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Interbasin Transfer Certificate  
**2021 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 2021 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 2021 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 2021 reporting year.
- Summary of amount of water used during 2015 to 2021 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 2021 reporting year.

Appendix B is a table of calculated daily IBT amounts for January 1 to December 31 of the 2021 reporting year.

Appendix C is a table of monthly billed water use for Cary/Apex for the 2021 reporting year from the Towns' billing database.

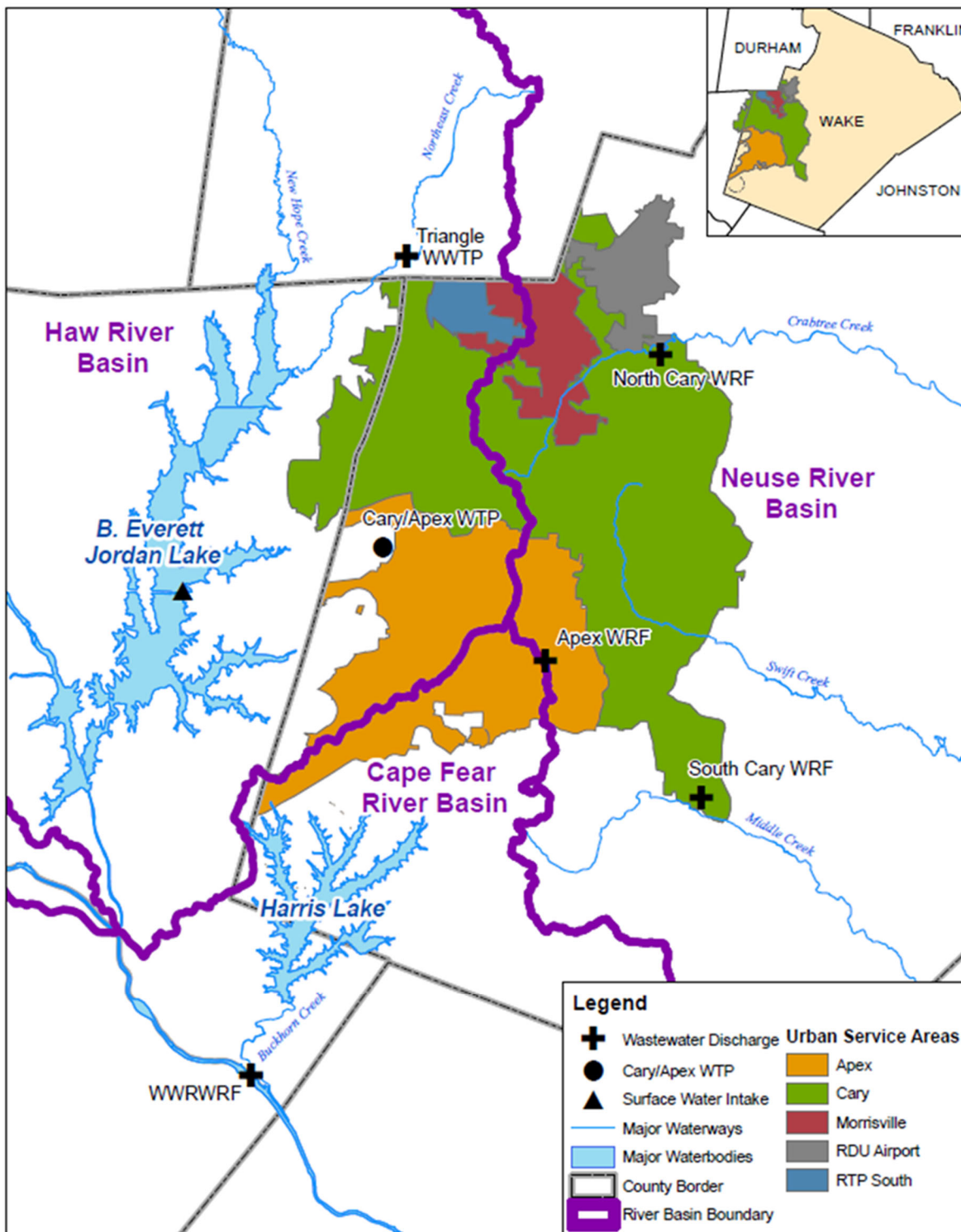
Appendix D is the performance indicator and water balance output from the Town of Cary's AWWA M36 Water Audit analysis performed for fiscal year 2021. The percentage non-revenue water is used in the discharge report to determine Neuse Demand.

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 2021 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 2021, 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 16.2 mgd (52% of certificate limit) which occurred during September 2021. The peak month transfer from the Haw River basin to the Cape Fear River basin was 0.1 mgd (5% of certificate limit) which also occurred during September 2021.

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, 2021 through December 31, 2021 is found in Appendix A.

The average daily withdrawal for the Towns was 26.1 mgd during 2021 (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 27 days during calendar year 2021.

<b>Table 2-1</b>	
Summary of Average Annual Jordan Lake Withdrawals <sup>1</sup>	
<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

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 2021.

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

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

<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

## 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 2021.

<b>Table 2-5</b>		
Monthly IBT for Calendar Year 2021		
<b>Month</b>	<b>Average Daily IBT from Haw to Neuse (mgd)</b>	<b>Average Daily IBT from Haw to Cape Fear (mgd)</b>
January	12.7	0.01
February	13.0	0.01
March	13.1	0.01
April	14.2	0.03
May	15.9	0.09
June	15.3	0.07
July	15.5	0.07
August	16.2	0.10
September	15.5	0.10
October	14.5	0.07
November	13.1	0.04
December	12.2	0.02
<b>Certificate Limit</b>	<b>31.0</b>	<b>2.00</b>
<b>Max Month</b>	September	September
<b>Max Month IBT</b>	16.2	0.1
<b>Maximum % of Limit</b>	<b>52%</b>	<b>5%</b>

## SECTION 3

# Consumptive Use by Basin

The average daily consumptive use was 16.7% for the period January 1, 2021 through December 31, 2021. 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.

Year	Average Daily Finished Water Demand (mgd)	Average Daily Consumptive Use (mgd)	% Consumptive Use
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%

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 2021 was estimated based on the previous year's water use in each basin as determined by billing records for Cary and Apex.

During 2021, based on 2020 billing records, it was assumed that 37% of water use occurred in the Haw subbasin, 1.4% of water use occurred in the Cape Fear subbasin, and 61.6% of water use occurred in the Neuse River subbasin. During 2022, based on 2021 billing records, it will be assumed that 37.9% of their water use will occur in the Haw subbasin, 1.4% of their water use will occur in the Cape Fear subbasin, and 60.7% 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 2021 calculations.

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%
Percentages to be used for 2022 IBT calculations			37.9%		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 2021. 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>3 year Running Average of Neuse Basin Demand</b>							<b>12.55</b>
<b>Required Discharge (3 year Running Average of Neuse Basin Demand – 9.756)</b>							<b>2.79</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 2021 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 2021.

Figure 4-1 below shows the Towns’ daily Cape Fear River Basin discharges from WWRWRF for 2021. Supporting data is found in Appendix E.

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

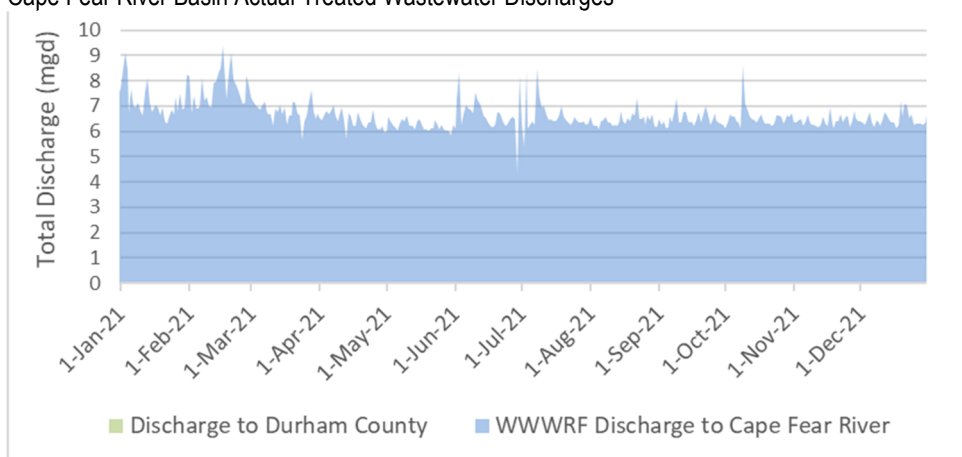


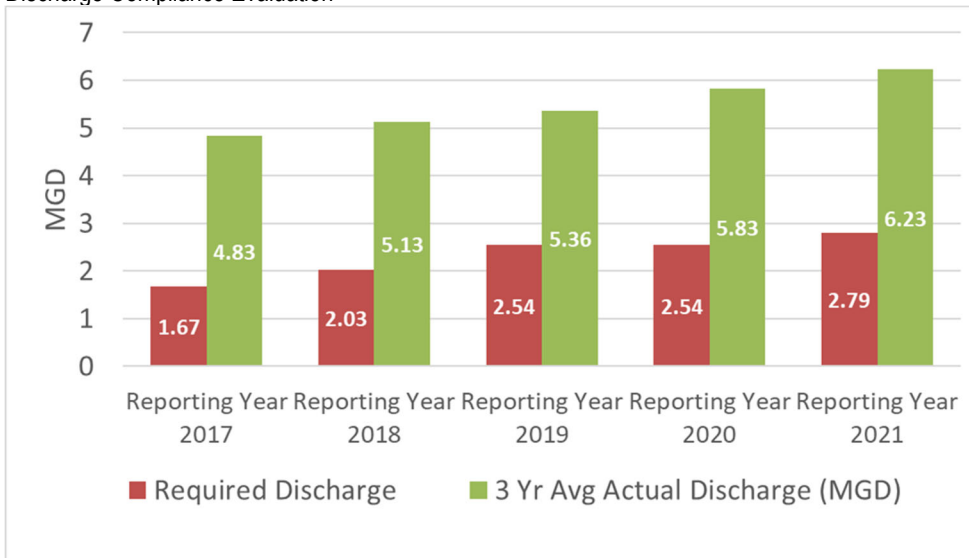
Table 4-2 shows the Towns’ discharges to the Cape Fear River Basin beginning with 2016 and the 3-year running average for the reporting year 2021 which is compared to the required discharge to determine compliance.

	<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>3 year running average</b>			<b>6.23</b>

## 4.3 Compliance Evaluation

For 2021, Cary and Apex's 3-year running average of actual discharge to the Cape Fear (6.23 mgd) exceeded the required discharge (2.79 mgd) by 3.44 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 2021 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 2021.

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 2021.

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 2021

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 27 days during calendar year 2021.

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 2021.

