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# Interbasin Transfer Certificate 2022 Annual Report

Prepared for  
Town of Cary  
Town of Apex

Submitted to  
North Carolina  
Division of Water Resources

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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 2022 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 2022 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 2022 reporting year.
- Summary of amount of water used during 2015 to 2022 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 2022 reporting year.

Appendix B is a table of calculated daily IBT amounts for January 1 to December 31 of the 2022 reporting year.

Appendix C is a table of monthly billed water use for Cary/Apex for the 2022 reporting year from the Towns' billing database.

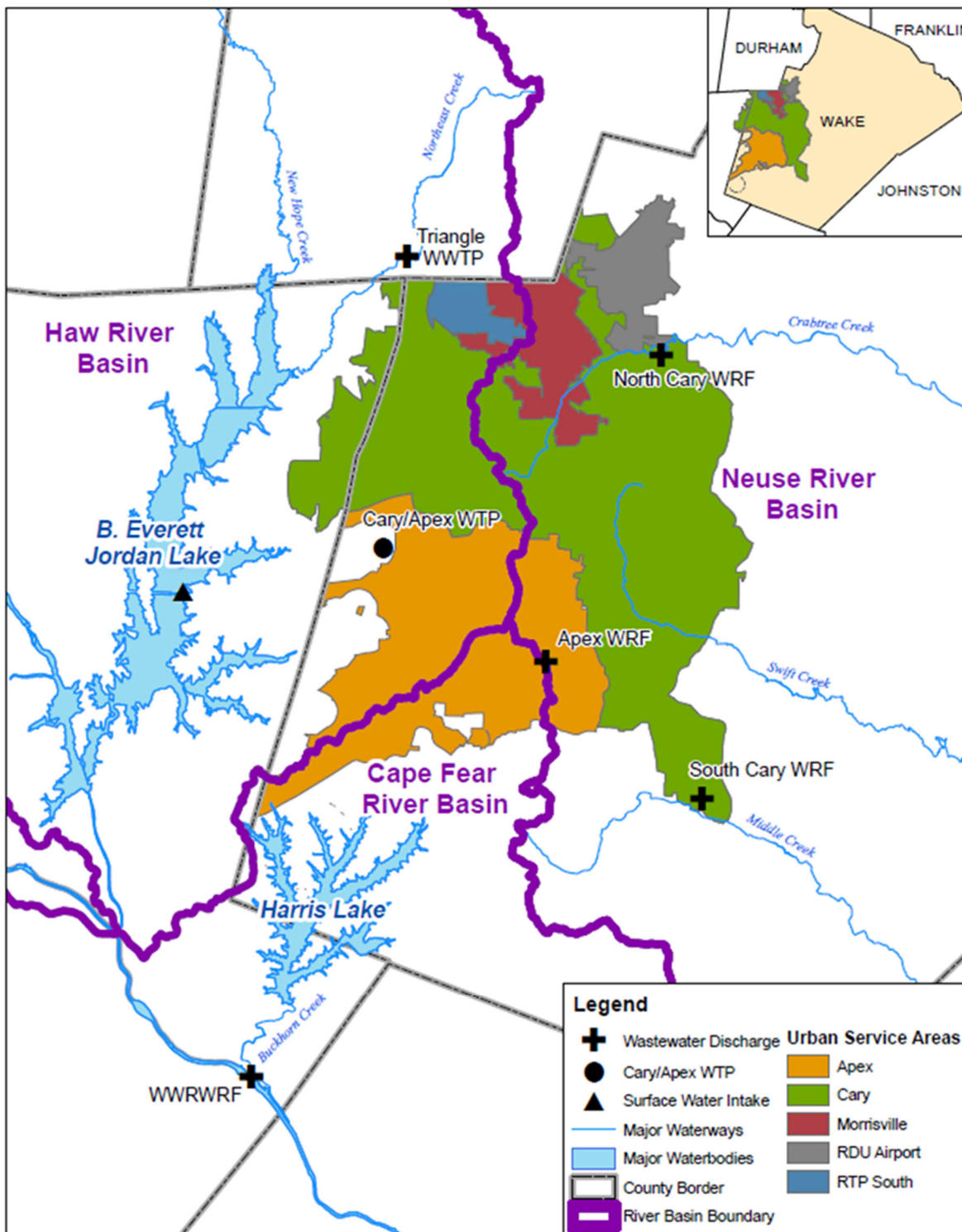
Appendix D is the performance indicator and water balance output from the Town of Cary's AWWA M36 Water Audit analysis performed for fiscal year 2022. The percentage non-revenue water is used in the discharge report to determine Neuse Demand.

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 2022 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 2022, 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 2022. The peak month transfer from the Haw River basin to the Cape Fear River basin was 0.1 mgd (6% of certificate limit) which occurred during September 2022.

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, 2022 through December 31, 2022 is found in Appendix A.

The average daily withdrawal for the Towns was 26.1 mgd during 2022 (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 1 day during calendar year 2022.

<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

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 0 days in 2022.

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

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

<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

## 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 2022.

Month	Average Daily IBT from Haw to Neuse (mgd)	Average Daily IBT from Haw to Cape Fear (mgd)
January	12.7	0.02
February	12.7	0.01
March	13.0	0.02
April	13.2	0.02
May	13.9	0.04
June	16.0	0.11
July	16.4	0.11
August	16.6	0.12
September	16.4	0.12
October	15.5	0.09
November	13.6	0.04
December	13.2	0.02
<b>Certificate Limit</b>	<b>31.0</b>	<b>2.00</b>
<b>Max Month</b>	August	September
<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 16.7% for the period January 1, 2022 through December 31, 2022. 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>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%

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 2022 was estimated based on the previous year’s water use in each basin as determined by billing records for Cary and Apex.

During 2022, based on 2021 billing records, it was assumed that 37.9% of water use occurred in the Haw subbasin, 1.4% of water use occurred in the Cape Fear subbasin, and 60.7% of water use occurred in the Neuse River subbasin. During 2023, based on 2022 billing records, it will be assumed that 37.8% of their water use will occur in the Haw subbasin, 1.4% of their water use will occur in the Cape Fear subbasin, and 60.8% 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 2022 calculations.

<b>Table 3-2</b>							
Historic Water Use by Subbasin for Cary (including Morrisville and RTP South) and Apex (Annual Average Day)							
Year	Total Billed Water Use (mgd)	Haw Subbasin		Cape Fear Subbasin		Neuse Subbasin	
		Billed Water Use (mgd)	Percent Use	Billed Water Use (mgd)	Percent Use	Billed Water Use (mgd)	Percent Use
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%
Percentages to be used for 2023 IBT calculations			37.8%		1.4%		

SECTION 4

# Discharge Report

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 2022. 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>3 year Running Average of Neuse Basin Demand</b>							<b>12.76</b>
<b>Required Discharge (3 year Running Average of Neuse Basin Demand – 9.756)</b>							<b>3.00</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 2022 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 not occur in 2022.

Figure 4-1 below shows the Towns’ daily Cape Fear River Basin discharges from WWRWRF for 2022. Supporting data is found in Appendix E.

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

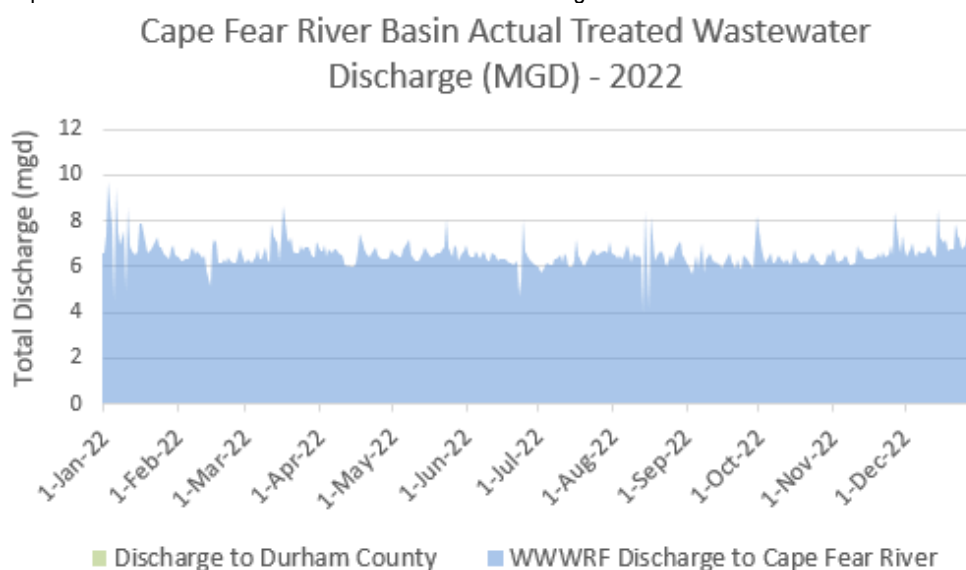


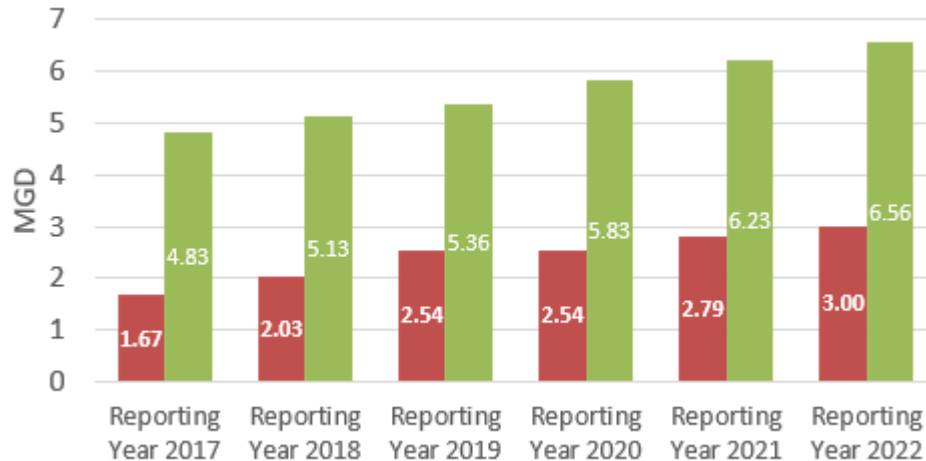
Table 4-2 shows the Towns’ discharges to the Cape Fear River Basin beginning with 2016 and the 3-year running average for the reporting year 2022 which is compared to the required discharge to determine compliance.

<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>3 year running average</b>			<b>6.56</b>

## 4.3 Compliance Evaluation

For 2022, Cary and Apex's 3-year running average of actual discharge to the Cape Fear (6.56 mgd) exceeded the required discharge (3.00 mgd) by 3.56 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 2022 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 2022.

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 2022.

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 2022

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 1 day 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 2022.

# Appendices

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- A Daily Jordan Lake Water Supply Raw Water Withdrawals
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- 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 (%)
1/1/2022	214.60	22.73	35.16	73.3	21,160	100.00%
1/2/2022	214.73	21.53	33.31	155.7	21,160	100.00%
1/3/2022	216.99	23.34	36.11	1,735.0	21,160	100.00%
1/4/2022	218.55	22.32	34.53	1,697.0	21,160	100.00%
1/5/2022	218.46	23.14	35.80	1,698.3	21,160	100.00%
1/6/2022	218.38	21.91	33.89	1,696.4	21,160	100.00%
1/7/2022	218.32	22.84	35.33	1,697.8	21,160	100.00%
1/8/2022	218.09	22.86	35.36	1,697.9	21,160	100.00%
1/9/2022	217.91	23.26	35.98	1,698.5	21,160	100.00%
1/10/2022	217.75	22.32	34.53	1,697.0	21,160	100.00%
1/11/2022	217.47	23.25	35.97	1,698.5	21,160	100.00%
1/12/2022	217.18	21.12	32.67	1,695.2	21,160	100.00%
1/13/2022	216.95	23.61	36.52	1,699.0	21,160	100.00%
1/14/2022	216.81	20.63	31.91	1,694.4	21,160	100.00%
1/15/2022	216.75	23.34	36.11	1,698.6	21,160	100.00%
1/16/2022	216.69	20.43	31.61	1,694.1	21,160	100.00%
1/17/2022	216.92	22.48	34.78	1,697.3	21,160	100.00%
1/18/2022	217.17	22.14	34.25	1,696.8	21,160	100.00%
1/19/2022	217.18	22.20	34.34	1,696.9	21,160	100.00%
1/20/2022	217.24	21.89	33.86	1,696.4	21,160	100.00%
1/21/2022	217.26	21.43	33.15	1,695.7	21,160	100.00%
1/22/2022	217.13	22.68	35.09	1,697.6	21,160	100.00%
1/23/2022	216.96	22.89	35.41	1,697.9	21,160	100.00%
1/24/2022	216.73	24.16	37.38	1,699.9	21,160	100.00%
1/25/2022	216.52	22.87	35.38	1,697.9	21,160	100.00%
1/26/2022	216.31	23.52	36.39	1,303.2	21,160	100.00%
1/27/2022	216.20	22.42	34.68	1,091.4	21,160	100.00%
1/28/2022	216.23	22.80	35.27	1,133.2	21,160	100.00%
1/29/2022	216.26	20.83	32.22	1,171.4	21,160	100.00%
1/30/2022	216.25	21.94	33.94	1,121.5	21,160	100.00%
1/31/2022	216.30	25.22	39.02	1,254.7	21,160	100.00%
2/1/2022	216.29	23.22	35.92	1,160.7	21,160	100.00%
2/2/2022	216.29	22.43	34.70	1,162.8	21,160	100.00%
2/3/2022	216.27	23.36	36.14	1,117.4	21,160	100.00%
2/4/2022	216.34	20.86	32.27	1,493.3	21,160	100.00%
2/5/2022	216.42	22.64	35.02	1,697.5	21,160	100.00%
2/6/2022	216.43	21.49	33.25	1,695.8	21,160	100.00%
2/7/2022	216.37	22.40	34.65	1,697.2	21,160	100.00%
2/8/2022	216.26	21.18	32.77	1,666.1	21,160	100.00%
2/9/2022	216.14	23.11	35.75	1,308.6	21,160	100.00%
2/10/2022	216.13	22.51	34.82	1,156.0	21,160	100.00%
2/11/2022	216.22	21.73	33.62	1,194.1	21,160	100.00%
2/12/2022	216.27	22.28	34.47	1,208.9	21,160	100.00%
2/13/2022	216.30	22.61	34.98	1,225.3	21,160	100.00%
2/14/2022	216.35	24.27	37.55	1,334.4	21,160	100.00%
2/15/2022	216.33	22.18	34.31	1,214.2	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 (%)
2/16/2022	216.28	21.62	33.45	1,140.3	21,160	100.00%
2/17/2022	216.17	22.48	34.78	580.9	21,160	100.00%
2/18/2022	216.32	21.37	33.06	1,462.3	21,160	100.00%
2/19/2022	216.33	21.91	33.89	1,230.7	21,160	100.00%
2/20/2022	216.33	22.40	34.65	1,216.0	21,160	100.00%
2/21/2022	216.34	21.39	33.09	1,229.0	21,160	100.00%
2/22/2022	216.31	22.99	35.57	1,140.4	21,160	100.00%
2/23/2022	216.26	22.28	34.47	1,141.0	21,160	100.00%
2/24/2022	216.40	20.35	31.48	1,694.0	21,160	100.00%
2/25/2022	216.80	24.63	38.10	1,700.6	21,160	100.00%
2/26/2022	216.84	19.88	30.75	1,693.3	21,160	100.00%
2/27/2022	216.80	22.60	34.96	1,697.5	21,160	100.00%
2/28/2022	216.65	22.62	34.99	1,697.5	21,160	100.00%
3/1/2022	216.43	24.99	38.66	1,701.2	21,160	100.00%
3/2/2022	216.24	24.21	37.45	1,223.1	21,160	100.00%
3/3/2022	216.25	21.84	33.79	1,264.8	21,160	100.00%
3/4/2022	216.27	24.92	38.55	1,158.3	21,160	100.00%
3/5/2022	216.27	23.43	36.25	1,165.8	21,160	100.00%
3/6/2022	216.26	22.66	35.06	1,140.4	21,160	100.00%
3/7/2022	216.31	24.39	37.73	1,261.4	21,160	100.00%
3/8/2022	216.35	23.22	35.92	1,281.7	21,160	100.00%
3/9/2022	217.15	24.28	37.56	1,700.1	21,160	100.00%
3/10/2022	217.79	22.72	35.15	1,149.8	21,160	100.00%
3/11/2022	217.43	21.67	33.52	1,696.0	21,160	100.00%
3/12/2022	217.82	22.45	34.73	1,234.6	21,160	100.00%
3/13/2022	218.52	21.34	33.01	1,450.0	21,160	100.00%
3/14/2022	218.35	26.60	41.15	1,703.7	21,160	100.00%
3/15/2022	217.90	23.87	36.93	1,699.4	21,160	100.00%
3/16/2022	217.58	21.77	33.68	1,696.2	21,160	100.00%
3/17/2022	220.37	21.60	33.42	1,695.9	21,160	100.00%
3/18/2022	221.57	25.57	39.56	1,702.1	21,160	100.00%
3/19/2022	221.86	21.70	33.57	1,696.1	21,160	100.00%
3/20/2022	221.82	23.56	36.45	1,699.0	21,160	100.00%
3/21/2022	221.46	23.28	36.01	1,698.5	21,160	100.00%
3/22/2022	220.99	24.07	37.24	1,699.8	21,160	100.00%
3/23/2022	220.65	22.64	35.02	1,697.5	21,160	100.00%
3/24/2022	220.25	23.54	36.42	1,698.9	21,160	100.00%
3/25/2022	220.25	22.16	34.28	1,696.8	21,160	100.00%
3/26/2022	219.65	22.44	34.71	1,697.2	21,160	100.00%
3/27/2022	218.26	21.88	33.85	1,696.4	21,160	100.00%
3/28/2022	217.70	25.39	39.28	1,701.8	21,160	100.00%
3/29/2022	217.35	21.78	33.69	1,696.2	21,160	100.00%
3/30/2022	216.99	24.46	37.84	1,700.4	21,160	100.00%
3/31/2022	216.80	22.80	35.27	1,697.8	21,160	100.00%
4/1/2022	216.98	23.49	36.34	1,698.9	21,160	100.00%
4/2/2022	216.88	23.60	36.51	1,699.0	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 (%)
4/3/2022	216.65	22.58	34.93	1,697.4	21,160	100.00%
4/4/2022	216.37	23.73	36.71	1,367.9	21,160	100.00%
4/5/2022	216.22	24.01	37.14	1,228.2	21,160	100.00%
4/6/2022	216.24	24.48	37.87	1,358.1	21,160	100.00%
4/7/2022	216.32	25.18	38.95	1,515.2	21,160	100.00%
4/8/2022	216.30	22.89	35.41	1,298.2	21,160	100.00%
4/9/2022	216.36	22.67	35.07	1,381.5	21,160	100.00%
4/10/2022	216.41	22.25	34.42	1,470.4	21,160	100.00%
4/11/2022	216.37	24.64	38.12	1,368.9	21,160	100.00%
4/12/2022	216.25	22.62	34.99	1,167.5	21,160	100.00%
4/13/2022	216.22	23.96	37.07	1,140.2	21,160	100.00%
4/14/2022	216.27	23.74	36.73	1,225.2	21,160	100.00%
4/15/2022	216.17	24.19	37.42	678.6	21,160	100.00%
4/16/2022	216.18	23.14	35.80	964.2	21,160	100.00%
4/17/2022	216.18	24.90	38.52	949.1	21,160	100.00%
4/18/2022	216.47	23.00	35.58	1,698.1	21,160	100.00%
4/19/2022	217.06	24.14	37.34	1,199.7	21,160	100.00%
4/20/2022	216.60	23.81	36.83	1,699.3	21,160	100.00%
4/21/2022	216.23	25.01	38.69	1,433.6	21,160	100.00%
4/22/2022	216.40	23.77	36.77	1,699.3	21,160	100.00%
4/23/2022	216.47	25.83	39.96	1,702.5	21,160	100.00%
4/24/2022	216.51	26.42	40.87	1,703.4	21,160	100.00%
4/25/2022	216.45	26.52	41.03	1,498.3	21,160	100.00%
4/26/2022	216.35	25.90	40.07	1,327.8	21,160	100.00%
4/27/2022	216.23	28.36	43.87	1,036.7	21,160	100.00%
4/28/2022	216.23	24.69	38.20	1,095.2	21,160	100.00%
4/29/2022	216.21	25.71	39.77	934.2	21,160	100.00%
4/30/2022	216.22	25.60	39.60	1,050.7	21,160	100.00%
5/1/2022	216.23	25.91	40.08	1,052.7	21,160	100.00%
5/2/2022	216.25	24.02	37.16	1,122.6	21,160	100.00%
5/3/2022	216.25	27.85	43.08	1,124.1	21,160	100.00%
5/4/2022	216.29	26.95	41.69	1,196.4	21,160	100.00%
5/5/2022	216.25	28.44	44.00	896.2	21,160	100.00%
5/6/2022	216.22	24.34	37.65	834.3	21,160	100.00%
5/7/2022	216.40	24.47	37.86	1,700.4	21,160	100.00%
5/8/2022	216.50	22.52	34.84	1,697.4	21,160	100.00%
5/9/2022	216.52	25.85	39.99	1,702.5	21,160	100.00%
5/10/2022	216.44	27.83	43.05	1,541.7	21,160	100.00%
5/11/2022	216.38	26.25	40.61	1,338.0	21,160	100.00%
5/12/2022	216.32	26.29	40.67	1,166.6	21,160	100.00%
5/13/2022	216.27	25.08	38.80	1,062.1	21,160	100.00%
5/14/2022	216.24	24.32	37.62	1,022.8	21,160	100.00%
5/15/2022	216.24	25.65	39.68	1,023.2	21,160	100.00%
5/16/2022	216.23	25.79	39.90	1,041.1	21,160	100.00%
5/17/2022	216.27	25.69	39.74	1,092.4	21,160	100.00%
5/18/2022	216.22	27.75	42.93	816.7	21,160	100.00%

