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CAPE FEAR RIVER PFAS MASS LOADING ASSESSMENT – THIRD QUARTER 2023

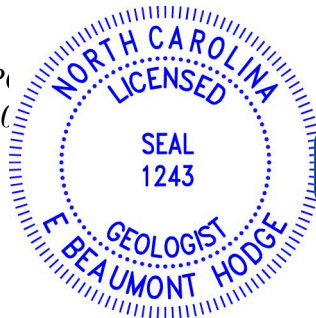
Chemours Fayetteville Works

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LIST OF ABBREVIATIONS

cfs	cubic feet per second
CO	Consent Order
CO Addendum	Addendum to Consent Order Paragraph 12
DVM	Data Verification Module
FTC	flow through cell
HDPE	high-density polyethylene
HFPO-DA	hexafluoropropylene oxide-dimer acid
kg	kilograms
lbs	pounds
LDPE	low-density polyethylene
mg/s	milligrams per second
m ³	cubic meters
ng/L	nanograms per liter
NCDEQ	North Carolina Department of Environmental Quality
PFAS	per- and polyfluoroalkyl substances
PFHpA	perfluoroheptanoic acid
Q1	first quarter
Q2	second quarter
Q3	third quarter
Q4	fourth quarter
SOP	standard operating procedure
SWTS	stormwater treatment system
USEPA	United States Environmental Protection Agency

1 INTRODUCTION

Geosyntec Consultants of NC, P.C. (Geosyntec) has prepared this *Cape Fear River PFAS Mass Loading Assessment - Third Quarter 2023 Report* for The Chemours Company, FC, LLC (Chemours). This report provides monitoring and assessment results pursuant to the requirements of paragraphs 1(a) and 1(b) of the Addendum to Consent Order paragraph 12 (CO Addendum) and paragraph 16 of the executed Consent Order (CO) (dated February 25, 2019) between the North Carolina Department of Environmental Quality (NCDEQ), Cape Fear River Watch, and Chemours. The CO Addendum requires sampling the Cape Fear River and mass loading transport pathways for the per- and polyfluoroalkyl substances (PFAS) compounds listed in Attachment C of the CO (Geosyntec 2020a). This is the 15th report prepared since the first quarter (Q1) 2020.

In addition to reporting the PFAS mass assessment results for this quarter, a total PFAS baseline mass load comparison in the Cape Fear River was calculated. The baseline mass load was calculated using the samples collected in the Cape Fear River at Tar Heel Ferry Road Bridge (or Tar Heel) over a 12-month timeframe (Q2 2020 through Q1 2021) and the continuous Cape Fear River flow recorded by the United States Geological Survey (USGS) at W.O. Huske Dam Station (Station #2105500). The collection of PFAS analytical data from Tar Heel was performed pursuant to paragraphs 1(a) and 1(b) of the CO Addendum, and the approach for developing the baseline mass load was described in the *Cape Fear River Mass Loading Calculation Protocol Version 2* (Geosyntec 2020a). The PFAS mass load in subsequent quarters were calculated by summing the rolling totals over four consecutive reporting quarters. The results of the baseline mass load and reductions of loads from the baseline are further described in Section 4.3 of this report.

1.1 Site Remedies

Chemours operates the Fayetteville Works facility in Bladen County, North Carolina (the Site) (Figure 1). The Site is within a 2,177-acre property at 22828 NC Highway 87, approximately 20 miles southeast of the city of Fayetteville.

Since October 2020,¹ Chemours installed multiple remedies to capture PFAS at the Site and to prevent PFAS from reaching the Cape Fear River. These remedies include two treatment systems, four on-site seeps interim flow-through cells (FTC), the groundwater extraction and barrier wall remedy, and the barrier wall. The start date of operation of each remedy are as follows:

- Outfall 003 treatment system² (October 1, 2020)
- Seep C FTC (December 16, 2020)

¹ There have been numerous other interim and permanent actions taken to limit PFAS reaching the Cape Fear River prior to Q1 2023, i.e., air abatement measures (installation of the thermal oxidizer and carbon beds, etc.), grouting of the terracotta pipe, sediment removal from onsite channels, among others, and these may not be reflected in the captured mass load calculations but should be considered in the overall assessment of PFAS reductions.

² Previously referred to as Old Outfall 002 treatment system

- Seep A FTC (April 28, 2021)
- Seep B FTC (June 8, 2021)
- Seep D FTC (June 24, 2021)
- Outfall 002 stormwater treatment system (SWTS) (June 30, 2021)³
- Barrier wall (June 11, 2023)
- Groundwater Extraction (March 14, 2023)
- Seep Ex-situ Capture Systems (April 20, 2023)

One year of monthly sampling of the mass loading model pathways per CO Paragraph 1(b) was completed in December 2021. Starting in January 2022 (Q1 2022), quarterly sampling of the mass loading model pathways was initiated and will continue for a period of 4 years (through Q4 2026), as outlined in the *Cape Fear River Mass Loading Calculation Protocol Version 2* (Geosyntec 2020a).

1.2 Monitoring and Report Objectives

This report presents data collected and analytical results for the third quarter 2023 (Q3 2023; July through September 2023) PFAS mass-loading assessment of the Cape Fear River. The primary objectives of the monitoring are as follows:

1. Assess the PFAS mass loads reaching the river primarily using the analytical results of the composite samples collected in the Cape Fear River at Tar Heel which is approximately 7 miles downstream of the Site (Figure 2).
2. Assess the PFAS mass loads that are being prevented from reaching the Cape Fear River by the remedies that have been implemented.

Along with presenting the results of the composite sampling conducted at Tar Heel, this report also presents the results of the grab samples collected at three downstream locations along the Cape Fear River: Bladen Bluffs, Tar Heel, and Kings Bluff Intake Canal (Kings Bluff) (Figure 3). The Tar Heel and Bladen Bluffs locations are within 2 miles of each other. The Kings Bluff location is farther away from the Site (48 miles downstream from Tar Heel).

This report also summarizes the surface water and groundwater sampling (Figures 3 and 4) that was conducted to estimate the PFAS loadings from the different PFAS transport pathways to the Cape Fear River, as identified in the conceptual site model (Figure 5) (Geosyntec 2019). The estimated PFAS loadings were modeled for this current reporting period using the Q3 2023 data

³ Diversion sumps in the Monomers/IXM area capture stormwater flows that would otherwise flow to Outfall 002 and transfers the stormwater to the SWTS for treatment. The diversion sumps and SWTS are designed to convey and then treat stormwater from storm events up to 1-inch over 24-hours. Further details on the SWTS are provided in the Stormwater Treatment System Capture and Removal Efficiency Report (Geosyntec, 2021a).

and the mass loading model. A summary of the mass loading model is presented in this report, and the scope and analysis are in Appendix A.

The results are presented as three PFAS groupings and presented in Table 1: Total Table 3+ (17 compounds)⁴, Total Table 3+ (20 and 21 compounds), and Total Attachment C (Geosyntec 2020b). Although the report tables include results for Total Attachment C and Total Table 3+ (20 compounds), the text, tables, and figures of this report focus on the Total Table 3+ (17 compounds) PFAS grouping.

1.3 Report Organization

The remainder of this report is organized as follows:

- Section 2 presents details of the field work conducted (e.g., samples collected, measurements taken) and the laboratory analyses completed.
- Section 3 presents the sampling results.
- Section 4 presents the mass load results, the mass discharge calculations, and a comparison to the Total PFAS baseline mass load as described above.
- Section 5 provides a summary and conclusions of the Q3 2023 mass load assessment.

⁴ Total Table 3+ PFAS concentrations are calculated and presented two ways in this report: (i) summing over 17 of the 21 Table 3+ compounds “Total Table 3+ (17 compounds)”, i.e., excluding results of R-PSDA, Hydrolyzed PSDA, R-EVE, and PFPrA; and (ii) summing over 20 or 21 of the Table 3+ compounds “Total Table 3+ (20 compounds)”, i.e., excluding results of PFPrA. Starting Q4, 2023, PFPrA will be analyzed in all the samples, and therefore the Total Table 3+ (21 compounds) will be presented instead of Total Table 3+ (20 compounds) in these reports.

2 SAMPLING ACTIVITIES AND LABORATORY ANALYSIS

The field work associated with collecting data for this Q3 2023 mass load assessment was completed by Parsons of NC (Parsons) and Geosyntec from July 1 through September 30, 2023. The scope of sampling and analysis conducted are presented below. Details of the sampling methods and flow measurement methods can be found in *Cape Fear River Mass Loading Calculation Protocol Version 2* (Geosyntec 2020a). Details of the sampling scope for the mass loading model are in Appendix A.

2.1 Sampling Activities

In Q3 2023, composite samples were collected from Tar Heel (sample location CFR-TARHEEL), which is approximately 7 miles downstream of the Site (Figure 2). In addition, grab samples were collected at the three downstream locations along the Cape Fear River (Bladen Bluffs, Tar Heel, and Kings Bluff). The flow measurements were collected at W.O. Huske Dam (Station #2105500) and Cape Fear Lock and Dam #1 (Station #2105769) and are summarized in Appendix B. Field forms are provided in Appendix C.

The composite samples were collected using an autosampler and were generally composited over 24 hours with aliquots collected at 1-hour intervals and at two samples per week. A total of 28 primary composite samples and 3 field duplicate composite samples were collected from this location from July 3, through September 28, 2023. The duplicate samples were collected on July 24, August 14, and September 11, 2023. The sampling program was interrupted on September 1, 2023, due to an equipment malfunction (ISCO head tubing was not properly attached). As a result, an additional grab sample was collected to continue a record of river concentrations over time. The field parameters and associated flow measurements are provided in Table 2.

Grab samples were collected using a peristaltic pump and new dedicated high-density polyethylene (HDPE) or low-density polyethylene (LDPE) tubing and dedicated silicone tubing for the pump head. A total of three grab samples were collected: one from Tar Heel (sample location CFR-TARHEEL) and one from Bladen Bluffs (sample location CFR-BLADEN) on July 26, 2023, and one from Kings Bluff (sample location CFR-KINGS) on August 1, 2023 (Table 2). The grab sample from Kings Bluff was collected six days after sampling conducted at Tar Heel and Bladen Bluffs to account for the estimated travel time between these locations.

For the remedies installed at Outfall 003 stream; Seeps A, B, C, and D; and Outfall 002, samples and flow measurements were collected at the influent and effluent stilling basins and at the Outfall 003 treatment system. The sampling methods for the Seeps are not part of the scope of the mass loading assessment but are provided in *CFR Long-Term Remedy Performance Monitoring Report #3* (Geosyntec 2023a).

2.2 Laboratory Analyses

Samples were sent to Eurofins Scientific (West Sacramento, California). The twice weekly samples from Tar Heel were analyzed for PFAS by Table 3+ Laboratory standard operating procedure (SOP) (which includes PFHpA). The grab samples from Bladen Bluffs, Tar Heel, and Kings Bluff were analyzed for Table 3+ and other PFAS compounds using Method 537 Mod Max (56 compounds which now includes PFPrA).

3 PFAS ANALYTICAL RESULTS

Table 3+ analytical results from samples collected at Bladen Bluffs, Tar Heel, and Kings Bluff in Q3 2023 are presented in Tables 3 and 4. The analytical results for the Seeps influent and effluent (to estimate remedies) are provided in *CFR Long-Term Remedy Performance Monitoring Report #3* (Geosyntec 2023a). The laboratory reports and Data Verification Module (DVM) reports are provided in Appendix D. The analytical data have been reviewed and validated. The duplicate samples have also been compared to the primary samples.

3.1 Data Validation

The laboratory data were reviewed using the DVM within the Locus[™] Environmental Information Management (EIM) system, a commercial software program used to manage data. Following the DVM process, a secondary review of the data was conducted. The DVM and secondary review results were combined in a data review narrative report for each set of sample results, which were consistent with Stage 2b of the United States Environmental Protection Agency (USEPA) *Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use* (USEPA 2009).

Additional details of the data validation are provided in Appendix A. Based on the review, the data are complete, representative, and comparable, with the exception of R-PSDA, Hydrolyzed PSDA, and R-EVE⁵.

3.2 Equipment Blanks, Quality Assurance/Quality Control, and Duplicate Samples

No equipment blank samples were collected for the Tar Heel sampling program (CFR-TARHEEL) during this period because there were no maintenance activities conducted on the composite samplers. There were no other quality assurance/quality control samples collected for this reporting period. PFAS results for the primary and duplicate samples had relative percent differences less than 30% for the reported compounds.

3.3 Analytical Results

The Q3 2023 analytical results from the samples collected at Tar Heel are presented in Table 3. The Total Table 3+ (17 compounds) concentrations in Q3 2023 ranged from 6.2 nanograms per liter (ng/L) to 77 ng/L. This range in concentrations is within the observed range in previous quarterly sampling events that occurred after the remedies were in operation (Geosyntec: 2020c;

⁵ As reported in the *Matrix Interference During Analysis of Table 3+ Compounds* memorandum (Geosyntec, 2020b), matrix interference studies conducted by the analytical laboratory (TestAmerica, Sacramento) have shown that the quantitation of three compounds (R-PSDA, Hydrolyzed PSDA, and R-EVE) is inaccurate due to interferences by the sample matrix in both groundwater and surface water.

2020d; 2020e; 2021b; 2021c; 2021d; 2021e; 2022a; 2022b; 2022c; 2022d; 2022e; 2023b; 2023c; 2023d).

The Q3 2023 Table 3+ analytical results from the grab samples collected at Bladen Bluffs, Tar Heel, and Kings Bluff are presented in Table 4 and the other PFAS analytical results are presented in Appendix B (Table B2). The analytical results for these downstream locations are discussed in Section 4.3.

4 CAPE FEAR RIVER MASS LOAD AND MASS DISCHARGE CALCULATIONS

The analytical results from the sampling and the flows reported from W.O. Huske Dam (Station #2105500) and Cape Fear Lock and Dam #1 (Station #2105769) (Appendix B) were used to estimate the Total Table 3+ (17 compounds) mass loads and mass discharge in the Cape Fear River. Specifically, the mass load is calculated as the product of the concentration of PFAS and the total volume of water (million gallons [MG]) that flowed past the sampling point within the sampling time interval (pounds [lbs]); and the mass discharge is generally calculated as the product of the concentration of PFAS and the volumetric flow rate (milligrams per second [mg/s]).

The Total Table 3+ (17 compounds) mass load measured in the Cape Fear River and prevented from entering the Cape Fear River due to the remedies are summarized in Table 5. The mass load estimation intervals are presented in Tables 6A to 6G.

4.1 PFAS Mass Load in the Cape Fear River

In Q3 2023, the in-river Total Table 3+ (17 compounds) mass load measured at Tar Heel was 25 lbs and is based on the 58 mass loading estimation intervals (Table 6A).

PFAS mass load prevented from discharging to the Cape Fear River was estimated using analytical results measured from samples collected at the influent and effluent of the remedies and their respective flows. Due to the implementation of the groundwater extraction and barrier wall remedy, the flows at the Seep FTCs are much lower than quarters prior to the operation of the groundwater extraction system, and at times no flow was observed at the FTCs. As a result, the total PFAS mass load captured by the Seep FTCs are less than previous quarters prior to the operation of the groundwater extraction system. During the Q3 2023 reporting period, the remedies at Outfall 003, the Seeps, and the SWTS prevented the following Total Table 3+ PFAS mass loads:

- For the Outfall 003 treatment system, a total of 13 lbs of PFAS was captured and prevented from reaching the Cape Fear River with a total treated flow of 49 MG (Table 6B).
- For the Seep A FTC, a total of 1.9 lbs was captured and prevented from reaching the Cape Fear River with a total measured flow of about 5.1 MG (Table 6C).
- For the Seep B FTC, a total of 1.3 lbs was captured and prevented from reaching the Cape Fear River with a total measured flow of about 4.3 MG (Table 6D).
- For the Seep C FTC, a total of 0.63 lbs was captured and prevented from reaching the Cape Fear River with a total measured flow of about 3.6 MG (Table 6E).
- For the Seep D FTC, a total of 0.70 lbs was captured and prevented from reaching the Cape Fear River with a total measured flow of about 1.3 MG (Table 6F).

- The SWTS captures PFAS originating from stormwater in the Monomers/IXM area that would otherwise flow to Outfall 002 during storm events. When stormwater is being treated at the SWTS, HFPO-DA, PFMOAA, and PMPA concentrations are measured in the SWTS influent and effluent flows. The captured total mass of HFPO-DA, PFMOAA, and PMPA during storm events between July 6 to September 26, 2023, was 3.4 lbs. This estimate was based on mass loading estimates for 30 days when flow was recorded at the SWTS in Q3 2023, with a total treated flow of about 3.4 MG (Table 6G). This captured total mass likely underestimates the mass of PFAS captured by the SWTS during Q3 2023 because the samples collected are analyzed for the three indicator compounds (HFPO-DA, PFMOAA, and PMPA) and not the full Table 3+ analyte list.

In addition to the remedies discussed above, the seeps ex-situ capture system, and the groundwater extraction and barrier wall remedy captured a combined 58.2 MG of seep flow and groundwater, removing a mass load of 74 lbs. This estimate was based on the mass loading estimates of flow rate data and PFAS concentration data collected between July through September 2023 (Geosyntec, 2023a). These reductions are further discussed in the *CFR Long-Term Remedy Performance Monitoring Report #3* (Geosyntec 2023a).