# Appendices

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- A Daily Jordan Lake Water Supply Raw Water Withdrawals
- B Daily IBT Amounts
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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 (%)
1/1/2021	216.90	21.07	32.60	32.5	21,160	100.00%
1/2/2021	216.71	22.09	34.17	34.1	21,160	100.00%
1/3/2021	218.65	21.95	33.96	33.9	21,160	100.00%
1/4/2021	219.45	24.38	37.72	37.7	21,160	100.00%
1/5/2021	219.36	21.28	32.92	32.9	21,160	100.00%
1/6/2021	218.60	24.24	37.50	37.4	21,160	100.00%
1/7/2021	217.63	24.19	37.42	37.5	21,160	100.00%
1/8/2021	216.92	21.56	33.35	33.2	21,160	100.00%
1/9/2021	216.49	22.64	35.02	34.9	21,160	100.00%
1/10/2021	216.04	23.59	36.49	36.5	21,160	100.00%
1/11/2021	215.77	23.12	35.77	35.8	21,160	100.00%
1/12/2021	215.83	23.23	35.94	35.9	21,160	100.00%
1/13/2021	215.95	23.39	36.18	36.1	21,159	100.00%
1/14/2021	216.07	23.00	35.58	35.6	21,160	100.00%
1/15/2021	216.21	22.36	34.59	34.6	21,160	100.00%
1/16/2021	216.27	22.52	34.84	34.8	21,160	100.00%
1/17/2021	216.30	22.04	34.10	34.0	21,160	100.00%
1/18/2021	216.33	23.81	36.83	37.6	21,160	100.00%
1/19/2021	216.30	23.40	36.20	36.9	21,160	100.00%
1/20/2021	216.24	23.23	35.93	36.7	21,160	100.00%
1/21/2021	216.18	22.96	35.52	36.2	21,160	100.00%
1/22/2021	216.18	22.91	35.44	36.2	21,160	100.00%
1/23/2021	216.20	22.80	35.27	36.0	21,160	100.00%
1/24/2021	216.23	22.95	35.50	36.2	21,160	100.00%
1/25/2021	216.28	22.68	35.09	35.8	21,160	100.00%
1/26/2021	216.64	22.85	35.35	36.1	21,160	100.00%
1/27/2021	217.05	23.29	36.03	36.8	21,160	100.00%
1/28/2021	217.72	21.77	33.68	34.4	21,160	100.00%
1/29/2021	218.14	23.52	36.39	37.2	21,160	100.00%
1/30/2021	219.05	21.60	33.42	34.1	21,160	100.00%
1/31/2021	219.05	22.34	34.56	35.3	21,160	100.00%
2/1/2021	220.02	24.39	37.73	38.6	21,160	100.00%
2/2/2021	219.87	28.49	44.07	45.1	21,160	100.00%
2/3/2021	219.14	24.73	38.26	39.2	21,160	100.00%
2/4/2021	218.24	23.06	35.67	36.5	21,160	100.00%
2/5/2021	217.28	21.48	33.23	34.0	21,160	100.00%
2/6/2021	216.29	22.88	35.40	36.2	21,160	100.00%
2/7/2021	215.84	23.96	37.07	37.9	21,160	100.00%
2/8/2021	215.96	22.45	34.73	35.5	21,160	100.00%
2/9/2021	216.15	24.09	37.27	38.2	21,160	100.00%
2/10/2021	216.33	23.19	35.87	36.7	21,160	100.00%
2/11/2021	216.59	22.54	34.87	35.6	21,160	100.00%
2/12/2021	217.67	21.21	32.81	33.6	21,160	100.00%
2/13/2021	219.23	23.04	35.64	36.5	21,160	100.00%
2/14/2021	221.00	21.68	33.54	34.3	21,160	100.00%
2/15/2021	222.60	23.72	36.69	37.5	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 (%)
2/16/2021	225.20	23.28	36.01	36.8	21,160	100.00%
2/17/2021	226.36	24.87	38.47	39.4	21,160	100.00%
2/18/2021	227.35	20.68	31.99	32.7	21,160	100.00%
2/19/2021	228.83	24.63	38.10	39.0	21,160	100.00%
2/20/2021	229.60	23.31	36.06	36.9	21,160	100.00%
2/21/2021	229.93	24.63	38.10	39.0	21,160	100.00%
2/22/2021	230.14	23.90	36.97	37.8	21,160	100.00%
2/23/2021	230.32	22.99	35.57	36.4	21,160	100.00%
2/24/2021	230.18	23.78	36.79	37.6	21,160	100.00%
2/25/2021	229.86	22.83	35.32	36.1	21,160	100.00%
2/26/2021	229.41	22.72	35.15	36.0	21,160	100.00%
2/27/2021	229.22	22.95	35.50	36.3	21,160	100.00%
2/28/2021	228.64	23.86	36.91	37.8	21,160	100.00%
3/1/2021	227.89	26.30	40.69	41.6	21,160	100.00%
3/2/2021	227.06	25.40	39.29	40.2	21,160	100.00%
3/3/2021	226.10	25.31	39.15	40.1	21,160	100.00%
3/4/2021	225.10	25.01	38.69	39.6	21,160	100.00%
3/5/2021	224.01	24.95	38.60	39.5	21,160	100.00%
3/6/2021	222.88	23.10	35.74	36.5	21,160	100.00%
3/7/2021	221.70	24.05	37.21	38.1	21,160	100.00%
3/8/2021	220.49	24.79	38.35	39.2	21,160	100.00%
3/9/2021	219.38	24.67	38.16	39.0	21,160	100.00%
3/10/2021	218.79	26.24	40.59	41.5	21,160	100.00%
3/11/2021	217.97	23.22	35.92	36.7	21,160	100.00%
3/12/2021	217.97	25.40	39.29	40.2	21,160	100.00%
3/13/2021	217.42	21.18	32.77	33.4	21,160	100.00%
3/14/2021	216.81	22.53	34.85	35.7	21,160	100.00%
3/15/2021	216.43	24.36	37.68	38.6	21,160	100.00%
3/16/2021	216.35	22.29	34.48	35.3	21,160	100.00%
3/17/2021	216.29	22.79	35.26	36.1	21,160	100.00%
3/18/2021	216.27	22.45	34.73	35.5	21,160	100.00%
3/19/2021	216.65	22.95	35.50	36.3	21,160	100.00%
3/20/2021	217.09	21.24	32.86	33.6	21,160	100.00%
3/21/2021	217.27	23.25	35.97	36.8	21,160	100.00%
3/22/2021	217.21	25.15	38.91	39.8	21,160	100.00%
3/23/2021	216.96	23.12	35.77	36.6	21,160	100.00%
3/24/2021	216.64	23.33	36.09	36.9	21,160	100.00%
3/25/2021	216.47	23.68	36.63	37.5	21,160	100.00%
3/26/2021	217.25	22.75	35.19	36.0	21,160	100.00%
3/27/2021	217.91	23.42	36.23	37.1	21,160	100.00%
3/28/2021	218.56	21.68	33.54	34.3	21,160	100.00%
3/29/2021	219.63	22.12	34.23	35.1	21,160	100.00%
3/30/2021	217.87	22.29	34.48	35.4	21,160	100.00%
3/31/2021	217.03	21.19	32.78	33.6	21,160	100.00%
4/1/2021	216.74	22.98	35.55	36.5	21,160	100.00%
4/2/2021	216.23	22.40	34.65	35.6	21,160	100.00%

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

Date	Reservoir Level (ft)	Cary/Apex/Morrisville/RTP Water Supply (mgd)	Cary/Apex/Morrisville/RTP Water Supply (cfs)	Inflow to Cary/Apex/Morrisville/RTP (cfs)	Cary/Apex/Morrisville/RTP Storage Level (ac-ft)	Cary/Apex/Morrisville/RTP Storage Level (%)
4/3/2021	216.30	21.40	33.11	34.0	21,160	100.00%
4/4/2021	216.50	23.06	35.68	36.6	21,160	100.00%
4/5/2021	216.58	24.41	37.76	38.8	21,160	100.00%
4/6/2021	216.60	24.00	37.13	38.1	21,160	100.00%
4/7/2021	216.60	24.34	37.65	38.5	21,160	100.00%
4/8/2021	216.58	26.05	40.30	41.2	21,160	100.00%
4/9/2021	216.45	25.20	38.98	39.9	21,160	100.00%
4/10/2021	216.49	24.34	37.65	38.5	21,160	100.00%
4/11/2021	216.56	24.03	37.17	38.0	21,160	100.00%
4/12/2021	216.51	23.82	36.85	37.7	21,160	100.00%
4/13/2021	216.27	25.39	39.28	40.2	21,160	100.00%
4/14/2021	216.18	24.96	38.61	39.5	21,160	100.00%
4/15/2021	216.17	25.56	39.54	40.5	21,160	100.00%
4/16/2021	216.09	25.26	39.08	40.0	21,160	100.00%
4/17/2021	215.98	22.87	35.38	36.2	21,160	100.00%
4/18/2021	215.90	26.58	41.12	42.1	21,160	100.00%
4/19/2021	215.90	24.82	38.40	39.3	21,160	100.00%
4/20/2021	215.90	27.10	41.92	42.9	21,160	100.00%
4/21/2021	215.97	26.02	40.25	41.2	21,160	100.00%
4/22/2021	215.99	25.71	39.77	40.8	21,160	100.00%
4/23/2021	216.04	24.53	37.95	38.8	21,160	100.00%
4/24/2021	216.11	24.86	38.46	39.4	21,160	100.00%
4/25/2021	216.21	21.94	33.94	34.8	21,160	100.00%
4/26/2021	216.33	27.19	42.06	43.1	21,160	100.00%
4/27/2021	216.38	26.65	41.23	42.2	21,160	100.00%
4/28/2021	216.40	27.18	42.05	43.1	21,160	100.00%
4/29/2021	216.33	30.05	46.49	47.6	21,160	100.00%
4/30/2021	216.28	27.93	43.21	44.2	21,160	100.00%
5/1/2021	216.17	29.91	46.27	46.9	21,160	100.00%
5/2/2021	216.14	29.73	45.99	46.6	21,160	100.00%
5/3/2021	216.15	27.26	42.17	42.8	21,160	100.00%
5/4/2021	216.20	26.86	41.55	42.1	21,160	100.00%
5/5/2021	216.37	27.24	42.14	42.7	21,160	100.00%
5/6/2021	216.37	26.77	41.41	42.0	21,160	100.00%
5/7/2021	216.36	26.09	40.36	40.9	21,160	100.00%
5/8/2021	216.28	25.03	38.72	39.2	21,160	100.00%
5/9/2021	216.11	27.04	41.83	42.4	21,160	100.00%
5/10/2021	216.18	25.93	40.11	40.7	21,160	100.00%
5/11/2021	216.20	24.16	37.38	37.9	21,160	100.00%
5/12/2021	216.23	25.76	39.85	40.4	21,160	100.00%
5/13/2021	216.24	25.66	39.70	40.2	21,160	100.00%
5/14/2021	216.18	27.93	43.21	43.8	21,160	100.00%
5/15/2021	216.14	26.53	41.04	41.6	21,160	100.00%
5/16/2021	216.13	28.34	43.84	44.4	21,160	100.00%
5/17/2021	216.12	24.94	38.58	39.1	21,160	100.00%
5/18/2021	216.12	29.13	45.06	45.7	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 (%)
5/19/2021	216.09	30.93	47.85	48.5	21,160	100.00%
5/20/2021	216.10	29.42	45.51	46.1	21,160	100.00%
5/21/2021	216.10	32.45	50.20	50.9	21,160	100.00%
5/22/2021	216.09	31.68	49.01	49.7	21,160	100.00%
5/23/2021	216.08	31.98	49.47	50.1	21,160	100.00%
5/24/2021	216.08	30.97	47.91	48.6	21,160	100.00%
5/25/2021	216.06	31.35	48.50	49.1	21,160	100.00%
5/26/2021	216.03	33.56	51.92	52.6	21,160	100.00%
5/27/2021	216.00	34.29	53.05	30.5	21,115	99.79%
5/28/2021	215.98	31.88	49.32	45.8	21,108	99.76%
5/29/2021	216.05	28.92	44.74	72.8	21,160	100.00%
5/30/2021	215.95	25.92	40.10	-38.6	21,004	99.26%
5/31/2021	215.97	27.95	43.24	86.4	21,089	99.67%
6/1/2021	215.96	30.77	47.60	55.0	21,104	99.74%
6/2/2021	216.02	28.64	44.31	74.4	21,160	100.00%
6/3/2021	216.39	26.25	40.61	41.2	21,160	100.00%
6/4/2021	216.62	26.01	40.24	40.9	21,160	100.00%
6/5/2021	216.58	28.32	43.81	44.5	21,160	100.00%
6/6/2021	216.48	25.85	39.99	40.6	21,160	100.00%
6/7/2021	216.34	28.06	43.41	44.1	21,160	100.00%
6/8/2021	216.26	29.64	45.85	46.6	21,160	100.00%
6/9/2021	216.25	28.94	44.77	45.4	21,160	100.00%
6/10/2021	216.34	29.64	45.85	46.6	21,160	100.00%
6/11/2021	216.54	26.01	40.24	40.9	21,160	100.00%
6/12/2021	216.67	25.31	39.15	39.7	21,160	100.00%
6/13/2021	216.78	29.62	45.82	46.5	21,160	100.00%
6/14/2021	216.67	26.65	41.23	41.9	21,160	100.00%
6/15/2021	216.39	30.93	47.84	48.6	21,160	100.00%
6/16/2021	216.11	30.54	47.25	48.0	21,160	100.00%
6/17/2021	216.11	32.08	49.63	50.4	21,160	100.00%
6/18/2021	215.92	31.60	48.89	29.4	21,121	99.82%
6/19/2021	215.88	31.38	48.54	29.4	21,083	99.64%
6/20/2021	215.93	27.02	41.80	81.3	21,160	100.00%
6/21/2021	215.93	25.45	39.37	41.0	21,160	100.00%
6/22/2021	215.96	27.15	42.00	42.9	21,160	100.00%
6/23/2021	216.12	28.51	44.10	44.8	21,160	100.00%
6/24/2021	216.18	28.54	44.15	44.8	21,160	100.00%
6/25/2021	216.18	27.67	42.81	43.5	21,160	100.00%
6/26/2021	216.18	27.60	42.70	43.4	21,160	100.00%
6/27/2021	216.18	26.14	40.44	41.1	21,160	100.00%
6/28/2021	216.17	30.00	46.41	47.1	21,160	100.00%
6/29/2021	216.14	27.05	41.85	42.5	21,160	100.00%
6/30/2021	216.07	29.02	44.89	44.3	21,160	100.00%
7/1/2021	216.07	30.71	47.51	48.4	21,160	100.00%
7/2/2021	216.19	26.23	40.58	41.3	21,160	100.00%
7/3/2021	216.32	24.97	38.63	39.4	21,160	100.00%



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7/4/2021	216.40	25.37	39.25	40.0	21,160	100.00%
7/5/2021	216.42	25.03	38.72	39.4	21,160	100.00%
7/6/2021	216.43	30.46	47.12	48.0	21,160	100.00%
7/7/2021	216.39	28.10	43.47	44.3	21,160	100.00%
7/8/2021	216.84	26.37	40.79	41.6	21,160	100.00%
7/9/2021	219.14	24.89	38.50	39.2	21,160	100.00%
7/10/2021	217.10	25.26	39.08	39.8	21,160	100.00%
7/11/2021	216.79	26.79	41.44	42.2	21,160	100.00%
7/12/2021	216.46	26.39	40.83	41.6	21,160	100.00%
7/13/2021	216.24	28.48	44.06	44.9	21,160	100.00%
7/14/2021	216.16	29.46	45.57	46.4	21,160	100.00%
7/15/2021	216.18	29.04	44.92	45.8	21,160	100.00%
7/16/2021	216.22	28.79	44.54	45.4	21,160	100.00%
7/17/2021	216.21	30.05	46.49	47.3	21,160	100.00%
7/18/2021	216.20	28.21	43.64	44.5	21,160	100.00%
7/19/2021	216.52	25.96	40.16	40.9	21,160	100.00%
7/20/2021	217.02	25.31	39.15	39.9	21,160	100.00%
7/21/2021	216.79	27.82	43.04	43.9	21,160	100.00%
7/22/2021	216.40	29.37	45.44	46.3	21,160	100.00%
7/23/2021	216.27	29.09	45.00	45.8	21,160	100.00%
7/24/2021	216.23	29.72	45.98	46.8	21,160	100.00%
7/25/2021	216.20	28.78	44.52	45.3	21,160	100.00%
7/26/2021	216.24	28.83	44.60	45.4	21,160	100.00%
7/27/2021	216.26	30.75	47.57	48.4	21,160	100.00%
7/28/2021	216.20	31.56	48.82	49.7	21,160	100.00%
7/29/2021	216.17	30.07	46.52	47.4	21,160	100.00%
7/30/2021	216.14	29.61	45.81	46.7	21,160	100.00%
7/31/2021	216.10	32.53	50.32	51.3	21,160	100.00%
8/1/2021	216.06	29.39	45.47	46.6	21,160	100.00%
8/2/2021	216.00	28.73	44.45	10.5	21,092	99.68%
8/3/2021	215.99	27.71	42.86	62.2	21,131	99.86%
8/4/2021	215.91	29.14	45.08	-6.5	21,028	99.38%
8/5/2021	215.86	30.63	47.38	25.0	20,984	99.17%
8/6/2021	215.88	31.14	48.17	92.4	21,071	99.58%
8/7/2021	215.87	26.90	41.61	62.3	21,113	99.78%
8/8/2021	216.03	28.53	44.14	75.8	21,160	100.00%
8/9/2021	216.04	27.41	42.40	43.5	21,160	100.00%
8/10/2021	216.04	32.64	50.49	51.8	21,160	100.00%
8/11/2021	216.01	31.64	48.95	29.6	21,160	100.00%
8/12/2021	215.98	29.62	45.82	30.2	21,129	99.85%
8/13/2021	215.91	32.84	50.80	-6.6	21,015	99.31%
8/14/2021	215.91	32.44	50.18	72.4	21,059	99.52%
8/15/2021	216.04	26.44	40.90	96.6	21,160	100.00%
8/16/2021	216.34	28.06	43.41	44.5	21,160	100.00%
8/17/2021	216.47	27.24	42.14	43.2	21,160	100.00%
8/18/2021	216.44	27.26	42.17	43.3	21,160	100.00%