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**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 (%)
5/19/2022	216.24	29.68	45.91	1,062.3	21,160	100.00%
5/20/2022	216.27	26.62	41.18	1,162.1	21,160	100.00%
5/21/2022	216.27	28.09	43.46	1,062.2	21,160	100.00%
5/22/2022	216.27	25.14	38.89	1,066.2	21,160	100.00%
5/23/2022	216.39	26.21	40.55	1,483.1	21,160	100.00%
5/24/2022	217.17	24.10	37.28	1,699.8	21,160	100.00%
5/25/2022	217.38	24.71	38.23	1,700.7	21,160	100.00%
5/26/2022	216.78	26.77	41.41	1,703.9	21,160	100.00%
5/27/2022	216.89	25.26	39.08	1,701.6	21,160	100.00%
5/28/2022	217.27	24.46	37.84	1,193.9	21,160	100.00%
5/29/2022	216.93	23.75	36.74	1,699.3	21,160	100.00%
5/30/2022	216.37	25.29	39.12	1,481.0	21,160	100.00%
5/31/2022	216.14	29.71	45.96	980.8	21,160	100.00%
6/1/2022	216.19	30.67	47.45	974.0	21,160	100.00%
6/2/2022	216.22	30.22	46.75	948.3	21,160	100.00%
6/3/2022	216.22	29.44	45.54	840.5	21,160	100.00%
6/4/2022	216.19	29.42	45.51	609.1	21,160	100.00%
6/5/2022	216.15	29.73	45.99	439.5	21,160	100.00%
6/6/2022	216.11	29.71	45.96	290.6	21,160	100.00%
6/7/2022	216.08	32.25	49.89	219.2	21,160	100.00%
6/8/2022	216.04	27.70	42.85	28.4	21,160	100.00%
6/9/2022	216.06	29.14	45.08	327.5	21,160	100.00%
6/10/2022	216.03	33.08	51.17	26.9	21,160	100.00%
6/11/2022	215.99	31.67	48.99	15.7	21,094	99.69%
6/12/2022	216.02	29.41	45.50	96.4	21,160	100.00%
6/13/2022	216.00	27.65	42.77	38.6	21,151	99.96%
6/14/2022	215.97	32.92	50.93	32.4	21,115	99.79%
6/15/2022	215.89	32.55	50.35	-13.9	20,987	99.19%
6/16/2022	215.90	31.99	49.49	78.6	21,045	99.46%
6/17/2022	215.82	27.10	41.92	-19.7	20,923	98.88%
6/18/2022	215.87	27.56	42.64	114.8	21,066	99.56%
6/19/2022	215.83	27.58	42.67	21.6	21,024	99.36%
6/20/2022	215.80	28.85	44.63	32.0	20,999	99.24%
6/21/2022	215.76	30.51	47.20	282.4	21,160	100.00%
6/22/2022	215.78	33.29	51.50	89.2	21,160	100.00%
6/23/2022	215.68	29.69	45.93	-33.3	21,002	99.26%
6/24/2022	215.61	32.61	50.45	-1.8	20,899	98.77%
6/25/2022	215.53	33.36	51.61	-0.3	20,796	98.28%
6/26/2022	215.45	31.83	49.24	5.3	20,709	97.87%
6/27/2022	215.43	27.00	41.77	66.5	20,758	98.10%
6/28/2022	215.36	28.22	43.66	10.0	20,691	97.79%
6/29/2022	215.30	29.70	45.95	13.8	20,627	97.48%
6/30/2022	215.26	26.89	41.60	33.1	20,610	97.40%
7/1/2022	215.17	30.59	47.32	-17.2	20,482	96.80%
7/2/2022	215.10	29.77	46.05	-0.5	20,390	96.36%
7/3/2022	215.04	28.46	44.03	5.6	20,314	96.00%



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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 (%)
7/4/2022	214.96	29.20	45.17	-13.0	20,198	95.46%
7/5/2022	214.88	31.55	48.81	-11.8	20,078	94.89%
7/6/2022	214.82	30.51	47.20	8.0	20,001	94.52%
7/7/2022	214.74	36.00	55.69	-9.9	19,870	93.91%
7/8/2022	214.82	29.63	45.84	139.3	20,056	94.78%
7/9/2022	214.92	29.46	45.57	147.1	20,257	95.74%
7/10/2022	215.13	26.28	40.66	254.8	20,682	97.74%
7/11/2022	215.28	27.56	42.64	199.4	20,993	99.21%
7/12/2022	215.30	30.28	46.84	73.9	21,047	99.47%
7/13/2022	215.32	30.78	47.62	74.0	21,099	99.71%
7/14/2022	215.46	29.30	45.33	189.6	21,160	100.00%
7/15/2022	215.78	29.86	46.19	93.3	21,160	100.00%
7/16/2022	215.78	29.97	46.36	93.2	21,160	100.00%
7/17/2022	215.77	29.75	46.02	45.0	21,158	99.99%
7/18/2022	215.85	30.22	46.75	131.9	21,160	100.00%
7/19/2022	215.83	32.67	50.54	50.7	21,160	100.00%
7/20/2022	215.83	33.16	51.30	50.6	21,158	99.99%
7/21/2022	215.78	31.49	48.72	-9.2	21,043	99.45%
7/22/2022	215.82	31.39	48.56	80.2	21,106	99.75%
7/23/2022	215.91	34.07	52.71	139.1	21,160	100.00%
7/24/2022	216.00	29.36	45.42	168.1	21,160	100.00%
7/25/2022	216.01	27.89	43.15	65.5	21,160	100.00%
7/26/2022	216.08	31.76	49.13	140.4	21,160	100.00%
7/27/2022	216.18	28.72	44.43	199.7	21,160	100.00%
7/28/2022	216.34	30.74	47.55	1,295.2	21,160	100.00%
7/29/2022	216.44	29.80	46.10	1,508.0	21,160	100.00%
7/30/2022	216.45	29.42	45.51	1,364.1	21,160	100.00%
7/31/2022	216.50	28.20	43.63	1,568.5	21,160	100.00%
8/1/2022	216.55	28.50	44.09	1,670.7	21,160	100.00%
8/2/2022	216.34	30.97	47.91	1,202.1	21,160	100.00%
8/3/2022	216.13	30.21	46.73	251.6	21,160	100.00%
8/4/2022	216.09	33.57	51.93	217.6	21,160	100.00%
8/5/2022	216.05	34.04	52.66	65.0	21,160	100.00%
8/6/2022	216.02	33.11	51.22	59.3	21,160	100.00%
8/7/2022	215.94	31.31	48.44	-1.7	21,060	99.53%
8/8/2022	215.88	28.22	43.66	22.3	21,018	99.33%
8/9/2022	215.83	33.93	52.49	26.1	20,966	99.08%
8/10/2022	215.79	35.05	54.22	32.5	20,922	98.88%
8/11/2022	215.74	32.32	50.00	21.2	20,865	98.61%
8/12/2022	215.72	27.33	42.28	50.5	20,882	98.69%
8/13/2022	215.68	29.91	46.27	22.8	20,835	98.47%
8/14/2022	215.63	29.42	45.51	29.8	20,804	98.32%
8/15/2022	215.58	28.53	44.14	16.1	20,748	98.06%
8/16/2022	215.52	29.97	46.36	5.0	20,666	97.67%
8/17/2022	215.45	31.68	49.01	0.9	20,571	97.22%
8/18/2022	215.39	35.68	55.20	12.3	20,486	96.81%

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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 (%)
8/19/2022	215.33	32.31	49.98	16.3	20,419	96.50%
8/20/2022	215.27	27.66	42.79	19.4	20,373	96.28%
8/21/2022	215.21	26.92	41.65	18.4	20,326	96.06%
8/22/2022	215.19	28.53	44.14	37.4	20,313	96.00%
8/23/2022	215.41	29.89	46.24	262.1	20,741	98.02%
8/24/2022	215.53	30.47	47.14	163.4	20,972	99.11%
8/25/2022	215.57	31.03	48.00	95.7	21,066	99.56%
8/26/2022	215.59	27.71	42.87	77.8	21,136	99.89%
8/27/2022	215.58	29.02	44.89	46.6	21,139	99.90%
8/28/2022	215.57	30.19	46.70	46.9	21,139	99.90%
8/29/2022	215.53	30.44	47.09	30.0	21,105	99.74%
8/30/2022	215.49	31.00	47.96	35.0	21,080	99.62%
8/31/2022	215.41	32.84	50.80	-4.5	20,970	99.10%
9/1/2022	215.34	33.03	51.10	9.1	20,887	98.71%
9/2/2022	215.27	33.78	52.26	10.2	20,803	98.32%
9/3/2022	215.19	32.63	50.48	-0.6	20,702	97.84%
9/4/2022	215.11	29.67	45.90	-1.2	20,609	97.40%
9/5/2022	215.01	28.51	44.10	-22.3	20,477	96.77%
9/6/2022	214.98	32.51	50.29	52.0	20,480	96.79%
9/7/2022	215.02	29.91	46.27	116.9	20,620	97.45%
9/8/2022	214.99	31.58	48.85	48.7	20,620	97.45%
9/9/2022	214.96	28.51	44.10	48.7	20,629	97.49%
9/10/2022	214.93	28.05	43.39	48.7	20,640	97.54%
9/11/2022	214.93	27.98	43.29	76.3	20,705	97.85%
9/12/2022	214.96	27.20	42.08	103.7	20,827	98.43%
9/13/2022	214.99	28.69	44.38	104.1	20,946	98.99%
9/14/2022	214.97	29.89	46.24	49.0	20,951	99.02%
9/15/2022	214.95	32.11	49.67	45.0	20,942	98.97%
9/16/2022	214.90	29.72	45.98	19.7	20,890	98.73%
9/17/2022	214.84	32.40	50.12	14.7	20,820	98.39%
9/18/2022	214.78	29.28	45.30	11.9	20,754	98.08%
9/19/2022	214.71	28.41	43.95	-1.1	20,664	97.66%
9/20/2022	214.65	33.58	51.95	6.1	20,573	97.23%
9/21/2022	214.59	31.55	48.81	2.1	20,481	96.79%
9/22/2022	214.56	33.43	51.72	32.8	20,443	96.61%
9/23/2022	214.44	30.02	46.44	-51.4	20,249	95.70%
9/24/2022	214.36	29.72	45.98	-3.8	20,150	95.23%
9/25/2022	214.32	30.12	46.60	27.3	20,112	95.05%
9/26/2022	214.24	29.69	45.93	-12.1	19,997	94.51%
9/27/2022	214.20	33.73	52.18	28.2	19,949	94.28%
9/28/2022	214.11	28.34	43.84	-22.3	19,818	93.66%
9/29/2022	214.09	30.48	47.15	47.1	19,818	93.66%
9/30/2022	214.31	25.69	39.74	250.0	20,235	95.63%
10/1/2022	214.77	25.05	38.75	456.8	21,064	99.55%
10/2/2022	215.34	25.54	39.51	570.9	21,160	100.00%
10/3/2022	215.45	25.31	39.15	139.8	21,160	100.00%