4.2 PFAS Mass Discharge in the Cape Fear River

Mass discharge was calculated from 33 samples collected at CFR-TARHEEL and recorded flows at W.O. Huske Dam during Q3 2023. The Total Table 3+ (17 compounds) mass discharge among samples with detected Total Table 3+ (17 compounds) concentrations ranged from 0.3 to 2.7 mg/s (Table 7), with the median mass discharge being 1.4 mg/s. The flow measured in Cape Fear River, the Total Table 3+ concentrations, and mass discharge over time have been plotted from the start of the mass loading program (from March 28, 2020, to September 30, 2023; Figure 6) and within the last 12 months (from October 1, 2022, to September 30, 2023; Figure 7).

During this quarter (Q3 2023), the Total Table 3+ (17 compounds) concentrations in the Cape Fear River were within the range of the previous 12 months and were highest from August 14 to 28 (25 to 77 ng/L) and from September 22 to 28 (42 to 54 ng/L). These two time periods correspond to extended periods of low river flows and is a trend that has been observed in the past. In fact, the total Cape Fear River flow measured during this quarter was the lowest of the past 12 months, or four quarters since Q4 2022. As such, the mass discharge calculated this quarter remained stable and at low levels typical of the past 12 months as shown in Figure 7. The highest mass discharge value, 2.7 mg/s (August 28, 2023, sample), corresponds to a Cape Fear River flooding event flow of 1,234 cfs and a Total Table 3+ (17 compounds) concentration of 77 ng/L.

The mass discharge values this quarter continued to remain lower than the mass discharges before Q3 2021, which corresponds to the time when the Outfall 003 treatment system, the Seep FTCs, and the SWTP were installed and operating. While this suggests additional mass removal from the installation of the groundwater extraction and barrier wall remedy implemented this year, additional sampling events are required to continue evaluating and quantifying the reduction from the groundwater extraction and barrier wall remedy.

4.3 Comparison of Current Period Mass Load to Baseline Mass Load

A baseline mass load in the Cape Fear River was established using the surface water samples collected at Tar Heel from Q2 2020 through Q1 2021, which corresponds to the first 12 months of sample collection at Tar Heel. The purpose of establishing a baseline mass load is to support the evaluation of mass load reductions in the Cape Fear River. The collection of PFAS analytical data from Tar Heel was conducted pursuant of paragraphs 1(a) and 1(b) of the CO Addendum, and the approach for developing the baseline mass load was described in the *Cape Fear River Mass Loading Calculation Protocol Version 2* (Geosyntec 2020a). Details on the approach and results are provided in Appendix E. Over the defined 12-month baseline period (from Q2 2020 through Q1 2021), the baseline mass load in the Cape Fear River at Tar Heel was 947 lbs.

Reductions of PFAS mass loads after the baseline period (Q2 2020 through Q1 2021) were assessed by using the quarterly PFAS mass loads that have been calculated for each quarterly report. These quarterly loads are summed with the loads from the preceding three quarters to calculate a rolling 12-month Total PFAS mass load at the Cape Fear River. A total rolling four quarter mass load captures the dynamics and inherent variability between in-river PFAS concentrations, river flows, and weather conditions (i.e., rainfall), which is well represented within a 12-month timeframe. This rolling 12-month total (or four consecutive quarters) allows for a quarterly cadence of evaluating Total PFAS mass load reductions from baseline, rather than an annual cadence.

To assess the reduction of PFAS mass load from this period to the baseline Cape Fear River load (947 lbs), the rolling sum of Total Table 3+ (17 compounds) mass load over the last four reporting quarters was calculated for each reporting quarter, starting from Q1 2022 and is summarized below. The percent reduction of the rolling total mass load from the total baseline mass load was calculated to evaluate if a 75% or greater reduction was achieved for the 4-quarter period.

- For the rolling four quarters total load ending in Q3 2023, the total in-river load was 139 lbs, which is an 85% reduction compared to the baseline load of 947 lbs.
- During the past six consecutive report quarters, there has been a 12-month rolling total reduction of 75% or greater from the total baseline mass load of 947 lbs, which is inclusive of nine total quarters.

Assessment of PFAS mass loads at Tar Heel will continue in future reporting quarters and the total in-river mass loads will be reported in future mass loading assessment reports.

Rolling Four Quarter Period	Sum of Total Table 3+ (17 Compounds) Rolling Four Quarter River Mass Load (lbs)	Percent Reduction
Q2 2020 to Q1 2021 (Baseline)	947	--
Q2 2021 to Q1 2022	373	61%
Q3 2021 to Q2 2022	237	75%
Q4 2021 to Q3 2022	171	82%
Q1 2022 to Q4 2022	167	82%
Q2 2022 to Q1 2023	146	85%
Q3 2022 to Q2 2023	137	85%
Q4 2022 to Q3 2023	139	85%

4.4 PFAS Mass Discharge at the Downstream River Locations

The Total Table 3+ (17 compounds) concentrations and mass discharge values from the Q3 2023 event are shown in the table below. Total Table 3+ (17 compounds) concentrations at the three downstream river locations ranged from 29 nanograms per liter (ng/L) (CFR-BLADEN and CFR-TARHEEL [grab]) to 33 ng/L (CFR-KINGS). The Tar Heel and Bladen Bluffs sampling locations are located within 2 miles of each other and have similar sample results. The Kings Bluff location is located further away (i.e., 48 miles from Tar Heel) but also had similar results to the other two locations.

As per the *Cape Fear River Mass Loading Calculation Protocol Version 2* (Geosyntec, 2020a), CFR-KINGS was sampled five days after CFR-TARHEEL and CFR-BLADEN to account for travel time between these two locations and CFR-KINGS. Flows reported at W.O. Huske Dam (Station #2105500) are adjusted for travel time and used in the calculation of mass discharge for Bladen Bluffs and Tar Heel. Flows reported at Cape Fear Lock and Dam #1 (Station #2105769) are used in the calculation of mass discharge for Kings Bluff. A total of 0.13 inches of rainfall was recorded during the travel period (July 26 to August 1, 2023).

The Total Table 3+ (17 compounds) mass discharge ranged from 0.98 mg/s (CFR-KINGS) to 1.1 mg/s (CFR-BLADEN). The mass discharge across the three downstream river locations in Q3 2023 was within the range of previous quarters (Geosyntec: 2020c; 2020d; 2020e; 2021b; 2021c; 2021d; 2021e; 2022a; 2022b; 2022c; 2022d; 2022e; 2023b; 2023c; 2023d). Specifically, the mass discharges from Q4 2021 to Q2 2023 were 0.43 to 3.0 mg/s at CFR-BLADEN, non-detect to 3.0 mg/s at CFR-TARHEEL (grab samples), and 0.36 to 4.4 mg/s at CFR-KINGS (Geosyntec: 2022a, 2022b, 2022c, 2022d, 2023c, 2023d). There is inherent variability associated with river sample collection due to changing flow rates, precipitation near the Site and along the river, sample collection location which can lead to variability in the PFAS mass discharge at these three locations. However, the mass discharges at the downstream river locations remain consistently lower since Q4 2021 than in previous assessments, which reflects the reduced mass discharge from the Site due to implemented remedies described in Section 4.2.

Sample Location	Sample Collection Method	Sample Collection Date	Flow Rate (cfs)	Total Table 3+ (17 Compounds)	
				Concentration (ng/L)	Mass Discharge (mg/s)
CFR-BLADEN	Grab	7/26/2023	1,360	29	1.1
CFR-TARHEEL	Grab	7/27/2023	1,260	29	1.0
CFR-KINGS	Grab	8/1/2023	1,050	33	0.98

4.5 Calculated Mass Discharge from the Mass Loading Model Assessment

This section presents the estimation of mass discharge from the identified PFAS transport pathways using the mass loading model and an assessment of the contributions by pathway. The results of the mass loading model assessment for Q3 2023 are briefly described below. Details on the mass loading model results and calculations are provided in Appendix A.

The table below summarizes the Total Table 3+ (17 compounds) mass discharge prior to the remedies (i.e., before the water passes through the remedies) by pathway from Q2 2020 to Q4 2022. The pathways with remedies (Seeps, Outfall 003 stream, Outfall 002, and onsite groundwater) have substantially lower mass discharges than the before remedies mass discharges.

Model Transport Pathway with Remedies	Before Remedies Total Table 3+ (17 Compounds) Mass Discharge (mg/s) ¹			Q3 2023 Total Table 3+ (17 Compounds) Mass Discharge (mg/s)
	Min	Median	Max	
Seeps	3.0	5.4	8.4	0.035
Onsite Groundwater	1.5	3.6	9.6	0.05
Outfall 002	0.006	0.10	0.68	0.025
Outfall 003 stream	0.63	2.5	4.7	0.10
Total²	6.7	14	24	0.90

1 – Before remedies mass discharge values taken from mass loading model data sets from Q2 2020 to Q4 2022 which excludes measurements after the installation of the groundwater extraction and barrier wall remedy which significantly altered the hydrologic conditions at site.

2 – Total values for before remedies mass discharge come from individual mass loading model assessments and therefore do not equal the sum of the values above.

5 SUMMARY AND CONCLUSIONS

This Q3 2023 Cape Fear River PFAS assessment at Tar Heel estimated the Total Table 3+ (17 compounds) that was measured at the Cape Fear River over the load assessment period of July 1, 2023, through September 30, 2023. Over this period, the in-river Total Table 3+ (17 compounds) mass load measured at Tar Heel was 25 lbs. The remedies that have been installed at SWTS, Outfall 003 and at Seeps A, B, C, and D prevented a mass load of 21 lbs of Total Table 3+ (17 compounds). In addition to these remedies, the groundwater extraction and barrier wall remedy have removed a mass load of 74 lbs of Total Table 3+ (17 compounds) this quarter (Geosyntec, 2023a). Due to the implementation of the groundwater extraction and barrier wall remedy, the flows at the Seep FTCs are much lower than quarters prior to the operation of the groundwater extraction system, and often no flow is observed at the FTCs. Additional sampling events from future reporting quarters are required to continue evaluating and quantifying the reduction from the groundwater extraction and barrier wall remedy.

The Total PFAS baseline mass load in the Cape Fear River was estimated using composite and grab samples collected at Tar Heel from April 1, 2020, to March 31, 2021 (i.e., the four quarters from Q2 2020 to Q1 2021). Over this period, the baseline mass load of Total PFAS was 947 lbs. The in-river Total PFAS mass loads were calculated for subsequent report quarters after the baseline period (i.e., starting from Q2 2021). A rolling Total PFAS mass load was calculated over four reporting quarters to assess reduction from the baseline mass load. A rolling 12-month total reduction of 75% or greater from the annual baseline load of 947 lbs was achieved during the past six consecutive reporting quarters, which is inclusive of nine total quarters. Assessment of PFAS mass loads at Tar Heel will continue in future reporting quarters and the total in-river mass loads will be reported in future mass loading assessment reports.

The PFAS mass discharge sampling at Bladen Bluffs, Tar Heel, and Kings Bluff consisted of three grab samples collected at the three downstream locations along Cape Fear River. Overall, the mass discharges measured at the downstream river locations were relatively consistent in Q3 2023 and have been consistently lower since Q4 2021, which may in part reflect the reduced mass discharge from the Site due to implemented remedies.

In July 2023, samples were collected from the PFAS transport pathways and were used to estimate the mass discharge and the contribution per transport pathway to the Cape Fear River. The model-estimated Total Table 3+ (17 compounds) mass discharge from the potential transport pathways during Q3 2023 is 0.90 mg/s. The implementation of remedies (Outfall 003 treatment system, Seeps FTCs, and the groundwater extraction and barrier wall remedy) show a significant mass discharge decreases in Q3 2023 compared to historical, pre-remediation ranges. The pathways with remedies have substantially lower mass discharges than the before remedies mass discharges, and the remaining PFAS transport pathways (i.e., Willis Creek and Georgia Branch Creek) have mass discharges that are within the range of previous values.

Quarterly sample collection was initiated in January 2022 and will continue for a period of 4 years (through Q4 2026). Assessment of PFAS mass loads will continue in future sampling events, including evaluation of reductions in mass loads from the model pathways due to the implemented remedies and calculations of measured mass loads at Tar Heel.

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Tables

TABLE 1
PFAS ANALYTE LIST
Chemours Fayetteville Works, North Carolina

Common Name	PFAS Grouping ^{1,2}				Chemical Name	CASRN	Chemical Formula
	Attachment C	Table 3+ (17 compounds)	Table 3+ (20 compounds)	Table 3+ (21 compounds)			
HFPO-DA	✓	✓	✓	✓	Hexafluoropropylene oxide dimer acid	13252-13-6	C6HF11O3
PEPA	✓	✓	✓	✓	Perfluoro-2-ethoxypropionic acid	267239-61-2	C5HF9O3
PFECA-G	✓	✓	✓	✓	Perfluoro-4-isopropoxybutanoic acid	801212-59-9	C12HF9O3S
PFMOAA	✓	✓	✓	✓	Perfluoro-2-methoxyacetic acid	674-13-5	C3HF5O3
PFO2HxA	✓	✓	✓	✓	Perfluoro-3,5-dioxahexanoic acid	39492-88-1	C4HF7O4
PFO3OA	✓	✓	✓	✓	Perfluoro-3,5,7-trioxaoctanoic acid	39492-89-2	C5HF9O5
PFO4DA	✓	✓	✓	✓	Perfluoro-3,5,7,9-tetraoxadecanoic acid	39492-90-5	C6HF11O6
PMPA	✓	✓	✓	✓	Perfluoro-2-methoxypropionic acid	13140-29-9	C4HF7O3
Hydro-EVE Acid	--	✓	✓	✓	2,2,3,3-tetrafluoro-3-((1,1,1,2,3,3-hexafluoro-3-((1,2,2,2-tetrafluoroethyl)oxy)propan-2-yl)oxy)propionic acid	773804-62-9	C8H2F14O4
EVE Acid	--	✓	✓	✓	2,2,3,3-tetrafluoro-3-((1,1,1,2,3,3-hexafluoro-3-((1,2,2,2-trifluoroethyl)oxy)propan-2-yl)oxy)propionic acid	69087-46-3	C8HF13O4
PFECA B	--	✓	✓	✓	Perfluoro-3,6-dioxaheptanoic acid	151772-58-6	C5HF9O4
R-EVE	--	--	✓	✓	Pentanoic acid, 4-(2-carboxy-1,1,2,2-tetrafluoroethoxy)-2,2,3,4,5,5,5-octafluoro-	2416366-22-6	C8H2F12O5
PFO5DA	✓	✓	✓	✓	Perfluoro-3,5,7,9,11-pentaaxadecanoic acid	39492-91-6	C7HF13O7
R-PSDA	--	--	✓	✓	Pentanoic acid, 2,2,3,3,4,5,5,5-octafluoro-4-(1,1,2,2-tetrafluoro-2-sulfoethoxy)-	2416366-18-0	C7H2F12O6S
R-PSDCA	--	✓	✓	✓	Ethanesulfonic acid, 1,1,2,2-tetrafluoro-2-[1,2,2,3,3-pentafluoro-1-(trifluoromethyl)propoxy]-	2416366-21-5	C6H2F12O4S
Hydrolyzed PSDA	--	--	✓	✓	Acetic acid, 2-fluoro-2-[1,1,2,3,3,3-hexafluoro-2-(1,1,2,2-tetrafluoro-2-sulfoethoxy)propoxy]-	2416366-19-1	C7H3F11O7S
NVHOS	--	✓	✓	✓	1,1,2,2,4,5,5,5-heptafluoro-3-oxapentanesulfonic acid; or 2-(1,2,2,2-ethoxy)tetrafluoroethanesulfonic acid; or 1-(1,1,2,2-tetrafluoro-2-sulfoethoxy)-1,2,2,2-tetrafluoroethane	801209-99-4	C4H2F8O4S
PES	--	✓	✓	✓	Perfluoro-2-ethoxyethanesulfonic acid	113507-82-7	C4HF9O4S
PS Acid	✓	✓	✓	✓	Ethanesulfonic acid, 2-[1-[difluoro[(1,2,2-trifluoroethyl)oxy]methyl]-1,2,2,2-tetrafluoroethoxy]-1,1,2,2-tetrafluoro-	29311-67-9	C7HF13O5S
Hydro-PS Acid	✓	✓	✓	✓	Ethanesulfonic acid, 2-[1-[difluoro(1,2,2,2-tetrafluoroethoxy)methyl]-1,2,2,2-tetrafluoroethoxy]-1,1,2,2-tetrafluoro-	749836-20-2	C7H2F14O5S
PFPrA ²	--	--	--	✓	Perfluoropropanoic acid	422-64-0	C3HF5O2
PFHpA	✓	--	--	--	Perfluoroheptanoic acid	375-85-9	C7HF13O2
PFBA	--	--	--	--	Perfluorobutanoic acid	375-22-4	C4HF7O2
PFPeA	--	--	--	--	Perfluoropentanoic acid	2706-90-3	C5HF9O2
PFHxA	--	--	--	--	Perfluorohexanoic acid	307-24-4	C6HF11O2
PFOA	--	--	--	--	Perfluorooctanoic acid	335-67-1	C8HF15O
PFNA	--	--	--	--	Perfluorononanoic acid	375-95-1	C9HF17O2
PFDA	--	--	--	--	Perfluorodecanoic acid	335-76-2	C10HF19O2
PFUnA	--	--	--	--	Perfluoroundecanoic acid	2058-94-8	C11HF21O2
PFDoA	--	--	--	--	Perfluorododecanoic acid	307-55-1	C12HF23O2
PFTriA	--	--	--	--	Perfluorotridecanoic acid	72629-94-8	C13HF25O2
PFTeA	--	--	--	--	Perfluorotetradecanoic acid	376-06-7	C14HF27O2
PFHxDA	--	--	--	--	Perfluorohexadecanoic acid	67905-19-5	C16HF31O2
PFODA	--	--	--	--	Perfluorooctadecanoic acid	16517-11-6	C18HF35O2
PFBS	--	--	--	--	Perfluorobutanesulfonic acid	375-73-5	C4HF9SO
PFPeS	--	--	--	--	Perfluoropentanesulfonic acid	2706-91-4	C5HF11O3S
PFHxS	--	--	--	--	Perfluorohexanesulfonic acid	355-46-4	C6HF13SO3
PFHpS	--	--	--	--	Perfluoroheptanesulfonic acid	375-92-8	C7HF15O3S
PFOS	--	--	--	--	Perfluorooctanesulfonic acid	1763-23-1	C8HF17SO3
PFNS	--	--	--	--	Perfluorononanesulfonic acid	68259-12-1	C9HF19O3S
PFDS	--	--	--	--	Perfluorodecanesulfonic acid	335-77-3	C10HF21O3S
PFDoS	--	--	--	--	Perfluorododecanesulfonic acid	79780-39-5	C12HF25O3S
4:2 FTS	--	--	--	--	4:2 Fluorotelomer sulfonic acid	757124-72-4	C6H5F9O3S
6:2 FTS	--	--	--	--	6:2 Fluorotelomer sulfonic acid	27619-97-2	C8H5F13SO3
8:2 FTS	--	--	--	--	8:2 Fluorotelomer sulfonic acid	39108-34-4	C10H5F17O3S
10:2 FTS	--	--	--	--	10:2 Fluorotelomer sulfonic acid	120226-60-0	C12H5F21O3
NEtFOSAA	--	--	--	--	N-ethyl perfluorooctane sulfonamidoacetic acid	2991-50-6	C12H8F17NO4S
NEtFOSA	--	--	--	--	N-ethylperfluoro-1-octanesulfonamide	4151-50-2	C10H6F17NO2S
NEtFOSAE	--	--	--	--	N-ethyl perfluorooctane sulphonamidoethanol	1691-99-2	C12H10F17NO3S
NMeFOSAA	--	--	--	--	N-methyl perfluorooctane sulfonamidoacetic acid	2355-31-9	C11H6F17NO4S
NMeFOSA	--	--	--	--	N-methyl perfluoro-1-octanesulfonamide	31506-32-8	C9H4F17NO2S
NMeFOSAE	--	--	--	--	N-methyl perfluorooctane sulfonamidoethanol	24448-09-7	C11H8F17NO3S
PFOA	--	--	--	--	Perfluorooctane sulfonamide	754-91-6	C8H2F17NO2S
F-53B Major	--	--	--	--	Perfluoro(2-((6-chlorohexyl)oxy)ethanesulfonic acid)	756426-58-1	C8HClF16O4S
F-53B Minor	--	--	--	--	Perfluoro(2-((8-chlorooctyl)oxy)ethanesulfonic acid)	763051-92-9	C10HClF20O4S
DONA	--	--	--	--	2,2,3-Trifluoro-3-(1,1,2,2,3,3-hexafluoro-3-(trifluoromethoxy)propoxy)propanoic acid	919005-14-4	C7H2F12O4

