	Cape Fear	Neuse	Total for All Basins	Haw to Cape Fear	Haw to Neuse
	Haw	Raleigh	Durham	Durham Co. Reclaimed		Potable	WRF Reuse	Potable	WRF Reuse	Potable	WRF Reuse	WTP Process Water	WRF	WRF	Total WRFs						
8/11/2023	28.96	0.00	0.00	0.315	29.28	2.752	0.315	0.101	0.001	4.425	0.576	3.40	0.00	6.56	11.14	6.47	6.67	16.14	29.28	0.102	15.83
8/12/2023	31.06	0.00	0.00	0.363	31.42	3.478	0.363	0.128	0.000	5.593	0.589	3.84	0.00	6.62	10.81	7.68	6.75	17.00	31.42	0.128	16.63
8/13/2023	32.72	0.00	0.00	0.418	33.14	3.772	0.418	0.139	0.000	6.065	0.605	4.34	0.00	6.85	10.95	8.53	6.99	17.62	33.14	0.139	17.20
8/14/2023	30.69	0.00	0.00	0.398	31.09	3.195	0.398	0.118	0.000	5.137	0.650	3.37	0.00	6.75	11.46	6.97	6.87	17.25	31.09	0.118	16.85
8/15/2023	30.86	0.00	0.00	0.367	31.23	2.778	0.367	0.102	0.000	4.467	0.596	4.90	0.00	6.71	11.30	8.04	6.82	16.37	31.23	0.102	16.00
8/16/2023	29.00	0.00	0.00	0.375	29.38	2.499	0.375	0.092	0.000	4.019	0.565	3.54	0.00	6.61	11.67	6.41	6.71	16.25	29.38	0.092	15.88
8/17/2023	32.17	0.00	0.00	0.397	32.57	3.156	0.397	0.116	0.000	5.074	0.496	5.09	0.00	6.64	11.60	8.64	6.75	17.17	32.57	0.116	16.78
8/18/2023	31.24	0.00	0.00	0.400	31.64	3.911	0.400	0.144	0.000	6.289	0.563	3.54	0.00	6.47	10.33	7.85	6.61	17.18	31.64	0.144	16.78
8/19/2023	31.63	0.00	0.00	0.414	32.04	3.753	0.414	0.138	0.000	6.034	0.615	4.36	0.00	6.41	10.32	8.53	6.55	16.97	32.04	0.138	16.55
8/20/2023	31.44	0.00	0.00	0.462	31.90	3.805	0.462	0.140	0.000	6.118	0.572	3.38	0.00	6.73	10.69	7.65	6.87	17.38	31.90	0.140	16.92
8/21/2023	32.87	0.00	0.00	0.440	33.31	3.777	0.440	0.139	0.000	6.073	0.616	4.78	0.00	6.57	10.91	9.00	6.71	17.60	33.31	0.139	17.16
8/22/2023	34.34	0.00	0.00	0.493	34.83	4.571	0.493	0.169	0.000	7.350	0.644	4.45	0.00	6.41	10.75	9.51	6.57	18.74	34.83	0.169	18.25
8/23/2023	33.32	0.00	0.00	0.377	33.70	4.161	0.377	0.153	0.000	6.690	0.646	4.33	0.00	6.38	10.96	8.87	6.53	18.29	33.70	0.153	17.92
8/24/2023	32.56	0.00	0.00	0.474	33.03	4.175	0.474	0.154	0.000	6.713	0.615	3.68	0.00	6.36	10.87	8.33	6.51	18.20	33.03	0.154	17.72
8/25/2023	35.49	0.00	0.00	0.507	36.00	5.108	0.507	0.188	0.000	8.213	0.646	4.97	0.00	6.40	9.96	10.58	6.59	18.82	36.00	0.188	18.32
8/26/2023	32.97	0.00	0.00	0.492	33.46	4.450	0.492	0.164	0.000	7.155	0.637	3.35	0.00	6.64	10.57	8.29	6.80	18.37	33.46	0.164	17.87
8/27/2023	32.19	0.00	0.00	0.375	32.57	3.251	0.375	0.120	0.000	5.227	0.592	4.44	0.00	7.13	11.43	8.07	7.25	17.25	32.57	0.120	16.88
8/28/2023	28.54	0.00	0.00	0.404	28.94	2.401	0.404	0.089	0.000	3.861	0.549	3.59	0.00	6.71	11.34	6.40	6.80	15.75	28.94	0.089	15.35
8/29/2023	30.10	0.00	0.00	0.426	30.53	2.876	0.426	0.106	0.000	4.624	0.438	4.28	0.00	6.59	11.18	7.58	6.70	16.25	30.53	0.106	15.82
8/30/2023	30.31	0.00	0.00	0.369	30.68	2.665	0.369	0.098	0.000	4.285	0.415	4.46	0.00	6.57	11.82	7.49	6.67	16.52	30.68	0.098	16.15
8/31/2023	24.75	0.00	0.00	0.364	25.11	1.527	0.364	0.056	0.000	2.455	0.314	1.95	0.00	6.77	11.68	3.84	6.82	14.45	25.11	0.056	14.09
9/1/2023	31.43	0.00	0.00	0.380	31.81	3.425	0.380	0.126	0.000	5.507	0.514	4.91	0.00	6.45	10.50	8.71	6.57	16.52	31.81	0.126	16.14
9/2/2023	28.47	0.00	0.00	0.414	28.88	2.781	0.414	0.103	0.000	4.472	0.610	4.21	0.00	6.20	10.09	7.41	6.30	15.17	28.88	0.103	14.76
9/3/2023	29.76	0.00	0.00	0.430	30.19	3.245	0.430	0.120	0.000	5.218	0.582	4.51	0.00	6.17	9.91	8.19	6.29	15.71	30.19	0.120	15.28
9/4/2023	29.33	0.00	0.00	0.405	29.74	3.066	0.405	0.113	0.000	4.930	0.608	2.71	0.00	6.90	11.00	6.18	7.02	16.54	29.74	0.113	16.13
9/5/2023	34.59	0.00	0.00	0.505	35.10	4.088	0.505	0.151	0.000	6.574	0.618	5.48	0.00	6.63	11.05	10.07	6.78	18.24	35.10	0.151	17.74
9/6/2023	33.53	0.00	0.00	0.427	33.96	4.163	0.427	0.153	0.000	6.693	0.669	3.80	0.00	6.53	11.53	8.39	6.68	18.89	33.96	0.153	18.46
9/7/2023	34.40	0.00	0.00	0.652	35.05	4.402	0.652	0.162	0.000	7.078	0.654	5.13	0.00	6.45	10.52	10.18	6.61	18.25	35.05	0.162	17.60
9/8/2023	33.62	0.00	0.00	0.567	34.19	4.201	0.567	0.155	0.000	6.755	0.689	4.33	0.00	6.51	10.98	9.10	6.66	18.42	34.19	0.155	17.86
9/9/2023	30.19	0.00	0.00	0.490	30.68	2.116	0.490	0.078	0.000	3.403	0.525	1.80	0.00	8.01	14.25	4.41	8.09	18.18	30.68	0.078	17.69
9/10/2023	27.68	0.00	0.00	0.569	28.25	1.290	0.569	0.048	0.000	2.074	0.469	3.57	0.00	7.57	12.66	5.43	7.61	15.21	28.25	0.048	14.64
9/11/2023	28.88	0.00	0.00	0.363	29.24	2.390	0.363	0.088	0.000	3.843	0.463	3.47	0.00	7.00	11.62	6.22	7.09	15.93	29.24	0.088	15.57
9/12/2023	28.88	0.00	0.00	0.425	29.31	2.536	0.425	0.093	0.000	4.078	0.517	3.47	0.00	6.69	11.49	6.43	6.79	16.09	29.31	0.094	15.66
9/13/2023	31.20	0.00	0.00	0.352	31.55	2.411	0.352	0.089	0.000	3.877	0.520	5.74	0.00	6.63	11.93	8.50	6.72	16.33	31.55	0.089	15.97
9/14/2023	30.72	0.00	0.00	0.363	31.08	2.212	0.363	0.082	0.000	3.557	0.529	5.03	0.00	6.57	12.74	7.61	6.65	16.83	31.08	0.082	16.47
9/15/2023	31.35	0.00	0.00	0.361	31.71	2.765	0.361	0.102	0.000	4.446	0.560	5.05	0.00	6.43	11.99	8.18	6.54	17.00	31.71	0.102	16.64
9/16/2023	30.13	0.00	0.00	0.391	30.52	3.089	0.391	0.114	0.000	4.967	0.578	4.10	0.00	6.56	10.72	7.58	6.68	16.27	30.52	0.114	15.87