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

Date	Reservoir Level (ft)	Cary/Apex/Morrisville/RTP Water Supply (mgd)	Cary/Apex/Morrisville/RTP Water Supply (cfs)	Inflow to Cary/Apex/Morrisville/RTP (cfs)	Cary/Apex/Morrisville/RTP Storage Level (ac-ft)	Cary/Apex/Morrisville/RTP Storage Level (%)
8/19/2021	216.38	28.65	44.32	45.4	21,160	100.00%
8/20/2021	216.46	26.28	40.66	41.7	21,160	100.00%
8/21/2021	216.42	26.82	41.49	42.5	21,160	100.00%
8/22/2021	216.33	26.70	41.30	42.3	21,160	100.00%
8/23/2021	216.49	27.00	41.77	42.9	21,160	100.00%
8/24/2021	216.35	28.96	44.80	46.0	21,160	100.00%
8/25/2021	216.23	29.96	46.35	47.5	21,160	100.00%
8/26/2021	216.18	30.76	47.59	48.8	21,160	100.00%
8/27/2021	216.14	29.38	45.45	46.6	21,160	100.00%
8/28/2021	216.10	31.55	48.81	50.1	21,160	100.00%
8/29/2021	216.04	29.35	45.40	24.5	21,160	100.00%
8/30/2021	216.01	32.88	50.87	24.8	21,160	100.00%
8/31/2021	215.94	29.70	45.95	6.7	21,082	99.63%
9/1/2021	215.91	32.22	49.84	47.2	21,076	99.61%
9/2/2021	215.83	28.39	43.92	-3.5	20,982	99.16%
9/3/2021	215.82	29.49	45.62	66.1	21,023	99.35%
9/4/2021	215.77	29.77	46.05	26.9	20,985	99.17%
9/5/2021	215.71	28.54	44.15	16.9	20,931	98.92%
9/6/2021	215.67	28.38	43.90	35.9	20,915	98.84%
9/7/2021	215.60	31.28	48.39	7.4	20,834	98.46%
9/8/2021	215.53	30.18	46.69	7.0	20,755	98.09%
9/9/2021	215.73	28.37	43.89	247.3	21,159	99.99%
9/10/2021	215.73	26.74	41.37	43.8	21,160	100.00%
9/11/2021	215.68	27.26	42.17	26.1	21,128	99.85%
9/12/2021	215.62	28.67	44.35	16.8	21,073	99.59%
9/13/2021	215.56	29.55	45.71	17.0	21,016	99.32%
9/14/2021	215.51	29.19	45.16	128.1	21,160	100.00%
9/15/2021	215.44	31.47	48.68	7.2	21,077	99.61%
9/16/2021	215.42	29.96	46.35	55.7	21,096	99.70%
9/17/2021	215.34	29.59	45.78	-3.2	20,999	99.24%
9/18/2021	215.28	29.29	45.31	17.2	20,943	98.98%
9/19/2021	215.21	29.43	45.53	6.6	20,866	98.61%
9/20/2021	215.16	31.22	48.30	27.6	20,825	98.42%
9/21/2021	215.17	27.92	43.19	83.9	20,906	98.80%
9/22/2021	215.25	25.47	39.40	148.9	21,123	99.83%
9/23/2021	215.77	27.07	41.88	73.8	21,160	100.00%
9/24/2021	216.06	25.36	39.23	40.1	21,160	100.00%
9/25/2021	216.16	30.10	46.56	47.7	21,160	100.00%
9/26/2021	216.20	26.69	41.29	42.2	21,160	100.00%
9/27/2021	216.22	28.76	44.49	45.6	21,160	100.00%
9/28/2021	216.20	31.70	49.04	50.2	21,160	100.00%
9/29/2021	216.21	29.12	45.05	46.1	21,160	100.00%
9/30/2021	216.21	31.42	48.61	49.8	21,160	100.00%
10/1/2021	216.18	29.71	45.96	46.9	21,160	100.00%
10/2/2021	216.14	29.81	46.12	47.1	21,160	100.00%
10/3/2021	216.07	31.17	48.22	16.3	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 (%)
10/4/2021	216.05	28.83	44.60	45.5	21,160	100.00%
10/5/2021	216.01	27.87	43.11	36.7	21,160	100.00%
10/6/2021	215.98	29.52	45.67	45.5	21,159	100.00%
10/7/2021	215.92	27.21	42.09	19.7	21,115	99.79%
10/8/2021	215.89	26.83	41.51	48.2	21,128	99.85%
10/9/2021	216.08	25.88	40.04	59.5	21,160	100.00%
10/10/2021	216.16	25.28	39.11	39.9	21,160	100.00%
10/11/2021	216.19	26.27	40.64	41.5	21,160	100.00%
10/12/2021	216.18	27.59	42.68	43.6	21,160	100.00%
10/13/2021	216.17	27.95	43.24	44.2	21,160	100.00%
10/14/2021	216.16	28.09	43.46	44.4	21,160	100.00%
10/15/2021	216.14	27.67	42.81	43.7	21,160	100.00%
10/16/2021	216.12	27.96	43.25	44.2	21,160	100.00%
10/17/2021	216.08	24.80	38.37	39.2	21,160	100.00%
10/18/2021	216.03	26.93	41.66	1.4	21,160	100.00%
10/19/2021	216.00	28.40	43.93	26.4	21,125	99.84%
10/20/2021	215.97	28.61	44.26	37.4	21,111	99.77%
10/21/2021	215.89	28.08	43.44	-2.0	21,021	99.35%
10/22/2021	215.86	26.94	41.68	47.8	21,034	99.40%
10/23/2021	215.82	28.00	43.32	37.5	21,022	99.35%
10/24/2021	215.75	27.72	42.88	8.5	20,954	99.03%
10/25/2021	215.69	26.54	41.06	18.2	20,908	98.81%
10/26/2021	215.76	24.56	37.99	141.1	21,113	99.78%
10/27/2021	215.81	26.70	41.30	66.3	21,160	100.00%
10/28/2021	215.82	26.80	41.46	44.7	21,160	100.00%
10/29/2021	215.80	23.45	36.28	37.5	21,160	100.00%
10/30/2021	215.81	23.29	36.03	39.6	21,160	100.00%
10/31/2021	215.84	25.48	39.42	41.3	21,160	100.00%
11/1/2021	215.78	24.66	38.15	38.9	21,160	100.00%
11/2/2021	215.77	26.43	40.89	41.7	21,160	100.00%
11/3/2021	215.72	25.50	39.45	19.2	21,119	99.81%
11/4/2021	215.67	25.82	39.94	19.3	21,079	99.62%
11/5/2021	215.67	24.70	38.21	28.6	21,060	99.53%
11/6/2021	215.64	25.61	39.62	76.5	21,133	99.87%
11/7/2021	215.54	26.31	40.70	-31.2	20,990	99.20%
11/8/2021	215.47	26.57	41.10	-0.5	20,908	98.81%
11/9/2021	215.43	25.87	40.02	36.3	20,900	98.77%
11/10/2021	215.37	25.78	39.88	36.7	20,894	98.74%
11/11/2021	215.30	25.18	38.95	25.2	20,867	98.62%
11/12/2021	215.23	25.10	38.83	24.9	20,839	98.49%
11/13/2021	215.18	23.25	35.97	43.6	20,854	98.56%
11/14/2021	215.18	25.16	38.92	43.6	20,863	98.60%
11/15/2021	215.03	25.45	39.37	26.5	20,838	98.48%
11/16/2021	214.99	25.26	39.08	39.2	20,838	98.48%
11/17/2021	214.94	25.30	39.14	31.2	20,822	98.41%
11/18/2021	214.89	23.68	36.64	31.5	20,812	98.36%

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Date	Reservoir Level (ft)	Cary/Apex/Morrisville/RTP Water Supply (mgd)	Cary/Apex/Morrisville/RTP Water Supply (cfs)	Inflow to Cary/Apex/Morrisville/RTP (cfs)	Cary/Apex/Morrisville/RTP Storage Level (ac-ft)	Cary/Apex/Morrisville/RTP Storage Level (%)
11/19/2021	214.84	24.11	37.29	31.5	20,801	98.30%
11/20/2021	214.79	24.25	37.51	31.7	20,789	98.25%
11/21/2021	214.70	23.54	36.41	-6.5	20,704	97.85%
11/22/2021	214.71	24.68	38.18	87.7	20,802	98.31%
11/23/2021	214.65	23.90	36.97	22.3	20,773	98.18%
11/24/2021	214.61	22.29	34.49	35.4	20,775	98.18%
11/25/2021	214.57	24.71	38.23	31.0	20,761	98.12%
11/26/2021	214.53	21.20	32.79	30.2	20,756	98.09%
11/27/2021	214.49	21.99	34.02	30.6	20,749	98.06%
11/28/2021	214.43	22.06	34.13	39.3	20,759	98.11%
11/29/2021	214.40	23.70	36.67	12.4	20,711	97.88%
11/30/2021	214.37	23.49	36.33	39.6	20,718	97.91%
12/1/2021	214.34	26.53	41.04	35.1	20,706	97.86%
12/2/2021	214.33	20.55	31.79	42.7	20,728	97.96%
12/3/2021	214.29	22.80	35.27	15.9	20,689	97.78%
12/4/2021	214.29	22.66	35.06	52.4	20,724	97.94%
12/5/2021	214.25	22.40	34.65	16.2	20,687	97.77%
12/6/2021	214.29	23.39	36.19	89.0	20,792	98.26%
12/7/2021	214.20	22.78	35.24	-33.0	20,656	97.62%
12/8/2021	214.20	22.00	34.03	55.5	20,699	97.82%
12/9/2021	214.19	22.97	35.54	43.3	20,714	97.90%
12/10/2021	214.17	22.74	35.17	34.3	20,713	97.89%
12/11/2021	214.17	22.85	35.35	52.4	20,746	98.05%
12/12/2021	214.15	23.22	35.92	34.1	20,743	98.03%
12/13/2021	214.18	25.46	39.38	79.9	20,823	98.41%
12/14/2021	214.20	22.96	35.52	70.0	20,892	98.73%
12/15/2021	214.19	22.97	35.53	38.3	20,897	98.76%
12/16/2021	214.18	23.33	36.09	32.9	20,891	98.73%
12/17/2021	214.18	22.32	34.53	41.8	20,905	98.80%
12/18/2021	214.16	23.52	36.39	23.8	20,880	98.68%
12/19/2021	214.30	20.68	31.99	156.8	21,128	99.85%
12/20/2021	214.33	23.42	36.23	38.6	21,132	99.87%
12/21/2021	214.43	21.58	33.38	41.3	21,148	99.95%
12/22/2021	214.45	22.86	35.36	37.1	21,151	99.96%
12/23/2021	214.47	23.40	36.20	37.7	21,154	99.97%
12/24/2021	214.49	22.26	34.44	36.0	21,157	99.99%
12/25/2021	214.52	20.78	32.15	34.6	21,160	100.00%
12/26/2021	214.53	22.18	34.31	35.2	21,160	100.00%
12/27/2021	214.54	22.71	35.13	35.7	21,160	100.00%
12/28/2021	214.53	21.68	33.54	27.2	21,147	99.94%
12/29/2021	214.54	22.38	34.62	40.7	21,159	100.00%
12/30/2021	214.56	22.00	34.03	33.9	21,159	100.00%
12/31/2021	214.56	22.95	35.50	35.2	21,158	99.99%