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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 (%)
10/4/2022	215.51	27.53	42.59	92.3	21,160	100.00%
10/5/2022	215.58	29.05	44.94	102.3	21,160	100.00%
10/6/2022	215.59	30.31	46.89	45.0	21,156	99.98%
10/7/2022	215.58	29.62	45.82	30.9	21,126	99.84%
10/8/2022	215.54	28.22	43.66	10.5	21,061	99.53%
10/9/2022	215.52	29.39	45.47	29.8	21,029	99.38%
10/10/2022	215.49	30.00	46.41	20.4	20,978	99.14%
10/11/2022	215.45	29.99	46.39	10.7	20,907	98.81%
10/12/2022	215.41	28.16	43.56	10.4	20,841	98.50%
10/13/2022	215.37	27.29	42.22	10.1	20,777	98.19%
10/14/2022	215.33	28.95	44.79	10.5	20,710	97.87%
10/15/2022	215.28	29.16	45.11	0.2	20,620	97.45%
10/16/2022	215.25	27.91	43.18	20.5	20,575	97.24%
10/17/2022	215.22	26.94	41.68	19.4	20,531	97.03%
10/18/2022	215.19	29.04	44.92	20.1	20,482	96.80%
10/19/2022	215.18	29.38	45.45	39.1	20,469	96.74%
10/20/2022	215.16	28.56	44.18	29.4	20,440	96.60%
10/21/2022	215.13	27.94	43.22	25.2	20,404	96.43%
10/22/2022	215.08	27.77	42.96	14.0	20,347	96.16%
10/23/2022	215.03	29.67	45.90	14.5	20,285	95.87%
10/24/2022	214.99	28.78	44.52	24.4	20,245	95.68%
10/25/2022	214.84	31.42	48.61	17.1	20,182	95.38%
10/26/2022	214.90	29.76	46.04	25.9	20,142	95.19%
10/27/2022	214.86	29.82	46.13	25.7	20,102	95.00%
10/28/2022	214.83	31.44	48.64	35.3	20,075	94.88%
10/29/2022	214.75	25.87	40.02	-13.6	19,969	94.37%
10/30/2022	214.68	27.41	42.40	-0.2	19,885	93.97%
10/31/2022	214.71	26.47	40.95	91.4	19,985	94.45%
11/1/2022	214.72	26.05	40.30	70.6	20,045	94.73%
11/2/2022	214.69	27.00	41.77	34.2	20,030	94.66%
11/3/2022	214.67	25.04	38.74	42.9	20,038	94.70%
11/4/2022	214.63	25.29	39.12	24.6	20,009	94.56%
11/5/2022	214.57	25.36	39.23	6.2	19,944	94.25%
11/6/2022	214.54	27.54	42.60	34.5	19,928	94.18%
11/7/2022	214.51	27.69	42.84	34.2	19,910	94.10%
11/8/2022	214.43	24.34	37.65	-14.0	19,808	93.61%
11/9/2022	214.40	25.31	39.15	35.2	19,800	93.57%
11/10/2022	214.30	25.68	39.73	-38.9	19,644	92.84%
11/11/2022	214.43	24.76	38.30	174.3	19,914	94.11%
11/12/2022	214.68	24.24	37.50	280.6	20,396	96.39%
11/13/2022	214.83	23.82	36.85	188.7	20,697	97.82%
11/14/2022	214.84	24.64	38.12	55.7	20,732	97.98%
11/15/2022	214.89	24.29	37.58	89.6	20,835	98.47%
11/16/2022	214.96	25.83	39.96	107.4	20,969	99.10%
11/17/2022	215.07	24.41	37.76	146.7	21,160	100.00%
11/18/2022	215.12	23.12	35.77	97.5	21,160	100.00%

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11/19/2022	215.15	23.53	36.40	85.0	21,160	100.00%
11/20/2022	215.16	23.92	37.00	66.1	21,160	100.00%
11/21/2022	215.15	25.91	40.08	42.4	21,160	100.00%
11/22/2022	215.14	24.13	37.33	37.7	21,160	100.00%
11/23/2022	215.13	23.62	36.54	43.7	21,160	100.00%
11/24/2022	215.09	23.52	36.39	17.9	21,123	99.83%
11/25/2022	215.24	21.88	33.85	195.6	21,160	100.00%
11/26/2022	215.38	23.05	35.66	180.7	21,160	100.00%
11/27/2022	215.86	23.99	37.11	505.3	21,160	100.00%
11/28/2022	216.60	24.18	37.41	780.2	21,160	100.00%
11/29/2022	216.74	23.62	36.54	1,699.1	21,160	100.00%
11/30/2022	216.74	24.51	37.92	1,700.4	21,160	100.00%
12/1/2022	216.91	23.81	36.83	1,699.3	21,160	100.00%
12/2/2022	216.78	22.13	34.24	1,696.8	21,160	100.00%
12/3/2022	216.64	22.34	34.56	1,697.1	21,160	100.00%
12/4/2022	216.43	24.27	37.55	1,562.4	21,160	100.00%
12/5/2022	216.29	24.78	38.33	1,326.7	21,160	100.00%
12/6/2022	216.27	22.44	34.71	1,261.9	21,160	100.00%
12/7/2022	216.31	23.13	35.78	1,308.9	21,160	100.00%
12/8/2022	216.27	21.40	33.11	1,280.2	21,160	100.00%
12/9/2022	216.18	25.69	39.74	1,076.3	21,160	100.00%
12/10/2022	216.14	21.17	32.75	921.6	21,160	100.00%
12/11/2022	216.05	23.66	36.60	481.0	21,160	100.00%
12/12/2022	216.08	21.35	33.03	715.0	21,160	100.00%
12/13/2022	216.11	24.56	37.99	585.9	21,160	100.00%
12/14/2022	216.19	23.95	37.05	989.9	21,160	100.00%
12/15/2022	216.79	22.49	34.79	1,697.3	21,160	100.00%
12/16/2022	217.98	23.23	35.94	1,449.6	21,160	100.00%
12/17/2022	218.09	21.60	33.42	1,695.9	21,160	100.00%
12/18/2022	217.93	24.24	37.50	1,700.0	21,160	100.00%
12/19/2022	217.51	24.51	37.92	1,700.4	21,160	100.00%
12/20/2022	216.88	21.13	32.69	1,695.2	21,160	100.00%
12/21/2022	216.44	23.92	37.00	1,566.7	21,160	100.00%
12/22/2022	216.45	23.39	36.18	1,698.7	21,160	100.00%
12/23/2022	217.16	22.99	35.57	1,698.1	21,160	100.00%
12/24/2022	217.29	22.96	35.52	1,698.0	21,160	100.00%
12/25/2022	217.20	25.75	39.84	1,702.4	21,160	100.00%
12/26/2022	217.03	25.66	39.70	1,702.2	21,160	100.00%
12/27/2022	216.78	24.86	38.46	1,701.0	21,160	100.00%
12/28/2022	216.51	25.67	39.71	1,702.2	21,160	100.00%
12/29/2022	216.38	24.17	37.39	1,443.1	21,160	100.00%
12/30/2022	216.35	23.67	36.62	1,339.2	21,160	100.00%
12/31/2022	216.36	23.38	36.17	1,407.4	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						
1/1/2022	22.73	0.00	0.00	0.424	23.15	0.354	0.424	0.013	0.000	0.569	0.195	4.43	0.00	6.22	10.95	5.21	6.24	11.71	23.15	0.013	11.29
1/2/2022	21.53	0.00	0.00	0.411	21.94	0.377	0.411	0.014	0.000	0.606	0.197	2.02	0.00	6.31	12.00	2.81	6.33	12.81	21.94	0.014	12.40
1/3/2022	23.34	0.00	0.00	0.419	23.76	0.390	0.419	0.014	0.000	0.627	0.195	3.13	0.00	5.67	13.32	3.94	5.68	14.14	23.76	0.014	13.72
1/4/2022	22.32	0.00	0.00	0.420	22.74	0.363	0.420	0.013	0.000	0.583	0.198	3.55	0.00	5.56	12.06	4.33	5.57	12.84	22.74	0.013	12.42
1/5/2022	23.14	0.00	0.00	0.424	23.56	0.381	0.424	0.014	0.000	0.612	0.205	3.42	0.00	4.05	14.46	4.22	4.06	15.28	23.56	0.014	14.85
1/6/2022	21.91	0.00	0.00	0.429	22.34	0.363	0.429	0.013	0.000	0.583	0.196	3.16	0.00	7.02	10.58	3.95	7.03	11.36	22.34	0.013	10.93
1/7/2022	22.84	0.00	0.00	0.425	23.27	0.387	0.425	0.014	0.000	0.622	0.194	2.79	0.00	7.19	11.65	3.60	7.20	12.46	23.27	0.014	12.04
1/8/2022	22.86	0.00	0.00	0.427	23.29	0.356	0.427	0.013	0.000	0.572	0.196	4.46	0.00	6.13	11.13	5.24	6.15	11.90	23.29	0.013	11.47
1/9/2022	23.26	0.00	0.00	0.433	23.69	0.386	0.433	0.014	0.000	0.621	0.194	3.25	0.00	6.67	12.12	4.07	6.68	12.94	23.69	0.014	12.51
1/10/2022	22.32	0.00	0.00	0.365	22.69	0.373	0.365	0.014	0.000	0.599	0.196	2.98	0.00	4.84	13.32	3.72	4.85	14.12	22.69	0.014	13.75
1/11/2022	23.25	0.00	0.00	0.351	23.60	0.375	0.351	0.014	0.001	0.602	0.202	3.79	0.00	7.31	10.95	4.52	7.33	11.76	23.60	0.014	11.41
1/12/2022	21.12	0.00	0.00	0.353	21.47	0.373	0.353	0.014	0.001	0.600	0.160	1.75	0.00	6.31	11.92	2.48	6.32	12.67	21.47	0.014	12.32
1/13/2022	23.61	0.00	0.00	0.348	23.96	0.370	0.348	0.014	0.000	0.596	0.124	4.36	0.00	6.19	11.96	5.08	6.20	12.68	23.96	0.014	12.33
1/14/2022	20.63	0.00	0.00	0.341	20.97	0.352	0.341	0.013	0.000	0.566	0.133	2.35	0.00	5.94	11.28	3.04	5.95	11.98	20.97	0.013	11.64
1/15/2022	23.34	0.00	0.00	0.319	23.66	0.398	0.319	0.015	0.000	0.640	0.125	3.21	0.00	6.53	12.42	3.93	6.54	13.19	23.66	0.015	12.87
1/16/2022	20.43	0.00	0.00	0.319	20.75	0.350	0.319	0.013	0.000	0.563	0.130	2.23	0.00	5.71	11.44	2.90	5.72	12.13	20.75	0.013	11.81
1/17/2022	22.48	0.00	0.00	0.328	22.81	0.606	0.328	0.022	0.000	0.974	0.129	-2.82	0.00	7.78	15.79	-1.89	7.80	16.89	22.81	0.022	16.56
1/18/2022	22.14	0.00	0.00	0.135	22.28	0.360	0.135	0.013	0.000	0.578	0.128	3.25	0.00	5.98	11.83	3.74	5.99	12.54	22.28	0.013	12.40
1/19/2022	22.20	0.00	0.00	0.129	22.33	0.361	0.129	0.013	0.000	0.581	0.136	3.22	0.00	5.79	12.10	3.71	5.80	12.82	22.33	0.013	12.69
1/20/2022	21.89	0.00	0.00	0.110	22.00	0.352	0.110	0.013	0.000	0.566	0.121	3.39	0.00	5.58	11.87	3.85	5.59	12.56	22.00	0.013	12.45
1/21/2022	21.43	0.00	0.00	0.086	21.52	0.341	0.086	0.013	0.000	0.548	0.122	3.50	0.00	5.55	11.36	3.93	5.56	12.03	21.52	0.013	11.94
1/22/2022	22.68	0.00	0.00	0.123	22.80	0.382	0.123	0.014	0.000	0.614	0.119	2.60	0.00	6.44	12.51	3.10	6.45	13.25	22.80	0.014	13.12
1/23/2022	22.89	0.00	0.00	0.124	23.01	0.376	0.124	0.014	0.000	0.604	0.112	3.15	0.00	6.43	12.20	3.65	6.45	12.92	23.01	0.014	12.79
1/24/2022	24.16	0.00	0.00	0.250	24.41	0.400	0.250	0.015	0.000	0.644	0.121	3.24	0.00	6.46	13.28	3.89	6.48	14.04	24.41	0.015	13.79
1/25/2022	22.87	0.00	0.00	0.135	23.01	0.379	0.135	0.014	0.000	0.609	0.123	2.97	0.00	6.27	12.50	3.48	6.29	13.23	23.01	0.014	13.10
1/26/2022	23.52	0.00	0.00	0.126	23.65	0.368	0.126	0.014	0.000	0.592	0.124	4.17	0.00	5.97	12.28	4.66	5.99	12.99	23.65	0.014	12.87
1/27/2022	22.42	0.00	0.00	0.129	22.55	0.387	0.129	0.014	0.000	0.623	0.124	2.07	0.00	6.36	12.84	2.59	6.38	13.59	22.55	0.014	13.46
1/28/2022	22.80	0.00	0.00	0.133	22.93	0.352	0.133	0.013	0.000	0.566	0.120	4.31	0.00	5.74	11.70	4.80	5.76	12.38	22.93	0.013	12.25
1/29/2022	20.83	0.00	0.00	0.127	20.96	0.346	0.127	0.013	0.000	0.556	0.114	2.68	0.00	5.98	11.14	3.15	6.00	11.81	20.96	0.013	11.68
1/30/2022	21.94	0.00	0.00	0.130	22.07	0.356	0.130	0.013	0.000	0.572	0.116	3.25	0.00	6.12	11.52	3.74	6.13	12.21	22.07	0.013	12.08
1/31/2022	25.22	0.00	0.00	0.144	25.36	1.312	0.144	0.048	0.000	2.110	0.116	2.85	0.00	6.43	12.35	4.31	6.48	14.58	25.36	0.048	14.43
2/1/2022	23.22	0.00	0.00	0.137	23.36	0.370	0.137	0.014	0.000	0.594	0.118	3.81	0.00	6.16	12.16	4.32	6.17	12.87	23.36	0.014	12.73
2/2/2022	22.43	0.00	0.00	0.047	22.48	0.371	0.047	0.014	0.000	0.597	0.124	2.85	0.00	5.92	12.56	3.27	5.93	13.28	22.48	0.014	13.23
2/3/2022	23.36	0.00	0.00	0.043	23.40	0.374	0.043	0.014	0.001	0.602	0.115	3.60	0.00	6.18	12.47	4.02	6.20	13.19	23.40	0.015	13.14
2/4/2022	20.86	0.00	0.00	0.031	20.89	0.356	0.031	0.013	0.000	0.573	0.117	2.04	0.00	5.97	11.79	2.43	5.98	12.48	20.89	0.013	12.45
2/5/2022	22.64	0.00	0.00	0.027	22.67	0.373	0.027	0.014	0.000	0.599	0.136	2.96	0.00	6.29	12.27	3.36	6.31	13.00	22.67	0.014	12.97
2/6/2022	21.49	0.00	0.00	0.027	21.52	0.365	0.027	0.013	0.000	0.587	0.113	2.22	0.00	6.24	11.95	2.61	6.26	12.65	21.52	0.013	12.62