APPENDIX B – DAILY IBT AMOUNTS

	(1)	(2)	(3)	(4)	(5)=1+2 +3+4	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)=6+7+1 2+13	(17)=8+9+ 14	(18)=10+ 11+15	(19)=16+1 7+18	(20)=8+9	(21)=18- 2-3-4
	Water Withdrawal/Purchase (mgd)				Consumptive Use (mgd)							Water Use Discharged as Wastewater (mgd)				Total Returned/Used in Each Basin (mgd)				Interbasin Transfer (mgd)	
	Jordan Lake Withdrawal	Neuse Basin Purchase			Total System Use	Haw		Cape Fear		Neuse		Haw		Cape Fear	Neuse	Haw	Cape Fear	Neuse	Total for All Basins	Haw to Cape Fear	Haw to Neuse
	Haw	Raleigh	Durham	Durham Co. Reclaimed		Potable	WRF Reuse	Potable	WRF Reuse	Potable	WRF Reuse	WTP Process Water	WRF	WRF	Total WRFs						
9/17/2023	29.30	0.00	0.00	0.314	29.61	2.272	0.314	0.084	0.000	3.653	0.516	4.50	0.00	6.95	11.32	7.09	7.03	15.49	29.61	0.084	15.18
9/18/2023	30.41	0.00	0.00	0.355	30.77	2.291	0.355	0.084	0.000	3.684	0.474	5.66	0.00	6.42	11.79	8.31	6.51	15.95	30.77	0.085	15.59
9/19/2023	29.84	0.00	0.00	0.435	30.28	2.929	0.435	0.108	0.000	4.710	0.544	4.13	0.00	6.39	11.03	7.49	6.50	16.28	30.28	0.108	15.85
9/20/2023	31.94	0.00	0.00	0.333	32.27	3.283	0.333	0.121	0.000	5.279	0.595	4.93	0.00	6.37	11.36	8.55	6.49	17.24	32.27	0.121	16.90
9/21/2023	30.41	0.00	0.00	0.342	30.75	2.606	0.342	0.096	0.000	4.191	0.557	5.66	0.00	6.40	10.90	8.61	6.50	15.64	30.75	0.096	15.30
9/22/2023	30.18	0.00	0.00	0.270	30.45	2.613	0.270	0.096	0.000	4.201	0.503	5.43	0.00	6.41	10.93	8.31	6.51	15.63	30.45	0.096	15.36
9/23/2023	25.31	0.00	0.00	0.282	25.59	0.404	0.282	0.015	0.000	0.650	0.418	4.20	0.00	6.79	12.83	4.89	6.81	13.90	25.59	0.015	13.62
9/24/2023	28.69	0.00	0.00	0.335	29.03	1.258	0.335	0.046	0.000	2.023	0.385	4.07	0.00	7.57	13.34	5.66	7.62	15.75	29.03	0.046	15.41
9/25/2023	28.61	0.00	0.00	0.283	28.89	1.737	0.283	0.064	0.001	2.793	0.413	4.69	0.00	6.87	12.05	6.71	6.93	15.25	28.89	0.065	14.97
9/26/2023	30.85	0.00	0.00	0.357	31.21	2.508	0.357	0.092	0.001	4.032	0.744	4.79	0.00	6.60	12.08	7.65	6.70	16.86	31.21	0.093	16.50
9/27/2023	30.27	0.00	0.00	0.271	30.54	1.963	0.271	0.072	0.001	3.157	0.486	5.04	0.00	6.51	13.04	7.27	6.58	16.68	30.54	0.073	16.41
9/28/2023	30.27	0.00	0.00	0.304	30.57	2.503	0.304	0.092	0.001	4.025	0.480	5.04	0.00	6.55	11.58	7.85	6.64	16.08	30.57	0.093	15.78
9/29/2023	30.28	0.00	0.00	0.307	30.59	3.162	0.307	0.117	0.001	5.084	0.578	4.02	0.00	6.50	10.81	7.49	6.62	16.48	30.59	0.118	16.17
9/30/2023	28.44	0.00	0.00	0.295	28.74	2.335	0.295	0.086	0.000	3.755	0.541	3.69	0.00	6.94	11.10	6.32	7.02	15.39	28.74	0.086	15.10
10/1/2023	29.64	0.00	0.00	0.332	29.97	2.412	0.332	0.089	0.003	3.879	0.303	4.47	0.00	6.95	11.54	7.21	7.04	15.72	29.97	0.092	15.39
10/2/2023	29.66	0.00	0.00	0.291	29.95	2.315	0.291	0.085	0.000	3.723	0.413	4.89	0.00	6.67	11.56	7.50	6.76	15.70	29.95	0.085	15.40