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+12+13	(17)=8+9+14	(18)=10+11+15	(19)=16+17+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						
1/1/2021	21.07	0.00	0.00	0.039	21.11	0.316	0.039	0.012	0.000	0.525	0.309	4.04	0.00	5.08	10.79	4.40	5.09	11.62	21.11	0.012	11.59
1/2/2021	22.09	0.00	0.00	0.050	22.14	0.346	0.050	0.013	0.000	0.575	0.303	3.45	0.00	5.64	11.77	3.85	5.65	12.64	22.14	0.013	12.59
1/3/2021	21.95	0.00	0.00	0.051	22.00	0.345	0.051	0.013	0.000	0.572	0.309	3.40	0.00	4.89	12.43	3.80	4.90	13.31	22.00	0.013	13.26
1/4/2021	24.38	0.00	0.00	0.047	24.43	0.379	0.047	0.014	0.000	0.631	0.312	3.94	0.00	6.40	12.70	4.37	6.42	13.64	24.43	0.014	13.60
1/5/2021	21.28	0.00	0.00	0.064	21.34	0.344	0.064	0.013	0.000	0.571	0.311	2.78	0.00	5.16	12.10	3.19	5.18	12.98	21.34	0.013	12.92
1/6/2021	24.24	0.00	0.00	0.067	24.31	0.367	0.067	0.014	0.000	0.610	0.332	4.49	0.00	6.21	12.22	4.92	6.22	13.16	24.31	0.014	13.10
1/7/2021	24.19	0.00	0.00	0.064	24.25	0.377	0.064	0.014	0.000	0.626	0.333	3.91	0.00	6.12	12.81	4.35	6.14	13.77	24.25	0.014	13.70
1/8/2021	21.56	0.00	0.00	0.078	21.64	0.347	0.078	0.013	0.000	0.576	0.310	2.91	0.00	5.46	11.94	3.33	5.47	12.83	21.64	0.013	12.75
1/9/2021	22.64	0.00	0.00	0.085	22.73	0.344	0.085	0.013	0.000	0.571	0.311	4.16	0.00	5.32	11.92	4.59	5.34	12.80	22.73	0.013	12.71
1/10/2021	23.59	0.00	0.00	0.092	23.68	0.367	0.092	0.014	0.000	0.610	0.312	3.87	0.00	5.86	12.56	4.33	5.87	13.48	23.68	0.014	13.39
1/11/2021	23.12	0.00	0.00	0.064	23.18	0.358	0.064	0.014	0.000	0.594	0.319	3.88	0.00	5.56	12.39	4.30	5.58	13.31	23.18	0.014	13.24
1/12/2021	23.23	0.00	0.00	0.062	23.29	0.356	0.062	0.013	0.000	0.592	0.314	4.07	0.00	6.14	11.74	4.49	6.15	12.65	23.29	0.013	12.59
1/13/2021	23.39	0.00	0.00	0.088	23.48	0.365	0.088	0.014	0.000	0.607	0.334	3.75	0.00	6.50	11.82	4.20	6.51	12.76	23.48	0.014	12.68
1/14/2021	23.00	0.00	0.00	0.068	23.07	0.349	0.068	0.013	0.000	0.581	0.315	4.20	0.00	5.97	11.57	4.62	5.98	12.47	23.07	0.013	12.40
1/15/2021	22.36	0.00	0.00	0.066	22.43	0.355	0.066	0.013	0.000	0.590	0.321	3.25	0.00	5.88	11.95	3.67	5.90	12.86	22.43	0.013	12.79
1/16/2021	22.52	0.00	0.00	0.059	22.58	0.355	0.059	0.013	0.000	0.590	0.312	3.41	0.00	5.83	12.01	3.82	5.84	12.91	22.58	0.013	12.85
1/17/2021	22.04	0.00	0.00	0.062	22.10	0.336	0.062	0.013	0.000	0.558	0.310	3.97	0.00	5.70	11.15	4.37	5.71	12.02	22.10	0.013	11.96
1/18/2021	23.81	0.00	0.00	0.056	23.87	0.369	0.056	0.014	0.000	0.613	0.309	3.94	0.00	6.38	12.19	4.37	6.39	13.11	23.87	0.014	13.05
1/19/2021	23.40	0.00	0.00	0.066	23.47	0.365	0.066	0.014	0.000	0.606	0.309	3.76	0.00	6.09	12.26	4.19	6.10	13.17	23.47	0.014	13.11
1/20/2021	23.23	0.00	0.00	0.077	23.30	0.363	0.077	0.014	0.000	0.603	0.336	3.70	0.00	6.16	12.05	4.14	6.18	12.99	23.30	0.014	12.91
1/21/2021	22.96	0.00	0.00	0.083	23.04	0.354	0.083	0.013	0.000	0.588	0.324	3.95	0.00	5.77	11.96	4.39	5.79	12.87	23.04	0.013	12.79
1/22/2021	22.91	0.00	0.00	0.079	22.99	0.356	0.079	0.013	0.000	0.591	0.276	3.79	0.00	6.00	11.89	4.22	6.01	12.75	22.99	0.013	12.68
1/23/2021	22.80	0.00	0.00	0.067	22.87	0.340	0.067	0.013	0.000	0.565	0.310	4.52	0.00	5.95	11.10	4.93	5.96	11.98	22.87	0.013	11.91
1/24/2021	22.95	0.00	0.00	0.062	23.01	0.360	0.062	0.014	0.000	0.598	0.312	3.58	0.00	5.95	12.13	4.00	5.97	13.04	23.01	0.014	12.98
1/25/2021	22.68	0.00	0.00	0.077	22.76	0.336	0.077	0.013	0.000	0.559	0.314	4.59	0.00	5.52	11.35	5.00	5.53	12.22	22.76	0.013	12.14
1/26/2021	22.85	0.00	0.00	0.065	22.92	0.343	0.065	0.013	0.000	0.570	0.306	4.41	0.00	5.66	11.55	4.82	5.67	12.43	22.92	0.013	12.36
1/27/2021	23.29	0.00	0.00	0.067	23.36	0.373	0.067	0.014	0.000	0.620	0.338	3.22	0.00	6.03	12.70	3.66	6.04	13.66	23.36	0.014	13.59
1/28/2021	21.77	0.00	0.00	0.066	21.84	0.336	0.066	0.013	0.000	0.559	0.319	3.68	0.00	5.71	11.15	4.08	5.73	12.03	21.84	0.013	11.96
1/29/2021	23.52	0.00	0.00	0.073	23.59	0.359	0.073	0.014	0.000	0.596	0.311	4.23	0.00	5.81	12.20	4.66	5.83	13.11	23.59	0.014	13.03
1/30/2021	21.60	0.00	0.00	0.080	21.68	0.323	0.080	0.012	0.000	0.536	0.306	4.25	0.00	5.40	10.77	4.65	5.42	11.61	21.68	0.012	11.53
1/31/2021	22.34	0.00	0.00	0.061	22.40	0.343	0.061	0.013	0.000	0.570	0.322	3.87	0.00	5.28	11.94	4.27	5.30	12.83	22.40	0.013	12.77
2/1/2021	24.39	0.00	0.00	0.070	24.46	0.350	0.070	0.013	0.000	0.581	0.311	5.58	0.00	5.66	11.89	6.00	5.67	12.79	24.46	0.013	12.72
2/2/2021	28.49	0.00	0.00	0.066	28.56	0.422	0.066	0.016	0.000	0.702	0.216	5.75	0.00	6.39	14.99	6.24	6.41	15.91	28.56	0.016	15.84
2/3/2021	24.73	0.00	0.00	0.074	24.80	0.370	0.074	0.014	0.000	0.614	0.328	4.84	0.00	6.03	12.54	5.28	6.04	13.48	24.80	0.014	13.40
2/4/2021	23.06	0.00	0.00	0.085	23.15	0.343	0.085	0.013	0.000	0.569	0.311	4.65	0.00	5.47	11.70	5.08	5.48	12.58	23.15	0.013	12.50
2/5/2021	21.48	0.00	0.00	0.072	21.55	0.336	0.072	0.013	0.000	0.559	0.294	3.39	0.00	5.46	11.42	3.80	5.48	12.28	21.55	0.013	12.20
2/6/2021	22.88	0.00	0.00	0.075	22.96	0.359	0.075	0.014	0.000	0.597	0.302	3.57	0.00	5.99	12.04	4.00	6.01	12.94	22.96	0.014	12.87

APPENDIX B – DAILY IBT AMOUNTS

	(1)	(2)	(3)	(4)	(5)=1+2 +3+4	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)=6+7+1 2+13	(17)=8+9+ 14	(18)=10+ 11+15	(19)=16+1 7+18	(20)=8+9	(21)=18- 2-3-4
	Water Withdrawal/Purchase (mgd)				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
2/7/2021	23.96	0.00	0.00	0.051	24.01	0.367	0.051	0.014	0.000	0.609	0.302	4.21	0.00	5.82	12.63	4.63	5.84	13.55	24.01	0.014	13.50
2/8/2021	22.45	0.00	0.00	0.062	22.51	0.337	0.062	0.013	0.000	0.560	0.308	4.32	0.00	5.40	11.51	4.72	5.41	12.38	22.51	0.013	12.32
2/9/2021	24.09	0.00	0.00	0.052	24.14	0.369	0.052	0.014	0.000	0.614	0.298	4.20	0.00	6.18	12.42	4.62	6.19	13.33	24.14	0.014	13.28
2/10/2021	23.19	0.00	0.00	0.052	23.24	0.353	0.052	0.013	0.000	0.587	0.305	4.18	0.00	5.75	12.00	4.59	5.76	12.89	23.24	0.013	12.84
2/11/2021	22.54	0.00	0.00	0.050	22.59	0.342	0.050	0.013	0.000	0.568	0.291	4.14	0.00	5.23	11.96	4.53	5.24	12.82	22.59	0.013	12.77
2/12/2021	21.21	0.00	0.00	0.050	21.26	0.330	0.050	0.012	0.000	0.548	0.436	3.46	0.00	5.07	11.36	3.84	5.08	12.34	21.26	0.012	12.29
2/13/2021	23.04	0.00	0.00	0.050	23.09	0.341	0.050	0.013	0.000	0.567	0.532	4.68	0.00	4.82	12.09	5.07	4.83	13.19	23.09	0.013	13.14
2/14/2021	21.68	0.00	0.00	0.343	22.02	0.345	0.343	0.013	0.000	0.573	0.986	3.41	0.00	4.75	11.61	4.10	4.76	13.16	22.02	0.013	12.82
2/15/2021	23.72	0.00	0.00	0.014	23.73	0.365	0.014	0.014	0.000	0.607	0.438	4.02	0.00	5.59	12.69	4.40	5.60	13.74	23.73	0.014	13.72
2/16/2021	23.28	0.00	0.00	0.000	23.28	0.355	0.000	0.013	0.000	0.590	0.000	4.10	0.00	5.76	12.46	4.46	5.78	13.05	23.28	0.013	13.05
2/17/2021	24.87	0.00	0.00	0.000	24.87	0.349	0.000	0.013	0.000	0.579	0.000	6.05	0.00	5.93	11.95	6.40	5.94	12.53	24.87	0.013	12.53
2/18/2021	20.68	0.00	0.00	0.000	20.68	0.327	0.000	0.012	0.000	0.543	0.000	3.05	0.00	4.41	12.34	3.38	4.42	12.88	20.68	0.012	12.88
2/19/2021	24.63	0.00	0.00	0.000	24.63	0.356	0.000	0.013	0.000	0.592	0.109	5.40	0.00	5.22	12.94	5.76	5.23	13.64	24.63	0.013	13.64
2/20/2021	23.31	0.00	0.00	0.110	23.42	0.337	0.110	0.013	0.000	0.561	0.730	5.20	0.00	5.53	10.94	5.65	5.54	12.23	23.42	0.013	12.12
2/21/2021	24.63	0.00	0.00	0.091	24.72	0.373	0.091	0.014	0.000	0.620	0.950	4.59	0.00	5.87	12.21	5.05	5.88	13.78	24.72	0.014	13.69
2/22/2021	23.90	0.00	0.00	0.079	23.98	0.356	0.079	0.013	0.000	0.592	0.505	4.75	0.00	5.56	12.13	5.19	5.57	13.22	23.98	0.013	13.15
2/23/2021	22.99	0.00	0.00	0.091	23.08	0.347	0.091	0.013	0.000	0.577	0.324	4.33	0.00	5.45	11.95	4.77	5.46	12.85	23.08	0.013	12.76
2/24/2021	23.78	0.00	0.00	0.101	23.88	0.354	0.101	0.013	0.000	0.588	0.330	4.77	0.00	5.52	12.20	5.22	5.54	13.12	23.88	0.013	13.02
2/25/2021	22.83	0.00	0.00	0.099	22.93	0.341	0.099	0.013	0.000	0.567	0.320	4.52	0.00	5.44	11.63	4.96	5.46	12.51	22.93	0.013	12.41
2/26/2021	22.72	0.00	0.00	0.080	22.80	0.356	0.080	0.013	0.000	0.592	0.321	3.56	0.00	5.75	12.13	4.00	5.77	13.04	22.80	0.013	12.96
2/27/2021	22.95	0.00	0.00	0.085	23.04	0.341	0.085	0.013	0.000	0.567	0.331	4.62	0.00	5.54	11.53	5.05	5.56	12.43	23.04	0.013	12.35
2/28/2021	23.86	0.00	0.00	0.078	23.94	0.360	0.078	0.014	0.000	0.598	0.316	4.50	0.00	5.98	12.09	4.94	6.00	13.00	23.94	0.014	12.93
3/1/2021	26.30	0.00	0.00	0.069	26.37	0.398	0.069	0.015	0.000	0.661	0.320	4.90	0.00	6.48	13.52	5.37	6.50	14.50	26.37	0.015	14.43
3/2/2021	25.40	0.00	0.00	0.074	25.47	0.382	0.074	0.014	0.000	0.635	0.320	4.85	0.00	6.18	13.01	5.31	6.20	13.97	25.47	0.014	13.89
3/3/2021	25.31	0.00	0.00	0.075	25.39	0.382	0.075	0.014	0.000	0.634	0.336	4.78	0.00	5.99	13.18	5.24	6.00	14.15	25.39	0.014	14.07
3/4/2021	25.01	0.00	0.00	0.087	25.10	0.371	0.087	0.014	0.000	0.616	0.323	5.08	0.00	5.92	12.69	5.54	5.93	13.63	25.10	0.014	13.54
3/5/2021	24.95	0.00	0.00	0.077	25.03	0.369	0.077	0.014	0.000	0.614	0.310	5.08	0.00	6.19	12.37	5.53	6.21	13.29	25.03	0.014	13.22
3/6/2021	23.10	0.00	0.00	0.073	23.17	0.340	0.073	0.013	0.000	0.565	0.319	4.82	0.00	5.85	11.19	5.23	5.86	12.08	23.17	0.013	12.00
3/7/2021	24.05	0.00	0.00	0.073	24.12	0.369	0.073	0.014	0.000	0.613	0.324	4.22	0.00	6.64	11.88	4.66	6.65	12.81	24.12	0.014	12.74
3/8/2021	24.79	0.00	0.00	0.085	24.88	0.370	0.085	0.014	0.000	0.614	0.321	4.92	0.00	6.20	12.35	5.37	6.22	13.28	24.88	0.014	13.20
3/9/2021	24.67	0.00	0.00	0.087	24.76	0.364	0.087	0.014	0.001	0.605	0.333	5.09	0.00	5.92	12.34	5.54	5.94	13.28	24.76	0.014	13.19
3/10/2021	26.24	0.00	0.00	0.085	26.33	0.394	0.085	0.015	0.000	0.655	0.358	5.03	0.00	6.24	13.55	5.51	6.25	14.56	26.33	0.015	14.48
3/11/2021	23.22	0.00	0.00	0.086	23.31	0.353	0.086	0.013	0.000	0.586	0.362	4.25	0.00	5.54	12.12	4.69	5.55	13.07	23.31	0.013	12.98
3/12/2021	25.40	0.00	0.00	0.077	25.48	0.782	0.077	0.030	0.000	1.299	0.345	3.89	0.00	6.85	12.20	4.75	6.88	13.85	25.48	0.030	13.77
3/13/2021	21.18	0.00	0.00	0.066	21.25	0.320	0.066	0.012	0.000	0.531	0.348	3.99	0.00	5.57	10.41	4.38	5.58	11.29	21.25	0.012	11.22
3/14/2021	22.53	0.00	0.00	0.080	22.61	0.368	0.080	0.014	0.000	0.612	0.329	2.73	0.00	6.67	11.80	3.18	6.69	12.75	22.61	0.014	12.67
3/15/2021	24.36	0.00	0.00	0.066	24.43	0.377	0.066	0.014	0.000	0.626	0.324	4.07	0.00	6.46	12.49	4.51	6.48	13.44	24.43	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						
3/16/2021	22.29	0.00	0.00	0.050	22.34	0.345	0.050	0.013	0.000	0.574	0.335	3.69	0.00	5.65	11.68	4.09	5.66	12.59	22.34	0.013	12.54
3/17/2021	22.79	0.00	0.00	0.057	22.85	0.369	0.057	0.014	0.000	0.613	0.337	2.93	0.00	5.59	12.93	3.36	5.61	13.88	22.85	0.014	13.83
3/18/2021	22.45	0.00	0.00	0.056	22.51	0.328	0.056	0.012	0.000	0.544	0.333	4.82	0.00	5.43	10.99	5.20	5.44	11.86	22.51	0.013	11.81
3/19/2021	22.95	0.00	0.00	0.052	23.00	0.380	0.052	0.014	0.000	0.631	0.320	2.49	0.00	6.32	12.79	2.92	6.34	13.74	23.00	0.014	13.69
3/20/2021	21.24	0.00	0.00	0.055	21.30	0.320	0.055	0.012	0.000	0.532	0.337	4.02	0.00	5.60	10.42	4.39	5.61	11.29	21.30	0.012	11.23
3/21/2021	23.25	0.00	0.00	0.061	23.31	0.365	0.061	0.014	0.000	0.607	0.329	3.58	0.00	6.48	11.88	4.01	6.49	12.81	23.31	0.014	12.75
3/22/2021	25.15	0.00	0.00	0.060	25.21	0.480	0.060	0.018	0.000	0.797	0.345	3.92	0.00	6.68	12.91	4.46	6.70	14.05	25.21	0.018	13.99
3/23/2021	23.12	0.00	0.00	0.056	23.18	0.359	0.056	0.014	0.000	0.596	0.338	3.81	0.00	6.08	11.93	4.22	6.09	12.86	23.18	0.014	12.81
3/24/2021	23.33	0.00	0.00	0.047	23.38	0.359	0.047	0.014	0.000	0.596	0.356	4.02	0.00	5.18	12.81	4.43	5.19	13.76	23.38	0.014	13.71
3/25/2021	23.68	0.00	0.00	0.054	23.73	0.370	0.054	0.014	0.000	0.615	0.360	3.75	0.00	6.05	12.52	4.17	6.07	13.49	23.73	0.014	13.44
3/26/2021	22.75	0.00	0.00	0.049	22.80	0.357	0.049	0.014	0.000	0.594	0.488	3.51	0.00	5.88	11.91	3.92	5.89	12.99	22.80	0.014	12.94
3/27/2021	23.42	0.00	0.00	0.037	23.46	0.367	0.037	0.014	0.000	0.610	0.342	3.63	0.00	6.36	12.10	4.03	6.37	13.05	23.46	0.014	13.01
3/28/2021	21.68	0.00	0.00	0.039	21.72	0.336	0.039	0.013	0.000	0.558	0.341	3.60	0.00	5.42	11.41	3.97	5.44	12.31	21.72	0.013	12.27
3/29/2021	22.12	0.00	0.00	0.037	22.16	0.345	0.037	0.013	0.000	0.574	0.329	3.52	0.00	5.57	11.77	3.91	5.58	12.68	22.16	0.013	12.64
3/30/2021	22.29	0.00	0.00	0.054	22.34	0.348	0.054	0.013	0.000	0.578	0.339	3.57	0.00	5.58	11.86	3.97	5.59	12.78	22.34	0.013	12.72
3/31/2021	21.19	0.00	0.00	0.028	21.21	0.347	0.028	0.013	0.000	0.577	0.344	2.47	0.00	5.41	12.02	2.85	5.43	12.94	21.21	0.013	12.91
4/1/2021	22.98	0.00	0.00	0.029	23.01	0.357	0.029	0.014	0.000	0.594	0.330	3.72	0.00	5.68	12.28	4.10	5.70	13.20	23.01	0.014	13.18
4/2/2021	22.40	0.00	0.00	0.027	22.42	0.359	0.027	0.014	0.000	0.596	0.335	3.05	0.00	5.96	12.08	3.44	5.97	13.01	22.42	0.014	12.98
4/3/2021	21.40	0.00	0.00	0.027	21.43	0.338	0.027	0.013	0.000	0.561	0.340	3.20	0.00	5.73	11.22	3.57	5.74	12.12	21.43	0.013	12.09
4/4/2021	23.06	0.00	0.00	0.033	23.09	0.373	0.033	0.014	0.000	0.620	0.345	2.94	0.00	6.41	12.36	3.35	6.43	13.32	23.09	0.014	13.29
4/5/2021	24.41	0.00	0.00	0.041	24.45	0.395	0.041	0.015	0.000	0.657	0.379	3.10	0.00	6.64	13.22	3.54	6.65	14.25	24.45	0.015	14.21
4/6/2021	24.00	0.00	0.00	0.062	24.06	0.390	0.062	0.015	0.000	0.648	0.424	3.00	0.00	6.70	12.82	3.45	6.72	13.89	24.06	0.015	13.83
4/7/2021	24.34	0.00	0.00	0.064	24.40	0.397	0.064	0.015	0.001	0.660	0.447	2.95	0.00	6.80	13.07	3.41	6.82	14.18	24.40	0.016	14.11
4/8/2021	26.05	0.00	0.00	0.064	26.11	0.851	0.064	0.032	0.000	1.413	0.461	3.84	0.00	6.56	12.89	4.75	6.59	14.77	26.11	0.032	14.70
4/9/2021	25.20	0.00	0.00	0.030	25.23	0.683	0.030	0.026	0.000	1.135	0.451	4.10	0.00	6.40	12.41	4.81	6.43	13.99	25.23	0.026	13.96
4/10/2021	24.34	0.00	0.00	0.025	24.37	0.419	0.025	0.016	0.000	0.696	0.369	3.41	0.00	6.63	12.80	3.85	6.65	13.86	24.37	0.016	13.84
4/11/2021	24.03	0.00	0.00	0.027	24.06	0.374	0.027	0.014	0.000	0.621	0.356	3.87	0.00	6.50	12.29	4.27	6.52	13.27	24.06	0.014	13.24
4/12/2021	23.82	0.00	0.00	0.031	23.85	0.739	0.031	0.028	0.000	1.227	0.380	2.31	0.00	6.43	12.71	3.08	6.46	14.31	23.85	0.028	14.28
4/13/2021	25.39	0.00	0.00	0.036	25.43	1.016	0.036	0.038	0.000	1.688	0.404	4.07	0.00	5.70	12.47	5.12	5.74	14.57	25.43	0.038	14.53
4/14/2021	24.96	0.00	0.00	0.037	25.00	0.675	0.037	0.026	0.001	1.122	0.459	2.81	0.00	6.69	13.18	3.52	6.71	14.76	25.00	0.026	14.72
4/15/2021	25.56	0.00	0.00	0.042	25.60	0.562	0.042	0.021	0.000	0.933	0.411	4.47	0.00	6.55	12.62	5.07	6.57	13.96	25.60	0.021	13.92
4/16/2021	25.26	0.00	0.00	0.036	25.30	1.035	0.036	0.039	0.000	1.719	0.440	3.65	0.00	6.19	12.19	4.72	6.23	14.35	25.30	0.039	14.31
4/17/2021	22.87	0.00	0.00	0.028	22.90	0.631	0.028	0.024	0.000	1.049	0.413	2.55	0.00	6.18	12.02	3.21	6.20	13.48	22.90	0.024	13.46
4/18/2021	26.58	0.00	0.00	0.049	26.63	0.947	0.049	0.036	0.000	1.574	0.428	4.60	0.00	6.73	12.26	5.60	6.77	14.26	26.63	0.036	14.22
4/19/2021	24.82	0.00	0.00	0.027	24.85	0.582	0.027	0.022	0.000	0.967	0.408	3.85	0.00	6.46	12.53	4.46	6.48	13.91	24.85	0.022	13.88
4/20/2021	27.10	0.00	0.00	0.057	27.16	1.678	0.057	0.064	0.003	2.789	0.442	3.57	0.00	6.26	12.29	5.31	6.33	15.52	27.16	0.066	15.47
4/21/2021	26.02	0.00	0.00	0.033	26.05	1.225	0.033	0.046	0.000	2.036	0.459	3.40	0.00	6.19	12.66	4.66	6.24	15.16	26.05	0.046	15.13