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						
2/7/2022	22.40	0.00	0.00	0.021	22.42	0.346	0.021	0.013	0.000	0.557	0.392	4.11	0.00	5.60	11.39	4.48	5.61	12.33	22.42	0.013	12.31
2/8/2022	21.18	0.00	0.00	0.028	21.21	0.349	0.028	0.013	0.000	0.561	0.604	2.74	0.00	5.44	11.47	3.12	5.45	12.64	21.21	0.013	12.61
2/9/2022	23.11	0.00	0.00	0.038	23.15	0.386	0.038	0.014	0.000	0.620	0.623	2.74	0.00	6.07	12.66	3.16	6.08	13.90	23.15	0.014	13.86
2/10/2022	22.51	0.00	0.00	0.043	22.55	0.361	0.043	0.013	0.000	0.580	0.585	3.47	0.00	5.91	11.59	3.87	5.92	12.75	22.55	0.013	12.71
2/11/2022	21.73	0.00	0.00	0.229	21.96	0.335	0.229	0.012	0.000	0.539	0.828	4.23	0.00	5.42	10.37	4.79	5.43	11.73	21.96	0.012	11.50
2/12/2022	22.28	0.00	0.00	0.240	22.52	0.368	0.240	0.014	0.000	0.591	1.134	3.08	0.00	5.96	11.14	3.69	5.97	12.86	22.52	0.014	12.62
2/13/2022	22.61	0.00	0.00	0.220	22.83	0.372	0.220	0.014	0.000	0.598	1.209	3.17	0.00	5.34	11.91	3.76	5.35	13.72	22.83	0.014	13.50
2/14/2022	24.27	0.00	0.00	0.019	24.29	0.922	0.019	0.034	0.000	1.482	0.800	3.71	0.00	5.14	12.18	4.65	5.18	14.46	24.29	0.034	14.44
2/15/2022	22.18	0.00	0.00	0.000	22.18	0.347	0.000	0.013	0.000	0.558	0.374	3.84	0.00	6.04	11.00	4.19	6.06	11.94	22.18	0.013	11.94
2/16/2022	21.62	0.00	0.00	0.000	21.62	0.349	0.000	0.013	0.000	0.561	0.335	3.18	0.00	6.21	10.97	3.53	6.23	11.86	21.62	0.013	11.86
2/17/2022	22.48	0.00	0.00	0.000	22.48	0.356	0.000	0.013	0.000	0.573	0.342	3.64	0.00	6.27	11.28	4.00	6.29	12.20	22.48	0.013	12.20
2/18/2022	21.37	0.00	0.00	0.023	21.39	0.365	0.023	0.013	0.000	0.587	1.336	2.09	0.00	5.82	11.16	2.48	5.84	13.08	21.39	0.014	13.05
2/19/2022	21.91	0.00	0.00	0.357	22.27	0.363	0.357	0.013	0.000	0.583	1.628	3.08	0.00	5.61	10.63	3.80	5.62	12.84	22.27	0.013	12.49
2/20/2022	22.40	0.00	0.00	0.296	22.70	0.366	0.296	0.013	0.000	0.588	0.879	3.36	0.00	5.82	11.37	4.02	5.83	12.84	22.70	0.013	12.54
2/21/2022	21.39	0.00	0.00	0.175	21.57	0.349	0.175	0.013	0.000	0.561	0.598	3.10	0.00	5.47	11.30	3.62	5.49	12.46	21.57	0.013	12.28
2/22/2022	22.99	0.00	0.00	0.171	23.16	0.384	0.171	0.014	0.001	0.618	0.627	2.83	0.00	6.27	12.24	3.39	6.29	13.49	23.16	0.015	13.31
2/23/2022	22.28	0.00	0.00	0.156	22.44	0.341	0.156	0.013	0.000	0.548	0.613	4.42	0.00	5.38	10.96	4.92	5.40	12.12	22.44	0.013	11.97
2/24/2022	20.35	0.00	0.00	0.148	20.50	0.355	0.148	0.013	0.000	0.571	0.616	1.73	0.00	5.61	11.46	2.23	5.62	12.64	20.50	0.013	12.50
2/25/2022	24.63	0.00	0.00	0.161	24.79	0.361	0.161	0.013	0.000	0.581	0.631	5.67	0.00	5.79	11.58	6.19	5.80	12.80	24.79	0.014	12.63
2/26/2022	19.88	0.00	0.00	0.153	20.03	0.338	0.153	0.012	0.000	0.543	0.609	2.16	0.00	5.72	10.50	2.65	5.73	11.65	20.03	0.012	11.50
2/27/2022	22.60	0.00	0.00	0.147	22.75	0.367	0.147	0.014	0.000	0.589	0.552	3.36	0.00	6.17	11.55	3.87	6.19	12.69	22.75	0.014	12.54
2/28/2022	22.62	0.00	0.00	0.164	22.78	0.372	0.164	0.014	0.000	0.598	0.470	3.10	0.00	6.01	12.06	3.64	6.02	13.13	22.78	0.014	12.96
3/1/2022	24.99	0.00	0.00	0.174	25.16	1.022	0.174	0.038	0.000	1.644	0.262	3.54	0.00	6.12	12.36	4.74	6.16	14.27	25.16	0.038	14.09
3/2/2022	24.21	0.00	0.00	0.180	24.39	0.389	0.180	0.014	0.000	0.626	0.277	3.81	0.00	6.25	12.85	4.38	6.26	13.75	24.39	0.014	13.57
3/3/2022	21.84	0.00	0.00	0.185	22.03	0.352	0.185	0.013	0.000	0.566	0.380	3.39	0.00	5.71	11.43	3.93	5.72	12.38	22.03	0.013	12.19
3/4/2022	24.92	0.00	0.00	0.173	25.09	1.572	0.173	0.058	0.000	2.528	0.270	2.40	0.00	6.09	12.00	4.15	6.15	14.80	25.09	0.058	14.63
3/5/2022	23.43	0.00	0.00	0.169	23.60	0.354	0.169	0.013	0.000	0.569	0.258	4.88	0.00	5.85	11.50	5.40	5.86	12.33	23.60	0.013	12.16
3/6/2022	22.66	0.00	0.00	0.176	22.84	0.382	0.176	0.014	0.000	0.615	0.262	2.61	0.00	6.57	12.20	3.17	6.59	13.08	22.84	0.014	12.90
3/7/2022	24.39	0.00	0.00	0.175	24.57	0.643	0.175	0.024	0.000	1.033	0.263	3.93	0.00	6.30	12.20	4.75	6.32	13.49	24.57	0.024	13.32
3/8/2022	23.22	0.00	0.00	0.162	23.38	0.369	0.162	0.014	0.000	0.594	0.262	3.85	0.00	6.19	11.95	4.38	6.20	12.80	23.38	0.014	12.64
3/9/2022	24.28	0.00	0.00	0.151	24.43	0.391	0.151	0.014	0.000	0.629	0.265	3.74	0.00	6.28	12.96	4.28	6.29	13.86	24.43	0.014	13.71
3/10/2022	22.72	0.00	0.00	0.158	22.88	0.365	0.158	0.013	0.000	0.586	0.272	3.59	0.00	5.84	12.06	4.11	5.85	12.91	22.88	0.013	12.76
3/11/2022	21.67	0.00	0.00	0.175	21.85	0.337	0.175	0.012	0.000	0.542	0.238	4.00	0.00	5.58	10.96	4.51	5.60	11.74	21.85	0.012	11.56
3/12/2022	22.45	0.00	0.00	0.170	22.62	0.357	0.170	0.013	0.000	0.574	0.245	3.74	0.00	5.68	11.84	4.27	5.70	12.66	22.62	0.013	12.49
3/13/2022	21.34	0.00	0.00	0.182	21.52	0.359	0.182	0.013	0.000	0.578	0.240	2.52	0.00	6.07	11.56	3.06	6.08	12.38	21.52	0.013	12.20
3/14/2022	26.60	0.00	0.00	0.191	26.79	0.407	0.191	0.015	0.000	0.654	0.259	5.28	0.00	6.82	13.17	5.88	6.84	14.08	26.79	0.015	13.89
3/15/2022	23.87	0.00	0.00	0.190	24.06	0.382	0.190	0.014	0.000	0.614	0.263	3.86	0.00	6.05	12.69	4.43	6.06	13.56	24.06	0.014	13.37

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						
3/16/2022	21.77	0.00	0.00	0.183	21.95	0.354	0.183	0.013	0.000	0.570	0.264	3.21	0.00	5.61	11.75	3.75	5.62	12.59	21.95	0.013	12.40
3/17/2022	21.60	0.00	0.00	0.189	21.79	0.359	0.189	0.013	0.000	0.577	0.258	2.80	0.00	5.40	12.19	3.35	5.41	13.03	21.79	0.013	12.84
3/18/2022	25.57	0.00	0.00	0.190	25.76	0.399	0.190	0.015	0.000	0.641	0.252	4.66	0.00	6.22	13.38	5.25	6.24	14.27	25.76	0.015	14.08
3/19/2022	21.70	0.00	0.00	0.186	21.89	0.349	0.186	0.013	0.000	0.561	0.261	3.43	0.00	5.55	11.54	3.96	5.56	12.36	21.89	0.013	12.17
3/20/2022	23.56	0.00	0.00	0.182	23.74	0.376	0.182	0.014	0.000	0.605	0.245	3.83	0.00	6.28	12.21	4.39	6.29	13.06	23.74	0.014	12.88
3/21/2022	23.28	0.00	0.00	0.188	23.47	0.370	0.188	0.014	0.000	0.596	0.167	3.87	0.00	5.78	12.48	4.43	5.80	13.24	23.47	0.014	13.05
3/22/2022	24.07	0.00	0.00	0.188	24.26	0.405	0.188	0.015	0.000	0.650	0.302	2.86	0.00	6.40	13.44	3.45	6.41	14.39	24.26	0.015	14.21
3/23/2022	22.64	0.00	0.00	0.180	22.82	0.391	0.180	0.014	0.000	0.629	0.280	2.12	0.00	6.27	12.94	2.69	6.28	13.85	22.82	0.014	13.67
3/24/2022	23.54	0.00	0.00	0.179	23.72	0.353	0.179	0.013	0.000	0.567	0.269	5.07	0.00	5.60	11.67	5.60	5.62	12.50	23.72	0.013	12.32
3/25/2022	22.16	0.00	0.00	0.183	22.34	0.354	0.183	0.013	0.000	0.569	0.276	3.62	0.00	5.48	11.85	4.16	5.49	12.70	22.34	0.013	12.51
3/26/2022	22.44	0.00	0.00	0.178	22.62	0.381	0.178	0.014	0.000	0.613	0.263	2.45	0.00	6.28	12.44	3.01	6.30	13.31	22.62	0.014	13.13
3/27/2022	21.88	0.00	0.00	0.175	22.06	0.350	0.175	0.013	0.000	0.563	0.249	3.54	0.00	5.80	11.36	4.07	5.81	12.18	22.06	0.013	12.00
3/28/2022	25.39	0.00	0.00	0.184	25.57	0.731	0.184	0.027	0.000	1.175	0.246	4.08	0.00	6.56	12.57	4.99	6.58	14.00	25.57	0.027	13.81
3/29/2022	21.78	0.00	0.00	0.183	21.96	0.360	0.183	0.013	0.000	0.579	0.285	2.93	0.00	5.92	11.69	3.47	5.94	12.55	21.96	0.013	12.37
3/30/2022	24.46	0.00	0.00	0.188	24.65	0.380	0.188	0.014	0.000	0.611	0.321	4.54	0.00	5.99	12.60	5.11	6.01	13.53	24.65	0.014	13.34
3/31/2022	22.80	0.00	0.00	0.181	22.98	0.365	0.181	0.013	0.000	0.586	0.272	3.70	0.00	5.73	12.13	4.25	5.75	12.99	22.98	0.013	12.81
4/1/2022	23.49	0.00	0.00	0.174	23.66	0.385	0.174	0.014	0.000	0.620	0.210	3.28	0.00	6.41	12.57	3.84	6.42	13.40	23.66	0.014	13.23
4/2/2022	23.60	0.00	0.00	0.166	23.77	0.357	0.166	0.013	0.000	0.574	0.267	4.87	0.00	5.88	11.64	5.39	5.90	12.48	23.77	0.013	12.31
4/3/2022	22.58	0.00	0.00	0.181	22.76	0.377	0.181	0.014	0.000	0.606	0.223	2.84	0.00	6.32	12.20	3.40	6.34	13.03	22.76	0.014	12.84
4/4/2022	23.73	0.00	0.00	0.185	23.92	0.359	0.185	0.013	0.000	0.577	0.266	4.93	0.00	5.79	11.80	5.47	5.80	12.64	23.92	0.013	12.45
4/5/2022	24.01	0.00	0.00	0.169	24.18	0.392	0.169	0.014	0.000	0.631	0.292	3.43	0.00	6.36	12.89	3.99	6.38	13.81	24.18	0.014	13.64
4/6/2022	24.48	0.00	0.00	0.180	24.66	0.392	0.180	0.014	0.000	0.630	0.312	3.95	0.00	6.05	13.14	4.52	6.06	14.08	24.66	0.014	13.90
4/7/2022	25.18	0.00	0.00	0.181	25.36	0.382	0.181	0.014	0.000	0.614	0.676	5.17	0.00	6.07	12.26	5.73	6.08	13.55	25.36	0.014	13.37
4/8/2022	22.89	0.00	0.00	0.188	23.08	0.351	0.188	0.013	0.000	0.564	0.256	4.53	0.00	5.64	11.54	5.07	5.65	12.36	23.08	0.013	12.17
4/9/2022	22.67	0.00	0.00	0.176	22.85	0.355	0.176	0.013	0.000	0.571	0.273	4.06	0.00	5.76	11.64	4.59	5.77	12.48	22.85	0.013	12.30
4/10/2022	22.25	0.00	0.00	0.189	22.44	0.354	0.189	0.013	0.000	0.568	0.254	3.74	0.00	5.82	11.50	4.28	5.83	12.32	22.44	0.013	12.13
4/11/2022	24.64	0.00	0.00	0.220	24.86	0.808	0.220	0.030	0.000	1.299	0.297	4.07	0.00	6.12	12.02	5.10	6.15	13.62	24.86	0.030	13.40
4/12/2022	22.62	0.00	0.00	0.235	22.86	0.359	0.235	0.013	0.001	0.577	0.317	3.87	0.00	5.78	11.71	4.46	5.79	12.60	22.86	0.013	12.36
4/13/2022	23.96	0.00	0.00	0.250	24.21	0.369	0.250	0.014	0.000	0.594	0.348	4.68	0.00	5.60	12.35	5.30	5.62	13.29	24.21	0.014	13.04
4/14/2022	23.74	0.00	0.00	0.237	23.98	0.642	0.237	0.024	0.000	1.032	0.281	3.56	0.00	5.89	12.31	4.44	5.92	13.62	23.98	0.024	13.38
4/15/2022	24.19	0.00	0.00	0.250	24.44	0.961	0.250	0.035	0.000	1.546	0.415	4.27	0.00	5.86	11.10	5.48	5.90	13.06	24.44	0.035	12.81
4/16/2022	23.14	0.00	0.00	0.211	23.35	0.363	0.211	0.013	0.000	0.583	0.260	4.17	0.00	6.03	11.72	4.74	6.05	12.56	23.35	0.013	12.35
4/17/2022	24.90	0.00	0.00	0.205	25.11	0.764	0.205	0.028	0.000	1.229	0.319	4.03	0.00	6.61	11.92	5.00	6.64	13.47	25.11	0.028	13.27
4/18/2022	23.00	0.00	0.00	0.153	23.15	0.351	0.153	0.013	0.000	0.564	0.256	4.59	0.00	5.78	11.45	5.09	5.79	12.27	23.15	0.013	12.12
4/19/2022	24.14	0.00	0.00	0.178	24.32	0.377	0.178	0.014	0.000	0.607	0.293	4.35	0.00	5.88	12.62	4.91	5.89	13.52	24.32	0.014	13.35
4/20/2022	23.81	0.00	0.00	0.208	24.02	0.396	0.208	0.015	0.000	0.637	0.360	3.07	0.00	6.14	13.20	3.67	6.15	14.19	24.02	0.015	13.99
4/21/2022	25.01	0.00	0.00	0.229	25.24	0.651	0.229	0.024	0.000	1.046	0.384	3.86	0.00	6.46	12.58	4.74	6.49	14.01	25.24	0.024	13.78



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						
4/22/2022	23.77	0.00	0.00	0.263	24.03	0.373	0.263	0.014	0.000	0.600	0.357	4.29	0.00	6.28	11.86	4.93	6.29	12.81	24.03	0.014	12.55
4/23/2022	25.83	0.00	0.00	0.235	26.07	1.007	0.235	0.037	0.000	1.619	0.373	4.38	0.00	6.53	11.89	5.62	6.56	13.88	26.07	0.037	13.64
4/24/2022	26.42	0.00	0.00	0.328	26.75	1.219	0.328	0.045	0.000	1.960	0.399	3.90	0.00	6.75	12.14	5.45	6.80	14.50	26.75	0.045	14.18
4/25/2022	26.52	0.00	0.00	0.254	26.77	1.426	0.254	0.053	0.000	2.292	0.333	4.31	0.00	6.45	11.66	5.99	6.50	14.28	26.77	0.053	14.03
4/26/2022	25.90	0.00	0.00	0.230	26.13	0.858	0.230	0.032	0.000	1.380	0.401	4.62	0.00	6.36	12.25	5.71	6.39	14.03	26.13	0.032	13.80
4/27/2022	28.36	0.00	0.00	0.217	28.58	1.708	0.217	0.063	0.000	2.746	0.388	4.56	0.00	6.29	12.61	6.49	6.35	15.74	28.58	0.063	15.52
4/28/2022	24.69	0.00	0.00	0.243	24.93	0.995	0.243	0.037	0.002	1.599	0.407	3.69	0.00	6.28	11.68	4.93	6.31	13.69	24.93	0.039	13.45
4/29/2022	25.71	0.00	0.00	0.208	25.92	1.245	0.208	0.046	0.000	2.001	0.335	4.35	0.00	6.27	11.47	5.80	6.31	13.80	25.92	0.046	13.59
4/30/2022	25.60	0.00	0.00	0.177	25.78	1.115	0.177	0.041	0.000	1.793	0.334	4.30	0.00	6.33	11.69	5.59	6.37	13.82	25.78	0.041	13.64
5/1/2022	25.91	0.00	0.00	0.175	26.09	1.109	0.175	0.041	0.000	1.783	0.355	3.86	0.00	6.73	12.04	5.14	6.77	14.17	26.09	0.041	14.00
5/2/2022	24.02	0.00	0.00	0.290	24.31	0.382	0.290	0.014	0.002	0.615	0.351	4.08	0.00	6.40	12.18	4.75	6.42	13.14	24.31	0.016	12.85
5/3/2022	27.85	0.00	0.00	0.309	28.16	1.654	0.309	0.061	0.000	2.659	0.427	5.05	0.00	6.39	11.61	7.01	6.45	14.70	28.16	0.061	14.39
5/4/2022	26.95	0.00	0.00	0.344	27.29	1.628	0.344	0.060	0.001	2.618	0.511	3.64	0.00	6.31	12.18	5.61	6.37	15.31	27.29	0.061	14.96
5/5/2022	28.44	0.00	0.00	0.311	28.75	1.747	0.311	0.064	0.000	2.809	0.431	5.28	0.00	6.34	11.77	7.34	6.41	15.01	28.75	0.065	14.70
5/6/2022	24.34	0.00	0.00	0.216	24.56	0.503	0.216	0.019	0.000	0.809	0.377	4.14	0.00	6.66	11.83	4.86	6.68	13.02	24.56	0.019	12.80
5/7/2022	24.47	0.00	0.00	0.193	24.66	0.376	0.193	0.014	0.000	0.605	0.296	4.77	0.00	6.50	11.91	5.34	6.51	12.81	24.66	0.014	12.62
5/8/2022	22.52	0.00	0.00	0.210	22.73	0.366	0.210	0.013	0.000	0.588	0.263	3.38	0.00	6.66	11.25	3.96	6.67	12.10	22.73	0.013	11.89
5/9/2022	25.85	0.00	0.00	0.255	26.11	1.443	0.255	0.053	0.000	2.320	0.300	3.74	0.00	6.40	11.59	5.44	6.45	14.21	26.11	0.053	13.96
5/10/2022	27.83	0.00	0.00	0.346	28.18	1.586	0.346	0.058	0.000	2.550	0.390	5.17	0.00	6.27	11.81	7.10	6.33	14.75	28.18	0.059	14.40
5/11/2022	26.25	0.00	0.00	0.350	26.60	1.701	0.350	0.063	0.005	2.734	0.435	3.41	0.00	6.10	11.80	5.46	6.17	14.97	26.60	0.068	14.62
5/12/2022	26.29	0.00	0.00	0.311	26.60	0.990	0.311	0.036	0.000	1.592	0.383	5.22	0.00	6.18	11.89	6.52	6.22	13.86	26.60	0.036	13.55
5/13/2022	25.08	0.00	0.00	0.309	25.39	1.002	0.309	0.037	0.000	1.612	0.302	3.53	0.00	6.30	12.30	4.84	6.33	14.22	25.39	0.037	13.91
5/14/2022	24.32	0.00	0.00	0.302	24.62	0.388	0.302	0.014	0.000	0.624	0.306	4.08	0.00	6.39	12.52	4.77	6.40	13.45	24.62	0.014	13.15
5/15/2022	25.65	0.00	0.00	0.353	26.00	1.053	0.353	0.039	0.000	1.693	0.308	3.70	0.00	6.70	12.15	5.11	6.74	14.15	26.00	0.039	13.80
5/16/2022	25.79	0.00	0.00	0.335	26.13	0.412	0.335	0.015	0.000	0.662	0.400	4.35	0.00	6.54	13.41	5.10	6.55	14.48	26.13	0.015	14.14
5/17/2022	25.69	0.00	0.00	0.388	26.08	1.084	0.388	0.040	0.000	1.743	0.418	3.79	0.00	6.28	12.34	5.26	6.32	14.50	26.08	0.040	14.11
5/18/2022	27.75	0.00	0.00	0.384	28.13	1.870	0.384	0.069	0.001	3.008	0.479	3.46	0.00	6.33	12.53	5.71	6.40	16.02	28.13	0.070	15.63
5/19/2022	29.68	0.00	0.00	0.405	30.09	2.187	0.405	0.081	0.001	3.516	0.485	5.31	0.00	6.36	11.74	7.90	6.44	15.74	30.09	0.082	15.34
5/20/2022	26.62	0.00	0.00	0.346	26.97	1.383	0.346	0.051	0.000	2.224	0.406	3.63	0.00	6.45	12.47	5.36	6.50	15.10	26.97	0.051	14.76
5/21/2022	28.09	0.00	0.00	0.269	28.36	1.902	0.269	0.070	0.000	3.059	0.454	4.52	0.00	6.45	11.63	6.69	6.52	15.14	28.36	0.070	14.87
5/22/2022	25.14	0.00	0.00	0.325	25.47	1.226	0.325	0.045	0.000	1.972	0.360	3.05	0.00	6.66	11.82	4.60	6.71	14.16	25.47	0.045	13.83
5/23/2022	26.21	0.00	0.00	0.230	26.44	0.542	0.230	0.020	0.000	0.872	0.335	4.02	0.00	6.78	13.64	4.79	6.80	14.84	26.44	0.020	14.61
5/24/2022	24.10	0.00	0.00	0.218	24.32	0.376	0.218	0.014	0.000	0.605	0.328	4.42	0.00	6.19	12.17	5.01	6.20	13.10	24.32	0.014	12.89
5/25/2022	24.71	0.00	0.00	0.339	25.05	0.399	0.339	0.015	0.000	0.642	0.390	3.93	0.00	6.52	12.81	4.67	6.53	13.85	25.05	0.015	13.51
5/26/2022	26.77	0.00	0.00	0.258	27.03	0.366	0.258	0.013	0.000	0.588	0.406	7.68	0.00	5.91	11.80	8.30	5.93	12.80	27.03	0.013	12.54
5/27/2022	25.26	0.00	0.00	0.307	25.57	0.410	0.307	0.015	0.000	0.660	0.314	3.87	0.00	6.68	13.31	4.59	6.69	14.29	25.57	0.015	13.98
5/28/2022	24.46	0.00	0.00	0.203	24.66	0.396	0.203	0.015	0.000	0.637	0.287	3.70	0.00	6.48	12.95	4.30	6.49	13.87	24.66	0.015	13.67