Notes:

-- not included in the PFAS grouping

PFAS - Per- and Polyfluoroalkyl substances

1 - As reported in the Matrix Interference During Analysis of Table 3+ Compounds memorandum (Geosyntec, 2020a), matrix interference studies conducted by the analytical laboratory (TestAmerica, Sacramento) have shown that the quantitation of three compounds (R-PSDA, Hydrolyzed PSDA, and R-EVE) is inaccurate due to interferences by the sample matrix in both groundwater and surface water. Given the matrix interference issues, Total Table 3+ PFAS concentrations have been calculated and presented as: (i) the summation of 17 of the 21 Table 3+ compounds "Total Table 3+ (17 compounds)", i.e., does not include R-PSDA, Hydrolyzed PSDA, R-EVE, and PFPrA; (ii) the summation of 20 of the 21 compounds "Total Table 3+ (20 compounds)", i.e., does not include PFPrA; and (iii) the summation of 21 of the Table 3+ compounds "Total Table 3+ (21 compounds)".

2 - PFPrA was not analyzed in the twice weekly Tar Heel samples this quarter; however, it was analyzed in the surface and groundwater samples collected for the Q3 2023 mass loading model event (July 2023). As a result, the Total Table 3+ (20 compounds) results were presented for the biweekly Tar Heel samples, whereas the Total Table 3+ (21 compounds) results were presented for the mass loading model samples. Starting Q4 2023, PFPrA will be analyzed in all the samples, including the twice weekly Tar Heel samples, and therefore the Total Table 3+ (20 compounds) will no longer be presented in these reports.

TABLE 2
RIVER SAMPLES AT TAR HEEL AND DOWNSTREAM LOCATIONS - Q3 2023
Chemours Fayetteville Works, North Carolina

Location ID	Sample ID	QA/QC	Date and Time	Sample Collection								Flow Measurement		
				Method	Hours Composit ¹	pH (S.U.)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Specific Conductivity (µS/cm)	Temperature (°C)	Method	Total Volume (ft ³) ²	Instantaneous Flow Rate (ft ³ /s) ³
CFR-TARHEEL ⁴	CFR-TARHEEL-24-070323		7/3/23 23:01	Composite	24	7.91	2.60	-65.30	48.70	837.21	31.28	USGS Data ⁷	590,680,000	--
	CFR-TARHEEL-24-070523		7/5/23 23:01	Composite	24	NM	NM	NM	NM	NM	NM	USGS Data ⁷	460,330,000	--
	CFR-TARHEEL-24-070723		7/7/23 23:01	Composite	24	7.70	7.17	15.20	62.70	255.17	27.82	USGS Data ⁷	465,480,000	--
	CFR-TARHEEL-24-071023		7/10/23 23:01	Composite	24	8.21	6.15	-3.70	158.00	500.50	26.55	USGS Data ⁷	684,360,000	--
	CFR-TARHEEL-24-071323		7/13/23 23:01	Composite	24	6.88	5.22	42.00	41.30	118.00	27.89	USGS Data ⁷	502,300,000	--
	CFR-TARHEEL-24-071723		7/17/23 23:01	Composite	24	5.77	10.23	5.30	29.70	0.11	30.76	USGS Data ⁷	440,040,000	--
	CFR-TARHEEL-24-072023		7/20/23 23:01	Composite	24	7.62	4.27	36.10	22.90	620.46	31.02	USGS Data ⁷	261,670,000	--
	CFR-TARHEEL-24-072423		7/24/23 23:01	Composite	24	7.09	6.52	184.40	29.20	288.65	27.24	USGS Data ⁷	156,820,000	--
	CFR-TARHEEL-24-072423-D	Field Duplicate	7/24/23 23:01	Composite	24	7.09	6.52	184.40	29.20	288.65	27.24	USGS Data ⁷	156,820,000	--
	CFR-TARHEEL-24-072723		7/27/23 23:01	Composite	24	7.00	7.28	96.90	45.70	161.04	29.04	USGS Data ⁷	95,211,000	--
	CAP3Q23-CFR-TARHEEL-6-072723		7/27/23 13:46	Composite	6	7.25	6.25	106.00	15.20	150.77	27.28	USGS Data ⁷	19,179,000	--
	CAP3Q23-CFR-TARHEEL-072723		7/27/23 10:18	Grab	0	7.24	6.60	117.60	13.40	130.70	30.81	USGS Data ⁷	--	1,260
	CFR-TARHEEL-24-073123		7/31/23 23:01	Composite	24	7.67	7.07	65.60	14.30	194.76	30.47	USGS Data ⁷	70,540,000	--
	CFR-TARHEEL-24-080323		8/3/23 23:01	Composite	24	7.42	6.49	85.30	23.00	423.83	25.29	USGS Data ⁷	79,117,000	--
	CFR-TARHEEL-24-080723		8/7/23 23:01	Composite	24	7.88	5.43	54.60	14.00	481.85	30.87	USGS Data ⁷	76,969,000	--
	CFR-TARHEEL-24-081023		8/10/23 23:01	Composite	24	8.08	7.28	44.50	13.40	380.50	26.49	USGS Data ⁷	78,714,000	--
	CFR-TARHEEL-24-081423		8/14/23 23:01	Composite	24	7.31	7.53	54.70	28.70	435.33	28.20	USGS Data ⁷	78,184,000	--
	CFR-TARHEEL-24-081423-D	Field Duplicate	8/14/23 23:01	Composite	24	7.31	7.53	54.70	28.70	435.33	28.20	USGS Data ⁷	78,184,000	--
	CFR-TARHEEL-24-081723		8/17/23 23:01	Composite	24	NM	NM	NM	NM	NM	NM	USGS Data ⁷	92,844,000	--
	CFR-TARHEEL-24-082123		8/21/23 23:01	Composite	24	7.90	7.42	17.10	71.00	192.25	27.66	USGS Data ⁷	70,047,000	--
	CFR-TARHEEL-24-082423		8/24/23 23:01	Composite	24	7.03	7.34	114.90	11.40	184.25	27.48	USGS Data ⁷	71,062,000	--
	CFR-TARHEEL-24-082823		8/28/23 23:01	Composite	24	6.96	7.17	111.70	19.90	186.13	28.72	USGS Data ⁷	103,600,000	--
	CFR-TARHEEL-090123		9/1/23 9:10	Grab	0	7.58	7.20	37.80	32.40	113.03	23.55	USGS Data ⁷	--	5,460
	CFR-TARHEEL-15-090123		9/1/23 23:01	Composite	15	NM ¹	NM ¹	NM ¹	NM ¹	NM ¹	NM ¹	USGS Data ⁷	243,220,000	--
	CFR-TARHEEL-24-090423		9/4/23 23:01	Composite	24	NM ¹	NM ¹	NM ¹	NM ¹	NM ¹	NM ¹	USGS Data ⁷	128,490,000	--
	CFR-TARHEEL-24-090723		9/7/23 23:01	Composite	24	6.49	7.58	127.00	11.50	130.39	24.93	USGS Data ⁷	87,309,000	--
	CFR-TARHEEL-24-091123		9/11/23 23:01	Composite	24	7.80	7.69	97.30	64.00	135.25	25.40	USGS Data ⁷	165,780,000	--
	CFR-TARHEEL-24-091123-D	Field Duplicate	9/11/23 23:01	Composite	24	7.80	7.69	97.30	64.00	135.25	25.40	USGS Data ⁷	165,780,000	--
	CFR-TARHEEL-24-091523		9/15/23 23:01	Composite	24	6.92	8.92	157.40	10.60	164.66	22.64	USGS Data ⁷	88,182,000	--
	CFR-TARHEEL-24-091823		9/18/23 23:01	Composite	24	7.35	6.70	86.50	14.60	49189.00	23.21	USGS Data ⁷	125,040,000	--
CFR-TARHEEL-24-092223		9/22/23 23:01	Composite	24	NM	NM	NM	NM	NM	NM	USGS Data ⁷	75,101,000	--	
CFR-TARHEEL-24-092523		9/25/23 23:01	Composite	24	7.54	8.63	85.50	9.44	226.45	22.64	USGS Data ⁷	121,860,000	--	
CFR-TARHEEL-24-092823		9/28/23 23:01	Composite	24	7.56	8.22	63.30	10.50	225.65	23.69	USGS Data ⁷	77,989,000	--	
CFR-BLADEN ⁵	CAP3Q23-CFR-BLADEN-072623		7/26/23 16:50	Grab	0	7.48	6.29	162.90	10.70	134.40	32.71	USGS Data ⁹	--	1,360
CFR-KINGS ⁶	CAP3Q23-CFR-KINGS-080123		8/1/23 13:50	Grab	0	7.62	111.00	94.50	18.00	469.02	33.88	USGS Data ¹⁰	--	1,050

- Notes**
 -- not applicable
 °C - degrees Celsius
 ft³ - cubic feet
 ft³/s - cubic feet per second
 mg/L - milligrams per liter
 mV - millivolts
 NM - not measured; field parameters were not collected.
 NTU - nephelometric Turbidity Unit
 ORP - oxidation reduction potential
 QA/QC - Quality assurance/ quality control
 S.U. - Standard Units
 USGS - United States Geological Survey
 µS/cm - microsiemens per centimeter
 1 - Samples with a compositing duration of zero (0) hours are grab samples.
 2 - Total flow volume is determined based on measurements taken over the sample collection period.
 3 - For samples with a duration of zero (0) hours, i.e., grab samples, the instantaneous flow rate was used.
 4 - The sample location is along the Cape Fear River at Tar Heel Ferry Road Bridge.
 5 - The sample location is along the Cape Fear River at Bladen Bluffs.
 6 - The sample location is along the Cape Fear River at Kings Bluff.
 7 - Flow rate measured at USGS gauging station #02105500 located at William O Huske Lock & Dam used to estimate flow rate at Tar Heel Ferry Road Bridge during the 24 hr period between the collection of the composite sample.
 8 - Flow rate measured at USGS gauging station #02105500 located at William O Huske Lock & Dam used to estimate flow rate at Tar Heel Ferry Road Bridge during grab sample collection.
 9 - Flow rate measured at USGS gauging station #02105500 located at William O Huske Lock & Dam used to estimate flow rate at Bladen Bluffs during sample collection.
 10 - Flow rate measured at USGS gauging station #02105769 located at Lock #1 near Kelly used to estimate flow rate at Kings Bluff during sample collection.

TABLE 3
CAPE FEAR RIVER TAR HEEL ANALYTICAL RESULTS - Q3 2023
Chemours Fayetteville Works, North Carolina

Sampling Event	Q3 2023	Q3 2023	Q3 2023	Q3 2023	Q3 2023
Location ID	CFR-TARHEEL	CFR-TARHEEL	CFR-TARHEEL	CFR-TARHEEL	CFR-TARHEEL
Field Sample ID	CFR-TARHEEL-24-070323	CFR-TARHEEL-24-070523	CFR-TARHEEL-24-070723	CFR-TARHEEL-24-071023	CFR-TARHEEL-24-071323
Sample Date	07/03/2023	07/05/2023	07/07/2023	07/10/2023	07/13/2023
Sample Type	Composite	Composite	Composite	Composite	Composite
Sample Start Date and Time	07/03/23 12:00 AM	07/05/23 12:00 AM	07/07/23 12:00 AM	07/10/23 12:00 AM	07/13/23 12:00 AM
Sample Stop Date and Time	07/03/23 11:00 PM	07/05/23 11:00 PM	07/07/23 11:00 PM	07/10/23 11:00 PM	07/13/23 11:00 PM
Composite Duration (hours) ¹	24	24	24	24	24
QA/QC					
Sample Delivery Group (SDG)	320-102524-1	320-102369-1	320-102524-1	320-102524-1	320-102689-1
Lab Sample ID	320-102524-1	320-102369-2	320-102524-2	320-102524-3	320-102689-1
Table 3+ (ng/L)					
HFPO-DA	2.0	3.2	2.8	2.2	2.5
PFMOAA	3.7	<2.0	4.0	4.9	2.9
PFO2HxA	2.6	3.0	4.2	3.8	2.0
PFO3OA	<2.0	<2.0	<2.0	<2.0	<2.0
PFO4DA	<2.0	<2.0	<2.0	<2.0	<2.0
PFO5DA	<2.0	<2.0	<2.0	<2.0	<2.0
PMPA	<10	<10	<10	<10	<10
PEPA	<20	<20	<20	<20	<20
PS Acid	<2.0	<2.0	<2.0	<2.0	<2.0
Hydro-PS Acid	<2.0	<2.0	<2.0	<2.0	<2.0
R-PSDA	<2.0	2.2 J	3.1 J	5.7 J	2.6 J
Hydrolyzed PSDA	<2.0	<2.0	<2.0	<2.0	<2.0
R-PSDCA	<2.0	<2.0	<2.0	<2.0	<2.0
NVHOS	<2.0	<2.0	<2.0	<2.0	<2.0
EVE Acid	<2.0	<2.0	<2.0	<2.0	<2.0
Hydro-EVE Acid	<2.0	<2.0	<2.0	<2.0	<2.0
R-EVE	<2.0	<2.0	<2.0	2.9 J	<2.0
PES	<2.0	<2.0	<2.0	<2.0	<2.0
PFECA B	<2.0	<2.0	<2.0	<2.0	<2.0
PFECA-G	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluoroheptanoic Acid	4.0	3.4	3.2	3.7	3.0
Total Attachment C^{2,3}	8.3	6.2	11	11	7.4
Total Table 3+ (17 compounds)^{3,4}	8.3	6.2	11	11	7.4
Total Table 3+ (20 compounds)³	8.3	8.4	14	20	10

TABLE 3
CAPE FEAR RIVER TAR HEEL ANALYTICAL RESULTS - Q3 2023
Chemours Fayetteville Works, North Carolina