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						
4/22/2021	25.71	0.00	0.00	0.041	25.75	1.144	0.041	0.043	0.000	1.901	0.431	3.97	0.00	6.10	12.12	5.16	6.14	14.46	25.75	0.043	14.42
4/23/2021	24.53	0.00	0.00	0.023	24.55	0.942	0.023	0.036	0.000	1.565	0.417	3.37	0.00	6.33	11.87	4.33	6.37	13.85	24.55	0.036	13.83
4/24/2021	24.86	0.00	0.00	0.016	24.88	0.478	0.016	0.018	0.000	0.794	0.382	4.45	0.00	6.36	12.37	4.94	6.38	13.55	24.88	0.018	13.53
4/25/2021	21.94	0.00	0.00	0.023	21.96	0.364	0.023	0.014	0.000	0.605	0.385	2.29	0.00	6.48	11.81	2.68	6.49	12.80	21.96	0.014	12.77
4/26/2021	27.19	0.00	0.00	0.061	27.25	1.504	0.061	0.057	0.002	2.499	0.419	4.31	0.00	6.28	12.12	5.88	6.34	15.04	27.25	0.059	14.98
4/27/2021	26.65	0.00	0.00	0.092	26.74	1.672	0.092	0.063	0.001	2.779	0.499	3.63	0.00	6.04	11.97	5.39	6.10	15.24	26.74	0.064	15.15
4/28/2021	27.18	0.00	0.00	0.053	27.23	1.817	0.053	0.069	0.000	3.019	0.552	3.61	0.00	6.05	12.06	5.48	6.12	15.63	27.23	0.069	15.58
4/29/2021	30.05	0.00	0.00	0.072	30.12	2.291	0.072	0.087	0.001	3.807	0.576	5.26	0.00	6.20	11.83	7.62	6.28	16.22	30.12	0.088	16.14
4/30/2021	27.93	0.00	0.00	0.079	28.01	3.017	0.079	0.114	0.002	5.013	0.586	2.22	0.00	5.92	11.06	5.32	6.04	16.66	28.01	0.116	16.58
5/1/2021	29.91	0.00	0.00	0.042	29.95	2.868	0.042	0.109	0.000	4.765	0.546	4.45	0.00	6.00	11.18	7.36	6.10	16.49	29.95	0.109	16.45
5/2/2021	29.73	0.00	0.00	0.060	29.79	2.970	0.060	0.112	0.000	4.934	0.533	2.90	0.00	6.57	11.71	5.93	6.68	17.18	29.79	0.112	17.12
5/3/2021	27.26	0.00	0.00	0.028	27.29	1.430	0.028	0.054	0.002	2.376	0.468	4.46	0.00	6.40	12.07	5.92	6.46	14.91	27.29	0.056	14.89
5/4/2021	26.86	0.00	0.00	0.049	26.91	0.978	0.049	0.037	0.001	1.625	0.502	5.28	0.00	6.25	12.18	6.31	6.29	14.31	26.91	0.038	14.26
5/5/2021	27.24	0.00	0.00	0.057	27.30	1.571	0.057	0.059	0.002	2.610	0.533	3.92	0.00	6.16	12.38	5.55	6.22	15.53	27.30	0.062	15.47
5/6/2021	26.77	0.00	0.00	0.046	26.82	1.594	0.046	0.060	0.001	2.648	0.516	4.15	0.00	6.02	11.78	5.79	6.09	14.94	26.82	0.062	14.89
5/7/2021	26.09	0.00	0.00	0.004	26.09	1.082	0.004	0.041	0.000	1.798	0.495	4.06	0.00	6.32	12.29	5.15	6.36	14.59	26.09	0.041	14.58
5/8/2021	25.03	0.00	0.00	0.049	25.08	0.499	0.049	0.019	0.000	0.829	0.469	5.07	0.00	6.49	11.65	5.62	6.51	12.95	25.08	0.019	12.90
5/9/2021	27.04	0.00	0.00	0.048	27.09	1.782	0.048	0.067	0.000	2.961	0.485	3.86	0.00	6.39	11.49	5.69	6.46	14.94	27.09	0.067	14.89
5/10/2021	25.93	0.00	0.00	0.019	25.95	0.900	0.019	0.034	0.000	1.496	0.442	3.73	0.00	6.60	12.72	4.65	6.64	14.66	25.95	0.034	14.64
5/11/2021	24.16	0.00	0.00	0.022	24.18	0.739	0.022	0.028	0.000	1.228	0.439	3.28	0.00	6.27	12.17	4.04	6.30	13.84	24.18	0.028	13.82
5/12/2021	25.76	0.00	0.00	0.032	25.79	0.832	0.032	0.032	0.000	1.382	0.486	4.13	0.00	6.20	12.70	4.99	6.23	14.57	25.79	0.032	14.54
5/13/2021	25.66	0.00	0.00	0.066	25.73	1.082	0.066	0.041	0.000	1.797	0.444	3.92	0.00	6.19	12.19	5.07	6.23	14.43	25.73	0.041	14.36
5/14/2021	27.93	0.00	0.00	0.057	27.99	2.398	0.057	0.091	0.002	3.985	0.501	3.45	0.00	6.06	11.44	5.91	6.15	15.93	27.99	0.093	15.87
5/15/2021	26.53	0.00	0.00	0.042	26.57	1.852	0.042	0.070	0.000	3.078	0.511	3.33	0.00	6.36	11.32	5.22	6.44	14.91	26.57	0.070	14.87
5/16/2021	28.34	0.00	0.00	0.071	28.41	1.920	0.071	0.073	0.000	3.191	0.467	4.41	0.00	6.47	11.80	6.40	6.55	15.46	28.41	0.073	15.39
5/17/2021	24.94	0.00	0.00	0.048	24.99	1.354	0.048	0.051	0.002	2.250	0.468	3.42	0.00	6.23	11.16	4.82	6.29	13.88	24.99	0.054	13.83
5/18/2021	29.13	0.00	0.00	0.056	29.19	2.073	0.056	0.079	0.000	3.445	0.539	4.76	0.00	6.04	12.19	6.89	6.12	16.18	29.19	0.079	16.12
5/19/2021	30.93	0.00	0.00	0.060	30.99	3.110	0.060	0.118	0.001	5.168	0.647	3.65	0.00	6.04	12.20	6.82	6.16	18.01	30.99	0.119	17.95
5/20/2021	29.42	0.00	0.00	0.071	29.49	2.799	0.071	0.106	0.002	4.650	0.637	4.06	0.00	6.03	11.14	6.93	6.13	16.43	29.49	0.108	16.36
5/21/2021	32.45	0.00	0.00	0.052	32.50	3.800	0.052	0.144	0.001	6.314	0.644	4.56	0.00	6.09	10.90	8.41	6.24	17.85	32.50	0.145	17.80
5/22/2021	31.68	0.00	0.00	0.051	31.73	3.600	0.051	0.136	0.000	5.981	0.658	4.38	0.00	6.09	10.83	8.03	6.23	17.47	31.73	0.136	17.42
5/23/2021	31.98	0.00	0.00	0.074	32.05	3.794	0.074	0.144	0.000	6.304	0.622	3.60	0.00	6.42	11.09	7.47	6.57	18.02	32.05	0.144	17.95
5/24/2021	30.97	0.00	0.00	0.034	31.00	3.089	0.034	0.117	0.001	5.133	0.596	3.93	0.00	6.28	11.83	7.05	6.40	17.55	31.00	0.118	17.52
5/25/2021	31.35	0.00	0.00	0.090	31.44	2.995	0.090	0.113	0.000	4.976	0.608	5.05	0.00	6.04	11.57	8.13	6.15	17.15	31.44	0.114	17.06
5/26/2021	33.56	0.00	0.00	0.072	33.63	3.801	0.072	0.144	0.002	6.315	0.665	4.35	0.00	6.22	12.07	8.22	6.36	19.05	33.63	0.146	18.98
5/27/2021	34.29	0.00	0.00	0.079	34.37	4.290	0.079	0.162	0.001	7.129	0.782	4.73	0.00	6.04	11.15	9.10	6.21	19.06	34.37	0.163	18.99
5/28/2021	31.88	0.00	0.00	0.089	31.97	4.018	0.089	0.152	0.003	6.677	0.653	3.63	0.00	5.99	10.76	7.74	6.14	18.09	31.97	0.155	18.00