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						
5/29/2022	23.75	0.00	0.00	0.236	23.99	0.401	0.236	0.015	0.000	0.645	0.350	4.39	0.00	6.17	11.78	5.03	6.18	12.77	23.99	0.015	12.54
5/30/2022	25.29	0.00	0.00	0.300	25.59	1.185	0.300	0.044	0.000	1.906	0.437	3.30	0.00	6.49	11.92	4.79	6.54	14.27	25.59	0.044	13.97
5/31/2022	29.71	0.00	0.00	0.323	30.03	1.842	0.323	0.068	0.000	2.963	0.500	5.26	0.00	6.61	12.47	7.43	6.68	15.93	30.03	0.068	15.61
6/1/2022	30.67	0.00	0.00	0.364	31.03	2.726	0.364	0.100	0.001	4.383	0.611	3.80	0.00	6.80	12.25	6.89	6.90	17.24	31.03	0.101	16.88
6/2/2022	30.22	0.00	0.00	0.380	30.60	2.938	0.380	0.108	0.000	4.724	0.577	3.97	0.00	6.45	11.45	7.29	6.56	16.75	30.60	0.108	16.37
6/3/2022	29.44	0.00	0.00	0.364	29.80	2.583	0.364	0.095	0.000	4.154	0.570	4.62	0.00	6.29	11.13	7.57	6.38	15.85	29.80	0.095	15.49
6/4/2022	29.42	0.00	0.00	0.291	29.71	2.838	0.291	0.105	0.000	4.563	0.527	4.08	0.00	6.30	11.00	7.21	6.41	16.09	29.71	0.105	15.80
6/5/2022	29.73	0.00	0.00	0.441	30.17	3.073	0.441	0.113	0.000	4.941	0.486	3.76	0.00	6.54	10.81	7.27	6.66	16.24	30.17	0.113	15.80
6/6/2022	29.71	0.00	0.00	0.373	30.08	2.832	0.373	0.104	0.000	4.554	0.502	4.31	0.00	6.34	11.06	7.51	6.45	16.12	30.08	0.104	15.75
6/7/2022	32.25	0.00	0.00	0.465	32.72	3.453	0.465	0.127	0.000	5.552	0.504	5.33	0.00	6.17	11.11	9.25	6.30	17.17	32.72	0.128	16.70
6/8/2022	27.70	0.00	0.00	0.348	28.05	1.935	0.348	0.071	0.000	3.112	0.549	3.74	0.00	6.54	11.76	6.02	6.61	15.42	28.05	0.071	15.07
6/9/2022	29.14	0.00	0.00	0.436	29.58	2.743	0.436	0.101	0.000	4.411	0.380	3.95	0.00	6.26	11.29	7.13	6.37	16.08	29.58	0.101	15.64
6/10/2022	33.08	0.00	0.00	0.405	33.49	4.007	0.405	0.148	0.000	6.442	0.471	5.19	0.00	6.11	10.71	9.60	6.26	17.62	33.49	0.148	17.22
6/11/2022	31.67	0.00	0.00	0.372	32.04	3.926	0.372	0.145	0.000	6.312	0.488	4.28	0.00	6.07	10.45	8.58	6.22	17.25	32.04	0.145	16.87
6/12/2022	29.41	0.00	0.00	0.336	29.75	2.866	0.336	0.106	0.000	4.609	0.409	3.93	0.00	6.50	10.99	7.13	6.60	16.01	29.75	0.106	15.68
6/13/2022	27.65	0.00	0.00	0.372	28.02	2.180	0.372	0.080	0.000	3.505	0.472	3.88	0.00	6.34	11.20	6.43	6.42	15.17	28.02	0.080	14.80
6/14/2022	32.92	0.00	0.00	0.336	33.26	3.924	0.336	0.145	0.000	6.310	0.546	4.93	0.00	6.14	10.93	9.19	6.28	17.78	33.26	0.145	17.45
6/15/2022	32.55	0.00	0.00	0.320	32.87	3.734	0.320	0.138	0.000	6.004	0.709	4.40	0.00	6.20	11.37	8.45	6.34	18.08	32.87	0.138	17.76
6/16/2022	31.99	0.00	0.00	0.387	32.38	3.678	0.387	0.136	0.000	5.914	0.544	4.51	0.00	6.18	11.03	8.57	6.32	17.49	32.38	0.136	17.10
6/17/2022	27.10	0.00	0.00	0.403	27.50	2.101	0.403	0.077	0.000	3.378	0.474	3.78	0.00	6.17	11.12	6.28	6.24	14.98	27.50	0.077	14.57
6/18/2022	27.56	0.00	0.00	0.348	27.91	2.073	0.348	0.076	0.000	3.333	0.429	4.79	0.00	6.11	10.75	7.21	6.19	14.51	27.91	0.076	14.16
6/19/2022	27.58	0.00	0.00	0.425	28.01	2.647	0.425	0.098	0.000	4.256	0.435	3.91	0.00	5.98	10.25	6.98	6.08	14.94	28.01	0.098	14.52
6/20/2022	28.85	0.00	0.00	0.299	29.15	3.222	0.299	0.119	0.001	5.181	0.472	3.54	0.00	6.05	10.27	7.06	6.17	15.92	29.15	0.119	15.62
6/21/2022	30.51	0.00	0.00	0.498	31.01	3.465	0.498	0.128	0.000	5.572	0.461	4.44	0.00	5.93	10.51	8.40	6.06	16.55	31.01	0.128	16.05
6/22/2022	33.29	0.00	0.00	0.401	33.69	4.006	0.401	0.148	0.000	6.442	0.439	4.89	0.00	6.09	11.28	9.30	6.24	18.16	33.69	0.148	17.76
6/23/2022	29.69	0.00	0.00	0.452	30.14	3.580	0.452	0.132	0.000	5.756	0.386	3.97	0.00	4.61	11.26	8.00	4.74	17.40	30.14	0.132	16.95
6/24/2022	32.61	0.00	0.00	0.474	33.08	4.528	0.474	0.167	0.000	7.281	0.540	4.64	0.00	5.21	10.24	9.64	5.38	18.07	33.08	0.167	17.59
6/25/2022	33.36	0.00	0.00	0.453	33.81	3.808	0.453	0.140	0.000	6.124	0.538	4.74	0.00	7.84	10.17	9.00	7.98	16.83	33.81	0.140	16.38
6/26/2022	31.83	0.00	0.00	0.525	32.36	4.034	0.525	0.149	0.000	6.487	0.501	3.76	0.00	6.47	10.43	8.32	6.62	17.42	32.36	0.149	16.89
6/27/2022	27.00	0.00	0.00	0.272	27.27	2.268	0.272	0.084	0.000	3.647	0.502	3.43	0.00	6.24	10.83	5.97	6.32	14.98	27.27	0.084	14.71
6/28/2022	28.22	0.00	0.00	0.433	28.65	2.564	0.433	0.095	0.000	4.122	0.378	4.29	0.00	6.08	10.69	7.29	6.18	15.19	28.65	0.095	14.76
6/29/2022	29.70	0.00	0.00	0.358	30.06	2.017	0.358	0.074	0.000	3.243	0.574	6.36	0.00	6.01	11.43	8.73	6.08	15.24	30.06	0.075	14.88
6/30/2022	26.89	0.00	0.00	0.391	27.28	1.967	0.391	0.073	0.000	3.163	0.458	4.40	0.00	5.94	10.89	6.76	6.01	14.51	27.28	0.073	14.12
7/1/2022	30.59	0.00	0.00	0.394	30.98	3.467	0.394	0.128	0.001	5.575	0.618	4.42	0.00	5.88	10.50	8.28	6.01	16.70	30.98	0.129	16.30
7/2/2022	29.77	0.00	0.00	0.417	30.19	3.621	0.417	0.133	0.000	5.822	0.494	4.26	0.00	5.56	9.88	8.30	5.69	16.20	30.19	0.133	15.78
7/3/2022	28.46	0.00	0.00	0.428	28.89	3.581	0.428	0.132	0.000	5.758	0.516	3.33	0.00	5.67	9.47	7.34	5.80	15.75	28.89	0.132	15.32
7/4/2022	29.20	0.00	0.00	0.340	29.54	3.403	0.340	0.125	0.000	5.472	0.479	4.08	0.00	5.87	9.77	7.82	6.00	15.72	29.54	0.125	15.38

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						
7/5/2022	31.55	0.00	0.00	0.561	32.11	4.019	0.561	0.148	0.000	6.463	0.634	4.09	0.00	5.92	10.28	8.67	6.06	17.38	32.11	0.148	16.82
7/6/2022	30.51	0.00	0.00	0.372	30.88	3.742	0.372	0.138	0.000	6.017	0.704	3.45	0.00	5.94	10.52	7.56	6.07	17.24	30.88	0.138	16.87
7/7/2022	36.00	0.00	0.00	0.355	36.36	5.118	0.355	0.189	0.002	8.229	0.564	5.27	0.00	5.94	10.69	10.74	6.13	19.48	36.36	0.190	19.12
7/8/2022	29.63	0.00	0.00	0.430	30.06	3.071	0.430	0.113	0.000	4.938	0.417	3.83	0.00	6.16	11.10	7.33	6.27	16.46	30.06	0.113	16.03
7/9/2022	29.46	0.00	0.00	0.277	29.74	2.626	0.277	0.097	0.000	4.223	0.435	4.22	0.00	6.27	11.59	7.12	6.37	16.24	29.74	0.097	15.97
7/10/2022	26.28	0.00	0.00	0.269	26.55	1.641	0.269	0.060	0.000	2.638	0.344	3.25	0.00	6.38	11.97	5.16	6.44	14.95	26.55	0.060	14.68
7/11/2022	27.56	0.00	0.00	0.322	27.88	1.736	0.322	0.064	0.000	2.792	0.586	4.28	0.00	6.01	12.09	6.34	6.08	15.47	27.88	0.064	15.14
7/12/2022	30.28	0.00	0.00	0.435	30.72	2.535	0.435	0.093	0.000	4.077	0.468	4.99	0.00	6.45	11.67	7.96	6.54	16.22	30.72	0.094	15.78
7/13/2022	30.78	0.00	0.00	0.290	31.07	3.173	0.290	0.117	0.000	5.102	0.554	3.53	0.00	6.31	11.99	6.99	6.43	17.65	31.07	0.117	17.36
7/14/2022	29.30	0.00	0.00	0.386	29.69	2.938	0.386	0.108	0.000	4.725	0.416	4.13	0.00	5.86	11.13	7.45	5.97	16.27	29.69	0.108	15.88
7/15/2022	29.86	0.00	0.00	0.322	30.18	3.130	0.322	0.115	0.000	5.034	0.538	4.04	0.00	5.85	11.15	7.49	5.96	16.72	30.18	0.115	16.40
7/16/2022	29.97	0.00	0.00	0.422	30.39	2.837	0.422	0.105	0.000	4.562	0.563	4.65	0.00	6.12	11.13	7.91	6.22	16.26	30.39	0.105	15.84
7/17/2022	29.75	0.00	0.00	0.419	30.17	2.998	0.419	0.111	0.000	4.821	0.540	3.08	0.00	7.05	11.15	6.50	7.16	16.51	30.17	0.111	16.09
7/18/2022	30.22	0.00	0.00	0.298	30.52	2.889	0.298	0.106	0.001	4.645	0.524	4.46	0.00	6.41	11.18	7.65	6.52	16.35	30.52	0.107	16.05
7/19/2022	32.67	0.00	0.00	0.431	33.10	3.829	0.431	0.141	0.000	6.156	0.468	4.77	0.00	5.98	11.32	9.03	6.12	17.95	33.10	0.141	17.52
7/20/2022	33.16	0.00	0.00	0.450	33.61	4.092	0.450	0.151	0.000	6.580	0.675	4.21	0.00	5.84	11.61	8.75	5.99	18.87	33.61	0.151	18.42
7/21/2022	31.49	0.00	0.00	0.385	31.88	3.363	0.385	0.124	0.000	5.408	0.607	3.81	0.00	5.99	12.18	7.56	6.12	18.20	31.88	0.124	17.81
7/22/2022	31.39	0.00	0.00	0.348	31.74	4.244	0.348	0.156	0.000	6.824	0.583	3.41	0.00	6.23	9.95	8.00	6.38	17.35	31.74	0.156	17.01
7/23/2022	34.07	0.00	0.00	0.418	34.49	3.795	0.418	0.140	0.000	6.102	0.665	5.84	0.00	6.33	11.20	10.05	6.47	17.97	34.49	0.140	17.55
7/24/2022	29.36	0.00	0.00	0.430	29.79	3.007	0.430	0.111	0.000	4.835	0.465	3.00	0.00	6.58	11.36	6.44	6.69	16.66	29.79	0.111	16.23
7/25/2022	27.89	0.00	0.00	0.357	28.25	1.796	0.357	0.066	0.000	2.889	0.512	4.56	0.00	6.35	11.71	6.71	6.42	15.11	28.25	0.066	14.76
7/26/2022	31.76	0.00	0.00	0.367	32.13	3.230	0.367	0.119	0.000	5.194	0.485	4.13	0.00	6.35	12.25	7.73	6.47	17.93	32.13	0.119	17.56
7/27/2022	28.72	0.00	0.00	0.330	29.05	1.989	0.330	0.073	0.000	3.199	0.442	3.74	0.00	6.48	12.80	6.06	6.55	16.44	29.05	0.073	16.11
7/28/2022	30.74	0.00	0.00	0.367	31.11	2.880	0.367	0.106	0.000	4.631	0.459	3.70	0.00	6.55	12.41	6.95	6.66	17.50	31.11	0.106	17.13
7/29/2022	29.80	0.00	0.00	0.327	30.13	2.445	0.327	0.090	0.000	3.931	0.479	4.54	0.00	6.56	11.75	7.31	6.65	16.16	30.13	0.090	15.84
7/30/2022	29.42	0.00	0.00	0.378	29.80	2.487	0.378	0.092	0.000	4.000	0.518	4.53	0.00	6.47	11.32	7.40	6.56	15.84	29.80	0.092	15.46
7/31/2022	28.20	0.00	0.00	0.369	28.57	1.819	0.369	0.067	0.000	2.925	0.469	4.11	0.00	6.93	11.88	6.30	7.00	15.27	28.57	0.067	14.90
8/1/2022	28.50	0.00	0.00	0.376	28.88	2.368	0.376	0.087	0.000	3.807	0.436	3.58	0.00	6.47	11.76	6.32	6.55	16.00	28.88	0.087	15.62
8/2/2022	30.97	0.00	0.00	0.508	31.48	3.316	0.508	0.122	0.001	5.332	0.492	3.82	0.00	6.31	11.57	7.64	6.43	17.40	31.48	0.124	16.89
8/3/2022	30.21	0.00	0.00	0.457	30.67	3.283	0.457	0.121	0.001	5.280	0.628	3.05	0.00	6.14	11.70	6.79	6.27	17.61	30.67	0.122	17.15
8/4/2022	33.57	0.00	0.00	0.547	34.12	3.582	0.547	0.132	0.001	5.760	0.591	6.06	0.00	6.30	11.14	10.19	6.44	17.49	34.12	0.133	16.94
8/5/2022	34.04	0.00	0.00	0.461	34.50	4.459	0.461	0.164	0.000	7.170	0.576	4.53	0.00	6.20	10.94	9.45	6.37	18.68	34.50	0.164	18.22
8/6/2022	33.11	0.00	0.00	0.440	33.55	3.961	0.440	0.146	0.000	6.369	0.604	4.87	0.00	6.27	10.89	9.27	6.42	17.86	33.55	0.146	17.42
8/7/2022	31.31	0.00	0.00	0.448	31.76	3.555	0.448	0.131	0.000	5.717	0.572	3.52	0.00	6.73	11.08	7.52	6.86	17.37	31.76	0.131	16.93
8/8/2022	28.22	0.00	0.00	0.441	28.66	2.387	0.441	0.088	0.000	3.838	0.609	3.62	0.00	6.42	11.26	6.45	6.51	15.71	28.66	0.088	15.26
8/9/2022	33.93	0.00	0.00	0.473	34.40	3.889	0.473	0.143	0.002	6.253	0.677	5.47	0.00	6.04	11.46	9.83	6.18	18.39	34.40	0.145	17.92
8/10/2022	35.05	0.00	0.00	0.393	35.44	4.720	0.393	0.174	0.000	7.590	0.656	4.03	0.00	6.44	11.44	9.14	6.61	19.69	35.44	0.174	19.29