Sampling Event	Q3 2023	Q3 2023	Q3 2023	Q3 2023	Q3 2023
Location ID	CFR-TARHEEL	CFR-TARHEEL	CFR-TARHEEL	CFR-TARHEEL	CFR-TARHEEL
Field Sample ID	CFR-TARHEEL-24-071723	CFR-TARHEEL-24-072023	CFR-TARHEEL-24-072423	CFR-TARHEEL-24-072423-D	CFR-TARHEEL-24-072723
Sample Date	07/17/2023	07/20/2023	07/24/2023	07/24/2023	07/27/2023
Sample Type	Composite	Composite	Composite	Composite	Composite
Sample Start Date and Time	07/17/23 12:00 AM	07/20/23 12:00 AM	07/24/23 12:00 AM	07/24/23 12:00 AM	07/27/23 12:00 AM
Sample Stop Date and Time	07/17/23 11:00 PM	07/20/23 11:00 PM	07/24/23 11:00 PM	07/24/23 11:00 PM	07/27/23 11:00 PM
Composite Duration (hours) ¹	24	24	24	24	24
QA/QC				Field Duplicate	
Sample Delivery Group (SDG)	320-102689-1	320-103015-1	320-103015-1	320-103015-1	320-103209-1
Lab Sample ID	320-102689-2	320-103015-1	320-103015-2	320-103015-3	320-103209-1
Table 3+ (ng/L)					
HFPO-DA	2.4	4.6	4.4	4.3	5.0
PFMOAA	3.3	6.6	10	10	8.1
PFO2HxA	3.1	3.9	6.8	6.6	6.7
PFO3OA	<2.0	<2.0	<2.0	<2.0	<2.0
PFO4DA	<2.0	<2.0	<2.0	<2.0	<2.0
PFO5DA	<2.0	<2.0	<2.0	<2.0	<2.0
PMPA	<10	<10	<10	<10	13
PEPA	<20	<20	<20	<20	<20
PS Acid	<2.0	<2.0	<2.0	<2.0	<2.0
Hydro-PS Acid	<2.0	<2.0	<2.0	<2.0	<2.0
R-PSDA	<2.0	2.2 J	4.6 J	4.5 J	<2.0
Hydrolyzed PSDA	<2.0	<2.0	<2.0	<2.0	2.0 J
R-PSDCA	<2.0	<2.0	<2.0	<2.0	<2.0
NVHOS	<2.0	<2.0	<2.0	<2.0	<2.0
EVE Acid	<2.0	<2.0	<2.0	<2.0	<2.0
Hydro-EVE Acid	<2.0	<2.0	<2.0	<2.0	<2.0
R-EVE	<2.0	3.3 J	3.2 J	3.0 J	<2.0
PES	<2.0	<2.0	<2.0	<2.0	<2.0
PFECA B	<2.0	<2.0	<2.0	<2.0	<2.0
PFECA-G	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluoroheptanoic Acid	2.7	3.2	4.4	4.3	3.8
Total Attachment C^{2,3}	8.8	15	21	21	33
Total Table 3+ (17 compounds)^{3,4}	8.8	15	21	21	33
Total Table 3+ (20 compounds)³	8.8	21	29	28	35

TABLE 3
CAPE FEAR RIVER TAR HEEL ANALYTICAL RESULTS - Q3 2023
Chemours Fayetteville Works, North Carolina

Sampling Event	Q3 2023	Q3 2023	Q3 2023	Q3 2023	Q3 2023
Location ID	CFR-TARHEEL	CFR-TARHEEL	CFR-TARHEEL	CFR-TARHEEL	CFR-TARHEEL
Field Sample ID	CAP3Q23-CFR-TARHEEL-072723	CAP3Q23-CFR-TARHEEL-6-072723	CFR-TARHEEL-24-073123	CFR-TARHEEL-24-080323	CFR-TARHEEL-24-080723
Sample Date	07/27/2023	07/27/2023	07/31/2023	08/03/2023	08/07/2023
Sample Type	Grab	Composite	Composite	Composite	Composite
Sample Start Date and Time	07/27/23 10:25 AM	07/27/23 8:46 AM	07/31/23 12:00 AM	08/03/23 12:00 AM	08/07/23 12:00 AM
Sample Stop Date and Time	--	07/27/23 1:46 PM	07/31/23 11:00 PM	08/03/23 11:00 PM	08/07/23 11:00 PM
Composite Duration (hours) ¹	0	6	24	24	24
QA/QC					
Sample Delivery Group (SDG)	320-103017-1	320-103199-1	320-103209-1	320-103524-1	320-103524-1
Lab Sample ID	320-103017-6	320-103199-1	320-103209-2	320-103524-1	320-103524-2
Table 3+ (ng/L)					
HFPO-DA	5.4	5.3	5.5	5.3 J	5.8 J
PFMOAA	6.1	8.9	10	21 J	18 J
PFO2HxA	7.6	8.1	7.7	8.1 J	7.3 J
PFO3OA	<2.0	2.0	<2.0	<2.0 UJ	<2.0 UJ
PFO4DA	<2.0	<2.0	<2.0	<2.0 UJ	<2.0 UJ
PFO5DA	<2.0	<2.0	<2.0	<2.0 UJ	<2.0 UJ
PMPA	9.7	9.6	16	19 J	23 J
PEPA	<2.0	<2.0	<2.0	<2.0 UJ	<2.0 UJ
PS Acid	<2.0	<2.0	<2.0	<2.0 UJ	<2.0 UJ
Hydro-PS Acid	<2.0	<2.0	<2.0	<2.0 UJ	<2.0 UJ
R-PSDA	3.6 J	3.1 J	<2.0	4.4 J	5.4 J
Hydrolyzed PSDA	<2.0	<2.0	<2.0	2.6 J	<2.0 UJ
R-PSDCA	<3.0	<3.0	<2.0	<2.0 UJ	<2.0 UJ
NVHOS	<3.0	<3.0	<2.0	<2.0 UJ	<2.0 UJ
EVE Acid	<2.0	<2.0	<2.0	<2.0 UJ	<2.0 UJ
Hydro-EVE Acid	<2.0	<2.0	<2.0	<2.0 UJ	<2.0 UJ
R-EVE	<2.0	<2.0	<2.0	4.2 J	2.2 J
PES	<2.0	<2.0	<2.0	<2.0 UJ	<2.0 UJ
PFECA B	<2.0	<2.0	<2.0	<2.0 UJ	<2.0 UJ
PFECA-G	<2.0	<2.0	<2.0	<2.0 UJ	<2.0 UJ
Perfluoroheptanoic Acid	3.4	4.0	3.3	3.5 J	3.5 J
Total Attachment C^{2,3}	29	34	39	53	54
Total Table 3+ (17 compounds)^{3,4}	29	34	39	53	54
Total Table 3+ (20 compounds)³	32	37	39	65	62

TABLE 3
CAPE FEAR RIVER TAR HEEL ANALYTICAL RESULTS - Q3 2023
Chemours Fayetteville Works, North Carolina

Sampling Event	Q3 2023	Q3 2023	Q3 2023	Q3 2023	Q3 2023
Location ID	CFR-TARHEEL	CFR-TARHEEL	CFR-TARHEEL	CFR-TARHEEL	CFR-TARHEEL
Field Sample ID	CFR-TARHEEL-24-081023	CFR-TARHEEL-24-081423	CFR-TARHEEL-24-081423-D	CFR-TARHEEL-24-081723	CFR-TARHEEL-24-082123
Sample Date	08/10/2023	08/14/2023	08/14/2023	08/17/2023	08/21/2023
Sample Type	Composite	Composite	Composite	Composite	Composite
Sample Start Date and Time	08/10/23 12:00 AM	08/14/23 12:00 AM	08/14/23 12:00 AM	08/17/23 12:00 AM	08/21/23 12:00 AM
Sample Stop Date and Time	08/10/23 11:00 PM	08/14/23 11:00 PM	08/14/23 11:00 PM	08/17/23 11:00 PM	08/21/23 11:00 PM
Composite Duration (hours) ¹	24	24	24	24	24
QA/QC			Field Duplicate		
Sample Delivery Group (SDG)	320-104062-1	320-104062-1 / 320-104208-1	320-104208-1	320-104389-1	320-104389-1
Lab Sample ID	320-104062-1	320-104062-2 / 320-104208-1	320-104208-2	320-104389-1	320-104389-2
Table 3+ (ng/L)					
HFPO-DA	6.4	6.8 J	6.2 J	4.9	5.1
PFMOAA	<2.0	13 J	12 J	20	24
PFO2HxA	6.3	7.2 J	7.0 J	6.9	7.6
PFO3OA	<2.0	<2.0 UJ	<2.0 UJ	<2.0	<2.0
PFO4DA	<2.0	<2.0 UJ	<2.0 UJ	<2.0	<2.0
PFO5DA	<2.0	2.1 J	<2.0 UJ	<2.0	<2.0
PMPA	<10	20 J	<10 UJ	31	22
PEPA	<20	<20 UJ	<20 UJ	<20	<20
PS Acid	<2.0	<2.0 UJ	<2.0 UJ	<2.0	<2.0
Hydro-PS Acid	<2.0	<2.0 UJ	<2.0 UJ	<2.0	<2.0
R-PSDA	<2.0	<2.0 UJ	<2.0 UJ	3.8 J	3.1 J
Hydrolyzed PSDA	<2.0	<2.0 UJ	<2.0 UJ	<2.0	2.4 J
R-PSDCA	<2.0	<2.0 UJ	<2.0 UJ	<2.0	<2.0
NVHOS	<2.0	<2.0 UJ	<2.0 UJ	<2.0	<2.0
EVE Acid	<2.0	<2.0 UJ	<2.0 UJ	<2.0	<2.0
Hydro-EVE Acid	<2.0	<2.0 UJ	<2.0 UJ	<2.0	<2.0
R-EVE	<2.0	<2.0 UJ	<2.0 UJ	<2.0	<2.0
PES	<2.0	<2.0 UJ	<2.0 UJ	<2.0	<2.0
PFECA B	<2.0	<2.0 UJ	<2.0 UJ	<2.0	<2.0
PFECA-G	<2.0	<2.0 UJ	<2.0 UJ	<2.0	<2.0
Perfluoroheptanoic Acid	4.9	5.2 J	4.8 J	4.0	3.9
Total Attachment C^{2,3}	13	49	25	63	59
Total Table 3+ (17 compounds)^{3,4}	13	49	25	63	59
Total Table 3+ (20 compounds)³	13	49	25	67	64

TABLE 3
CAPE FEAR RIVER TAR HEEL ANALYTICAL RESULTS - Q3 2023
Chemours Fayetteville Works, North Carolina

Sampling Event	Q3 2023	Q3 2023	Q3 2023	Q3 2023	Q3 2023
Location ID	CFR-TARHEEL	CFR-TARHEEL	CFR-TARHEEL	CFR-TARHEEL	CFR-TARHEEL
Field Sample ID	CFR-TARHEEL-24-082423	CFR-TARHEEL-24-082823	CFR-TARHEEL-090123	CFR-TARHEEL-15-090123	CFR-TARHEEL-24-090423
Sample Date	08/24/2023	08/28/2023	09/01/2023	09/01/2023	09/04/2023
Sample Type	Composite	Composite	Grab	Composite	Composite
Sample Start Date and Time	08/24/23 12:00 AM	08/28/23 12:00 AM	09/01/23 11:00 PM	09/01/23 12:00 AM	09/04/23 12:00 AM
Sample Stop Date and Time	08/24/23 11:00 PM	08/28/23 11:00 PM	--	09/01/23 2:00 PM	09/04/23 11:00 PM
Composite Duration (hours) ¹	24	24	0	15	24
QA/QC					
Sample Delivery Group (SDG)	320-104389-1	320-104389-1	320-104624-1	320-104624-1	320-104624-1
Lab Sample ID	320-104389-3	320-104389-4	320-104624-2	320-104624-1	320-104624-3
Table 3+ (ng/L)					
HFPO-DA	5.1 J	6.6	4.8	5.1	6.3
PFMOAA	5.0 J	34	5.2	4.8	9.0
PFO2HxA	8.9 J	9.0	6.2	5.2	6.4
PFO3OA	2.4 J	2.1	<2.0	<2.0	<2.0
PFO4DA	<2.0 UJ	<2.0	<2.0	<2.0	<2.0
PFO5DA	<2.0 UJ	<2.0	<2.0	<2.0	<2.0
PMPA	17 J	18	<10	<10	<10
PEPA	<20 UJ	<20	<20	<20	<20
PS Acid	<2.0 UJ	<2.0	<2.0	<2.0	<2.0
Hydro-PS Acid	<2.0 UJ	<2.0	<2.0	<2.0	<2.0
R-PSDA	<2.0 UJ	<2.0	<2.0	<2.0	<2.0
Hydrolyzed PSDA	3.1 J	2.9 J	<2.0	<2.0	<2.0
R-PSDCA	<2.0 UJ	<2.0	<2.0	<2.0	<2.0
NVHOS	<2.0 UJ	6.9	<2.0	<2.0	<2.0
EVE Acid	<2.0 UJ	<2.0	<2.0	<2.0	<2.0
Hydro-EVE Acid	<2.0 UJ	<2.0	<2.0	<2.0	<2.0
R-EVE	<2.0 UJ	<2.0	<2.0	<2.0	<2.0
PES	<2.0 UJ	<2.0	<2.0	<2.0	<2.0
PFECA B	<2.0 UJ	<2.0	<2.0	<2.0	<2.0
PFECA-G	<2.0 UJ	<2.0	<2.0	<2.0	<2.0
Perfluoroheptanoic Acid	4.4 J	4.6	4.2	4.2	3.6
Total Attachment C^{2,3}	38	70	16	15	22
Total Table 3+ (17 compounds)^{3,4}	38	77	16	15	22
Total Table 3+ (20 compounds)³	42	80	16	15	22

TABLE 3
CAPE FEAR RIVER TAR HEEL ANALYTICAL RESULTS - Q3 2023
Chemours Fayetteville Works, North Carolina

Sampling Event	Q3 2023	Q3 2023	Q3 2023	Q3 2023	Q3 2023
Location ID	CFR-TARHEEL	CFR-TARHEEL	CFR-TARHEEL	CFR-TARHEEL	CFR-TARHEEL
Field Sample ID	CFR-TARHEEL-24-090723	CFR-TARHEEL-24-091123	CFR-TARHEEL-24-091123-D	CFR-TARHEEL-24-091523	CFR-TARHEEL-24-091823
Sample Date	09/07/2023	09/11/2023	09/11/2023	09/15/2023	09/18/2023
Sample Type	Composite	Composite	Composite	Composite	Composite
Sample Start Date and Time	09/07/23 12:00 AM	09/11/23 12:00 AM	09/11/23 12:00 AM	09/15/23 12:00 AM	09/18/23 12:00 AM
Sample Stop Date and Time	09/07/23 11:00 PM	09/11/23 11:00 PM	09/11/23 11:00 PM	09/15/23 11:00 PM	09/18/23 11:00 PM
Composite Duration (hours) ¹	24	24	24	24	24
QA/QC			Field Duplicate		
Sample Delivery Group (SDG)	320-104932-1	320-104932-1	320-104932-1	320-105126-1	320-105126-1
Lab Sample ID	320-104932-1	320-104932-2	320-104932-3	320-105126-1	320-105126-2
Table 3+ (ng/L)					
HFPO-DA	6.2	6.8	7.3	10	11
PFMOAA	8.6	8.7	8.4	11	12
PFO2HxA	5.3	6.0	5.9	5.9	6.4
PFO3OA	<2.0	<2.0	<2.0	<2.0	<2.0
PFO4DA	<2.0	<2.0	<2.0	<2.0	<2.0
PFO5DA	<2.0	<2.0	<2.0	<2.0	<2.0
PMPA	<10	<10	<10	<10	<10
PEPA	<20	<20	<20	<20	<20
PS Acid	<2.0	<2.0	<2.0	<2.0	<2.0
Hydro-PS Acid	<2.0	<2.0	<2.0	<2.0	<2.0
R-PSDA	<2.0	<2.0	<2.0	<2.0	<2.0
Hydrolyzed PSDA	<2.0	<2.0	<2.0	<2.0	<2.0
R-PSDCA	<2.0	<2.0	<2.0	<2.0	<2.0
NVHOS	<2.0	<2.0	<2.0	<2.0	<2.0
EVE Acid	<2.0	<2.0	<2.0	<2.0	<2.0
Hydro-EVE Acid	<2.0	<2.0	<2.0	<2.0	<2.0
R-EVE	<2.0	<2.0	<2.0	<2.0	<2.0
PES	<2.0	<2.0	<2.0	<2.0	<2.0
PFECA B	<2.0	<2.0	<2.0	<2.0	<2.0
PFECA-G	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluoroheptanoic Acid	3.3	4.0	3.9	4.6	4.3
Total Attachment C^{2,3}	20	22	22	27	29
Total Table 3+ (17 compounds)^{3,4}	20	22	22	27	29
Total Table 3+ (20 compounds)³	20	22	22	27	29

TABLE 3
CAPE FEAR RIVER TAR HEEL ANALYTICAL RESULTS - Q3 2023
Chemours Fayetteville Works, North Carolina

Sampling Event	Q3 2023	Q3 2023	Q3 2023
Location ID	CFR-TARHEEL	CFR-TARHEEL	CFR-TARHEEL
Field Sample ID	CFR-TARHEEL-24-092223	CFR-TARHEEL-24-092523	CFR-TARHEEL-24-092823
Sample Date	09/22/2023	09/25/2023	09/28/2023
Sample Type	Composite	Composite	Composite
Sample Start Date and Time	09/22/23 12:00 AM	09/25/23 12:00 AM	09/28/23 12:00 AM
Sample Stop Date and Time	09/22/23 11:00 PM	09/25/23 11:00 PM	09/28/23 11:00 PM
Composite Duration (hours) ¹	24	24	24
QA/QC			
Sample Delivery Group (SDG)	320-105404-1	320-105404-1	320-105754-1
Lab Sample ID	320-105404-1	320-105404-2	320-105754-1
Table 3+ (ng/L)			
HFPO-DA	7.2	6.2	6.2
PFMOAA	11	2.8	14
PFO2HxA	7.9	7.1	7.9
PFO3OA	<2.0	<2.0	<2.0
PFO4DA	<2.0	<2.0	<2.0
PFO5DA	<2.0	<2.0	<2.0
PMPA	24	26	20
PEPA	<20	<20	<20
PS Acid	<2.0	<2.0	<2.0
Hydro-PS Acid	<2.0	<2.0	<2.0
R-PSDA	4.7 J	5.2 J	3.3 J
Hydrolyzed PSDA	2.2 J	<2.0	2.3 J
R-PSDCA	<2.0	<2.0	<2.0
NVHOS	<2.0	<2.0	6.3
EVE Acid	<2.0	<2.0	<2.0
Hydro-EVE Acid	<2.0	<2.0	<2.0
R-EVE	2.2 J	<2.0	<2.0
PES	<2.0	<2.0	<2.0
PFECA B	<2.0	<2.0	<2.0
PFECA-G	<2.0	<2.0	<2.0
Perfluoroheptanoic Acid	3.9	4.8	4.1
Total Attachment C^{2,3}	50	42	48
Total Table 3+ (17 compounds)^{3,4}	50	42	54
Total Table 3+ (20 compounds)³	59	47	60

Notes:

Bold - Analyte detected above associated reporting limit.