10/3/2023	33.30	0.00	0.00	0.379	33.68	3.038	0.379	0.112	0.000	4.885	0.523	7.00	0.00	6.43	11.31	10.42	6.54	16.72	33.68	0.112	16.34
10/4/2023	30.79	0.00	0.00	0.274	31.06	3.200	0.274	0.118	0.000	5.146	0.537	3.73	0.00	6.46	11.60	7.20	6.58	17.28	31.06	0.118	17.01
10/5/2023	29.72	0.00	0.00	0.326	30.05	2.694	0.326	0.099	0.000	4.332	0.467	3.94	0.00	6.46	11.72	6.96	6.56	16.52	30.05	0.099	16.20
10/6/2023	30.31	0.00	0.00	0.263	30.57	2.998	0.263	0.111	0.000	4.821	0.491	4.31	0.00	6.52	11.06	7.57	6.63	16.37	30.57	0.111	16.11
10/7/2023	28.40	0.00	0.00	0.261	28.66	2.422	0.261	0.089	0.000	3.894	0.471	3.96	0.00	6.62	10.94	6.64	6.71	15.31	28.66	0.089	15.05
10/8/2023	31.63	0.00	0.00	0.256	31.89	3.271	0.256	0.121	0.000	5.260	0.435	5.08	0.00	6.64	10.82	8.61	6.76	16.52	31.89	0.121	16.26
10/9/2023	28.31	0.00	0.00	0.272	28.58	2.627	0.272	0.097	0.000	4.224	0.446	3.35	0.00	6.59	10.98	6.25	6.68	15.65	28.58	0.097	15.38
10/10/2023	33.42	0.00	0.00	0.323	33.74	3.871	0.323	0.143	0.000	6.224	0.515	5.11	0.00	6.43	11.13	9.30	6.57	17.86	33.74	0.143	17.54
10/11/2023	31.38	0.00	0.00	0.237	31.62	3.285	0.237	0.121	0.000	5.282	0.457	4.48	0.00	6.44	11.31	8.00	6.57	17.05	31.62	0.121	16.81
10/12/2023	30.02	0.00	0.00	0.268	30.29	2.804	0.268	0.103	0.000	4.509	0.548	4.84	0.00	6.41	10.81	7.91	6.51	15.86	30.29	0.103	15.59
10/13/2023	30.46	0.00	0.00	0.228	30.69	3.223	0.228	0.119	0.000	5.182	0.435	4.77	0.00	6.29	10.44	8.22	6.41	16.05	30.69	0.119	15.83
10/14/2023	27.26	0.00	0.00	0.233	27.49	0.843	0.233	0.031	0.000	1.356	0.447	4.46	0.00	7.56	12.56	5.54	7.59	14.36	27.49	0.031	14.13
10/15/2023	27.79	0.00	0.00	0.210	28.00	1.464	0.210	0.054	0.000	2.355	0.317	4.89	0.00	7.22	11.49	6.56	7.27	14.16	28.00	0.054	13.95
10/16/2023	27.13	0.00	0.00	0.155	27.29	1.525	0.155	0.056	0.000	2.451	0.417	4.39	0.00	6.71	11.58	6.07	6.77	14.45	27.29	0.056	14.29
10/17/2023	28.22	0.00	0.00	0.159	28.38	2.124	0.159	0.078	0.000	3.416	0.485	4.65	0.00	6.50	10.97	6.93	6.58	14.87	28.38	0.078	14.71
10/18/2023	28.22	0.00	0.00	0.131	28.35	2.267	0.131	0.084	0.000	3.645	0.467	4.65	0.00	6.44	10.67	7.05	6.52	14.78	28.35	0.084	14.65
10/19/2023	28.17	0.00	0.00	0.108	28.28	2.055	0.108	0.076	0.000	3.304	0.394	5.09	0.00	6.40	10.85	7.25	6.48	14.55	28.28	0.076	14.44
10/20/2023	28.56	0.00	0.00	0.099	28.66	2.338	0.099	0.086	0.000	3.760	0.450	4.50	0.00	6.42	11.00	6.94	6.51	15.21	28.66	0.086	15.11
10/21/2023	25.92	0.00	0.00	0.102	26.02	1.447	0.102	0.053	0.000	2.327	0.372	4.69	0.00	6.43	10.60	6.24	6.48	13.30	26.02	0.053	13.20
10/22/2023	28.36	0.00	0.00	0.105	28.47	2.655	0.105	0.098	0.000	4.270	0.421	3.37	0.00	6.53	11.02	6.13	6.63	15.71	28.47	0.098	15.60
10/23/2023	29.21	0.00	0.00	0.091	29.30	2.508	0.091	0.092	0.000	4.032	0.424	4.73	0.00	6.54	10.89	7.33	6.63	15.34	29.30	0.092	15.25