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						
5/29/2021	28.92	0.00	0.00	0.036	28.96	2.321	0.036	0.088	0.000	3.856	0.589	5.22	0.00	6.03	10.82	7.58	6.11	15.26	28.96	0.088	15.23
5/30/2021	25.92	0.00	0.00	0.057	25.98	2.260	0.057	0.086	0.000	3.756	0.455	2.95	0.00	5.82	10.59	5.27	5.91	14.80	25.98	0.086	14.75
5/31/2021	27.95	0.00	0.00	0.074	28.02	2.278	0.074	0.086	0.000	3.785	0.527	4.28	0.00	6.23	10.76	6.63	6.32	15.07	28.02	0.086	15.00
6/1/2021	30.77	0.00	0.00	0.074	30.84	2.997	0.074	0.113	0.001	4.979	0.645	4.57	0.00	6.11	11.35	7.64	6.23	16.97	30.84	0.114	16.90
6/2/2021	28.64	0.00	0.00	0.060	28.70	1.406	0.060	0.053	0.000	2.336	0.629	3.31	0.00	7.27	13.64	4.78	7.32	16.60	28.70	0.053	16.54
6/3/2021	26.25	0.00	0.00	0.033	26.28	0.401	0.033	0.015	0.000	0.667	0.481	4.62	0.00	6.79	13.28	5.05	6.80	14.42	26.28	0.015	14.39
6/4/2021	26.01	0.00	0.00	0.029	26.04	0.787	0.029	0.030	0.000	1.308	0.445	4.17	0.00	6.25	13.02	4.99	6.28	14.77	26.04	0.030	14.74
6/5/2021	28.32	0.00	0.00	0.042	28.36	1.380	0.042	0.052	0.000	2.292	0.502	5.47	0.00	6.70	11.92	6.89	6.76	14.71	28.36	0.052	14.67
6/6/2021	25.85	0.00	0.00	0.040	25.89	1.135	0.040	0.043	0.000	1.886	0.529	3.24	0.00	7.04	11.98	4.42	7.08	14.40	25.89	0.043	14.36
6/7/2021	28.06	0.00	0.00	0.051	28.11	1.548	0.051	0.059	0.000	2.572	0.504	4.12	0.00	6.87	12.38	5.72	6.93	15.46	28.11	0.059	15.41
6/8/2021	29.64	0.00	0.00	0.149	29.79	2.130	0.149	0.081	0.000	3.539	0.585	4.66	0.00	6.82	11.83	6.94	6.90	15.95	29.79	0.081	15.80
6/9/2021	28.94	0.00	0.00	0.416	29.36	2.120	0.416	0.080	0.000	3.523	0.602	4.06	0.00	6.55	12.00	6.60	6.63	16.13	29.36	0.080	15.71
6/10/2021	29.64	0.00	0.00	0.509	30.15	0.444	0.509	0.017	0.000	0.738	0.539	6.16	0.00	7.13	14.61	7.11	7.15	15.89	30.15	0.017	15.38
6/11/2021	26.01	0.00	0.00	0.354	26.36	0.430	0.354	0.016	0.000	0.714	0.443	3.17	0.00	7.01	14.22	3.95	7.03	15.38	26.36	0.016	15.03
6/12/2021	25.31	0.00	0.00	0.247	25.56	0.442	0.247	0.017	0.000	0.734	0.455	4.15	0.00	6.98	12.53	4.84	7.00	13.72	25.56	0.017	13.47
6/13/2021	29.62	0.00	0.00	0.252	29.87	1.602	0.252	0.061	0.000	2.662	0.447	6.26	0.00	6.86	11.73	8.11	6.92	14.84	29.87	0.061	14.59
6/14/2021	26.65	0.00	0.00	0.324	26.97	1.459	0.324	0.055	0.000	2.424	0.505	4.14	0.00	6.52	11.54	5.92	6.58	14.47	26.97	0.056	14.15
6/15/2021	30.93	0.00	0.00	0.341	31.27	2.662	0.341	0.101	0.000	4.423	0.605	5.26	0.00	6.41	11.47	8.27	6.51	16.49	31.27	0.101	16.15
6/16/2021	30.54	0.00	0.00	0.368	30.91	3.271	0.368	0.124	0.000	5.434	0.622	3.23	0.00	6.23	11.63	6.87	6.36	17.68	30.91	0.124	17.32
6/17/2021	32.08	0.00	0.00	0.313	32.39	3.315	0.313	0.126	0.000	5.509	0.693	5.38	0.00	6.11	10.95	9.01	6.23	17.15	32.39	0.126	16.84
6/18/2021	31.60	0.00	0.00	0.418	32.02	3.574	0.418	0.135	0.000	5.939	0.632	4.51	0.00	6.01	10.80	8.50	6.15	17.37	32.02	0.135	16.95
6/19/2021	31.38	0.00	0.00	0.381	31.76	3.524	0.381	0.133	0.000	5.856	0.669	4.34	0.00	6.11	10.75	8.25	6.25	17.27	31.76	0.133	16.89
6/20/2021	27.02	0.00	0.00	0.362	27.38	1.332	0.362	0.050	0.000	2.214	0.555	3.59	0.00	6.66	12.62	5.28	6.71	15.39	27.38	0.050	15.03
6/21/2021	25.45	0.00	0.00	0.318	25.77	0.850	0.318	0.032	0.000	1.412	0.426	3.65	0.00	6.60	12.48	4.82	6.63	14.32	25.77	0.032	14.00
6/22/2021	27.15	0.00	0.00	0.333	27.48	1.044	0.333	0.040	0.000	1.734	0.500	5.20	0.00	6.40	12.24	6.58	6.44	14.47	27.48	0.040	14.14
6/23/2021	28.51	0.00	0.00	0.300	28.81	1.738	0.300	0.066	0.000	2.887	0.474	4.75	0.00	6.27	12.33	6.79	6.33	15.69	28.81	0.066	15.39
6/24/2021	28.54	0.00	0.00	0.313	28.85	2.453	0.313	0.093	0.000	4.076	0.544	3.99	0.00	6.11	11.27	6.76	6.20	15.89	28.85	0.093	15.58
6/25/2021	27.67	0.00	0.00	0.398	28.07	1.809	0.398	0.069	0.000	3.006	0.519	5.18	0.00	6.17	10.92	7.39	6.23	14.45	28.07	0.069	14.05
6/26/2021	27.60	0.00	0.00	0.319	27.92	1.252	0.319	0.047	0.000	2.080	0.505	5.12	0.00	6.36	12.23	6.69	6.41	14.82	27.92	0.047	14.50
6/27/2021	26.14	0.00	0.00	0.261	26.40	1.503	0.261	0.057	0.000	2.497	0.447	3.30	0.00	6.48	11.86	5.06	6.53	14.80	26.40	0.057	14.54
6/28/2021	30.00	0.00	0.00	0.301	30.30	2.208	0.301	0.084	0.000	3.669	0.477	5.32	0.00	6.39	11.85	7.83	6.48	15.99	30.30	0.084	15.69
6/29/2021	27.05	0.00	0.00	0.402	27.45	2.447	0.402	0.093	0.000	4.066	0.599	4.05	0.00	4.28	11.51	6.90	4.37	16.18	27.45	0.093	15.78
6/30/2021	29.02	0.00	0.00	0.347	29.37	2.059	0.347	0.078	0.000	3.422	0.624	2.98	0.00	8.01	11.85	5.39	8.09	15.89	29.37	0.078	15.55
7/1/2021	30.71	0.00	0.00	0.393	31.10	2.550	0.393	0.097	0.000	4.238	0.647	5.57	0.00	6.17	11.44	8.51	6.27	16.32	31.10	0.097	15.93
7/2/2021	26.23	0.00	0.00	0.256	26.49	1.110	0.256	0.042	0.000	1.844	0.452	3.85	0.00	5.32	13.61	5.22	5.36	15.91	26.49	0.042	15.65
7/3/2021	24.97	0.00	0.00	0.321	25.29	0.400	0.321	0.015	0.000	0.664	0.474	3.72	0.00	7.72	11.98	4.44	7.74	13.11	25.29	0.015	12.79
7/4/2021	25.37	0.00	0.00	0.389	25.76	1.404	0.389	0.053	0.000	2.334	0.531	4.32	0.00	5.99	10.74	6.11	6.04	13.60	25.76	0.053	13.21