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						
8/11/2022	32.32	0.00	0.00	0.499	32.82	3.889	0.499	0.143	0.000	6.253	0.626	3.84	0.00	6.22	11.35	8.23	6.37	18.22	32.82	0.143	17.73
8/12/2022	27.33	0.00	0.00	0.375	27.71	1.857	0.375	0.068	0.000	2.986	0.478	3.41	0.00	6.34	12.19	5.64	6.41	15.65	27.71	0.068	15.28
8/13/2022	29.91	0.00	0.00	0.512	30.42	2.618	0.512	0.097	0.000	4.210	0.531	5.40	0.00	6.13	10.93	8.53	6.22	15.67	30.42	0.097	15.16
8/14/2022	29.42	0.00	0.00	0.469	29.89	4.070	0.469	0.150	0.000	6.544	0.484	3.43	0.00	3.86	10.88	7.97	4.01	17.91	29.89	0.150	17.44
8/15/2022	28.53	0.00	0.00	0.317	28.85	1.917	0.317	0.071	0.000	3.082	0.477	3.43	0.00	8.30	11.26	5.66	8.37	14.82	28.85	0.071	14.50
8/16/2022	29.97	0.00	0.00	0.457	30.43	3.831	0.457	0.141	0.000	6.159	0.495	4.00	0.00	4.02	11.32	8.29	4.16	17.98	30.43	0.141	17.52
8/17/2022	31.68	0.00	0.00	0.358	32.04	3.162	0.358	0.117	0.000	5.084	0.630	3.32	0.00	7.98	11.38	6.84	8.10	17.10	32.04	0.117	16.74
8/18/2022	35.68	0.00	0.00	0.456	36.14	4.311	0.456	0.159	0.000	6.931	0.476	5.16	0.00	7.05	11.60	9.93	7.21	19.00	36.14	0.159	18.55
8/19/2022	32.31	0.00	0.00	0.454	32.76	3.943	0.454	0.145	0.000	6.340	0.534	4.44	0.00	6.08	10.83	8.84	6.22	17.70	32.76	0.145	17.25
8/20/2022	27.66	0.00	0.00	0.354	28.01	2.632	0.354	0.097	0.000	4.232	0.581	2.88	0.00	6.45	10.79	5.87	6.54	15.60	28.01	0.097	15.25
8/21/2022	26.92	0.00	0.00	0.329	27.25	1.888	0.329	0.070	0.000	3.036	0.496	3.11	0.00	6.52	11.80	5.33	6.59	15.33	27.25	0.070	15.00
8/22/2022	28.53	0.00	0.00	0.605	29.14	1.959	0.605	0.072	0.000	3.151	0.446	4.62	0.00	6.37	11.91	7.18	6.44	15.51	29.14	0.072	14.90
8/23/2022	29.89	0.00	0.00	0.510	30.40	3.116	0.510	0.115	0.000	5.010	0.416	3.62	0.00	6.05	11.56	7.25	6.17	16.98	30.40	0.115	16.47
8/24/2022	30.47	0.00	0.00	0.333	30.80	3.211	0.333	0.118	0.000	5.164	0.476	4.01	0.00	5.84	11.65	7.55	5.96	17.29	30.80	0.118	16.96
8/25/2022	31.03	0.00	0.00	0.319	31.35	3.190	0.319	0.118	0.000	5.130	0.484	4.21	0.00	6.38	11.52	7.72	6.49	17.14	31.35	0.118	16.82
8/26/2022	27.71	0.00	0.00	0.312	28.02	2.366	0.312	0.087	0.000	3.805	0.486	3.78	0.00	6.16	11.03	6.46	6.25	15.32	28.02	0.087	15.01
8/27/2022	29.02	0.00	0.00	0.351	29.37	2.707	0.351	0.100	0.000	4.353	0.534	3.55	0.00	6.45	11.32	6.61	6.55	16.21	29.37	0.100	15.86
8/28/2022	30.19	0.00	0.00	0.402	30.59	2.967	0.402	0.109	0.000	4.771	0.490	4.02	0.00	6.71	11.12	7.39	6.82	16.38	30.59	0.109	15.98
8/29/2022	30.44	0.00	0.00	0.414	30.85	2.579	0.414	0.095	0.000	4.147	0.517	4.51	0.00	6.96	11.63	7.50	7.06	16.29	30.85	0.095	15.88
8/30/2022	31.00	0.00	0.00	0.384	31.38	3.125	0.384	0.115	0.000	5.025	0.493	4.30	0.00	6.38	11.56	7.81	6.50	17.08	31.38	0.115	16.69
8/31/2022	32.84	0.00	0.00	0.489	33.33	4.016	0.489	0.148	0.000	6.458	0.566	3.83	0.00	6.24	11.58	8.34	6.39	18.61	33.33	0.149	18.12
9/1/2022	33.03	0.00	0.00	0.560	33.59	4.023	0.560	0.148	0.000	6.469	0.580	5.18	0.00	5.99	10.64	9.76	6.14	17.69	33.59	0.148	17.13
9/2/2022	33.78	0.00	0.00	0.421	34.20	5.010	0.421	0.185	0.000	8.056	0.668	3.97	0.00	5.88	10.01	9.40	6.07	18.73	34.20	0.185	18.31
9/3/2022	32.63	0.00	0.00	0.519	33.15	4.333	0.519	0.160	0.000	6.968	0.665	5.09	0.00	5.46	9.96	9.94	5.62	17.59	33.15	0.160	17.07
9/4/2022	29.67	0.00	0.00	0.408	30.08	3.480	0.408	0.128	0.000	5.596	0.657	3.92	0.00	5.95	9.94	7.81	6.08	16.19	30.08	0.128	15.79
9/5/2022	28.51	0.00	0.00	0.418	28.93	2.653	0.418	0.098	0.000	4.267	0.657	3.63	0.00	6.38	10.82	6.70	6.48	15.74	28.93	0.098	15.33
9/6/2022	32.51	0.00	0.00	0.374	32.88	3.712	0.374	0.137	0.000	5.969	0.540	5.13	0.00	5.81	11.21	9.22	5.95	17.72	32.88	0.137	17.34
9/7/2022	29.91	0.17	0.00	0.387	30.47	2.825	0.387	0.104	0.000	4.542	0.576	3.55	0.00	6.90	11.59	6.76	7.00	16.71	30.47	0.104	16.15
9/8/2022	31.58	0.21	0.00	0.391	32.18	3.567	0.391	0.131	0.000	5.736	0.484	5.18	0.00	5.60	11.09	9.14	5.73	17.31	32.18	0.131	16.71
9/9/2022	28.51	0.20	0.00	0.309	29.02	3.078	0.309	0.113	0.000	4.950	0.554	2.70	0.00	6.24	11.08	6.09	6.35	16.58	29.02	0.113	16.07
9/10/2022	28.05	0.20	0.00	0.317	28.57	2.348	0.317	0.087	0.000	3.775	0.504	3.71	0.00	6.30	11.53	6.38	6.38	15.81	28.57	0.087	15.29
9/11/2022	27.98	0.20	0.00	0.441	28.62	1.820	0.441	0.067	0.000	2.926	0.444	4.41	0.00	6.43	12.08	6.67	6.49	15.45	28.62	0.067	14.81
9/12/2022	27.20	0.10	0.00	0.287	27.58	2.576	0.287	0.095	0.000	4.142	0.480	2.44	0.00	6.04	11.53	5.30	6.14	16.15	27.58	0.095	15.77
9/13/2022	28.69	0.01	0.00	0.509	29.21	2.632	0.509	0.097	0.000	4.232	0.466	3.84	0.00	6.08	11.34	6.98	6.18	16.04	29.21	0.097	15.53
9/14/2022	29.89	0.15	0.00	0.433	30.47	3.101	0.433	0.114	0.000	4.986	0.524	4.16	0.00	5.92	11.23	7.70	6.03	16.74	30.47	0.114	16.16
9/15/2022	32.11	0.19	0.00	0.431	32.73	3.963	0.431	0.146	0.001	6.373	0.499	4.25	0.00	5.99	11.08	8.65	6.14	17.95	32.73	0.147	17.33
9/16/2022	29.72	0.20	0.00	0.312	30.23	3.663	0.312	0.135	0.000	5.890	0.579	3.17	0.00	5.78	10.70	7.14	5.92	17.17	30.23	0.135	16.66

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)				Total System Use	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				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
9/17/2022	32.40	0.19	0.00	0.340	32.93	4.157	0.340	0.153	0.000	6.684	0.598	4.46	0.00	6.11	10.42	8.95	6.27	17.71	32.93	0.153	17.18
9/18/2022	29.28	0.19	0.00	0.422	29.89	3.358	0.422	0.124	0.000	5.399	0.552	2.85	0.00	6.23	10.96	6.62	6.35	16.91	29.89	0.124	16.30
9/19/2022	28.41	0.21	0.00	0.419	29.04	2.239	0.419	0.083	0.000	3.601	0.602	4.13	0.00	6.46	11.51	6.79	6.54	15.71	29.04	0.083	15.08
9/20/2022	33.58	0.20	0.00	0.485	34.26	4.124	0.485	0.152	0.000	6.631	0.544	4.70	0.00	6.09	11.53	9.31	6.24	18.71	34.26	0.152	18.02
9/21/2022	31.55	0.28	0.00	0.347	32.18	4.153	0.347	0.153	0.000	6.677	0.658	3.04	0.00	5.79	11.36	7.54	5.95	18.69	32.18	0.153	18.07
9/22/2022	33.43	0.20	0.00	0.487	34.11	4.372	0.487	0.161	0.000	7.030	0.586	4.65	0.00	6.17	10.65	9.51	6.33	18.27	34.11	0.161	17.58
9/23/2022	30.02	0.18	0.00	0.297	30.50	4.079	0.297	0.150	0.000	6.558	0.651	2.68	0.00	5.84	10.24	7.05	5.99	17.45	30.50	0.151	16.97
9/24/2022	29.72	0.19	0.00	0.370	30.28	3.724	0.370	0.137	0.000	5.989	0.560	3.68	0.00	5.74	10.08	7.78	5.87	16.62	30.28	0.137	16.07
9/25/2022	30.12	0.19	0.00	0.456	30.76	3.299	0.456	0.122	0.000	5.304	0.566	4.16	0.00	6.35	10.50	7.92	6.47	16.37	30.76	0.122	15.73
9/26/2022	29.69	0.19	0.00	0.344	30.22	3.205	0.344	0.118	0.000	5.153	0.609	3.52	0.00	6.19	11.09	7.07	6.31	16.85	30.22	0.119	16.32
9/27/2022	33.73	0.20	0.00	0.441	34.37	4.487	0.441	0.165	0.000	7.215	0.546	4.47	0.00	6.00	11.04	9.40	6.17	18.80	34.37	0.165	18.16
9/28/2022	28.34	0.19	0.00	0.276	28.81	2.995	0.276	0.110	0.000	4.815	0.574	2.82	0.00	5.98	11.24	6.09	6.09	16.62	28.81	0.111	16.16
9/29/2022	30.48	0.19	0.00	0.338	31.01	3.621	0.338	0.133	0.000	5.822	0.381	4.47	0.00	5.79	10.45	8.43	5.92	16.65	31.01	0.134	16.13
9/30/2022	25.69	0.17	0.00	0.220	26.08	0.427	0.220	0.016	0.000	0.686	0.281	3.51	0.00	7.29	13.64	4.16	7.31	14.61	26.08	0.016	14.22
10/1/2022	25.05	0.18	0.00	0.259	25.49	0.406	0.259	0.015	0.000	0.652	0.273	4.03	0.00	6.69	13.16	4.70	6.70	14.09	25.49	0.015	13.65
10/2/2022	25.54	0.18	0.00	0.338	26.06	1.100	0.338	0.041	0.000	1.768	0.211	3.00	0.00	6.86	12.74	4.44	6.90	14.71	26.06	0.041	14.20
10/3/2022	25.31	0.20	0.00	0.238	25.74	0.607	0.238	0.022	0.000	0.976	0.211	4.84	0.00	6.40	12.45	5.69	6.42	13.63	25.74	0.022	13.20
10/4/2022	27.53	0.19	0.00	0.388	28.11	2.301	0.388	0.085	0.000	3.700	0.208	3.79	0.00	6.07	11.58	6.48	6.15	15.49	28.11	0.085	14.90
10/5/2022	29.05	0.20	0.00	0.304	29.55	2.608	0.304	0.096	0.000	4.194	0.328	4.04	0.00	6.29	11.68	6.96	6.39	16.21	29.55	0.096	15.71
10/6/2022	30.31	0.15	0.00	0.476	30.94	2.740	0.476	0.101	0.000	4.406	1.191	4.50	0.00	6.39	11.13	7.72	6.49	16.73	30.94	0.101	16.11
10/7/2022	29.62	0.10	0.00	0.289	30.01	2.939	0.289	0.108	0.000	4.726	0.457	4.07	0.00	6.09	11.32	7.30	6.20	16.51	30.01	0.108	16.12
10/8/2022	28.22	0.09	0.00	0.301	28.61	2.931	0.301	0.108	0.000	4.713	0.457	3.48	0.00	6.02	10.60	6.71	6.13	15.77	28.61	0.108	15.38
10/9/2022	29.39	0.09	0.00	0.336	29.82	2.781	0.336	0.103	0.000	4.472	0.394	4.26	0.00	6.37	11.10	7.38	6.47	15.97	29.82	0.103	15.54
10/10/2022	30.00	0.05	0.00	0.268	30.32	3.291	0.268	0.121	0.000	5.292	0.458	3.75	0.00	6.26	10.88	7.31	6.38	16.63	30.32	0.121	16.31
10/11/2022	29.99	0.04	0.00	0.372	30.41	2.822	0.372	0.104	0.000	4.537	0.423	4.84	0.00	6.14	11.17	8.03	6.24	16.13	30.41	0.104	15.72
10/12/2022	28.16	0.06	0.00	0.264	28.48	2.899	0.264	0.107	0.000	4.662	0.460	2.57	0.00	6.09	11.43	5.74	6.20	16.55	28.48	0.107	16.23
10/13/2022	27.29	0.04	0.00	0.009	27.34	1.797	0.009	0.066	0.000	2.889	0.393	3.99	0.00	6.32	11.87	5.80	6.38	15.16	27.34	0.066	15.11
10/14/2022	28.95	0.04	0.00	0.391	29.38	3.333	0.391	0.123	0.000	5.359	0.447	3.03	0.00	5.94	10.76	6.75	6.06	16.57	29.38	0.123	16.13
10/15/2022	29.16	0.04	0.00	0.386	29.58	2.929	0.386	0.108	0.000	4.709	0.481	3.99	0.00	6.16	10.82	7.30	6.27	16.01	29.58	0.108	15.59
10/16/2022	27.91	0.04	0.00	0.418	28.37	2.580	0.418	0.095	0.000	4.149	0.428	2.70	0.00	6.60	11.40	5.70	6.69	15.98	28.37	0.095	15.52
10/17/2022	26.94	0.05	0.00	0.297	27.28	1.989	0.297	0.073	0.000	3.198	0.484	3.39	0.00	6.29	11.56	5.68	6.36	15.25	27.28	0.074	14.90
10/18/2022	29.04	0.05	0.00	0.370	29.46	2.715	0.370	0.100	0.000	4.365	0.432	4.40	0.00	6.05	11.02	7.49	6.15	15.82	29.46	0.100	15.40
10/19/2022	29.38	0.04	0.00	0.310	29.73	2.888	0.310	0.106	0.000	4.643	0.465	3.77	0.00	6.07	11.47	6.97	6.18	16.58	29.73	0.107	16.23
10/20/2022	28.56	0.04	0.00	0.361	28.96	2.816	0.361	0.104	0.000	4.528	0.424	3.48	0.00	6.08	11.16	6.66	6.19	16.11	28.96	0.104	15.71
10/21/2022	27.94	0.04	0.00	0.353	28.33	2.850	0.353	0.105	0.000	4.583	0.497	3.03	0.00	6.02	10.88	6.24	6.13	15.96	28.33	0.105	15.57
10/22/2022	27.77	0.03	0.00	0.317	28.12	2.429	0.317	0.090	0.000	3.906	0.465	3.86	0.00	6.15	10.91	6.60	6.24	15.28	28.12	0.090	14.93
10/23/2022	29.67	0.04	0.00	0.330	30.04	2.731	0.330	0.101	0.000	4.391	0.418	4.26	0.00	6.43	11.38	7.32	6.53	16.19	30.04	0.101	15.82