APPENDIX B – DAILY IBT AMOUNTS

	(1)	(2)	(3)	(4)	(5)=1+2 +3+4	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)=6+7+1 2+13	(17)=8+9+ 14	(18)=10+ 11+15	(19)=16+1 7+18	(20)=8+9	(21)=18- 2-3-4
	Water Withdrawal/Purchase (mgd)				Consumptive Use (mgd)							Water Use Discharged as Wastewater (mgd)				Total Returned/Used in Each Basin (mgd)				Interbasin Transfer (mgd)	
	Jordan Lake Withdrawal	Neuse Basin Purchase			Total System Use	Haw		Cape Fear		Neuse		Haw		Cape Fear	Neuse	Haw	Cape Fear	Neuse	Total for All Basins	Haw to Cape Fear	Haw to Neuse
	Haw	Raleigh	Durham	Durham Co. Reclaimed		Potable	WRF Reuse	Potable	WRF Reuse	Potable	WRF Reuse	WTP Process Water	WRF	WRF	Total WRFs						
10/24/2023	28.96	0.00	0.00	0.128	29.09	2.380	0.128	0.088	0.000	3.827	0.526	4.84	0.00	6.40	10.90	7.35	6.49	15.25	29.09	0.088	15.12
10/25/2023	29.52	0.00	0.00	0.130	29.65	2.338	0.130	0.086	0.000	3.760	0.544	4.82	0.00	6.33	11.64	7.29	6.42	15.94	29.65	0.086	15.81
10/26/2023	27.78	0.00	0.00	0.129	27.91	2.204	0.129	0.081	0.000	3.543	0.452	4.15	0.00	6.33	11.02	6.48	6.41	15.01	27.91	0.081	14.88
10/27/2023	31.64	0.00	0.00	0.096	31.74	3.375	0.096	0.124	0.000	5.426	0.429	5.46	0.00	6.38	10.44	8.93	6.51	16.30	31.74	0.124	16.20
10/28/2023	29.34	0.00	0.00	0.083	29.42	2.600	0.083	0.096	0.000	4.181	0.454	4.75	0.00	6.52	10.74	7.43	6.61	15.38	29.42	0.096	15.29
10/29/2023	28.77	0.00	0.00	0.072	28.84	2.264	0.072	0.083	0.000	3.640	0.406	4.53	0.00	6.84	11.01	6.87	6.93	15.05	28.84	0.083	14.98
10/30/2023	30.33	0.00	0.00	0.099	30.43	2.592	0.099	0.096	0.000	4.168	0.496	5.01	0.00	6.65	11.32	7.70	6.75	15.98	30.43	0.096	15.88
10/31/2023	28.02	0.00	0.00	0.068	28.09	1.963	0.068	0.072	0.000	3.157	0.425	5.55	0.00	6.23	10.62	7.58	6.31	14.20	28.09	0.072	14.13
11/1/2023	27.69	0.00	0.00	0.088	27.78	2.006	0.088	0.074	0.000	3.225	0.512	4.35	0.00	6.32	11.21	6.44	6.39	14.94	27.78	0.074	14.85
11/2/2023	28.59	0.00	0.00	0.071	28.66	2.122	0.071	0.078	0.000	3.412	0.414	5.30	0.00	6.44	10.82	7.49	6.52	14.65	28.66	0.079	14.58
11/3/2023	25.79	0.00	0.00	0.079	25.87	1.409	0.079	0.052	0.000	2.266	0.386	4.44	0.00	6.29	10.95	5.93	6.34	13.60	25.87	0.052	13.52
11/4/2023	25.82	0.00	0.00	0.069	25.89	1.796	0.069	0.066	0.000	2.888	0.393	3.64	0.00	6.36	10.67	5.51	6.43	13.95	25.89	0.066	13.88
11/5/2023	29.58	0.00	0.00	0.073	29.65	2.303	0.073	0.085	0.000	3.703	0.371	5.04	0.00	6.71	11.37	7.42	6.80	15.44	29.65	0.085	15.37
11/6/2023	27.43	0.00	0.00	0.101	27.53	2.270	0.101	0.084	0.000	3.650	0.443	4.05	0.00	6.31	10.62	6.42	6.40	14.71	27.53	0.084	14.61
11/7/2023	30.46	0.00	0.00	0.109	30.57	2.978	0.109	0.110	0.000	4.788	0.465	4.82	0.00	6.59	10.71	7.91	6.70	15.96	30.57	0.110	15.85
11/8/2023	27.15	0.00	0.00	0.124	27.27	2.005	0.124	0.074	0.000	3.224	0.563	4.16	0.00	6.28	10.84	6.29	6.36	14.63	27.27	0.074	14.50
11/9/2023	25.83	0.00	0.00	0.103	25.93	1.847	0.103	0.068	0.000	2.969	0.501	3.53	0.00	6.20	10.71	5.48	6.27	14.18	25.93	0.068	14.08
11/10/2023	27.47	0.00	0.00	0.088	27.56	2.333	0.088	0.086	0.000	3.751	0.411	4.20	0.00	6.26	10.43	6.62	6.34	14.59	27.56	0.086	14.51
11/11/2023	25.43	0.00	0.00	0.086	25.52	1.583	0.086	0.058	0.000	2.545	0.396	4.01	0.00	6.39	10.45	5.68	6.45	13.39	25.52	0.058	13.31
11/12/2023	27.17	0.00	0.00	0.081	27.25	1.725	0.081	0.064	0.000	2.774	0.318	4.33	0.00	6.91	11.05	6.14	6.97	14.14	27.25	0.064	14.06
11/13/2023	25.86	0.00	0.00	0.133	25.99	1.436	0.133	0.053	0.000	2.308	0.563	3.92	0.00	6.44	11.14	5.49	6.49	14.01	25.99	0.053	13.88
11/14/2023	25.15	0.00	0.00	0.108	25.26	1.589	0.108	0.059	0.000	2.555	0.359	3.54	0.00	6.33	10.72	5.24	6.39	13.63	25.26	0.059	13.52
11/15/2023	26.52	0.00	0.00	0.097	26.62	1.877	0.097	0.069	0.000	3.019	0.511	3.61	0.00	6.29	11.14	5.58	6.36	14.67	26.62	0.069	14.57
11/16/2023	25.81	0.00	0.00	0.098	25.91	1.715	0.098	0.063	0.000	2.758	0.390	3.87	0.00	6.34	10.67	5.68	6.41	13.82	25.91	0.063	13.72
11/17/2023	25.97	0.00	0.00	0.098	26.07	2.052	0.098	0.076	0.000	3.299	0.387	3.15	0.00	6.33	10.67	5.30	6.41	14.36	26.07	0.076	14.26
11/18/2023	24.63	0.00	0.00	0.104	24.73	1.533	0.104	0.056	0.000	2.464	0.379	3.63	0.00	6.50	10.07	5.27	6.56	12.91	24.73	0.056	12.81
11/19/2023	26.46	0.00	0.00	0.106	26.57	2.029	0.106	0.075	0.000	3.262	0.266	3.53	0.00	6.77	10.53	5.66	6.84	14.06	26.57	0.075	13.95
11/20/2023	27.09	0.00	0.00	0.098	27.19	2.363	0.098	0.087	0.000	3.799	0.344	3.49	0.00	6.43	10.57	5.95	6.52	14.72	27.19	0.087	14.62
11/21/2023	23.63	0.00	0.00	0.073	23.70	0.554	0.073	0.020	0.000	0.891	0.367	3.27	0.00	6.57	11.95	3.90	6.59	13.21	23.70	0.020	13.14
11/22/2023	24.16	0.00	0.00	0.093	24.25	0.391	0.093	0.014	0.000	0.628	0.344	3.58	0.00	6.73	12.47	4.06	6.74	13.44	24.25	0.014	13.35
11/23/2023	24.05	0.00	0.00	0.099	24.15	1.004	0.099	0.037	0.000	1.615	0.075	3.84	0.00	6.79	10.69	4.94	6.83	12.38	24.15	0.037	12.28
11/24/2023	23.35	0.00	0.00	0.074	23.42	1.146	0.074	0.042	0.000	1.842	0.235	3.49	0.00	6.25	10.34	4.71	6.29	12.42	23.42	0.042	12.35
11/25/2023	22.47	0.00	0.00	0.098	22.57	0.860	0.098	0.032	0.000	1.382	0.273	2.74	0.00	6.62	10.56	3.70	6.65	12.22	22.57	0.032	12.12
11/26/2023	24.34	0.00	0.00	0.104	24.44	0.966	0.104	0.036	0.000	1.553	0.251	2.96	0.00	7.05	11.52	4.03	7.09	13.33	24.44	0.036	13.22
11/27/2023	24.76	0.00	0.00	0.095	24.86	0.943	0.095	0.035	0.000	1.517	0.345	3.79	0.00	6.68	11.45	4.83	6.71	13.32	24.86	0.035	13.22
11/28/2023	23.09	0.00	0.00	0.087	23.18	0.791	0.087	0.029	0.000	1.272	0.348	3.25	0.00	6.42	10.98	4.13	6.45	12.60	23.18	0.030	12.51
11/29/2023	24.98	0.00	0.00	0.094	25.07	0.885	0.094	0.033	0.000	1.423	0.365	3.44	0.00	6.63	12.21	4.42	6.66	14.00	25.07	0.033	13.90