B - analyte detected in an associated blank.

J - Analyte detected. Reported value may not be accurate or precise.

ND - no Table 3+ analytes were detected above the associated reporting limits.

ng/L - nanograms per liter

QA/QC - Quality assurance/ quality control

SDG - Sample Delivery Group

SOP - standard operating procedure

UJ - Analyte not detected. Reporting limit may not be accurate or precise.

< - Analyte not detected above associated reporting limit.

1 - Samples with a compositing duration of zero (0)

hours are grab samples.

2 - Total Attachment C does not include Perfluoroheptanoic acid (PFHpA).

3 - Total Table 3+ and Total Attachment C were calculated including J qualified data but not non-detect data. The sum is rounded to two significant figures

4 - Total Table 3+ (17 compounds) does not include PFHpA, R-PSDA, Hydrolyzed PSDA, and R-EVE.

TABLE 4
SURFACE WATER ANALYTICAL RESULTS AT DOWNSTREAM LOCATIONS
 Chemours Fayetteville Works, North Carolina

Location ID	CFR-BLADEN	CFR-KINGS	CFR-TARHEEL	CFR-TARHEEL	EB	EB
Field Sample ID	CAP3Q23-CFR-BLADEN-072623	CAP3Q23-CFR-KINGS-080123	CAP3Q23-CFR-TARHEEL-072723	CAP3Q23-CFR-TARHEEL-6-072723	CAP3Q23-EQBLK-IS-072723	CAP3Q23-EQBLK-PP-072723
Sample Date and Time	07/26/2023	08/01/2023	07/27/2023	07/27/2023	07/27/2023	07/27/2023
QA/QC					Equipment Blank	Equipment Blank
Sample Delivery Group (SDG)	320-103017-1	320-103199-1	320-103017-1	320-103199-1	320-103017-1	320-103017-1
Lab Sample ID	320-103017-5	320-103199-2	320-103017-6	320-103199-1	320-103017-7	320-103017-8
Table 3+ SOP (ng/L)						
HFPO-DA	6.0	4.5	5.4	5.3	<4.0	<4.0
PFMOAA	6.5	11	6.1	8.9	<2.0	<2.0
PFO2HxA	7.6	8.4	7.6	8.1	<2.0	<2.0
PFO3OA	<2.0	<2.0	<2.0	2.0	<2.0	<2.0
PFO4DA	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFO5DA	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PMPA	9.2	8.9	9.7	9.6	<2.0	<2.0
PEPA	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PS Acid	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Hydro-PS Acid	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
R-PSDA	3.1 J	4.0 J	3.6 J	3.1 J	<2.0	<2.0
Hydrolyzed PSDA	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
R-PSDCA	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
NVHOS	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
EVE Acid	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Hydro-EVE Acid	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
R-EVE	<2.0	3.2 J	<2.0	<2.0	<2.0	<2.0
PES	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFECA B	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFECA-G	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFPrA	26	21	3.4	4.0	<5.0	<5.0
Perfluoroheptanoic Acid	3.7	4.1	3.4	4.0	<2.0	<2.0
Total Attachment C^{1,3}	29	33	29	34	ND	ND
Total Table 3+ (17 compounds)^{2,3}	29	33	29	34	ND	ND
Total Table 3+ (21 compounds)³	58	61	58	57	ND	ND

Notes:

1 - Total Attachment C does not include Perfluoroheptanoic acid (PFHpA).

2 - Total Table 3+ (17 compounds) does not include PFHpA, R-PSDA, Hydrolyzed PSDA, R-EVE, and PFPrA.

3 - Total Table 3+ and Total Attachment C were calculated including J qualified data but not non-detect data. The sum is rounded to two significant figures.

B - analyte detected in an associated blank

Bold - Analyte detected above associated reporting limit

J - Analyte detected. Reported value may not be accurate or precise.

EPA - Environmental Protection Agency

ND - no analytes were detected above the associated reporting limits.

ng/L - nanograms per liter

QA/QC - Quality assurance/ quality control

SDG - Sample Delivery Group

SOP - standard operating procedure

< - Analyte not detected above associated reporting limit.

TABLE 5
SUMMARY OF CALCULATED TOTAL MASS LOAD IN THE CAPE FEAR RIVER
Chemours Fayetteville Works, North Carolina

Reporting Period ^{1,2,3}	River volume (MG)	Total Attachment C ⁴			Total Table 3+ (17 Compounds) ⁵			Total Table 3+ (20 Compounds)		
		Projected Load (lb) ⁶	Measured Load in Cape Fear River (lb) ⁷	Remedy Reduction Load (lb) ⁸	Projected Load (lb) ⁶	Measured Load in Cape Fear River (lb) ⁷	Remedy Reduction Load (lb) ⁸	Projected Load (lb) ⁶	Measured Load in Cape Fear River (lb) ⁷	Remedy Reduction Load (lb) ⁸
2020 Q2	460,084	266	266	--	269	269	--	345	345	--
2020 Q3	269,003	167	167	--	170	170	--	215	215	--
2020 Q4	648,470	235	179	56	237	180	57	292	233	59
2021 Q1	746,265	268	205	62	271	207	63	322	257	65
2021 Q2	184,977	261	165	96	267	170	97	336	233	103
2021 Q3	156,006	213	85	128	219	89	130	248	108	140
2021 Q4	73,532	135	38	97	140	42	99	160	49	110
2022 Q1	380,263	151	68	83	156	72	84	180	88	92
2022 Q2	175,562	121	29	92	127	33	94	143	41	102
2022 Q3	78,649	117	20	96	121	23	98	134	27	107
2022 Q4	164,830	118	36	83	122	38	84	132	41	91
2023 Q1	324,227	108	50	58	112	51	61	130	63	67
2023 Q2	298,943	53	23	30	56	25	31	59	26	33
2023 Q3	140,296	40	25	16	45	25	20	49	29	20
<i>Last Four Quarters</i>	<i>928,296</i>	<i>320</i>	<i>133</i>	<i>187</i>	<i>334</i>	<i>139</i>	<i>195</i>	<i>370</i>	<i>158</i>	<i>212</i>

Notes:

- 1 - Calculated total mass loads by compound and time interval are provided in Tables 6A through 6G for 2023 Q1 and in Appendix B for previous reporting periods.
 - 2 - The remedies at Outfall 003 Stream, Seeps A, B, C, and D, and at Outfall 002 were operational since Q3 2021.
 - 3 - The barrier wall remedy and groundwater extraction system were operational since Q1 2023.
 - 4 - Total Attachment C does not include Perfluoroheptanoic acid (PFHpA).
 - 5 - Total Table 3+ (17 compounds) does not include Perfluoroheptanoic acid (PFHpA), R-PSDA, Hydrolyzed PSDA, and R-EVE.
 - 6 - Projected load is calculated as the total of the measured load in the Cape Fear River and the calculated remedy reduction load.
 - 7 - Measured load in Cape Fear River represent loads measured in the Cape Fear River at the CFR-TARHEEL sampling location downstream of the Site.
 - 8 - Calculated remedy reduction loads represent the total load that was prevented from reaching the Cape Fear River. This is calculated as the total load from Outfall 003 Treatment System, Seeps A to D and the Stormwater Treatment System.
- - not calculated
lb - pounds
MG - million gallons

TABLE 6A
CAPE FEAR RIVER PFAS MASS LOAD BY COMPOUND AND TIME INTERVAL - Q3 2023
Chemours Fayetteville Works, North Carolina

Interval Details			Calculated Mass Load ² (lbs)																							Total Attachment C ³	Total Table 3+ (17 Compounds) ⁴	Total Table 3+ (20 Compounds)	
Interval ID	Start Time ¹	End Time ¹	Total River Volume (MG)	HFPO-DA	PFMOAA	PFO2HxA	PFO3OA	PFO4DA	PFO5DA	PMPA	PEPA	PS Acid	Hydro-PS Acid	R-PSDA	Hydrolyzed PSDA	R-PSDCA	NVHOS	EVE Acid	Hydro-EVE Acid	R-EVE	PES	PFECA B	PFECA-G	PFHpA					
2023_Q3_1	7/1/23 0:01	7/3/23 0:01	5,613	0.11	0.17	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.40	0.40	0.40	
2023_Q3_2	7/3/23 0:01	7/3/23 23:01	4,419	0.07	0.14	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.31	0.31	0.31	
2023_Q3_3	7/3/23 23:01	7/5/23 0:01	4,393	0.10	0.07	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.27	0.27	0.31	
2023_Q3_4	7/5/23 0:01	7/5/23 23:01	3,444	0.09	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.18	0.18	0.24	
2023_Q3_5	7/5/23 23:01	7/7/23 0:01	3,999	0.10	0.07	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.29	0.29	0.38	
2023_Q3_6	7/7/23 0:01	7/7/23 23:01	3,482	0.08	0.12	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.32	0.32	0.41	
2023_Q3_7	7/7/23 23:01	7/10/23 0:01	5,471	0.11	0.20	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.16	0.50	0.50	0.77	
2023_Q3_8	7/10/23 0:01	7/10/23 23:01	5,119	0.09	0.21	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.16	0.47	0.47	0.83		
2023_Q3_9	7/10/23 23:01	7/13/23 0:01	12,123	0.24	0.39	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.34	0.93	0.93	1.49		
2023_Q3_10	7/13/23 0:01	7/13/23 23:01	3,757	0.08	0.09	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.23	0.23	0.31		
2023_Q3_11	7/13/23 23:01	7/17/23 0:01	15,639	0.32	0.40	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	1.06	1.06	1.23		
2023_Q3_12	7/17/23 0:01	7/17/23 23:01	3,292	0.07	0.09	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.24	0.24	0.24		
2023_Q3_13	7/17/23 23:01	7/20/23 0:01	5,106	0.15	0.21	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.13	0.51	0.51	0.63		
2023_Q3_14	7/20/23 0:01	7/20/23 23:01	1,957	0.08	0.11	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.05	0.25	0.25	0.34		
2023_Q3_15	7/20/23 23:01	7/24/23 0:01	4,134	0.16	0.29	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.13	0.63	0.63	0.86		
2023_Q3_16	7/24/23 0:01	7/24/23 23:01	1,173	0.04	0.10	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.04	0.21	0.21	0.28		
2023_Q3_17	7/24/23 23:01	7/27/23 8:46	2,242	0.09	0.18	0.14	0.02	0.00	0.00	0.09	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.08	0.52	0.52	0.62		
2023_Q3_18	7/27/23 8:46	7/27/23 10:18	43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	
2023_Q3_19	7/27/23 10:18	7/27/23 13:46	100	0.00	0.01	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	
2023_Q3_20	7/27/23 13:46	7/27/23 23:01	272	0.01	0.02	0.02	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.08	0.08	0.08	0.08	
2023_Q3_21	7/27/23 23:01	7/31/23 0:01	1,869	0.08	0.14	0.11	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.56	0.56	0.58	0.58	
2023_Q3_22	7/31/23 0:01	7/31/23 23:01	528	0.02	0.04	0.03	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.17	0.17	0.17	0.17	
2023_Q3_23	7/31/23 23:01	8/3/23 0:01	1,147	0.05	0.15	0.08	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.03	0.44	0.44	0.50	0.50	
2023_Q3_24	8/3/23 0:01	8/3/23 23:01	592	0.03	0.10	0.04	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.02	0.26	0.26	0.32	0.32	
2023_Q3_25	8/3/23 23:01	8/7/23 0:01	2,380	0.11	0.39	0.15	0.00	0.00	0.00	0.42	0.00	0.00	0.00	0.10	0.03	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.07	1.07	1.07	1.25	1.25	
2023_Q3_26	8/7/23 0:01	8/7/23 23:01	576	0.03	0.09	0.04	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.02	0.26	0.26	0.30	0.30	
2023_Q3_27	8/7/23 23:01	8/10/23 0:01	1,384	0.07	0.10	0.08	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.05	0.39	0.39	0.43	0.43	
2023_Q3_28	8/10/23 0:01	8/10/23 23:01	589	0.03	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.06	0.06	0.06	0.06	
2023_Q3_29	8/10/23 23:01	8/14/23 0:01	2,032	0.11	0.11	0.11	0.00	0.00	0.02	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.52	0.52	0.52	0.52	
2023_Q3_30	8/14/23 0:01	8/14/23 23:01	585	0.03	0.06	0.03	0.00	0.00	0.01	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.18	0.18	0.18	0.18	
2023_Q3_31	8/14/23 23:01	8/17/23 0:01	1,545	0.08	0.21	0.09	0.00	0.00	0.01	0.33	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.72	0.72	0.75	0.75	
2023_Q3_32	8/17/23 0:01	8/17/23 23:01	695	0.03	0.12	0.04	0.00	0.00	0.00	0.18	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.36	0.36	0.39	0.39	
2023_Q3_33	8/17/23 23:01	8/21/23 0:01	1,830	0.08	0.34	0.11	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.93	0.93	1.00	1.00	
2023_Q3_34	8/21/23 0:01	8/21/23 23:01	524	0.02	0.10	0.03	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.26	0.26	0.28	0.28	
2023_Q3_35	8/21/23 23:01	8/24/23 0:01	1,123	0.05	0.14	0.08	0.01	0.00	0.00	0.18	0.00	0.00	0.00	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.46	0.46	0.50	0.50	
2023_Q3_36	8/24/23 0:01	8/24/23 23:01	532	0.02	0.02	0.04	0.01	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.17	0.17	0.18	0.18	
2023_Q3_37	8/24/23 23:01	8/28/23 0:01	1,661	0.08	0.27	0.12	0.03	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.04	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.75	0.80	0.84	0.84	
2023_Q3_38	8/28/23 0:01	8/28/23 23:01	775	0.04	0.22	0.06	0.01	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.02	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.45	0.50	0.51	0.51	
2023_Q3_39	8/28/23 23:01	9/1/23 8:58	8,529	0.41	1.40	0.54	0.07	0.00	0.00	0.64	0.00	0.00	0.00	0.00	0.10	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.31	3.06	3.30	3.41	3.41		
2023_Q3_40	9/1/23 8:58	9/1/23 9:01	37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2023_Q3_41	9/1/23 8:58	9/1/23 23:01	1,856	0.08	0.08	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.24	0.24	0.24	0.24	
2023_Q3_42	9/1/23 23:01	9/4/23 0:01	3,741	0.18	0.22	0.18																							

**TABLE 6B
OUTFALL 003 CAPTURED MASS LOAD BY COMPOUND AND TIME INTERVAL - Q3 2023
Chemours Fayetteville Works, North Carolina**

Interval Details					Calculated Captured Mass Load (lbs) ¹																							
Interval ID	Start Time	End Time	Duration (hours)	Total Flow (MG)	HFPO-DA	PFMOAA	PFO2HxA	PFO3OA	PFO4DA	PFO5DA	PMPA	PEPA	PS Acid	Hydro-PS Acid	R-PSDA	Hydrolyzed PSDA	R-PSDCA	NVHOS	EVE Acid	Hydro-EVE Acid	R-EVE	PES	PFECA B	PFECA-G	Total Attachment C ²	Total Table 3+ (17 compounds) ³	Total Table 3+ (20 compounds)	
OF003 2023 1 Q3	7/1/23 0:00	7/31/23 23:59	744	13	0.62	1.8	0.63	0.17	0.081	0.048	0.32	0.11	0.084	0.031	0.030	0.10	0.00093	0.028	0.0031	0.018	0.015	0.00093	0	0	0	0	4.0	4.1
OF003 2023 2 Q3	8/1/23 0:00	8/31/23 23:59	744	25	1.1	3.1	1.2	0.33	0.17	0.11	0.57	0.19	0.13	0.049	0.029	0.092	0.0015	0.043	0.0053	0.031	0.015	0	0	0	7.0	7.0	7.2	
OF003 2023 3 Q3	9/1/23 0:00	9/30/23 23:59	720	12	0.49	1.1	0.41	0.13	0.065	0.034	0.18	0.064	0.045	0.020	0.015	0.041	0	0.016	0.0018	0.012	0.0072	0	0	0	2.5	2.5	2.6	
Total				49	2.2	6.0	2.2	0.63	0.32	0.19	1.1	0.36	0.26	0.10	0.073	0.23	0.0024	0.087	0.010	0.061	0.037	0.00093	0	0	9.5	13	14	

Notes:
 1 - The calculated captured mass load is a product of the concentration difference in the influent and the effluent samples and total flow at the influent for the sampling interval, see Appendix B for more details.
 2 - Total Attachment C does not include Perfluorohexanoic acid (PFHpA).
 3 - Total Table 3+ (17 compounds) does not include PFHpA, R-PSDA, Hydrolyzed PSDA, and R-EVE.
 Where mass loads are equal to 0 kg, the compound was not detected above the reporting limit.
 OF003 - previously Old Outfall 002 treatment system
 lbs - pounds
 MG - million gallons

**TABLE 6C
SEEP A FLOW THROUGH CELL CAPTURED MASS LOAD BY COMPOUND AND TIME INTERVAL - Q3 2023
Chemours Fayetteville Works, North Carolina**