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						
10/24/2022	28.78	0.05	0.00	0.325	29.16	2.959	0.325	0.109	0.000	4.758	0.435	3.36	0.00	6.37	10.84	6.64	6.48	16.03	29.16	0.109	15.66
10/25/2022	31.42	0.05	0.00	0.355	31.82	3.722	0.355	0.137	0.000	5.985	0.385	3.71	0.00	6.13	11.40	7.79	6.26	17.77	31.82	0.137	17.37
10/26/2022	29.76	0.05	0.00	0.284	30.09	2.724	0.284	0.100	0.001	4.380	0.399	4.61	0.00	6.11	11.48	7.62	6.21	16.26	30.09	0.102	15.93
10/27/2022	29.82	0.05	0.00	0.387	30.25	3.063	0.387	0.113	0.000	4.926	0.372	4.33	0.00	5.96	11.10	7.78	6.08	16.39	30.25	0.113	15.96
10/28/2022	31.44	0.04	0.00	0.264	31.74	3.584	0.264	0.132	0.000	5.762	0.359	4.65	0.00	6.01	10.98	8.50	6.14	17.11	31.74	0.132	16.80
10/29/2022	25.87	0.07	0.00	0.315	26.26	2.214	0.315	0.082	0.000	3.560	0.334	2.75	0.00	6.13	10.87	5.28	6.21	14.77	26.26	0.082	14.38
10/30/2022	27.41	0.15	0.00	0.345	27.90	2.436	0.345	0.090	0.000	3.917	0.314	3.31	0.00	6.46	11.02	6.10	6.55	15.25	27.90	0.090	14.76
10/31/2022	26.47	0.05	0.00	0.258	26.78	1.721	0.258	0.063	0.000	2.767	0.315	3.59	0.00	6.37	11.69	5.57	6.43	14.77	26.78	0.063	14.47
11/1/2022	26.05	0.06	0.00	0.316	26.43	0.743	0.316	0.027	0.000	1.195	0.268	4.08	0.00	6.63	13.17	5.14	6.66	14.63	26.43	0.027	14.25
11/2/2022	27.00	0.09	0.00	0.307	27.39	1.771	0.307	0.065	0.000	2.847	0.285	3.71	0.00	6.23	12.18	5.79	6.29	15.31	27.39	0.066	14.92
11/3/2022	25.04	0.09	0.00	0.362	25.49	1.968	0.362	0.073	0.000	3.165	0.324	2.27	0.00	6.07	11.25	4.60	6.15	14.74	25.49	0.073	14.29
11/4/2022	25.29	0.09	0.00	0.353	25.73	1.940	0.353	0.072	0.000	3.119	0.334	2.73	0.00	6.13	11.05	5.03	6.21	14.50	25.73	0.072	14.06
11/5/2022	25.36	0.14	0.00	0.345	25.85	1.479	0.345	0.055	0.000	2.377	0.349	3.93	0.00	6.11	11.21	5.75	6.16	13.93	25.85	0.055	13.45
11/6/2022	27.54	0.16	0.00	0.333	28.04	2.177	0.333	0.080	0.000	3.500	0.349	3.14	0.00	6.41	12.05	5.65	6.49	15.89	28.04	0.080	15.40
11/7/2022	27.69	0.08	0.00	0.295	28.07	2.641	0.295	0.097	0.001	4.247	0.345	3.13	0.00	6.23	11.08	6.07	6.33	15.67	28.07	0.098	15.29
11/8/2022	24.34	0.09	0.00	0.300	24.73	1.724	0.300	0.064	0.000	2.772	0.327	2.45	0.00	5.98	11.12	4.47	6.04	14.22	24.73	0.064	13.83
11/9/2022	25.31	0.08	0.00	0.252	25.65	1.578	0.252	0.058	0.000	2.537	0.327	3.45	0.00	5.99	11.45	5.28	6.05	14.31	25.65	0.059	13.98
11/10/2022	25.68	0.08	0.00	0.303	26.07	1.885	0.303	0.069	0.000	3.031	0.297	3.16	0.00	6.07	11.25	5.34	6.14	14.58	26.07	0.070	14.19
11/11/2022	24.76	0.00	0.00	0.292	25.05	0.848	0.292	0.031	0.000	1.363	0.241	2.84	0.00	6.86	12.58	3.98	6.89	14.19	25.05	0.031	13.89
11/12/2022	24.24	0.00	0.00	0.261	24.50	0.611	0.261	0.023	0.000	0.983	0.258	3.52	0.00	6.54	12.31	4.39	6.56	13.55	24.50	0.023	13.29
11/13/2022	23.82	0.08	0.00	0.314	24.21	0.923	0.314	0.034	0.000	1.485	0.262	3.26	0.00	6.61	11.32	4.50	6.65	13.07	24.21	0.034	12.67
11/14/2022	24.64	0.09	0.00	0.332	25.07	1.308	0.332	0.048	0.000	2.104	0.266	3.10	0.00	6.27	11.64	4.74	6.32	14.01	25.07	0.048	13.58
11/15/2022	24.29	0.00	0.00	0.222	24.51	1.138	0.222	0.042	0.000	1.830	0.243	2.94	0.00	6.24	11.85	4.30	6.29	13.93	24.51	0.042	13.70
11/16/2022	25.83	0.09	0.00	0.187	26.10	1.017	0.187	0.037	0.000	1.636	0.228	4.52	0.00	6.25	12.23	5.73	6.28	14.09	26.10	0.037	13.82
11/17/2022	24.41	0.09	0.00	0.177	24.67	1.477	0.177	0.054	0.000	2.374	0.221	2.53	0.00	6.24	11.60	4.19	6.29	14.19	24.67	0.054	13.93
11/18/2022	23.12	0.09	0.00	0.163	23.37	1.096	0.163	0.040	0.001	1.762	0.217	2.55	0.00	6.26	11.28	3.81	6.30	13.26	23.37	0.041	13.01
11/19/2022	23.53	0.08	0.00	0.163	23.77	0.783	0.163	0.029	0.000	1.258	0.219	3.63	0.00	6.32	11.37	4.58	6.35	12.85	23.77	0.029	12.60
11/20/2022	23.92	0.08	0.00	0.150	24.15	1.305	0.150	0.048	0.000	2.099	0.204	2.15	0.00	6.57	11.63	3.60	6.61	13.93	24.15	0.048	13.71
11/21/2022	25.91	0.08	0.00	0.227	26.22	1.715	0.227	0.063	0.000	2.758	0.201	3.86	0.00	6.27	11.12	5.80	6.33	14.08	26.22	0.063	13.78
11/22/2022	24.13	0.08	0.00	0.155	24.36	0.625	0.155	0.023	0.000	1.006	0.209	4.09	0.00	6.58	11.67	4.87	6.61	12.88	24.36	0.023	12.65
11/23/2022	23.62	0.08	0.00	0.156	23.85	1.082	0.156	0.040	0.000	1.739	0.225	2.32	0.00	6.36	11.93	3.56	6.40	13.90	23.85	0.040	13.66
11/24/2022	23.52	0.08	0.00	0.155	23.75	0.864	0.155	0.032	0.000	1.390	0.222	3.64	0.00	6.48	10.97	4.65	6.51	12.58	23.75	0.032	12.35
11/25/2022	21.88	0.08	0.00	0.152	22.11	0.385	0.152	0.014	0.000	0.618	0.189	1.76	0.00	6.71	12.28	2.30	6.72	13.08	22.11	0.014	12.86
11/26/2022	23.05	0.08	0.00	0.155	23.28	0.706	0.155	0.026	0.000	1.135	0.200	3.09	0.00	6.43	11.54	3.95	6.46	12.87	23.28	0.026	12.64
11/27/2022	23.99	0.08	0.00	0.156	24.22	0.369	0.156	0.014	0.000	0.593	0.191	4.72	0.00	6.31	11.87	5.24	6.33	12.65	24.22	0.014	12.42
11/28/2022	24.18	0.08	0.00	0.215	24.48	0.393	0.215	0.015	0.000	0.633	0.195	3.67	0.00	6.72	12.64	4.28	6.74	13.46	24.48	0.015	13.17
11/29/2022	23.62	0.09	0.00	0.151	23.86	0.917	0.151	0.034	0.000	1.474	0.194	2.46	0.00	6.54	12.09	3.53	6.57	13.76	23.86	0.034	13.52



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						
11/30/2022	24.51	0.08	0.00	0.130	24.72	0.395	0.130	0.015	0.000	0.635	0.189	3.84	0.00	6.48	13.04	4.36	6.50	13.86	24.72	0.015	13.65
12/1/2022	23.81	0.00	0.00	0.129	23.94	0.454	0.129	0.017	0.000	0.730	0.195	3.21	0.00	6.70	12.50	3.79	6.72	13.43	23.94	0.017	13.30
12/2/2022	22.13	0.08	0.00	0.135	22.35	0.372	0.135	0.014	0.000	0.599	0.206	2.65	0.00	6.24	12.13	3.15	6.26	12.94	22.35	0.014	12.72
12/3/2022	22.34	0.09	0.00	0.118	22.54	0.381	0.118	0.014	0.000	0.612	0.201	2.41	0.00	6.58	12.23	2.91	6.59	13.04	22.54	0.014	12.84
12/4/2022	24.27	0.09	0.00	0.127	24.49	0.393	0.127	0.014	0.000	0.632	0.191	3.69	0.00	6.91	12.52	4.21	6.93	13.35	24.49	0.014	13.13
12/5/2022	24.78	0.07	0.00	0.193	25.04	0.832	0.193	0.031	0.000	1.337	0.192	4.02	0.00	6.55	11.88	5.05	6.58	13.41	25.04	0.031	13.15
12/6/2022	22.44	0.06	0.00	0.121	22.62	0.659	0.121	0.024	0.000	1.060	0.204	2.20	0.00	6.40	11.95	2.98	6.42	13.22	22.62	0.024	13.04
12/7/2022	23.13	0.00	0.00	0.128	23.26	0.393	0.128	0.014	0.000	0.632	0.205	2.48	0.00	6.57	12.84	3.00	6.58	13.68	23.26	0.014	13.55
12/8/2022	21.40	0.07	0.00	0.137	21.61	0.352	0.137	0.013	0.000	0.566	0.206	2.98	0.00	6.08	11.28	3.47	6.09	12.05	21.61	0.013	11.84
12/9/2022	25.69	0.07	0.00	0.148	25.91	1.308	0.148	0.048	0.000	2.104	0.188	3.75	0.00	6.52	11.84	5.21	6.57	14.13	25.91	0.048	13.92
12/10/2022	21.17	0.07	0.00	0.147	21.39	0.353	0.147	0.013	0.000	0.567	0.196	2.73	0.00	6.22	11.17	3.23	6.23	11.94	21.39	0.013	11.71
12/11/2022	23.66	0.06	0.00	0.143	23.86	0.820	0.143	0.030	0.000	1.319	0.196	2.51	0.00	6.88	11.97	3.47	6.91	13.48	23.86	0.030	13.28
12/12/2022	21.35	0.06	0.00	0.209	21.62	0.401	0.209	0.015	0.000	0.645	0.200	1.79	0.00	6.52	11.84	2.40	6.53	12.68	21.62	0.015	12.42
12/13/2022	24.56	0.06	0.00	0.143	24.76	0.766	0.143	0.028	0.000	1.231	0.221	4.44	0.00	6.39	11.54	5.35	6.42	12.99	24.76	0.028	12.79
12/14/2022	23.95	0.06	0.00	0.133	24.14	0.914	0.133	0.034	0.000	1.469	0.218	2.22	0.00	6.47	12.69	3.27	6.50	14.38	24.14	0.034	14.18
12/15/2022	22.49	0.05	0.00	0.128	22.67	0.387	0.128	0.014	0.000	0.623	0.203	2.19	0.00	6.27	12.85	2.70	6.29	13.68	22.67	0.014	13.50
12/16/2022	23.23	0.06	0.00	0.137	23.43	0.401	0.137	0.015	0.000	0.644	0.203	2.24	0.00	6.87	12.92	2.78	6.88	13.77	23.43	0.015	13.57
12/17/2022	21.60	0.05	0.00	0.127	21.78	0.358	0.127	0.013	0.000	0.576	0.200	2.85	0.00	6.31	11.35	3.33	6.32	12.13	21.78	0.013	11.95
12/18/2022	24.24	0.05	0.00	0.127	24.42	0.393	0.127	0.015	0.000	0.633	0.208	3.61	0.00	7.18	12.25	4.13	7.20	13.10	24.42	0.015	12.92
12/19/2022	24.51	0.06	0.00	0.127	24.69	1.098	0.127	0.040	0.000	1.766	0.198	2.48	0.00	6.64	12.35	3.71	6.68	14.31	24.69	0.040	14.13
12/20/2022	21.13	0.07	0.00	0.190	21.39	0.363	0.190	0.013	0.000	0.584	0.218	2.17	0.00	6.33	11.53	2.72	6.34	12.33	21.39	0.013	12.07
12/21/2022	23.92	0.05	0.00	0.128	24.10	0.621	0.128	0.023	0.000	0.999	0.222	3.15	0.00	6.68	12.28	3.90	6.71	13.50	24.10	0.023	13.32
12/22/2022	23.39	0.05	0.00	0.143	23.59	0.384	0.143	0.014	0.000	0.618	0.208	3.25	0.00	6.25	12.72	3.78	6.26	13.55	23.59	0.014	13.35
12/23/2022	22.99	0.05	0.00	0.136	23.18	0.394	0.136	0.015	0.000	0.633	0.199	2.34	0.00	6.67	12.79	2.87	6.68	13.63	23.18	0.015	13.44
12/24/2022	22.96	0.05	0.00	0.259	23.27	0.404	0.259	0.015	0.000	0.650	0.202	1.90	0.00	7.03	12.81	2.56	7.04	13.67	23.27	0.015	13.36
12/25/2022	25.75	0.05	0.00	0.128	25.93	1.519	0.128	0.056	0.000	2.443	0.206	3.10	0.00	6.75	11.73	4.74	6.81	14.38	25.93	0.056	14.20
12/26/2022	25.66	0.05	0.00	0.128	25.84	1.233	0.128	0.045	0.000	1.982	0.208	2.94	0.00	6.91	12.39	4.30	6.96	14.58	25.84	0.045	14.40
12/27/2022	24.87	0.05	0.00	0.196	25.11	1.021	0.196	0.038	0.000	1.642	0.212	2.69	0.00	7.27	12.05	3.90	7.30	13.90	25.11	0.038	13.66
12/28/2022	25.67	0.05	0.00	0.114	25.84	1.339	0.114	0.049	0.000	2.153	0.222	3.41	0.00	6.19	12.36	4.86	6.24	14.74	25.84	0.049	14.57
12/29/2022	24.17	0.05	0.00	0.118	24.34	1.034	0.118	0.038	0.000	1.662	0.221	2.72	0.00	6.51	12.04	3.87	6.55	13.93	24.34	0.038	13.76
12/30/2022	23.67	0.05	0.00	0.124	23.85	0.884	0.124	0.033	0.000	1.422	0.205	2.75	0.00	6.56	11.87	3.76	6.59	13.50	23.85	0.033	13.33
12/31/2022	23.38	0.05	0.00	0.102	23.53	0.387	0.102	0.014	0.000	0.623	0.198	3.04	0.00	6.76	12.40	3.53	6.78	13.22	23.53	0.014	13.07

## 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)

<u>Billed Month</u>	<u>Apex Billed Water Use (MGD)</u>			<u>Cary Billed Water Use<sup>1</sup> (MGD)</u>		<u>Total Billed Water Use (MGD)</u>		
	<u>Haw</u>	<u>Neuse</u>	<u>Cape Fear</u>	<u>Haw</u>	<u>Neuse</u>	<u>Haw</u>	<u>Neuse</u>	<u>Cape Fear</u>
Jan-2022	2.56	1.16	0.24	3.61	9.02	6.17	10.19	0.24
Feb-2022	2.71	1.25	0.30	3.87	9.48	6.58	10.72	0.30
Mar-2022	2.25	1.13	0.25	3.62	8.70	5.87	9.82	0.25
Apr-2022	2.41	1.16	0.23	3.75	9.26	6.16	10.42	0.23
May-2022	2.69	1.13	0.27	4.06	9.71	6.75	10.83	0.27
Jun-2022	2.93	1.16	0.26	4.91	11.19	7.85	12.35	0.26
Jul-2022	3.50	1.13	0.32	4.84	11.77	8.33	12.90	0.32
Aug-2022	3.48	1.13	0.21	4.71	11.56	8.19	12.68	0.21
Sep-2022	3.36	1.16	0.31	5.00	11.53	8.36	12.69	0.31
Oct-2022	3.28	1.13	0.28	4.94	11.47	8.21	12.60	0.28
Nov-2022	3.05	1.16	0.27	4.58	11.16	7.63	12.32	0.27
Dec-2022	2.56	1.13	0.24	3.65	8.84	6.21	9.97	0.24
<b>Annual Average Day</b>	34.78	13.81	3.19	51.55	123.69	86.33	137.50	3.19

<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) 2022, the non-revenue water is 18.2% by volume of the water supplied.