APPENDIX B – DAILY IBT AMOUNTS

	(1)	(2)	(3)	(4)	(5)=1+2 +3+4	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)=6+7+1 2+13	(17)=8+9+ 14	(18)=10+ 11+15	(19)=16+1 7+18	(20)=8+9	(21)=18- 2-3-4
	Water Withdrawal/Purchase (mgd)					Consumptive Use (mgd)						Water Use Discharged as Wastewater (mgd)				Total Returned/Used in Each Basin (mgd)				Interbasin Transfer (mgd)	
	Jordan Lake Withdrawal	Neuse Basin Purchase			Total System Use	Haw		Cape Fear		Neuse		Haw		Cape Fear	Neuse	Haw	Cape Fear	Neuse	Total for All Basins	Haw to Cape Fear	Haw to Neuse
	Haw	Raleigh	Durham	Durham Co. Reclaimed		Potable	WRF Reuse	Potable	WRF Reuse	Potable	WRF Reuse	WTP Process Water	WRF	WRF	Total WRFs						
11/30/2023	23.21	0.00	0.00	0.091	23.30	0.377	0.091	0.014	0.000	0.606	0.288	3.38	0.00	6.17	12.38	3.85	6.18	13.27	23.30	0.014	13.18
12/1/2023	23.94	0.00	0.00	0.090	24.03	0.382	0.090	0.014	0.000	0.614	0.259	3.84	0.00	5.97	12.86	4.31	5.99	13.73	24.03	0.014	13.64
12/2/2023	21.23	0.00	0.00	0.080	21.31	0.342	0.080	0.013	0.000	0.550	0.244	3.23	0.00	5.88	10.97	3.65	5.90	11.76	21.31	0.013	11.68
12/3/2023	22.56	0.00	0.00	0.080	22.64	0.380	0.080	0.014	0.000	0.611	0.254	2.54	0.00	6.57	12.19	3.00	6.58	13.06	22.64	0.014	12.98
12/4/2023	25.40	0.00	0.00	0.090	25.49	1.141	0.090	0.042	0.000	1.835	0.291	3.33	0.00	6.53	12.23	4.56	6.57	14.36	25.49	0.042	14.27
12/5/2023	22.63	0.00	0.00	0.100	22.73	0.680	0.100	0.025	0.000	1.094	0.326	1.73	0.00	6.32	12.46	2.51	6.34	13.88	22.73	0.025	13.78
12/6/2023	22.13	0.00	0.00	0.110	22.24	0.360	0.110	0.013	0.000	0.579	0.249	3.20	0.00	5.73	12.00	3.67	5.74	12.83	22.24	0.014	12.72
12/7/2023	23.30	0.00	0.00	0.100	23.40	0.363	0.100	0.013	0.000	0.583	0.166	4.21	0.00	5.91	12.06	4.67	5.92	12.81	23.40	0.013	12.71
12/8/2023	22.95	0.00	0.00	0.100	23.05	0.691	0.100	0.025	0.000	1.112	0.169	2.28	0.00	6.50	12.18	3.07	6.52	13.46	23.05	0.025	13.36
12/9/2023	22.46	0.00	0.00	0.100	22.56	0.360	0.100	0.013	0.000	0.579	0.175	3.52	0.00	6.18	11.63	3.98	6.20	12.38	22.56	0.013	12.28
12/10/2023	20.62	0.00	0.00	0.090	20.71	0.347	0.090	0.013	0.000	0.558	0.187	2.34	0.00	5.68	11.49	2.78	5.69	12.24	20.71	0.013	12.15
12/11/2023	23.64	0.00	0.00	0.090	23.73	0.373	0.090	0.014	0.000	0.599	0.232	4.02	0.00	5.73	12.67	4.48	5.75	13.50	23.73	0.014	13.41
12/12/2023	22.87	0.00	0.00	0.090	22.96	0.344	0.090	0.013	0.000	0.554	0.245	4.74	0.00	5.22	11.76	5.17	5.23	12.56	22.96	0.013	12.47
12/13/2023	23.18	0.00	0.00	0.090	23.27	0.403	0.090	0.015	0.000	0.647	0.290	1.97	0.00	6.14	13.72	2.46	6.15	14.66	23.27	0.015	14.57
12/14/2023	23.87	0.00	0.00	0.090	23.96	0.382	0.090	0.014	0.000	0.614	0.234	3.75	0.00	6.34	12.53	4.22	6.36	13.38	23.96	0.014	13.29
12/15/2023	23.33	0.00	0.00	0.090	23.42	0.379	0.090	0.014	0.000	0.609	0.128	3.39	0.00	6.19	12.62	3.86	6.21	13.36	23.42	0.014	13.27
12/16/2023	23.38	0.00	0.00	0.100	23.48	0.350	0.100	0.013	0.000	0.564	0.045	4.94	0.00	5.88	11.58	5.39	5.90	12.19	23.48	0.013	12.09
12/17/2023	21.77	0.00	0.00	0.100	21.87	0.367	0.100	0.014	0.000	0.591	0.018	2.44	0.00	6.21	12.13	2.91	6.22	12.74	21.87	0.014	12.64
12/18/2023	23.82	0.00	0.00	0.110	23.93	0.405	0.110	0.015	0.000	0.651	0.250	2.53	0.00	6.62	13.35	3.04	6.63	14.25	23.93	0.015	14.14
12/19/2023	23.08	0.00	0.00	0.110	23.19	0.366	0.110	0.013	0.000	0.588	0.457	3.84	0.00	5.56	12.26	4.32	5.57	13.30	23.19	0.013	13.19
12/20/2023	22.68	0.00	0.00	0.110	22.79	0.373	0.110	0.014	0.000	0.599	0.525	3.08	0.00	5.70	12.39	3.56	5.71	13.51	22.79	0.014	13.40
12/21/2023	23.19	0.00	0.00	0.120	23.31	0.366	0.120	0.013	0.000	0.589	0.466	3.95	0.00	5.37	12.44	4.44	5.38	13.49	23.31	0.013	13.37
12/22/2023	24.09	0.00	0.00	0.120	24.21	0.393	0.120	0.014	0.000	0.632	0.386	3.43	0.00	6.14	13.10	3.94	6.15	14.12	24.21	0.014	14.00
12/23/2023	22.41	0.00	0.00	0.120	22.53	0.365	0.120	0.013	0.000	0.588	0.337	3.20	0.00	5.81	12.10	3.69	5.82	13.02	22.53	0.013	12.90
12/24/2023	22.19	0.00	0.00	0.120	22.31	0.363	0.120	0.013	0.000	0.583	0.373	3.12	0.00	6.02	11.71	3.60	6.04	12.67	22.31	0.014	12.55
12/25/2023	21.97	0.00	0.00	0.120	22.09	0.363	0.120	0.013	0.000	0.583	0.309	2.90	0.00	6.10	11.70	3.38	6.11	12.60	22.09	0.013	12.48
12/26/2023	19.74	0.00	0.00	0.120	19.86	0.311	0.120	0.011	0.000	0.500	0.406	3.41	0.00	5.13	9.97	3.84	5.15	10.87	19.86	0.011	10.75
12/27/2023	21.94	0.00	0.00	0.120	22.06	0.366	0.120	0.013	0.000	0.589	0.469	2.70	0.00	5.52	12.28	3.19	5.53	13.34	22.06	0.013	13.22
12/28/2023	22.77	0.00	0.00	0.120	22.89	0.358	0.120	0.013	0.000	0.576	0.456	3.94	0.00	5.54	11.89	4.42	5.55	12.92	22.89	0.013	12.80
12/29/2023	20.66	0.00	0.00	0.120	20.78	0.366	0.120	0.013	0.000	0.588	0.410	1.44	0.00	5.77	12.08	1.93	5.78	13.07	20.78	0.013	12.95
12/30/2023	20.24	0.00	0.00	0.120	20.36	0.335	0.120	0.012	0.000	0.539	0.438	2.63	0.00	5.31	10.97	3.09	5.32	11.95	20.36	0.012	11.83
12/31/2023	23.73	0.00	0.00	0.120	23.85	0.377	0.120	0.014	0.000	0.606	0.388	3.92	0.00	6.19	12.24	4.42	6.20	13.23	23.85	0.014	13.11