Interval Details					Calculated Captured Mass Load (lbs) ¹																							
Interval ID	Start Time	End Time	Duration (hours)	Total Flow (MG)	Hfpo Dimer Acid	PFMOAA	PFO2HxA	PFO3OA	PFO4DA	PFO5DA	PMPA	PEPA	PS Acid	Hydro-PS Acid	R-PSDA	Hydrolyzed PSDA	R-PSDCA	NVHOS	EVE Acid	Hydro-EVE Acid	R-EVE	PES	PFECA B	PFECA-G	Total Attachment C ²	Total Table 3+ (17 compounds) ³	Total Table 3+ (20 compounds)	
SeepA 2023 1 Q3	7/1/23 0:00	7/14/23 18:00	330	1.8	0.094	0.22	0.15	0.050	0.021	0.013	0.072	0.030	0.0010	0.0046	0.012	0.048	0	0.0034	0	0.0037	0.0052	0	0	0	0	0.66	0.66	0.72
SeepA 2023 2 Q3	7/14/23 18:01	7/31/23 18:00	408	1.1	0.056	0.12	0.086	0.026	0.012	0.0078	0.037	0.017	0	0.0025	0.0067	0.027	0	0.0025	0	0.0018	0.0028	0	0	0	0	0.37	0.37	0.41
SeepA 2023 3 Q3	7/31/23 18:01	8/14/23 18:00	336	0.6	0.047	0.082	0.067	0.023	0.010	0.0059	0.035	0.014	0.00029	0.0018	0.0037	0.023	0	0.0021	0	0.0015	0.0012	0	0	0	0	0.29	0.29	0.32
SeepA 2023 4 Q3	8/14/23 18:01	8/30/23 18:00	384	0.5	0.034	0.080	0.059	0.018	0.0078	0.0063	0.022	0.010	0.00027	0.0016	0.0028	0.014	0	0.0014	0	0.0013	0.0015	0.000013	0	0	0	0.24	0.24	0.26
SeepA 2023 5 Q3	8/30/23 18:01	9/15/23 9:00	375	1.0	0.045	0.087	0.073	0.025	0.013	0.0075	0.032	0.011	0.00063	0.0023	0.0046	0.012	0	0.0014	0	0.0019	0.0020	0	0	0	0	0.30	0.30	0.32
SeepA 2023 6 Q3	9/15/23 9:01	9/23/23 23:59	207	0.035	0.0020	0.0046	0.0029	0.00093	0.00041	0.00024	0.0014	0.00055	0.0000085	0.000079	0.00017	0.00061	0	0.00006	0	0.000064	0.00009	0	0	0	0	0.013	0.01	0.014
Total				5.1	0.28	0.59	0.44	0.14	0.064	0.041	0.20	0.082	0.0022	0.013	0.030	0.13	0	0.011	0	0.010	0.013	0.000013	0	0	1.9	1.9	2.0	

Notes:

1 - The calculated captured mass load is a product of the concentration difference in the influent and the effluent samples and total flow recorded at the influent for the sampling interval.

2 - Total Attachment C does not include Perfluorheptanoic acid (PFHpA).

3 - Total Table 3+ (17 compounds) does not include PFHpA, R-PSDA, Hydrolyzed PSDA, and R-EVE.

Where mass loads are equal to 0 kg, the compound was not detected above the reporting limit.

-- mass load not calculated

lbs - pounds

MG -million gallons

**TABLE 6D
SEEP B FLOW THROUGH CELL CAPTURED MASS LOAD BY COMPOUND AND TIME INTERVAL - Q3 2023
Chemours Fayetteville Works, North Carolina**

Interval Details					Calculated Captured Mass Load (lbs) ¹																								
Interval ID	Start Time	End Time	Duration (hours)	Total Flow (MG)	Hfpo Dimer Acid	PFMOAA	PFO2HxA	PFO3OA	PFO4DA	PFO5DA	PMPA	PEPA	PS Acid	Hydro-PS Acid	R-PSDA	Hydrolyzed PSDA	R-PSDCA	NVHOS	EVE Acid	Hydro-EVE Acid	R-EVE	PES	PFECA B	PFECA-G	Total Attachment C ²	Total Table 3+ (17 compounds) ³	Total Table 3+ (20 compounds)		
SeepB_2023_1_Q3	7/1/2023 00:00	7/14/2023 18:00	330	1.5	0.053	0.202	0.088	0.015	0.0035	0.0020	0.075	0.035	0.00062	0.0025	0.0090	0.048	0	0.0045	0.00036	0.0035	0.0073	0	0	0	0	0	0.48	0.48	0.54
SeepB_2023_2_Q3	7/14/2023 18:01	7/31/2023 18:00	408	0.94	0.027	0.063	0.036	0.0077	0.0023	0	0.023	0.012	0	0	0.0047	0.014	0	0.0020	0	0	0.0026	0	0	0	0	0	0.18	0.18	0.19
SeepB_2023_3_Q3	7/31/2023 18:01	8/14/2023 18:00	336	0.70	0.054	0.067	0.10	0.020	0.0028	0.0013	0.033	0.024	0	0.0013	0.0080	0.053	0	0.0067	0.00020	0.0019	0.0046	0	0	0	0	0	0.31	0.31	0.38
SeepB_2023_4_Q3	8/14/2023 18:01	8/30/2023 18:00	384	0.31	0.037	0.050	0.082	0.013	0.0014	0.00036	0.016	0.016	0	0.00071	0.0045	0.030	0.000064	0.0049	0.00012	0.0011	0.0032	0.000012	0	0	0	0	0.22	0.22	0.27
SeepB_2023_5_Q3	8/30/2023 18:01	9/15/2023 09:00	375	0.67	0.026	0.024	0.032	0.0060	0.0012	0.00044	0.015	0.0069	0	0.00056	0.0018	0.010	0	0.0019	0	0.0006	0.0011	0	0	0	0	0	0.11	0.11	0.12
SeepB_2023_6_Q3	9/15/2023 09:01	9/30/2023 23:59	375	0.16	0.0033	0.0061	0.004	0.00088	0.00024	0.00016	0.0027	0.0012	0	0	0.00031	0.00075	0	0.00020	0	0.00010	0.00016	0	0	0	0	0	0.019	0.019	0.020
Total				4.3	0.20	0.41	0.34	0.062	0.011	0.0042	0.164	0.094	0.00117	0.0052	0.028	0.156	0.000064	0.020	0.00068	0.0072	0.019	0.000012	0	0	0	1.3	1.3	1.5	

Notes:

1 - The calculated captured mass load is a product of the concentration difference in the influent and the effluent samples and total flow recorded at the influent for the sampling interval.

2 - Total Attachment C does not include Perfluoroheptanoic acid (PFHpA).

3 - Total Table 3+ (17 compounds) does not include PFHpA, R-PSDA, Hydrolyzed PSDA, and R-EVE.

Where mass loads are equal to 0 kg, the compound was not detected above the reporting limit.

lbs - pounds

MG - million gallons

TABLE 6E
SEEP C FLOW THROUGH CELL CAPTURED MASS LOAD BY COMPOUND AND TIME INTERVAL - Q3 2023
Chemours Fayetteville Works, North Carolina

Interval Details					Calculated Captured Mass Load (lbs) ¹																							
Interval ID	Start Time	End Time	Duration (hours)	Total Flow (MG)	Hfpo Dimer Acid	PFMOAA	PFO2HxA	PFO3OA	PFO4DA	PFO5DA	PMPA	PEPA	PS Acid	Hydro-PS Acid	R-PSDA	Hydrolyzed PSDA	R-PSDCA	NVHOS	EVE Acid	Hydro-EVE Acid	R-EVE	PES	PFECA B	PFECA-G	Total Attachment C ²	Total Table 3+ (17 compounds) ³	Total Table 3+ (20 compounds)	
SeepC 2023 1 Q3	7/1/23 0:00	7/14/23 18:00	330	0.86	0.018	0.055	0.028	0.0092	0.0033	0	0.011	0.0039	0	0.00079	0.0016	0.00086	0	0	0	0.0014	0.0010	0	0	0	0	0.134	0.134	0.134
SeepC 2023 2 Q3	7/14/23 18:01	7/31/23 18:00	408	1.0	0.031	0.064	0.040	0.014	0.0052	0	0.014	0.0051	0	0	0.0026	0	0	0.0016	0	0.0025	0.0017	0	0	0	0	0.179	0.179	0.179
SeepC 2023 3 Q3	7/31/23 18:01	8/14/23 18:00	336	0.41	0.012	0.026	0.016	0.0057	0.0022	0.00048	0.0070	0.0021	0	0.00041	0	0	0	0.00067	0	0.00085	0	0	0	0	0	0.074	0.074	0.074
SeepC 2023 4 Q3	8/14/23 18:01	8/30/23 18:00	384	0.26	0.0075	0.021	0.013	0.0039	0.0014	0	0.0040	0.0013	0	0.00021	0.00039	0.00028	0	0.00041	0	0.00052	0.00041	0	0	0	0	0.053	0.053	0.053
SeepC 2023 5 Q3	8/30/23 18:01	9/15/23 9:00	375	0.59	0.026	0.045	0.033	0.012	0.0038	0	0.012	0.0044	0	0.00073	0.00088	0.00025	0	0.00087	0	0.0019	0.0011	0	0	0	0	0.14	0.14	0.14
SeepC 2023 6 Q3	9/15/23 9:01	9/19/23 9:00	96	0.044	0.0012	0.0023	0.0012	0.00040	0.00014	0	0.00046	0.00016	0	0.000035	0	0	0	0.000046	0	0.00044	0	0	0	0	0	0.0061	0.0061	0.0061
SeepC 2023 7 Q3	9/19/23 9:01	9/30/23 23:59	279	0.38	0.0077	0.019	0.010	0.0030	0.0012	0	0.0038	0.0012	0	0.00025	0.00045	0.00021	0	0.00026	0	0.00051	0.00035	0	0	0	0	0.048	0.048	0.048
Total				3.6	0.10	0.23	0.14	0.048	0.017	0.00048	0.051	0.018	0	0.0024	0.0059	0.0016	0	0.0038	0	0.0080	0.0046	0	0	0	0.63	0.63	0.63	

Notes:

1 - The calculated captured mass load is a product of the concentration difference in the influent and the effluent samples and total flow recorded at the influent for the sampling interval.

2 - Total Attachment C does not include Perfluoroheptanoic acid (PFHpA).

3 - Total Table 3+ (17 compounds) does not include PFHpA, R-PSDA, Hydrolyzed PSDA, and R-EVE.

Where mass loads are equal to 0 kg, the compound was not detected above the reporting limit.

lbs - pounds

MG - million gallons

**TABLE 6F
SEEP D FLOW THROUGH CELL CAPTURED MASS LOAD BY COMPOUND AND TIME INTERVAL - Q3 2023
Chemours Fayetteville Works, North Carolina**

Interval Details					Calculated Captured Mass Load (lbs) ¹																							
Interval ID	Start Time	End Time	Duration (hours)	Total Volume (MG)	Hfpo Dimer Acid	PFMOAA	PFO2HxA	PFO3OA	PFO4DA	PFO5DA	PMPA	PEPA	PS Acid	Hydro-PS Acid	R-PSDA	Hydrolyzed PSDA	R-PSDCA	NVHOS	EVE Acid	Hydro-EVE Acid	R-EVE	PES	PFECA B	PFECA-G	Total Attachment C ²	Total Table 3+ (17 compounds) ³	Total Table 3+ (20 compounds)	
SeepD 2023 1 Q3	7/1/23 0:00	7/14/23 18:00	330	0.66	0.044	0.18	0.075	0.025	0.0077	0.00072	0.026	0.0092	0	0.0013	0.0034	0.0075	0	0.0019	0	0.0039	0.0031	0	0	0	0	0.37	0.37	0.39
SeepD 2023 2 Q3	7/14/23 18:01	7/31/23 18:00	408	0.34	0.025	0.080	0.036	0.012	0.0037	0	0.011	0.0036	0	0.00059	0.0015	0.0028	0	0.00096	0	0.0017	0.0013	0	0	0	0	0.17	0.17	0.18
SeepD 2023 3 Q3	7/31/23 18:01	8/14/23 18:00	336	0.050	0.0053	0.012	0.0073	0.0020	0.00046	0	0.0020	0.00069	0	0.000079	0.00028	0.00050	0	0.00020	0	0.00021	0.00015	0	0	0	0	0.030	0.030	0.031
SeepD 2023 4 Q3 ⁴	8/14/23 18:01	8/30/23 18:00	384	0.042	0.0045	0.018	0.012	0.0020	0.00042	0	0.0022	0.00089	0	0.000049	0.00027	0.00048	0	0.00026	0	0.00017	0.00027	0	0	0	0	0.041	0.041	0.041
SeepD 2023 5 Q3	8/30/23 18:01	9/15/23 9:00	375	0.22	0.013	0.034	0.020	0.0043	0.0011	0	0.0053	0.0018	0	0.00023	0.00055	0.0012	0	0.00059	0	0.00063	0.00050	0	0	0	0	0.080	0.080	0.082
SeepD 2023 6 Q3	9/15/23 9:01	9/30/23 23:59	375	0.0075	0.00041	0.0013	0.00062	0.00017	0.000048	0.0000060	0.00018	0.000063	0	0.0000088	0.000020	0.000034	0	0.000016	0	0.000022	0.000019	0	0	0	0	0.0028	0.0028	0.0029
Total				1.3	0.092	0.32	0.15	0.045	0.013	0.00072	0.047	0.016	0	0.0023	0.0061	0.013	0	0.0039	0	0.0065	0.0053	0	0	0	0.70	0.70	0.72	

Notes:
 1 - The calculated captured mass load is a product of the concentration difference in the influent and the effluent samples and total flow recorded at the influent for the sampling interval.
 2 - Total Attachment C does not include Perfluoroheptanoic acid (PFHpA).
 3 - Total Table 3+ (17 compounds) does not include PFHpA, R-PSDA, Hydrolyzed PSDA, and R-EVE.
 4 - The 8/14/2023 sample results were reported as effluent PFAS detections appearing higher than influent. Based on historical data, it is assumed that this was a result of a field labeling error, and influent concentrations were actually higher than effluent, as presented above.
 Where mass loads are equal to 0 kg, the compound was not detected above the reporting limit.

lbs - pounds
 MG - million gallons

TABLE 6G
STORMWATER TREATMENT SYSTEM CAPTURED MASS LOAD
BY COMPOUND AND DATE - Q3 2023
Chemours Fayetteville Works, North Carolina

Date ¹	Total Flow (MG) ²	Calculated Captured Mass Load (lbs) ^{3,4}			
		HFPO-DA	PFMOAA	PMPA	Total of 3 Compounds ⁵
7/6/23	0.14	0.041	0.010	0.0010	0.052
7/7/23	0.15	0.044	0.011	0.0011	0.056
7/8/23	0.13	0.040	0.010	0.0010	0.051
7/9/23	0.13	0.039	0.0094	0.0010	0.050
7/10/23	0.13	0.031	0.010	0.00089	0.042
7/11/23	0.083	0.021	0.0064	0.00059	0.028
7/22/23	0.14	0.034	0.016	0.0013	0.051
7/23/23	0.14	0.033	0.015	0.0013	0.050
7/24/23	0.12	0.028	0.013	0.0011	0.043
7/25/23	0.051	0.012	0.0055	0.00047	0.018
7/26/23	0.058	0.014	0.0044	0.00040	0.019
8/11/23	0.11	0.032	0.011	0.00092	0.044
8/12/23	0.12	0.033	0.012	0.00097	0.046
8/13/23	0.064	0.018	0.0064	0.00053	0.025
8/15/23	0.073	0.022	0.012	0.00085	0.035
8/26/23	0.059	0.027	0.013	0.00054	0.040
8/27/23	0.019	0.008	0.0042	0.00017	0.013
8/28/23	0.067	0.030	0.015	0.00061	0.046
8/30/23	0.14	0.063	0.031	0.0013	0.095
8/31/23	0.15	0.069	0.035	0.0014	0.105
9/1/23	0.16	0.044	0.083	0.0015	0.128
9/2/23	0.15	0.039	0.074	0.0013	0.114
9/3/23	0.11	0.028	0.053	0.0010	0.083
9/4/23	0.089	0.023	0.043	0.00081	0.067
9/21/23	0.15	0.037	0.027	0.00076	0.065
9/22/23	0.15	0.038	0.028	0.00078	0.066
9/23/23	0.14	0.035	0.026	0.00073	0.062
9/24/23	0.15	0.032	0.031	0.00082	0.064
9/25/23	0.13	0.028	0.028	0.00072	0.056
9/26/23	0.13	0.028	0.028	0.00072	0.056
Total	3.4	0.97	0.67	0.027	1.7

Notes:

lbs - pounds

MG - million gallons

1 - Listed dates are days when flow was recorded at the Stormwater Treatment System.

2 - Total daily flows were based on the volume recorded via a totalizer at the Stormwater Treatment System effluent.

3 - The calculated captured mass load is a product of the concentration difference in the influent and the effluent samples and total flow at the effluent for the sampling date, see Appendix B for

4 - For days where only flow was recorded, the concentrations from the closest date was used to calculate mass loads.

5 - Only HFPO-DA, PFMOAA and PMPA are recorded at this location. Thus, the total captured mass load presented here is summed over these three compounds only.