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						
7/5/2021	25.03	0.00	0.00	0.328	25.36	1.487	0.328	0.056	0.000	2.470	0.499	3.37	0.00	6.15	11.00	5.18	6.21	13.96	25.36	0.056	13.64
7/6/2021	30.46	0.00	0.00	0.464	30.92	2.656	0.464	0.101	0.001	4.412	0.589	4.94	0.00	6.23	11.53	8.06	6.33	16.54	30.92	0.101	16.07
7/7/2021	28.10	0.00	0.00	0.319	28.42	2.413	0.319	0.091	0.000	4.009	0.579	2.91	0.00	6.15	11.95	5.64	6.24	16.53	28.42	0.091	16.22
7/8/2021	26.37	0.00	0.00	0.000	26.37	0.396	0.000	0.015	0.000	0.657	0.389	5.01	0.00	6.39	13.52	5.41	6.40	14.56	26.37	0.015	14.56
7/9/2021	24.89	0.00	0.00	0.242	25.13	0.408	0.242	0.015	0.000	0.678	0.889	3.09	0.00	6.51	13.30	3.74	6.52	14.87	25.13	0.015	14.63
7/10/2021	25.26	0.00	0.00	0.331	25.59	0.404	0.331	0.015	0.000	0.671	0.322	3.80	0.00	6.76	13.29	4.53	6.78	14.28	25.59	0.015	13.95
7/11/2021	26.79	0.00	0.00	0.354	27.14	1.197	0.354	0.045	0.000	1.989	0.304	3.44	0.00	6.87	12.95	4.99	6.91	15.24	27.14	0.045	14.89
7/12/2021	26.39	0.00	0.00	0.114	26.50	0.858	0.114	0.032	0.000	1.426	0.291	3.88	0.00	6.64	13.26	4.85	6.67	14.98	26.50	0.032	14.86
7/13/2021	28.48	0.00	0.00	0.360	28.84	1.883	0.360	0.071	0.000	3.129	0.414	4.38	0.00	6.32	12.29	6.62	6.39	15.83	28.84	0.071	15.47
7/14/2021	29.46	0.00	0.00	0.414	29.87	2.174	0.414	0.082	0.000	3.613	0.562	4.26	0.00	6.33	12.44	6.85	6.41	16.61	29.87	0.082	16.20
7/15/2021	29.04	0.00	0.00	0.358	29.40	2.002	0.358	0.076	0.000	3.326	0.581	4.84	0.00	6.34	11.88	7.20	6.41	15.79	29.40	0.076	15.43
7/16/2021	28.79	0.00	0.00	0.387	29.18	2.590	0.387	0.098	0.000	4.304	0.566	3.34	0.00	6.25	11.64	6.32	6.35	16.51	29.18	0.098	16.12
7/17/2021	30.05	0.00	0.00	0.376	30.43	2.577	0.376	0.098	0.000	4.283	0.537	4.53	0.00	6.33	11.70	7.48	6.43	16.52	30.43	0.098	16.14
7/18/2021	28.21	0.00	0.00	0.360	28.57	2.277	0.360	0.086	0.000	3.783	0.495	3.32	0.00	6.48	11.77	5.96	6.57	16.04	28.57	0.086	15.68
7/19/2021	25.96	0.00	0.00	0.271	26.23	0.698	0.271	0.026	0.000	1.159	0.352	3.91	0.00	6.90	12.92	4.88	6.92	14.43	26.23	0.027	14.16
7/20/2021	25.31	0.00	0.00	0.265	25.58	0.811	0.265	0.031	0.001	1.348	0.386	3.84	0.00	6.49	12.41	4.92	6.52	14.14	25.58	0.031	13.87
7/21/2021	27.82	0.00	0.00	0.330	28.15	2.136	0.330	0.081	0.000	3.550	0.449	3.40	0.00	6.34	11.86	5.87	6.43	15.86	28.15	0.081	15.53
7/22/2021	29.37	0.00	0.00	0.311	29.68	2.472	0.311	0.094	0.000	4.108	0.508	3.90	0.00	6.25	12.03	6.68	6.35	16.65	29.68	0.094	16.34
7/23/2021	29.09	0.00	0.00	0.409	29.50	2.570	0.409	0.097	0.000	4.270	0.574	4.20	0.00	6.10	11.28	7.18	6.19	16.13	29.50	0.097	15.72
7/24/2021	29.72	0.00	0.00	0.369	30.09	2.783	0.369	0.105	0.000	4.625	0.553	4.10	0.00	6.25	11.31	7.25	6.35	16.48	30.09	0.105	16.11
7/25/2021	28.78	0.00	0.00	0.358	29.14	2.623	0.358	0.099	0.000	4.358	0.516	3.31	0.00	6.46	11.41	6.29	6.56	16.29	29.14	0.099	15.93
7/26/2021	28.83	0.00	0.00	0.444	29.27	2.337	0.444	0.088	0.000	3.883	0.532	4.06	0.00	6.26	11.66	6.84	6.35	16.08	29.27	0.088	15.64
7/27/2021	30.75	0.00	0.00	0.303	31.05	2.966	0.303	0.112	0.000	4.929	0.526	4.17	0.00	6.25	11.80	7.44	6.36	17.26	31.05	0.112	16.95
7/28/2021	31.56	0.00	0.00	0.427	31.99	3.136	0.427	0.119	0.001	5.211	0.614	4.01	0.00	6.23	12.24	7.57	6.35	18.07	31.99	0.119	17.64
7/29/2021	30.07	0.00	0.00	0.377	30.45	2.574	0.377	0.097	0.001	4.276	0.606	4.51	0.00	6.26	11.75	7.46	6.36	16.63	30.45	0.098	16.25
7/30/2021	29.61	0.00	0.00	0.392	30.00	3.254	0.392	0.123	0.000	5.407	0.566	2.71	0.00	6.10	11.45	6.36	6.23	17.42	30.00	0.123	17.03
7/31/2021	32.53	0.00	0.00	0.000	32.53	3.663	0.000	0.139	0.000	6.086	0.555	4.82	0.00	6.29	10.98	8.48	6.43	17.62	32.53	0.139	17.62
8/1/2021	29.39	0.00	0.00	0.395	29.79	3.015	0.395	0.114	0.000	5.010	0.518	2.99	0.00	6.43	11.32	6.40	6.54	16.84	29.79	0.114	16.45
8/2/2021	28.73	0.00	0.00	0.395	29.13	2.709	0.395	0.103	0.000	4.502	0.553	3.86	0.00	6.14	10.87	6.96	6.24	15.92	29.13	0.103	15.53
8/3/2021	27.71	0.00	0.00	0.285	27.99	2.056	0.285	0.078	0.000	3.417	0.516	3.64	0.00	6.10	11.90	5.98	6.18	15.83	27.99	0.078	15.54
8/4/2021	29.14	0.00	0.00	0.426	29.57	2.259	0.426	0.086	0.000	3.754	0.468	4.61	0.00	6.05	11.92	7.30	6.13	16.14	29.57	0.086	15.71
8/5/2021	30.63	0.00	0.00	0.297	30.93	3.210	0.297	0.122	0.000	5.333	0.520	4.40	0.00	5.97	11.08	7.91	6.09	16.93	30.93	0.122	16.64
8/6/2021	31.14	0.00	0.00	0.684	31.82	3.927	0.684	0.149	0.000	6.526	0.561	3.27	0.00	6.13	10.58	7.88	6.28	17.66	31.82	0.149	16.98
8/7/2021	26.90	0.00	0.00	0.356	27.26	1.499	0.356	0.057	0.000	2.491	0.492	4.25	0.00	6.32	11.80	6.10	6.37	14.78	27.26	0.057	14.42
8/8/2021	28.53	0.00	0.00	0.362	28.89	2.723	0.362	0.103	0.000	4.524	0.471	2.74	0.00	6.43	11.54	5.82	6.53	16.53	28.89	0.103	16.17
8/9/2021	27.41	0.00	0.00	0.514	27.92	2.167	0.514	0.082	0.000	3.601	0.525	3.85	0.00	6.17	11.02	6.53	6.25	15.15	27.92	0.082	14.63
8/10/2021	32.64	0.00	0.00	0.459	33.10	3.729	0.459	0.141	0.001	6.196	0.605	4.34	0.00	6.20	11.43	8.53	6.34	18.23	33.10	0.142	17.77







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						
11/30/2021	23.49	0.00	0.00	0.453	23.94	0.640	0.453	0.024	0.000	1.064	0.197	4.02	0.00	6.24	11.31	5.11	6.26	12.57	23.94	0.024	12.11
12/1/2021	26.53	0.00	0.00	0.446	26.98	1.049	0.446	0.040	0.000	1.743	0.215	5.21	0.00	6.25	12.02	6.71	6.29	13.98	26.98	0.040	13.53
12/2/2021	20.55	0.00	0.00	0.418	20.97	0.684	0.418	0.026	0.000	1.136	0.210	1.00	0.00	6.22	11.28	2.10	6.25	12.63	20.97	0.026	12.21
12/3/2021	22.80	0.00	0.00	0.425	23.22	0.800	0.425	0.030	0.000	1.329	0.234	3.52	0.00	6.09	10.80	4.74	6.12	12.36	23.22	0.030	11.93
12/4/2021	22.66	0.00	0.00	0.428	23.09	0.575	0.428	0.022	0.000	0.956	0.197	3.52	0.00	6.34	11.05	4.53	6.37	12.20	23.09	0.022	11.77
12/5/2021	22.40	0.00	0.00	0.448	22.85	0.579	0.448	0.022	0.000	0.962	0.193	2.33	0.00	6.61	11.70	3.36	6.63	12.86	22.85	0.022	12.41
12/6/2021	23.39	0.00	0.00	0.456	23.85	0.981	0.456	0.037	0.000	1.630	0.182	2.94	0.00	6.21	11.41	4.38	6.25	13.23	23.85	0.037	12.77
12/7/2021	22.78	0.00	0.00	0.451	23.23	1.100	0.451	0.042	0.000	1.828	0.188	3.24	0.00	6.01	10.36	4.80	6.06	12.38	23.23	0.042	11.93
12/8/2021	22.00	0.00	0.00	0.442	22.44	0.338	0.442	0.013	0.000	0.561	0.187	4.21	0.00	5.42	11.27	4.99	5.43	12.02	22.44	0.013	11.58
12/9/2021	22.97	0.00	0.00	0.451	23.42	0.373	0.451	0.014	0.000	0.619	0.181	3.31	0.00	6.08	12.40	4.13	6.09	13.20	23.42	0.014	12.75
12/10/2021	22.74	0.00	0.00	0.457	23.19	0.879	0.457	0.033	0.000	1.461	0.169	2.67	0.00	6.07	11.45	4.01	6.10	13.08	23.19	0.033	12.62
12/11/2021	22.85	0.00	0.00	0.455	23.31	0.559	0.455	0.021	0.000	0.928	0.174	3.10	0.00	6.26	11.81	4.11	6.28	12.91	23.31	0.021	12.46
12/12/2021	23.22	0.00	0.00	0.449	23.67	0.370	0.449	0.014	0.000	0.614	0.173	3.72	0.00	6.58	11.75	4.54	6.59	12.54	23.67	0.014	12.09
12/13/2021	25.46	0.00	0.00	0.462	25.92	0.890	0.462	0.034	0.000	1.479	0.174	4.87	0.00	6.47	11.54	6.22	6.51	13.19	25.92	0.034	12.73
12/14/2021	22.96	0.00	0.00	0.460	23.42	0.652	0.460	0.025	0.000	1.084	0.181	3.16	0.00	6.28	11.58	4.27	6.30	12.84	23.42	0.025	12.38
12/15/2021	22.97	0.00	0.00	0.458	23.43	0.807	0.458	0.031	0.000	1.341	0.190	2.46	0.00	6.21	11.93	3.73	6.24	13.46	23.43	0.031	13.00
12/16/2021	23.33	0.00	0.00	0.460	23.79	0.359	0.460	0.014	0.000	0.596	0.192	4.43	0.00	6.11	11.63	5.25	6.12	12.42	23.79	0.014	11.96
12/17/2021	22.32	0.00	0.00	0.456	22.78	0.658	0.456	0.025	0.000	1.093	0.197	2.81	0.00	5.96	11.58	3.92	5.98	12.87	22.78	0.025	12.42
12/18/2021	23.52	0.00	0.00	0.450	23.97	0.403	0.450	0.015	0.000	0.670	0.187	4.42	0.00	6.11	11.72	5.27	6.12	12.58	23.97	0.015	12.13
12/19/2021	20.68	0.00	0.00	0.441	21.12	0.342	0.441	0.013	0.000	0.569	0.183	2.63	0.00	5.72	11.23	3.41	5.73	11.98	21.12	0.013	11.54
12/20/2021	23.42	0.00	0.00	0.453	23.87	0.959	0.453	0.036	0.000	1.593	0.181	2.27	0.00	6.42	11.96	3.68	6.46	13.73	23.87	0.036	13.28
12/21/2021	21.58	0.00	0.00	0.432	22.01	0.347	0.432	0.013	0.000	0.576	0.190	3.30	0.00	6.01	11.15	4.08	6.02	11.91	22.01	0.013	11.48
12/22/2021	22.86	0.00	0.00	0.432	23.29	0.360	0.432	0.014	0.000	0.598	0.192	3.87	0.00	6.12	11.70	4.66	6.14	12.49	23.29	0.014	12.06
12/23/2021	23.40	0.00	0.00	0.434	23.83	0.404	0.434	0.015	0.000	0.671	0.184	3.98	0.00	6.38	11.77	4.82	6.39	12.62	23.83	0.015	12.19
12/24/2021	22.26	0.00	0.00	0.440	22.70	0.359	0.440	0.014	0.000	0.596	0.180	3.34	0.00	6.48	11.29	4.14	6.50	12.07	22.70	0.014	11.63
12/25/2021	20.78	0.00	0.00	0.440	21.22	0.339	0.440	0.013	0.000	0.563	0.173	2.93	0.00	6.08	10.68	3.71	6.10	11.41	21.22	0.013	10.97
12/26/2021	22.18	0.00	0.00	0.433	22.61	0.375	0.433	0.014	0.000	0.622	0.176	4.00	0.00	6.14	10.85	4.81	6.16	11.65	22.61	0.014	11.21
12/27/2021	22.71	0.00	0.00	0.437	23.15	0.390	0.437	0.015	0.000	0.648	0.185	3.81	0.00	6.16	11.50	4.64	6.17	12.34	23.15	0.015	11.90
12/28/2021	21.68	0.00	0.00	0.435	22.12	0.351	0.435	0.013	0.000	0.584	0.198	3.14	0.00	5.95	11.44	3.93	5.97	12.22	22.12	0.013	11.79
12/29/2021	22.38	0.00	0.00	0.430	22.81	0.581	0.430	0.022	0.000	0.965	0.206	2.55	0.00	6.12	11.93	3.56	6.15	13.10	22.81	0.022	12.67
12/30/2021	22.00	0.00	0.00	0.426	22.43	0.344	0.426	0.013	0.000	0.572	0.195	3.84	0.00	5.76	11.28	4.61	5.77	12.05	22.43	0.013	11.62
12/31/2021	22.95	0.00	0.00	0.427	23.38	0.355	0.427	0.013	0.000	0.591	0.202	4.19	0.00	6.28	11.32	4.97	6.29	12.11	23.38	0.013	11.69

## 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-2021	2.47	1.15	0.24	3.70	8.65	6.17	9.80	0.24
Feb-2021	2.68	1.21	0.29	3.93	9.27	6.61	10.48	0.29
Mar-2021	2.20	0.97	0.21	3.53	8.33	5.73	9.30	0.21
Apr-2021	2.31	1.14	0.22	3.72	8.90	6.02	10.04	0.22
May-2021	2.72	1.15	0.24	4.38	9.97	7.10	11.12	0.24
Jun-2021	3.26	1.33	0.25	5.09	11.71	8.35	13.04	0.25
Jul-2021	3.13	1.27	0.26	4.59	11.17	7.72	12.44	0.26
Aug-2021	3.12	1.27	0.26	4.77	11.39	7.89	12.66	0.26
Sep-2021	3.33	1.35	0.28	5.12	11.90	8.45	13.25	0.28
Oct-2021	3.40	1.36	0.29	4.57	11.25	7.97	12.61	0.29
Nov-2021	2.80	1.22	0.26	4.29	10.46	7.08	11.69	0.26
Dec-2021	2.49	1.13	0.23	3.66	9.00	6.15	10.12	0.23
<b>Annual Average Day</b>	2.55	1.13	0.25	4.01	9.64	6.56	10.78	0.25

<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) 2021, the non-revenue water is 16.5% by volume of the water supplied.