## Appendix C - Monthly Billed Water Use

The monthly billed potable water use was exported from the billing databases of the Towns of Cary and Apex. The Town of Cary billed water use includes Morrisville and Wake County/RTP South.

### APPENDIX C

#### Billed Water Use

Apex and Cary (includes Morrisville, and Wake County/RTP South)

Billed Month	Apex Billed Water Use (MGD)			Cary Billed Water Use <sup>1</sup> (MGD)		Total Billed Water Use (MGD)		
	Haw	Neuse	Cape Fear	Haw	Neuse	Haw	Neuse	Cape Fear
Jan-2023	2.95	1.18	0.27	3.81	9.12	6.76	10.30	0.27
Feb-2023	2.88	1.25	0.31	3.99	9.71	6.86	10.97	0.31
Mar-2023	2.27	1.04	0.23	3.58	8.60	5.84	9.63	0.23
Apr-2023	2.56	1.17	0.26	3.72	9.08	6.27	10.26	0.26
May-2023	4.27	1.18	0.26	3.94	9.53	8.21	10.71	0.26
Jun-2023	3.02	1.32	0.27	4.82	12.36	7.84	13.69	0.27
Jul-2023	3.60	1.44	0.33	5.21	11.13	8.82	12.57	0.33
Aug-2023	3.24	1.35	0.28	5.02	11.67	8.26	13.02	0.28
Sep-2023	3.95	1.62	0.36	5.20	12.12	9.14	13.74	0.36
Oct-2023	3.32	1.34	0.35	4.53	11.00	7.84	12.34	0.35
Nov-2023	3.15	1.33	0.30	4.41	11.14	7.56	12.46	0.30
Dec-2023	2.91	1.31	0.34	3.75	9.07	6.66	10.39	0.34
<b>Annual Average Day</b>	38.11	15.54	3.57	51.96	124.54	90.07	140.08	3.57

<sup>1</sup> Cary Billed Water Use includes Morrisville and Wake County/RTP South

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# Appendix D - AWWA M36 Water Audit Summary

The following screen shots summarize the Town of Cary water audit using the AWWA Free Water Audit Software v6.0. For calendar year (CY) 2023, the non-revenue water is 16.3% by volume of the water supplied.

Water Balance Output from CY2023 AWWA Audit for the Town of Cary:

AWWA Free Water Audit Software		Water Audit Report for: Town of Cary		FWAS v6.0		
Water Balance		Audit Year: 2023		American Water Works Association		
		Data Validity Tier: Tier III (51-70)		Copyright © 2020, All Rights Reserved.		
				Jan 01 2023 - Dec 31 2023		
		Water Exported (WE) (corrected for known errors) 1,975.763	Billed Water Exported			Revenue Water (Exported) 1,975.763
Volume from Own Sources (VOS) (corrected for known errors)  8,437.537	System Input Volume 8,437.537	Water Supplied 6,461.774	Authorized Consumption  5,663.106	Billed Authorized Consumption  5,407.652	Billed Metered Consumption (BMAC) (water exported is removed) 5,407.652	Revenue Water 5,407.652
					Billed Unmetered Consumption (BUAC) 0.000	
			Unbilled Authorized Consumption  255.453	Unbilled Metered Consumption (UMAC) 233.083	Unbilled Unmetered Consumption (UUAC) 22.370	Non-Revenue Water (NRW)  1,054.122
				Apparent Losses 124.589	Systematic Data Handling Errors (SDHE) 13.519	
			Water Losses 798.668		Unauthorized Consumption (UC) 13.519	
Water Imported (WI) (corrected for known errors)  0.000				Real Losses 674.079	Leakage on Transmission and/or Distribution Mains <i>Not broken down</i>	Leakage and Overflows at Utility's Storage Tanks <i>Not broken down</i>
					Leakage on Service Connections <i>Not broken down</i>	

## Appendix E – Cape Fear River Basin Discharge (MGD)

<u>Date</u>	<u>Discharge to Durham County WWTP</u>	<u>WWWRF Discharge to Cape Fear River Basin</u>
1-Jan-23	0.00	7.01
2-Jan-23	0.00	7.33
3-Jan-23	0.00	6.90
4-Jan-23	0.00	7.24
5-Jan-23	0.00	7.07
6-Jan-23	0.00	6.74
7-Jan-23	0.00	6.85
8-Jan-23	0.00	7.25
9-Jan-23	0.00	6.85
10-Jan-23	0.00	6.59
11-Jan-23	0.00	6.57
12-Jan-23	0.00	6.65
13-Jan-23	0.46	6.05
14-Jan-23	2.92	4.13
15-Jan-23	2.92	3.88
16-Jan-23	2.92	4.02
17-Jan-23	3.24	4.02
18-Jan-23	3.24	3.76
19-Jan-23	3.04	3.77
20-Jan-23	3.10	3.64
21-Jan-23	3.19	3.84
22-Jan-23	3.19	4.54
23-Jan-23	3.19	5.20
24-Jan-23	0.00	6.79
25-Jan-23	0.00	7.18
26-Jan-23	0.00	7.06
27-Jan-23	0.00	6.79
28-Jan-23	0.00	6.90
29-Jan-23	0.00	7.26
30-Jan-23	0.00	7.34
31-Jan-23	0.00	6.93
1-Feb-23	0.00	7.26
2-Feb-23	0.00	7.60
3-Feb-23	0.00	7.51
4-Feb-23	0.00	7.33
5-Feb-23	0.00	7.62
6-Feb-23	0.00	6.72
7-Feb-23	0.00	6.81
8-Feb-23	0.00	6.71
9-Feb-23	0.00	6.76
10-Feb-23	0.00	6.78
11-Feb-23	0.00	7.10
12-Feb-23	0.00	8.56
13-Feb-23	0.00	8.95
14-Feb-23	0.00	7.19
15-Feb-23	0.00	6.81
16-Feb-23	0.00	6.69
17-Feb-23	0.00	6.93
18-Feb-23	0.00	6.90
19-Feb-23	0.00	6.92
20-Feb-23	0.00	6.99
21-Feb-23	0.00	6.66
22-Feb-23	0.00	6.56
23-Feb-23	0.00	6.54
24-Feb-23	0.00	6.40
25-Feb-23	0.00	6.64
26-Feb-23	0.00	7.09