TABLE 7
SUMMARY OF TOTAL PFAS MASS DISCHARGE AT TAR HEEL FERRY ROAD BRIDGE - Q3 2023
Chemours Fayetteville Works, North Carolina

Field Sample ID	Collection Date	Hours Composited ¹	Concentrations (ng/L)			Total Volume (MG) ⁴	Instantaneous Flow Rate (ft ³ /s) ⁵	Mass Discharge (mg/s)		
			Total Attachment C ²	Total Table 3+ (17 compounds) ³	Total Table 3+ (20 compounds)			Total Attachment C ²	Total Table 3+ (17 compounds) ³	Total Table 3+ (20 compounds)
CFR-TARHEEL-24-070323	7/3/23 23:01	24	8.3	8.3	8.3	4,419	--	1.7	1.7	1.7
CFR-TARHEEL-24-070523	7/5/23 23:01	24	6.2	6.2	8.4	3,444	--	1.0	1.0	1.3
CFR-TARHEEL-24-070723	7/7/23 23:01	24	11	11	14	3,482	--	1.8	1.8	2.2
CFR-TARHEEL-24-071023	7/10/23 23:01	24	11	11	20	5,119	--	2.6	2.6	4.6
CFR-TARHEEL-24-071323	7/13/23 23:01	24	7.4	7.4	10	3,757	--	1.3	1.3	1.7
CFR-TARHEEL-24-071723	7/17/23 23:01	24	8.8	8.8	8.8	3,292	--	1.3	1.3	1.3
CFR-TARHEEL-24-072023	7/20/23 23:01	24	15	15	21	1,957	--	1.4	1.4	1.8
CFR-TARHEEL-24-072423	7/24/23 23:01	24	21	21	29	1,173	--	1.1	1.1	1.6
CFR-TARHEEL-24-072423-D	7/24/23 23:01	24	21	21	28	1,173	--	1.1	1.1	1.5
CAP3Q23-CFR-TARHEEL-072723	7/27/23 10:18	0	39	39	42	--	1,260	1.4	1.4	1.5
CAP3Q23-CFR-TARHEEL-6-072723	7/27/23 13:46	6	44	44	47	143	--	1.3	1.3	1.4
CFR-TARHEEL-24-072723	7/27/23 23:01	24	33	33	35	712	--	1.1	1.1	1.1
CFR-TARHEEL-24-073123	7/31/23 23:01	24	39	39	39	528	--	1.0	1.0	1.0
CFR-TARHEEL-24-080323	8/3/23 23:01	24	53	53	65	592	--	1.4	1.4	1.7
CFR-TARHEEL-24-080723	8/7/23 23:01	24	54	54	62	576	--	1.4	1.4	1.6
CFR-TARHEEL-24-081023	8/10/23 23:01	24	13	13	13	589	--	0.3	0.3	0.3
CFR-TARHEEL-24-081423	8/14/23 23:01	24	68	68	68	585	--	1.8	1.8	1.8
CFR-TARHEEL-24-081423-D	8/14/23 23:01	24	25	25	25	585	--	0.7	0.7	0.7
CFR-TARHEEL-24-081723	8/17/23 23:01	24	63	63	67	695	--	2.0	2.0	2.1
CFR-TARHEEL-24-082123	8/21/23 23:01	24	59	59	64	524	--	1.4	1.4	1.5
CFR-TARHEEL-24-082423	8/24/23 23:01	24	38	38	42	532	--	0.9	0.9	1.0
CFR-TARHEEL-24-082823	8/28/23 23:01	24	70	77	80	775	--	2.5	2.7	2.8
CFR-TARHEEL-090123	9/1/23 9:10	0	16	16	16	37	5,430	2.5	2.5	2.5
CFR-TARHEEL-15-090123	9/1/23 23:01	15	15	15	15	1,819	--	2.1	2.1	2.1
CFR-TARHEEL-24-090423	9/4/23 23:01	24	22	22	22	961	--	1.0	1.0	1.0
CFR-TARHEEL-24-090723	9/7/23 23:01	24	20	20	20	653	--	0.6	0.6	0.6
CFR-TARHEEL-24-091123	9/11/23 23:01	24	22	22	22	1,240	--	1.2	1.2	1.2
CFR-TARHEEL-24-091123-D	9/11/23 23:01	24	22	22	22	1,240	--	1.2	1.2	1.2
CFR-TARHEEL-24-091523	9/15/23 23:01	24	27	27	27	660	--	0.8	0.8	0.8
CFR-TARHEEL-24-091823	9/18/23 23:01	24	29	29	29	935	--	1.3	1.3	1.3
CFR-TARHEEL-24-092223	9/22/23 23:01	24	50	50	59	562	--	1.3	1.3	1.5
CFR-TARHEEL-24-092523	9/25/23 23:01	24	42	42	47	912	--	1.8	1.8	2.0
CFR-TARHEEL-24-092823	9/28/23 23:01	24	38	61	64	583	--	1.0	1.6	1.7

Notes:

- 1 - Samples with a compositing duration of zero (0) hours are grab samples.
 - 2 - Total Attachment C does not include Perfluoroheptanoic acid (PFHpA).
 - 3 - Total Table 3+ (17 compounds) does not include PFHpA, R-PSDA, Hydrolyzed PSDA, and R-EVE.
 - 4 - Total flow volume is determined based on measurements taken over the sample collection period.
 - 5 - For samples with a duration of zero (0) hours, i.e., grab samples, the instantaneous flow rate was used to calculate the mass discharge.
- - not applicable

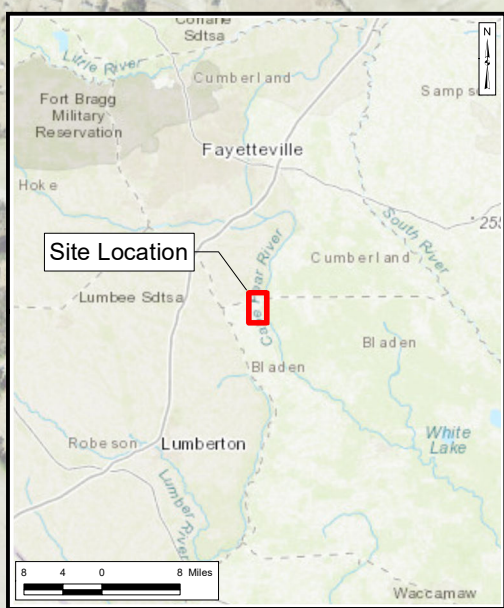
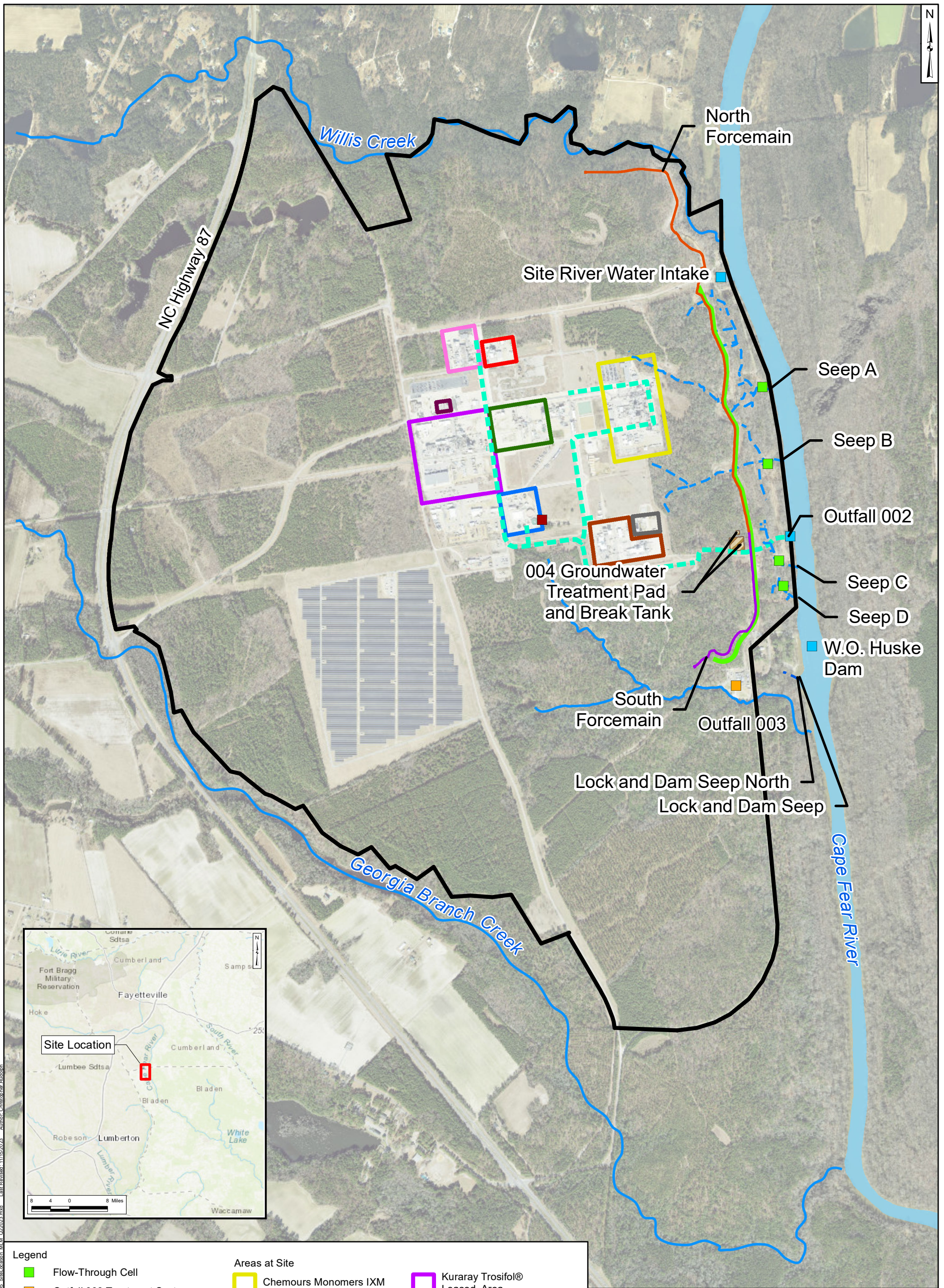
ft³/s - cubic feet per second

MG - million gallons

mg/s - milligrams per second

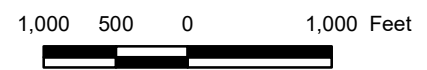
ng/L - nanograms per liter

Figures



Legend		Areas at Site	
■	Flow-Through Cell	 	Chemours Monomers IXM
■	Outfall 003 Treatment System	 	Chemours Polymer Processing Aid Area
■	Stormwater Treatment System	 	DuPont Polyvinyl Fluoride Leased Area
■	Site Features	 	Former DuPont PMDF Area
	Site Boundary	 	Kuraray SentryGlas® Leased Area
—	Nearby Tributary	 	Wastewater Treatment Plant
- - -	Observed Seep (Natural Drainage)	 	Power - Filtered and Demineralized Water Production
- - -	Site Conveyance Network	 	Kuraray Laboratory
—	North Forcemain		
—	South Forcemain		
—	Barrier Wall		
	Groundwater Treatment Pad		

Notes:
 1. The outline of Cape Fear River is approximate and is based on open data from ArcGIS Online and North Carolina Department of Environmental Quality Online GIS (MajorHydro shapefile).
 2. Basemap sources: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Site Location Map
 Chemours Fayetteville Works, North Carolina

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 consultants

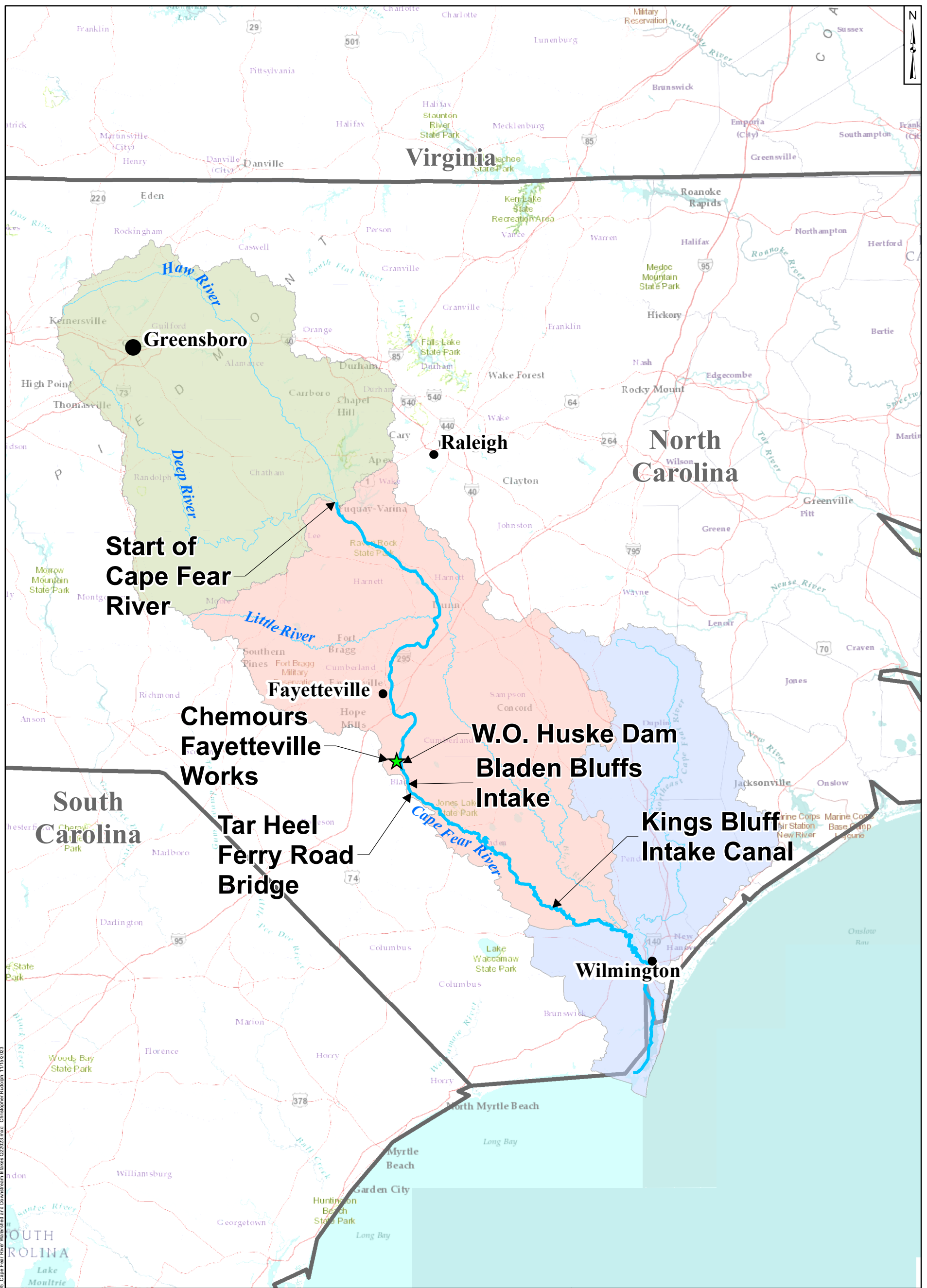
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


Figure

1



Path: P:\P\Projects\TR07\950 Database and GIS\GIS Baseline Monitoring\Workplan\TR0795 - Cape Fear River Watershed and Downstream Intakes Q22023.mxd; Christopher Rudo; 11/16/2023

Legend

-  Chemours Fayetteville Works
-  Upper Basin
-  Middle Basin
-  Lower Basin

Note:
 Basemap sources: Esri, DigitalGlobe, GeoEye, Earthstar
 Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN,
 and the GIS User Community.