Water Balance Output from CY2022 AWWA Audit for the Town of Cary:

AWWA Free Water Audit Software Water Balance		Water Audit Report for: <b>Town of Cary</b>		FWAS v6.0 American Water Works Association. Copyright © 2020. All Rights Reserved.		
		Audit Year: <b>2022</b>		Jan 01 2022 - Dec 31 2022		
		Data Validity Tier: <b>Tier III (51-70)</b>				
		Water Exported (WE) (corrected for known errors)	Billed Water Exported			Revenue Water (Exported)
		1,754.946				1,754.946
Volume from Own Sources (VOS) (corrected for known errors)	System Input Volume	Water Supplied	Authorized Consumption	Billed Authorized Consumption	Billed Metered Consumption (BMAC) (water exported is removed)	Revenue Water
				5,343.119	5,343.119	5,343.119
8,276.843	8,287.756	6,532.810	5,661.079	Unbilled Authorized Consumption	Billed Unmetered Consumption (BUAC)	
				317.960	0.000	
			Water Losses	Apparent Losses	Unbilled Metered Consumption (UMAC)	Non-Revenue Water (NRW)
				123.795	270.343	
				Real Losses	Unbilled Unmetered Consumption (UUAC)	
				747.936	47.617	
					Systematic Data Handling Errors (SDHE)	
					13.358	
					Customer Metering Inaccuracies (CMI)	
					97.079	
					Unauthorized Consumption (UC)	
					13.358	
Water Imported (WI) (corrected for known errors)				Leakage on Transmission and/or Distribution Mains		
10.913				Not broken down		
				Leakage and Overflows at Utility's Storage Tanks		
				Not broken down		
				Leakage on Service Connections		
				Not broken down		

## 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-22	0.00	6.59
2-Jan-22	0.00	7.38
3-Jan-22	0.00	9.68
4-Jan-22	0.00	7.73
5-Jan-22	0.00	4.56
6-Jan-22	0.00	9.44
7-Jan-22	0.00	7.52
8-Jan-22	0.00	6.94
9-Jan-22	0.00	7.50
10-Jan-22	0.00	4.95
11-Jan-22	0.00	8.61
12-Jan-22	0.00	6.92
13-Jan-22	0.00	6.66
14-Jan-22	0.00	6.51
15-Jan-22	0.00	6.64
16-Jan-22	0.00	7.90
17-Jan-22	0.00	7.89
18-Jan-22	0.00	7.06
19-Jan-22	0.00	6.63
20-Jan-22	0.00	6.65
21-Jan-22	0.00	6.75
22-Jan-22	0.00	6.96
23-Jan-22	0.00	7.28
24-Jan-22	0.00	6.87
25-Jan-22	0.00	6.86
26-Jan-22	0.00	6.55
27-Jan-22	0.00	6.45
28-Jan-22	0.00	6.34
29-Jan-22	0.00	6.75
30-Jan-22	0.00	6.98
31-Jan-22	0.00	6.48
1-Feb-22	0.00	6.42
2-Feb-22	0.00	6.26
3-Feb-22	0.00	6.28
4-Feb-22	0.00	6.35
5-Feb-22	0.00	6.35
6-Feb-22	0.00	6.69
7-Feb-22	0.00	6.84
8-Feb-22	0.00	6.48
9-Feb-22	0.00	6.64
10-Feb-22	0.00	6.48
11-Feb-22	0.00	6.34
12-Feb-22	0.00	6.53
13-Feb-22	0.00	5.81
14-Feb-22	0.00	5.15
15-Feb-22	0.00	6.91
16-Feb-22	0.00	7.22
17-Feb-22	0.00	7.04
18-Feb-22	0.00	6.15
19-Feb-22	0.00	6.19
20-Feb-22	0.00	6.36
21-Feb-22	0.00	6.17
22-Feb-22	0.00	6.40
23-Feb-22	0.00	6.28
24-Feb-22	0.00	6.18
25-Feb-22	0.00	6.13
26-Feb-22	0.00	6.51

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-22	0.00	6.88
28-Feb-22	0.00	6.29
1-Mar-22	0.00	6.18
2-Mar-22	0.00	6.32
3-Mar-22	0.00	6.21
4-Mar-22	0.00	6.15
5-Mar-22	0.00	6.45
6-Mar-22	0.00	6.73
7-Mar-22	0.00	6.36
8-Mar-22	0.00	6.34
9-Mar-22	0.00	6.86
10-Mar-22	0.00	6.37
11-Mar-22	0.00	6.17
12-Mar-22	0.00	7.92
13-Mar-22	0.00	7.33
14-Mar-22	0.00	7.05
15-Mar-22	0.00	6.23
16-Mar-22	0.00	7.18
17-Mar-22	0.00	8.68
18-Mar-22	0.00	7.27
19-Mar-22	0.00	7.04
20-Mar-22	0.00	7.28
21-Mar-22	0.00	6.70
22-Mar-22	0.00	6.61
23-Mar-22	0.00	6.62
24-Mar-22	0.00	6.91
25-Mar-22	0.00	6.69
26-Mar-22	0.00	6.83
27-Mar-22	0.00	6.84
28-Mar-22	0.00	6.62
29-Mar-22	0.00	6.44
30-Mar-22	0.00	6.42
31-Mar-22	0.00	7.10
1-Apr-22	0.00	6.69
2-Apr-22	0.00	6.72
3-Apr-22	0.00	6.96
4-Apr-22	0.00	6.45
5-Apr-22	0.00	6.74
6-Apr-22	0.00	6.62
7-Apr-22	0.00	6.77
8-Apr-22	0.00	6.73
9-Apr-22	0.00	6.57
10-Apr-22	0.00	6.52
11-Apr-22	0.00	6.19
12-Apr-22	0.00	6.02
13-Apr-22	0.00	6.04
14-Apr-22	0.00	5.97
15-Apr-22	0.00	5.95
16-Apr-22	0.00	6.15
17-Apr-22	0.00	6.68
18-Apr-22	0.00	7.49
19-Apr-22	0.00	6.86
20-Apr-22	0.00	6.55
21-Apr-22	0.00	6.54
22-Apr-22	0.00	6.45
23-Apr-22	0.00	6.61
24-Apr-22	0.00	6.87

## 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-22	0.00	6.54
26-Apr-22	0.00	6.44
27-Apr-22	0.00	6.36
28-Apr-22	0.00	6.36
29-Apr-22	0.00	6.34
30-Apr-22	0.00	6.39
1-May-22	0.00	6.79
2-May-22	0.00	6.58
3-May-22	0.00	6.50
4-May-22	0.00	6.43
5-May-22	0.00	6.45
6-May-22	0.00	6.74
7-May-22	0.00	7.06
8-May-22	0.00	7.17
9-May-22	0.00	6.49
10-May-22	0.00	6.39
11-May-22	0.00	6.22
12-May-22	0.00	6.29
13-May-22	0.00	6.40
14-May-22	0.00	6.59
15-May-22	0.00	6.83
16-May-22	0.00	6.72
17-May-22	0.00	6.41
18-May-22	0.00	6.46
19-May-22	0.00	6.50
20-May-22	0.00	6.57
21-May-22	0.00	6.55
22-May-22	0.00	6.78
23-May-22	0.00	6.86
24-May-22	0.00	8.05
25-May-22	0.00	6.82
26-May-22	0.00	6.46
27-May-22	0.00	6.97
28-May-22	0.00	6.87
29-May-22	0.00	6.25
30-May-22	0.00	6.60
31-May-22	0.00	6.72
1-Jun-22	0.00	6.93
2-Jun-22	0.00	6.59
3-Jun-22	0.00	6.42
4-Jun-22	0.00	6.41
5-Jun-22	0.00	6.71
6-Jun-22	0.00	6.48
7-Jun-22	0.00	6.34
8-Jun-22	0.00	6.66
9-Jun-22	0.00	6.42
10-Jun-22	0.00	6.26
11-Jun-22	0.00	6.21
12-Jun-22	0.00	6.62
13-Jun-22	0.00	6.47
14-Jun-22	0.00	6.26
15-Jun-22	0.00	6.31
16-Jun-22	0.00	6.32
17-Jun-22	0.00	6.31
18-Jun-22	0.00	6.24
19-Jun-22	0.00	6.14
20-Jun-22	0.00	6.16
21-Jun-22	0.00	6.11

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-22	0.00	6.23
23-Jun-22	0.00	4.74
24-Jun-22	0.00	5.37
25-Jun-22	0.00	8.04
26-Jun-22	0.00	6.67
27-Jun-22	0.00	6.34
28-Jun-22	0.00	6.24
29-Jun-22	0.00	6.13
30-Jun-22	0.00	6.08
1-Jul-22	0.00	6.02
2-Jul-22	0.00	5.71
3-Jul-22	0.00	5.83
4-Jul-22	0.00	6.00
5-Jul-22	0.00	6.12
6-Jul-22	0.00	6.07
7-Jul-22	0.00	6.07
8-Jul-22	0.00	6.31
9-Jul-22	0.00	6.37
10-Jul-22	0.00	6.47
11-Jul-22	0.00	6.12
12-Jul-22	0.00	6.60
13-Jul-22	0.00	6.41
14-Jul-22	0.00	5.99
15-Jul-22	0.00	5.96
16-Jul-22	0.00	6.27
17-Jul-22	0.00	7.21
18-Jul-22	0.00	6.52
19-Jul-22	0.00	6.13
20-Jul-22	0.00	5.99
21-Jul-22	0.00	6.12
22-Jul-22	0.00	6.36
23-Jul-22	0.00	6.48
24-Jul-22	0.00	6.74
25-Jul-22	0.00	6.48
26-Jul-22	0.00	6.48
27-Jul-22	0.00	6.59
28-Jul-22	0.00	6.68
29-Jul-22	0.00	6.68
30-Jul-22	0.00	6.61
31-Jul-22	0.00	7.07
1-Aug-22	0.00	6.60
2-Aug-22	0.00	6.49
3-Aug-22	0.00	6.30
4-Aug-22	0.00	6.50
5-Aug-22	0.00	6.37
6-Aug-22	0.00	6.43
7-Aug-22	0.00	6.90
8-Aug-22	0.00	6.58
9-Aug-22	0.00	6.20
10-Aug-22	0.00	6.58
11-Aug-22	0.00	6.40
12-Aug-22	0.00	6.47
13-Aug-22	0.00	6.31
14-Aug-22	0.00	3.98
15-Aug-22	0.00	8.43
16-Aug-22	0.00	4.14
17-Aug-22	0.00	8.13

APPENDIX E – CAPE FEAR RIVER BASIN DISCHARGE

<u>Date</u>	<u>Discharge to Durham County WWTP</u>	<u>WWWRF Discharge to Cape Fear River Basin</u>
18-Aug-22	0.00	7.22
19-Aug-22	0.00	6.24
20-Aug-22	0.00	6.58
21-Aug-22	0.00	6.64
22-Aug-22	0.00	6.58
23-Aug-22	0.00	6.23
24-Aug-22	0.00	5.95
25-Aug-22	0.00	6.49
26-Aug-22	0.00	6.27
27-Aug-22	0.00	6.58
28-Aug-22	0.00	6.86
29-Aug-22	0.00	7.12
30-Aug-22	0.00	6.52
31-Aug-22	0.00	6.41
1-Sep-22	0.00	6.19
2-Sep-22	0.00	6.04
3-Sep-22	0.00	5.64
4-Sep-22	0.00	6.10
5-Sep-22	0.00	6.54
6-Sep-22	0.00	5.94
7-Sep-22	0.00	7.04
8-Sep-22	0.00	5.73
9-Sep-22	0.00	6.35
10-Sep-22	0.00	6.41
11-Sep-22	0.00	6.58
12-Sep-22	0.00	6.14
13-Sep-22	0.00	6.26
14-Sep-22	0.00	6.07
15-Sep-22	0.00	6.14
16-Sep-22	0.00	5.89
17-Sep-22	0.00	6.24
18-Sep-22	0.00	6.38
19-Sep-22	0.00	6.61
20-Sep-22	0.00	6.26
21-Sep-22	0.00	5.91
22-Sep-22	0.00	6.35
23-Sep-22	0.00	5.95
24-Sep-22	0.00	5.87
25-Sep-22	0.00	6.52
26-Sep-22	0.00	6.31
27-Sep-22	0.00	6.16
28-Sep-22	0.00	6.08
29-Sep-22	0.00	5.91
30-Sep-22	0.00	8.23
1-Oct-22	0.00	7.52
2-Oct-22	0.00	6.98
3-Oct-22	0.00	6.48
4-Oct-22	0.00	6.20
5-Oct-22	0.00	6.40
6-Oct-22	0.00	6.56
7-Oct-22	0.00	6.19
8-Oct-22	0.00	6.13
9-Oct-22	0.00	6.49
10-Oct-22	0.00	6.36
11-Oct-22	0.00	6.27
12-Oct-22	0.00	6.18
13-Oct-22	0.00	6.32
14-Oct-22	0.00	6.08

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-22	0.00	6.30
16-Oct-22	0.00	6.75
17-Oct-22	0.00	6.39
18-Oct-22	0.00	6.18
19-Oct-22	0.00	6.18
20-Oct-22	0.00	6.21
21-Oct-22	0.00	6.15
22-Oct-22	0.00	6.26
23-Oct-22	0.00	6.55
24-Oct-22	0.00	6.49
25-Oct-22	0.00	6.25
26-Oct-22	0.00	6.21
27-Oct-22	0.00	6.10
28-Oct-22	0.00	6.10
29-Oct-22	0.00	6.24
30-Oct-22	0.00	6.59
31-Oct-22	0.00	6.46
1-Nov-22	0.00	6.74
2-Nov-22	0.00	6.33
3-Nov-22	0.00	6.20
4-Nov-22	0.00	6.26
5-Nov-22	0.00	6.23
6-Nov-22	0.00	6.53
7-Nov-22	0.00	6.34
8-Nov-22	0.00	6.08
9-Nov-22	0.00	6.08
10-Nov-22	0.00	6.18
11-Nov-22	0.00	6.96
12-Nov-22	0.00	6.63
13-Nov-22	0.00	6.73
14-Nov-22	0.00	6.39
15-Nov-22	0.00	6.32
16-Nov-22	0.00	6.31
17-Nov-22	0.00	6.30
18-Nov-22	0.00	6.32
19-Nov-22	0.00	6.38
20-Nov-22	0.00	6.62
21-Nov-22	0.00	6.35
22-Nov-22	0.00	6.64
23-Nov-22	0.00	6.41
24-Nov-22	0.00	6.54
25-Nov-22	0.00	6.98
26-Nov-22	0.00	6.49
27-Nov-22	0.00	8.37
28-Nov-22	0.00	7.00
29-Nov-22	0.00	6.59
30-Nov-22	0.00	7.35
1-Dec-22	0.00	6.75
2-Dec-22	0.00	6.44
3-Dec-22	0.00	6.77
4-Dec-22	0.00	7.05
5-Dec-22	0.00	6.62
6-Dec-22	0.00	6.44
7-Dec-22	0.00	6.66
8-Dec-22	0.00	6.58
9-Dec-22	0.00	6.57
10-Dec-22	0.00	6.65

## 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-22	0.00	6.93
12-Dec-22	0.00	6.59
13-Dec-22	0.00	6.44
14-Dec-22	0.00	6.51
15-Dec-22	0.00	8.47
16-Dec-22	0.00	7.25
17-Dec-22	0.00	7.06
18-Dec-22	0.00	7.23
19-Dec-22	0.00	6.68
20-Dec-22	0.00	6.74
21-Dec-22	0.00	6.73
22-Dec-22	0.00	7.85
23-Dec-22	0.00	7.40
24-Dec-22	0.00	7.23
25-Dec-22	0.00	6.80
26-Dec-22	0.00	6.96
27-Dec-22	0.00	7.34
28-Dec-22	0.00	6.23
29-Dec-22	0.00	6.55
30-Dec-22	0.00	6.60
31-Dec-22	0.00	7.20