APPENDIX E – CAPE FEAR RIVER BASIN DISCHARGE

<b>Date</b>	<b><u>Discharge to Durham County WWTP</u></b>	<b><u>WWWRF Discharge to Cape Fear River Basin</u></b>
27-Feb-23	0.00	7.09
28-Feb-23	0.00	7.09
1-Mar-23	0.00	7.09
2-Mar-23	0.00	7.44
3-Mar-23	0.00	7.26
4-Mar-23	0.00	7.32
5-Mar-23	0.00	4.50
6-Mar-23	0.00	7.05
7-Mar-23	0.00	7.01
8-Mar-23	0.00	6.92
9-Mar-23	0.00	6.89
10-Mar-23	0.00	6.99
11-Mar-23	0.00	7.15
12-Mar-23	0.00	7.96
13-Mar-23	0.00	7.43
14-Mar-23	0.00	6.99
15-Mar-23	0.00	6.98
16-Mar-23	0.00	6.89
17-Mar-23	0.00	6.93
18-Mar-23	0.00	7.49
19-Mar-23	0.00	7.52
20-Mar-23	0.00	6.96
21-Mar-23	0.00	6.84
22-Mar-23	0.00	6.52
23-Mar-23	0.00	6.66
24-Mar-23	0.00	6.97
25-Mar-23	0.00	6.97
26-Mar-23	0.00	7.68
27-Mar-23	0.00	7.43
28-Mar-23	0.00	7.05
29-Mar-23	0.00	7.80
30-Mar-23	0.00	6.95
31-Mar-23	0.00	6.85
1-Apr-23	0.00	6.87
2-Apr-23	0.00	6.84
3-Apr-23	0.00	6.53
4-Apr-23	0.00	6.32
5-Apr-23	0.00	6.31
6-Apr-23	0.00	6.36
7-Apr-23	0.00	9.08
8-Apr-23	0.00	9.91
9-Apr-23	0.00	10.15
10-Apr-23	0.00	8.45
11-Apr-23	0.00	7.95
12-Apr-23	0.00	8.23
13-Apr-23	0.00	7.37
14-Apr-23	0.00	8.92
15-Apr-23	0.00	9.51
16-Apr-23	0.00	8.52
17-Apr-23	0.00	8.15
18-Apr-23	0.00	7.58
19-Apr-23	0.00	7.25
20-Apr-23	0.00	7.11
21-Apr-23	0.00	6.93
22-Apr-23	0.00	7.78
23-Apr-23	0.00	7.90
24-Apr-23	0.00	7.39

## APPENDIX E – CAPE FEAR RIVER BASIN DISCHARGE

<b>Date</b>	<b>Discharge to Durham County WWTP</b>	<b>WWWRF Discharge to Cape Fear River Basin</b>
25-Apr-23	0.00	7.44
26-Apr-23	0.00	6.92
27-Apr-23	0.00	7.46
28-Apr-23	0.00	7.33
29-Apr-23	0.00	7.29
30-Apr-23	0.00	8.05
1-May-23	0.00	7.29
2-May-23	0.00	7.27
3-May-23	0.00	7.89
4-May-23	0.00	8.92
5-May-23	0.00	7.39
6-May-23	0.00	6.96
7-May-23	0.00	7.56
8-May-23	0.00	7.18
9-May-23	0.00	7.05
10-May-23	0.00	6.95
11-May-23	0.00	6.92
12-May-23	0.00	6.81
13-May-23	0.00	6.99
14-May-23	0.00	7.23
15-May-23	0.00	7.06
16-May-23	0.00	7.08
17-May-23	0.00	7.36
18-May-23	0.00	6.85
19-May-23	0.00	7.02
20-May-23	0.00	7.00
21-May-23	0.00	7.29
22-May-23	0.00	7.06
23-May-23	0.00	6.90
24-May-23	0.00	7.03
25-May-23	0.00	6.98
26-May-23	0.00	6.89
27-May-23	0.00	6.80
28-May-23	0.00	7.30
29-May-23	0.00	7.34
30-May-23	0.00	7.02
31-May-23	0.00	6.93
1-Jun-23	0.00	7.03
2-Jun-23	0.00	6.72
3-Jun-23	0.00	6.91
4-Jun-23	0.00	7.04
5-Jun-23	0.00	6.83
6-Jun-23	0.00	6.74
7-Jun-23	0.00	5.23
8-Jun-23	0.00	5.84
9-Jun-23	0.00	6.73
10-Jun-23	0.00	6.64
11-Jun-23	0.00	6.72
12-Jun-23	0.00	6.78
13-Jun-23	0.00	7.05
14-Jun-23	0.00	6.51
15-Jun-23	0.00	6.53
16-Jun-23	0.00	6.50
17-Jun-23	0.00	6.38
18-Jun-23	0.00	6.50
19-Jun-23	0.00	6.81
20-Jun-23	0.00	7.36
21-Jun-23	0.00	8.40

APPENDIX E – CAPE FEAR RIVER BASIN DISCHARGE

<b>Date</b>	<b>Discharge to Durham County WWTP</b>	<b>WWWRF Discharge to Cape Fear River Basin</b>
22-Jun-23	0.00	8.22
23-Jun-23	0.00	7.76
24-Jun-23	0.00	7.02
25-Jun-23	0.00	7.18
26-Jun-23	0.00	7.06
27-Jun-23	0.00	6.71
28-Jun-23	0.00	6.63
29-Jun-23	0.00	6.58
30-Jun-23	0.00	6.49
1-Jul-23	0.00	3.74
2-Jul-23	0.00	6.35
3-Jul-23	0.00	6.33
4-Jul-23	0.00	6.63
5-Jul-23	0.00	6.56
6-Jul-23	0.00	6.57
7-Jul-23	0.00	6.58
8-Jul-23	0.00	7.21
9-Jul-23	0.00	7.97
10-Jul-23	0.00	7.20
11-Jul-23	0.00	7.11
12-Jul-23	0.00	7.23
13-Jul-23	0.00	7.26
14-Jul-23	0.00	8.38
15-Jul-23	0.00	7.47
16-Jul-23	0.00	7.35
17-Jul-23	0.00	7.06
18-Jul-23	0.00	6.89
19-Jul-23	0.00	7.00
20-Jul-23	0.00	6.84
21-Jul-23	0.00	6.68
22-Jul-23	0.00	6.65
23-Jul-23	0.00	6.90
24-Jul-23	0.00	6.92
25-Jul-23	0.00	6.66
26-Jul-23	0.00	6.75
27-Jul-23	0.00	6.69
28-Jul-23	0.00	6.49
29-Jul-23	0.00	6.74
30-Jul-23	0.00	6.89
31-Jul-23	0.00	6.89
1-Aug-23	0.00	6.65
2-Aug-23	0.00	6.78
3-Aug-23	0.00	6.69
4-Aug-23	0.00	6.68
5-Aug-23	0.00	6.84
6-Aug-23	0.00	7.05
7-Aug-23	0.00	6.93
8-Aug-23	0.00	6.70
9-Aug-23	0.00	6.66
10-Aug-23	0.00	6.91
11-Aug-23	0.00	6.68
12-Aug-23	0.00	6.76
13-Aug-23	0.00	7.01
14-Aug-23	0.00	6.90
15-Aug-23	0.00	6.85
16-Aug-23	0.00	6.75
17-Aug-23	0.00	6.78