Water Balance Output from CY2020 AWWA Audit for the Town of Cary:

AWWA Free Water Audit Software Water Balance		Water Audit Report for: Town of Cary Audit Year: 2021 Data Validity Tier: Tier III (51-70)		Jan 01 2021 - Dec 31 2021		FWAS v6.0 American Water Works Association Copyright © 2020. All Rights Reserved.	
Volume from Own Sources (VOS) (corrected for known errors)	8,123.054	Water Exported (WE) (corrected for known errors)	1,815.307	Billed Authorized Consumption	5,271.467	Billed Water Exported	1,815.307
Water Imported (WI) (corrected for known errors)	4.387	Water Supplied	6,312.134	Authorized Consumption	5,650.855	Billed Metered Consumption (BMAC) (water exported is removed)	5,271.467
		System Input Volume	8,127.441	Unbilled Authorized Consumption	379.388	Billed Unmetered Consumption (BUAC)	0.000
				Apparent Losses	123.284	Unbilled Metered Consumption (UMAC)	333.790
				Real Losses	537.995	Unbilled Unmetered Consumption (UUAC)	46.198
				Water Losses	661.279	Systematic Data Handling Errors (SDHE)	13.179
						Customer Metering Inaccuracies (CMI)	96.927
						Unauthorized Consumption (UC)	13.179
						Leakage on Transmission and/or Distribution Mains	Not broken down
						Leakage and Overflows at Utility's Storage Tanks	Not broken down
						Leakage on Service Connections	Not broken down
						Non-Revenue Water (NRW)	1,040.667

## 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-21	0.00	7.67
2-Jan-21	0.00	8.43
3-Jan-21	0.00	9.09
4-Jan-21	0.00	8.44
5-Jan-21	0.00	6.71
6-Jan-21	0.00	7.66
7-Jan-21	0.00	7.00
8-Jan-21	0.00	6.93
9-Jan-21	0.00	7.13
10-Jan-21	0.00	6.80
11-Jan-21	0.00	6.61
12-Jan-21	0.00	7.54
13-Jan-21	0.00	8.10
14-Jan-21	0.00	7.15
15-Jan-21	0.00	6.75
16-Jan-21	0.00	6.86
17-Jan-21	0.00	7.02
18-Jan-21	0.00	6.94
19-Jan-21	0.00	6.64
20-Jan-21	0.00	6.94
21-Jan-21	0.00	6.39
22-Jan-21	0.00	6.32
23-Jan-21	0.00	6.63
24-Jan-21	0.00	6.84
25-Jan-21	0.00	6.67
26-Jan-21	0.00	7.38
27-Jan-21	0.00	6.81
28-Jan-21	0.00	7.51
29-Jan-21	0.00	6.84
30-Jan-21	0.00	6.97
31-Jan-21	0.00	8.23
1-Feb-21	0.00	8.21
2-Feb-21	0.00	6.73
3-Feb-21	0.00	7.42
4-Feb-21	0.00	6.88
5-Feb-21	0.00	6.88
6-Feb-21	0.00	7.01
7-Feb-21	0.00	8.09
8-Feb-21	0.00	7.20
9-Feb-21	0.00	7.36
10-Feb-21	0.00	6.99
11-Feb-21	0.00	6.95
12-Feb-21	0.00	7.90
13-Feb-21	0.00	7.97
14-Feb-21	0.00	8.27
15-Feb-21	0.00	8.50
16-Feb-21	0.00	9.40
17-Feb-21	0.00	8.62
18-Feb-21	0.00	7.27
19-Feb-21	0.00	8.28
20-Feb-21	0.00	9.12
21-Feb-21	0.00	8.04
22-Feb-21	0.00	7.86
23-Feb-21	0.00	7.65
24-Feb-21	0.00	7.34
25-Feb-21	0.00	7.08
26-Feb-21	0.00	7.12

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-21	0.00	8.21
28-Feb-21	0.00	7.88
1-Mar-21	0.00	7.34
2-Mar-21	0.00	7.17
3-Mar-21	0.00	7.06
4-Mar-21	0.00	6.96
5-Mar-21	0.00	6.84
6-Mar-21	0.00	7.03
7-Mar-21	0.00	7.16
8-Mar-21	0.00	6.71
9-Mar-21	0.00	6.69
10-Mar-21	0.00	6.65
11-Mar-21	0.00	6.20
12-Mar-21	0.00	6.88
13-Mar-21	0.00	6.77
14-Mar-21	0.00	7.06
15-Mar-21	0.00	6.67
16-Mar-21	0.00	6.95
17-Mar-21	0.00	6.28
18-Mar-21	0.00	6.62
19-Mar-21	0.00	6.64
20-Mar-21	0.00	7.19
21-Mar-21	0.00	7.14
22-Mar-21	0.00	6.70
23-Mar-21	0.00	6.64
24-Mar-21	0.00	5.66
25-Mar-21	0.00	6.41
26-Mar-21	0.00	6.61
27-Mar-21	0.00	7.18
28-Mar-21	0.00	7.64
29-Mar-21	0.00	6.76
30-Mar-21	0.00	6.51
31-Mar-21	0.00	6.70
1-Apr-21	0.00	6.55
2-Apr-21	0.00	6.44
3-Apr-21	0.00	6.64
4-Apr-21	0.00	6.80
5-Apr-21	0.00	6.66
6-Apr-21	0.00	6.79
7-Apr-21	0.00	7.06
8-Apr-21	0.00	6.58
9-Apr-21	0.00	6.41
10-Apr-21	0.00	6.64
11-Apr-21	0.00	6.97
12-Apr-21	0.00	6.44
13-Apr-21	0.00	5.71
14-Apr-21	0.00	6.70
15-Apr-21	0.00	6.56
16-Apr-21	0.00	6.20
17-Apr-21	0.00	6.19
18-Apr-21	0.00	6.75
19-Apr-21	0.00	6.47
20-Apr-21	0.00	6.28
21-Apr-21	0.00	6.20
22-Apr-21	0.00	6.11
23-Apr-21	0.00	6.34
24-Apr-21	0.00	6.37

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-21	0.00	6.84
26-Apr-21	0.00	6.30
27-Apr-21	0.00	6.07
28-Apr-21	0.00	6.07
29-Apr-21	0.00	6.22
30-Apr-21	0.00	5.95
1-May-21	0.00	6.01
2-May-21	0.00	6.59
3-May-21	0.00	6.41
4-May-21	0.00	6.27
5-May-21	0.00	6.18
6-May-21	0.00	6.04
7-May-21	0.00	6.32
8-May-21	0.00	6.51
9-May-21	0.00	6.41
10-May-21	0.00	6.61
11-May-21	0.00	6.28
12-May-21	0.00	6.21
13-May-21	0.00	6.21
14-May-21	0.00	6.08
15-May-21	0.00	6.38
16-May-21	0.00	6.50
17-May-21	0.00	6.25
18-May-21	0.00	6.06
19-May-21	0.00	6.06
20-May-21	0.00	6.05
21-May-21	0.00	6.11
22-May-21	0.00	6.11
23-May-21	0.00	6.45
24-May-21	0.00	6.29
25-May-21	0.00	6.07
26-May-21	0.00	6.24
27-May-21	0.00	6.07
28-May-21	0.00	6.02
29-May-21	0.00	6.04
30-May-21	0.00	5.84
31-May-21	0.00	6.26
1-Jun-21	0.00	6.14
2-Jun-21	0.00	7.29
3-Jun-21	0.00	8.31
4-Jun-21	0.00	6.26
5-Jun-21	0.00	6.72
6-Jun-21	0.00	7.05
7-Jun-21	0.00	6.89
8-Jun-21	0.00	6.87
9-Jun-21	0.00	6.70
10-Jun-21	0.00	7.54
11-Jun-21	0.00	7.24
12-Jun-21	0.00	7.07
13-Jun-21	0.00	6.95
14-Jun-21	0.00	6.64
15-Jun-21	0.00	6.53
16-Jun-21	0.00	6.36
17-Jun-21	0.00	6.22
18-Jun-21	0.00	6.16
19-Jun-21	0.00	6.25
20-Jun-21	0.00	6.78
21-Jun-21	0.00	6.71

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>
22-Jun-21	0.00	6.51
23-Jun-21	0.00	6.37
24-Jun-21	0.00	6.22
25-Jun-21	0.00	6.31
26-Jun-21	0.00	6.47
27-Jun-21	0.00	6.57
28-Jun-21	0.00	6.50
29-Jun-21	0.00	4.39
30-Jun-21	0.00	8.15
1-Jul-21	0.00	6.31
2-Jul-21	0.00	5.39
3-Jul-21	0.00	8.34
4-Jul-21	0.00	6.13
5-Jul-21	0.00	6.27
6-Jul-21	0.00	6.39
7-Jul-21	0.00	6.26
8-Jul-21	0.00	8.48
9-Jul-21	0.00	7.39
10-Jul-21	0.00	6.95
11-Jul-21	0.00	6.99
12-Jul-21	0.00	6.68
13-Jul-21	0.00	6.44
14-Jul-21	0.00	6.47
15-Jul-21	0.00	6.46
16-Jul-21	0.00	6.39
17-Jul-21	0.00	6.46
18-Jul-21	0.00	6.61
19-Jul-21	0.00	6.99
20-Jul-21	0.00	6.58
21-Jul-21	0.00	6.46
22-Jul-21	0.00	6.36
23-Jul-21	0.00	6.24
24-Jul-21	0.00	6.38
25-Jul-21	0.00	6.59
26-Jul-21	0.00	6.42
27-Jul-21	0.00	6.35
28-Jul-21	0.00	6.37
29-Jul-21	0.00	6.39
30-Jul-21	0.00	6.24
31-Jul-21	0.00	6.29
1-Aug-21	0.00	6.57
2-Aug-21	0.00	6.28
3-Aug-21	0.00	6.20
4-Aug-21	0.00	6.19
5-Aug-21	0.00	6.07
6-Aug-21	0.00	6.38
7-Aug-21	0.00	6.44
8-Aug-21	0.00	6.56
9-Aug-21	0.00	6.35
10-Aug-21	0.00	6.36
11-Aug-21	0.00	6.23
12-Aug-21	0.00	6.27
13-Aug-21	0.00	6.20
14-Aug-21	0.00	6.41
15-Aug-21	0.00	6.83
16-Aug-21	0.00	6.38
17-Aug-21	0.00	6.32

APPENDIX E – CAPE FEAR RIVER BASIN DISCHARGE

<u>Date</u>	<u>Discharge to Durham County WWTP</u>	<u>WWRF Discharge to Cape Fear River Basin</u>
18-Aug-21	0.00	6.52
19-Aug-21	0.00	6.38
20-Aug-21	0.00	6.71
21-Aug-21	0.00	6.61
22-Aug-21	0.00	7.31
23-Aug-21	0.00	6.51
24-Aug-21	0.00	6.50
25-Aug-21	0.00	6.59
26-Aug-21	0.00	6.27
27-Aug-21	0.00	6.64
28-Aug-21	0.00	6.44
29-Aug-21	0.00	6.67
30-Aug-21	0.00	6.21
31-Aug-21	0.00	6.18
1-Sep-21	0.00	6.48
2-Sep-21	0.00	6.27
3-Sep-21	0.00	6.38
4-Sep-21	0.00	6.11
5-Sep-21	0.00	6.15
6-Sep-21	0.00	6.58
7-Sep-21	0.00	6.37
8-Sep-21	0.00	6.78
9-Sep-21	0.00	7.33
10-Sep-21	0.00	6.37
11-Sep-21	0.00	6.35
12-Sep-21	0.00	6.76
13-Sep-21	0.00	6.78
14-Sep-21	0.00	6.41
15-Sep-21	0.00	6.37
16-Sep-21	0.00	6.38
17-Sep-21	0.00	6.21
18-Sep-21	0.00	6.44
19-Sep-21	0.00	6.78
20-Sep-21	0.00	6.33
21-Sep-21	0.00	6.69
22-Sep-21	0.00	6.98
23-Sep-21	0.00	6.65
24-Sep-21	0.00	6.28
25-Sep-21	0.00	6.42
26-Sep-21	0.00	6.73
27-Sep-21	0.00	6.42
28-Sep-21	0.00	6.35
29-Sep-21	0.00	6.32
30-Sep-21	0.00	6.27
1-Oct-21	0.00	6.14
2-Oct-21	0.00	6.34
3-Oct-21	0.00	6.66
4-Oct-21	0.00	6.58
5-Oct-21	0.00	6.56
6-Oct-21	0.00	6.36
7-Oct-21	0.00	6.39
8-Oct-21	0.00	6.13
9-Oct-21	0.00	8.62
10-Oct-21	0.00	7.07
11-Oct-21	0.00	6.86
12-Oct-21	0.00	6.56
13-Oct-21	0.00	6.51
14-Oct-21	0.00	6.44

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-21	0.00	6.33
16-Oct-21	0.00	6.52
17-Oct-21	0.00	6.66
18-Oct-21	0.00	6.47
19-Oct-21	0.00	6.32
20-Oct-21	0.00	6.29
21-Oct-21	0.00	6.31
22-Oct-21	0.00	6.21
23-Oct-21	0.00	6.31
24-Oct-21	0.00	6.63
25-Oct-21	0.00	6.62
26-Oct-21	0.00	6.59
27-Oct-21	0.00	6.30
28-Oct-21	0.00	6.40
29-Oct-21	0.00	6.62
30-Oct-21	0.00	6.60
31-Oct-21	0.00	6.72
1-Nov-21	0.00	6.37
2-Nov-21	0.00	6.35
3-Nov-21	0.00	6.42
4-Nov-21	0.00	6.47
5-Nov-21	0.00	6.21
6-Nov-21	0.00	6.39
7-Nov-21	0.00	6.68
8-Nov-21	0.00	6.43
9-Nov-21	0.00	6.27
10-Nov-21	0.00	6.24
11-Nov-21	0.00	6.23
12-Nov-21	0.00	6.17
13-Nov-21	0.00	6.24
14-Nov-21	0.00	6.56
15-Nov-21	0.00	6.30
16-Nov-21	0.00	6.21
17-Nov-21	0.00	6.97
18-Nov-21	0.00	6.29
19-Nov-21	0.00	6.11
20-Nov-21	0.00	6.38
21-Nov-21	0.00	6.38
22-Nov-21	0.00	6.66
23-Nov-21	0.00	6.37
24-Nov-21	0.00	6.53
25-Nov-21	0.00	6.62
26-Nov-21	0.00	6.15
27-Nov-21	0.00	6.41
28-Nov-21	0.00	6.79
29-Nov-21	0.00	6.52
30-Nov-21	0.00	6.40
1-Dec-21	0.00	6.40
2-Dec-21	0.00	6.37
3-Dec-21	0.00	6.24
4-Dec-21	0.00	6.50
5-Dec-21	0.00	6.77
6-Dec-21	0.00	6.37
7-Dec-21	0.00	6.18
8-Dec-21	0.00	6.46
9-Dec-21	0.00	6.33
10-Dec-21	0.00	6.23

## 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-21	0.00	6.42
12-Dec-21	0.00	6.77
13-Dec-21	0.00	6.64
14-Dec-21	0.00	6.44
15-Dec-21	0.00	6.37
16-Dec-21	0.00	6.34
17-Dec-21	0.00	6.11
18-Dec-21	0.00	6.26
19-Dec-21	0.00	7.23
20-Dec-21	0.00	6.58
21-Dec-21	0.00	7.08
22-Dec-21	0.00	7.06
23-Dec-21	0.00	6.53
24-Dec-21	0.00	6.69
25-Dec-21	0.00	6.27
26-Dec-21	0.00	6.30
27-Dec-21	0.00	6.31
28-Dec-21	0.00	6.29
29-Dec-21	0.00	6.27
30-Dec-21	0.00	6.33
31-Dec-21	0.00	6.63