APPENDIX E – CAPE FEAR RIVER BASIN DISCHARGE

<b>Date</b>	<b>Discharge to Durham County WWTP</b>	<b>WWWRF Discharge to Cape Fear River Basin</b>
18-Aug-23	0.00	6.62
19-Aug-23	0.00	6.57
20-Aug-23	0.00	6.91
21-Aug-23	0.00	6.74
22-Aug-23	0.00	6.59
23-Aug-23	0.00	6.52
24-Aug-23	0.00	6.53
25-Aug-23	0.00	6.60
26-Aug-23	0.00	6.83
27-Aug-23	0.00	7.27
28-Aug-23	0.00	6.86
29-Aug-23	0.00	6.75
30-Aug-23	0.00	6.70
31-Aug-23	0.00	6.90
1-Sep-23	0.00	6.59
2-Sep-23	0.00	6.36
3-Sep-23	0.00	6.34
4-Sep-23	0.00	7.06
5-Sep-23	0.00	6.82
6-Sep-23	0.00	6.68
7-Sep-23	0.00	6.70
8-Sep-23	0.00	6.72
9-Sep-23	0.00	8.19
10-Sep-23	0.00	7.78
11-Sep-23	0.00	7.14
12-Sep-23	0.00	6.85
13-Sep-23	0.00	6.76
14-Sep-23	0.00	6.69
15-Sep-23	0.00	6.56
16-Sep-23	0.00	6.71
17-Sep-23	0.00	7.07
18-Sep-23	0.00	6.55
19-Sep-23	0.00	6.55
20-Sep-23	0.00	6.49
21-Sep-23	0.00	6.53
22-Sep-23	0.00	6.51
23-Sep-23	0.00	8.54
24-Sep-23	0.00	7.69
25-Sep-23	0.00	6.97
26-Sep-23	0.00	6.73
27-Sep-23	0.00	6.60
28-Sep-23	0.00	6.66
29-Sep-23	0.00	6.62
30-Sep-23	0.00	7.05
1-Oct-23	0.00	7.07
2-Oct-23	0.00	6.78
3-Oct-23	0.00	6.57
4-Oct-23	0.00	6.56
5-Oct-23	0.00	6.58
6-Oct-23	0.00	6.62
7-Oct-23	0.00	6.72
8-Oct-23	0.00	6.74
9-Oct-23	0.00	6.69
10-Oct-23	0.00	6.55
11-Oct-23	0.00	6.53
12-Oct-23	0.00	6.51
13-Oct-23	0.00	6.38
14-Oct-23	0.00	7.65

APPENDIX E – CAPE FEAR RIVER BASIN DISCHARGE

<b>Date</b>	<b><u>Discharge to Durham County WWTP</u></b>	<b><u>WWWRF Discharge to Cape Fear River Basin</u></b>
15-Oct-23	0.00	7.30
16-Oct-23	0.00	6.77
17-Oct-23	0.00	6.56
18-Oct-23	0.00	6.49
19-Oct-23	0.00	6.44
20-Oct-23	0.00	6.46
21-Oct-23	0.00	6.47
22-Oct-23	0.00	6.57
23-Oct-23	0.00	6.57
24-Oct-23	0.00	6.45
25-Oct-23	0.00	6.38
26-Oct-23	0.00	6.38
27-Oct-23	0.00	6.42
28-Oct-23	0.00	6.55
29-Oct-23	0.00	6.87
30-Oct-23	0.00	6.69
31-Oct-23	0.00	6.26
1-Nov-23	0.00	6.35
2-Nov-23	0.00	6.47
3-Nov-23	0.00	6.32
4-Nov-23	0.00	6.39
5-Nov-23	0.00	6.74
6-Nov-23	0.00	6.35
7-Nov-23	0.00	6.63
8-Nov-23	0.00	6.33
9-Nov-23	0.00	6.24
10-Nov-23	0.00	6.29
11-Nov-23	0.00	6.42
12-Nov-23	0.00	6.94
13-Nov-23	0.00	6.49
14-Nov-23	0.00	6.37
15-Nov-23	0.00	6.33
16-Nov-23	0.00	6.38
17-Nov-23	0.00	6.37
18-Nov-23	0.00	6.54
19-Nov-23	0.00	6.81
20-Nov-23	0.00	6.47
21-Nov-23	0.00	6.60
22-Nov-23	0.00	8.13
23-Nov-23	0.00	6.83
24-Nov-23	0.00	6.28
25-Nov-23	0.00	6.66
26-Nov-23	0.00	7.09
27-Nov-23	0.00	6.71
28-Nov-23	0.00	6.45
29-Nov-23	0.00	6.66
30-Nov-23	0.00	6.32
1-Dec-23	0.00	6.24
2-Dec-23	0.00	7.11
3-Dec-23	0.00	7.25
4-Dec-23	0.00	6.56
5-Dec-23	0.00	6.35
6-Dec-23	0.00	6.39
7-Dec-23	0.00	6.23
8-Dec-23	0.00	6.53
9-Dec-23	0.00	6.58
10-Dec-23	0.00	8.16

## APPENDIX E – CAPE FEAR RIVER BASIN DISCHARGE

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<b>Date</b>	<b>Discharge to Durham County WWTP</b>	<b>WWWRF Discharge to Cape Fear River Basin</b>
11-Dec-23	0.00	8.68
12-Dec-23	0.00	6.84
13-Dec-23	0.00	6.77
14-Dec-23	0.00	6.80
15-Dec-23	0.00	6.52
16-Dec-23	0.00	6.73
17-Dec-23	0.00	10.09
18-Dec-23	0.00	9.29
19-Dec-23	0.00	7.39
20-Dec-23	0.00	7.10
21-Dec-23	0.00	6.95
22-Dec-23	0.00	6.90
23-Dec-23	0.00	6.89
24-Dec-23	0.00	6.78
25-Dec-23	0.00	6.42
26-Dec-23	0.00	7.25
27-Dec-23	0.00	9.04
28-Dec-23	0.00	7.46
29-Dec-23	0.00	7.20
30-Dec-23	0.00	7.12
31-Dec-23	0.00	7.12