20 10 0 20 Miles



**Cape Fear River Watershed and Downstream
 Drinking Water Intakes**
 Chemours Fayetteville Works, North Carolina

Geosyntec
 consultants

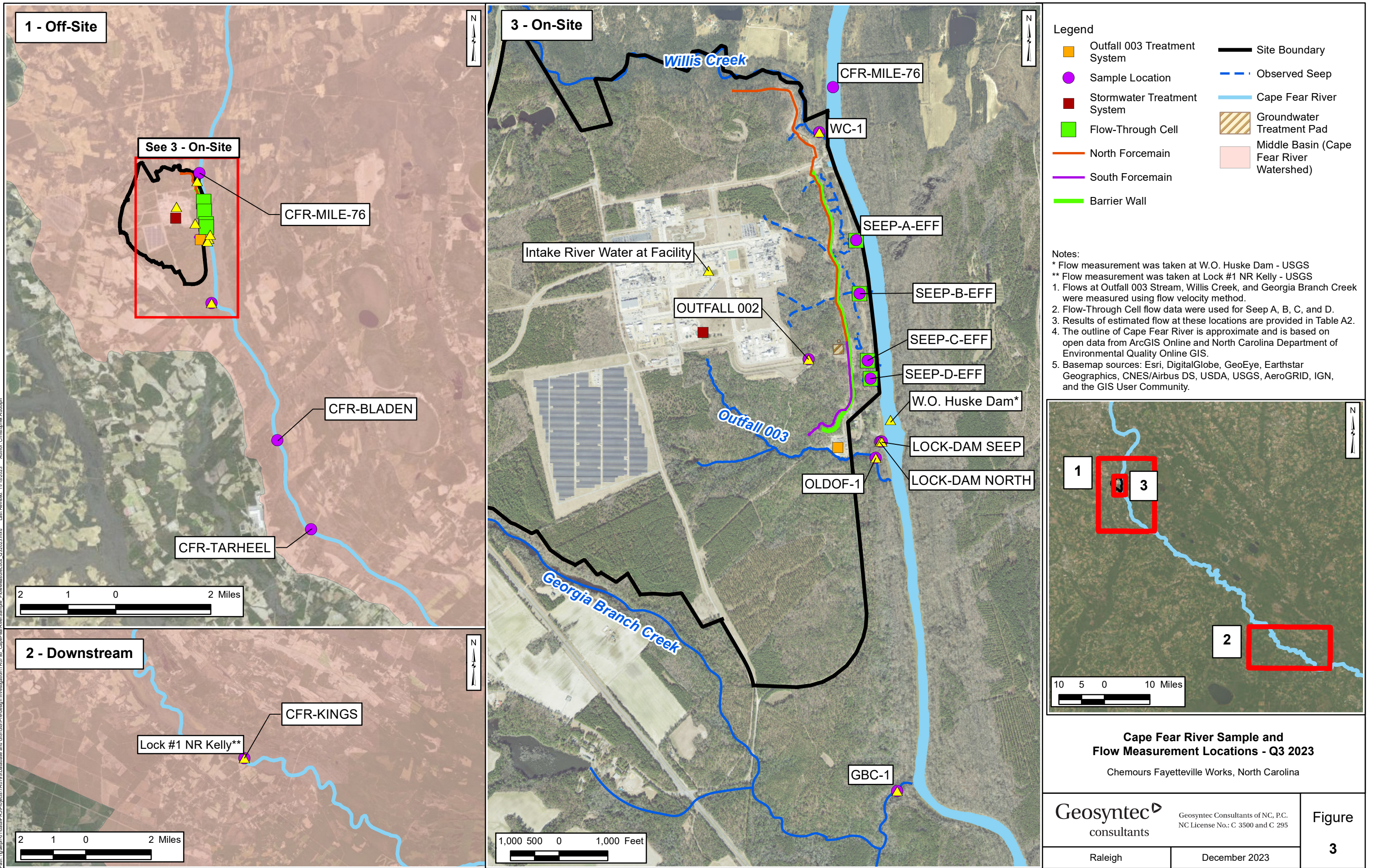
Geosyntec Consultants of NC, P.C.
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Figure

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December 2023

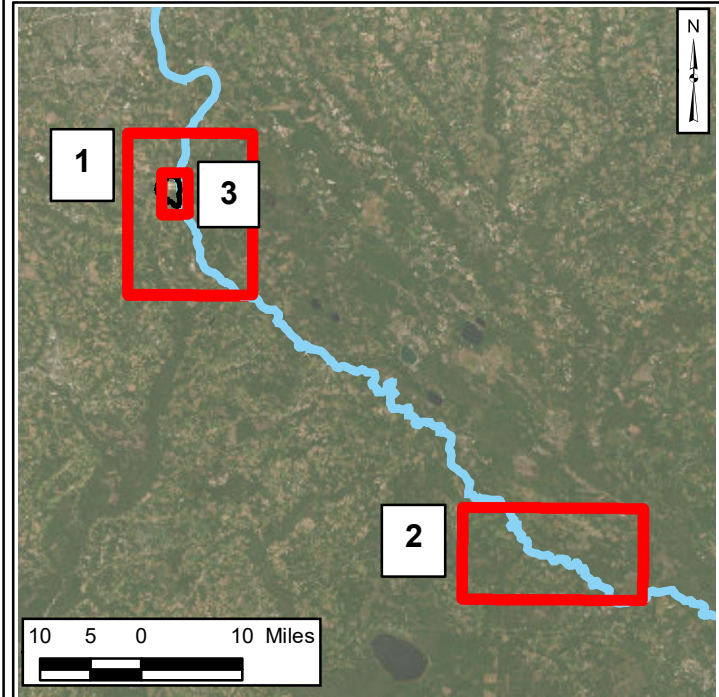
2



Legend

Outfall 003 Treatment System	Site Boundary
Sample Location	Observed Seep
Stormwater Treatment System	Cape Fear River
Flow-Through Cell	Groundwater Treatment Pad
North Forcemain	Middle Basin (Cape Fear River Watershed)
South Forcemain	
Barrier Wall	

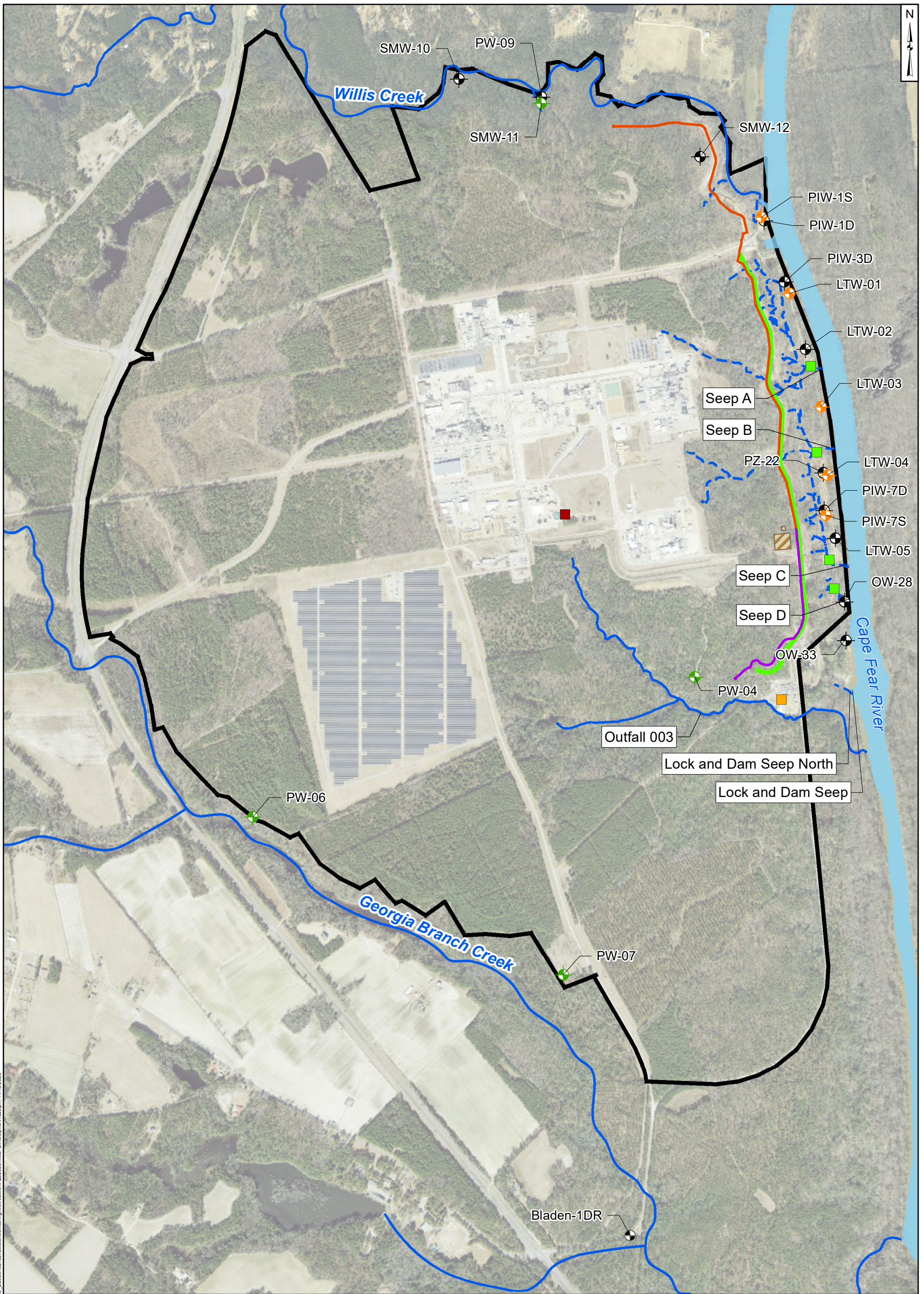
Notes:
 * Flow measurement was taken at W.O. Huske Dam - USGS
 ** Flow measurement was taken at Lock #1 NR Kelly - USGS
 1. Flows at Outfall 003 Stream, Willis Creek, and Georgia Branch Creek were measured using flow velocity method.
 2. Flow-Through Cell flow data were used for Seep A, B, C, and D.
 3. Results of estimated flow at these locations are provided in Table A2.
 4. The outline of Cape Fear River is approximate and is based on open data from ArcGIS Online and North Carolina Department of Environmental Quality Online GIS.
 5. Basemap sources: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.



Cape Fear River Sample and Flow Measurement Locations - Q3 2023
 Chemours Fayetteville Works, North Carolina

Path: \\unish-cv\share\p\proj\kcs\TR0705\GIS\GIS-Pre-Design\Investigation\TR0705_CapeFearRiver\Samps_FlowMeasurement\CS_032023.mxd
 Last Revised: 11/15/2023
 Author: Christopher Rudolph

Projection: NAD 1983 StatePlane North Carolina FIPS 3200 Feet Units in Foot US



Path: P:\P\Projects\TR0725\GIS\Baseline Monitoring\WorkArea\TR0725_BaselineGroundwaterMonitoringWellNetwork_022023.mxd; Christopher Rudolph; 11/15/2023

Legend			
	Surficial Aquifer Monitoring Well		Flow-Through Cell
	Floodplain Deposits Monitoring Well		Outfall 003 Treatment System
	Black Creek Aquifer Monitoring Well		Stormwater Treatment System
	Observed Seep		Nearby Tributary
	Site Boundary		North Forcemain
	South Forcemain		Barrier Wall
	Groundwater Treatment Pad and Break Tank		

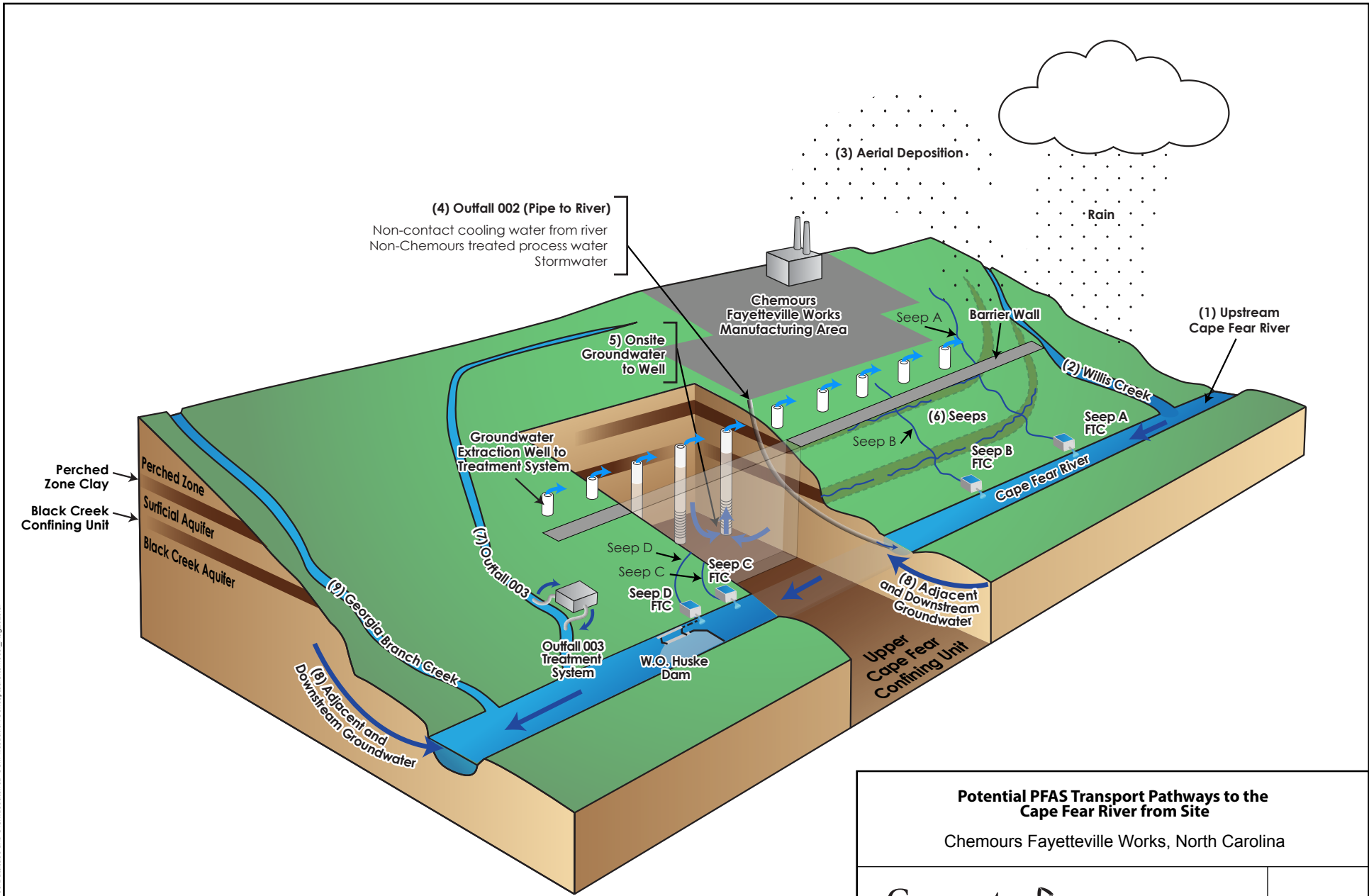
Notes:

- Bladen-1D has been abandoned and replaced with Bladen-1DR during Q1 2023.
- Due to the scale of the map, pairs of wells that are in close proximity have been offset for visibility. Therefore, the placement of these wells on this map do not reflect their true geographic coordinates.
- The outline of Cape Fear River is approximate and is based on open data from ArcGIS Online and North Carolina Department of Environmental Quality Online GIS.
- Basemap source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.

1,000 500 0 1,000 Feet

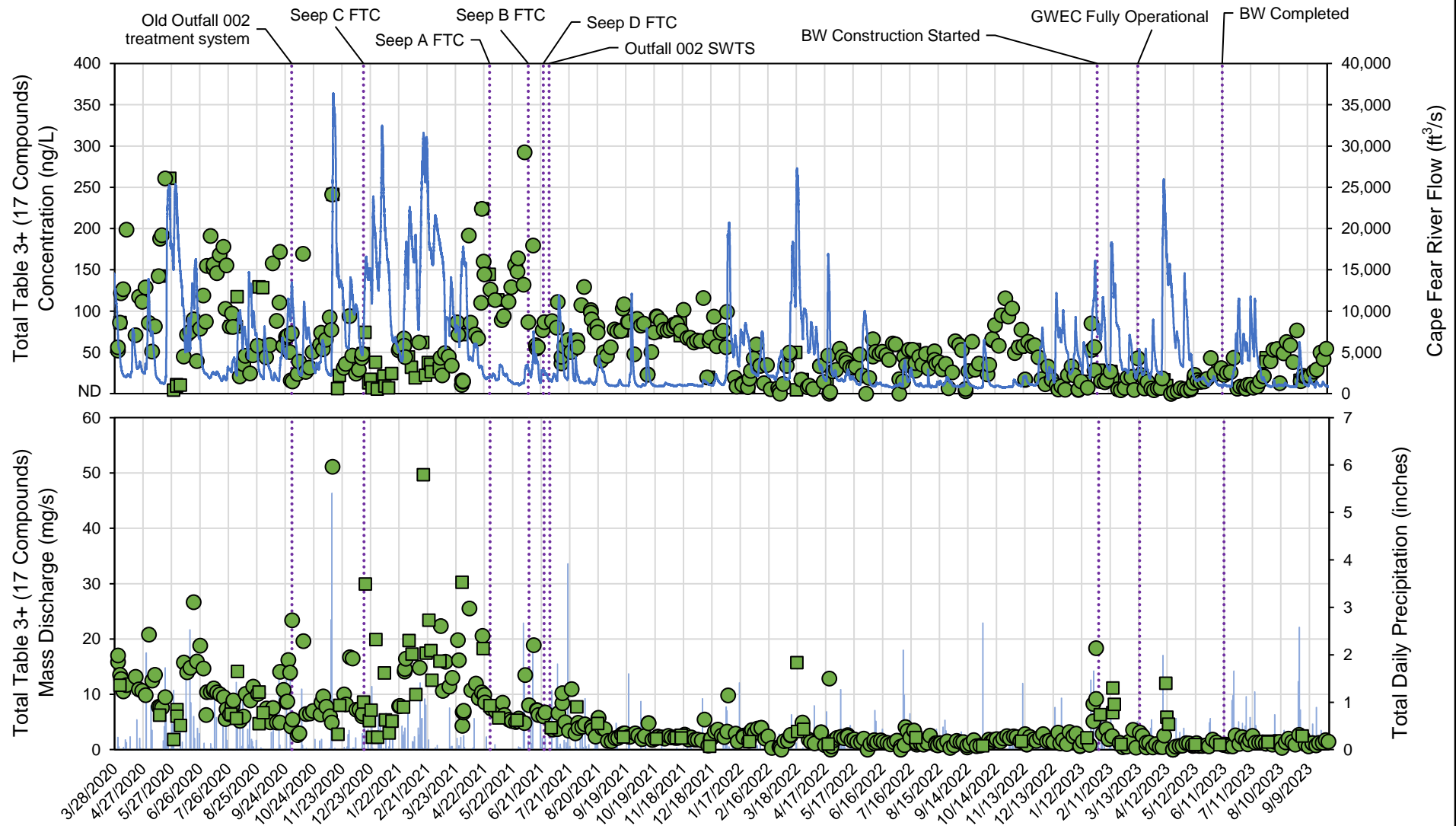
Groundwater Wells for Mass Loading Assessment
Chemours Fayetteville Works, North Carolina

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	Raleigh	



Note:
 FTC - Flow-through cell
 Image is conceptual and is not to scale

Potential PFAS Transport Pathways to the Cape Fear River from Site Chemours Fayetteville Works, North Carolina	
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Raleigh, NC	December 2023
Figure 5	

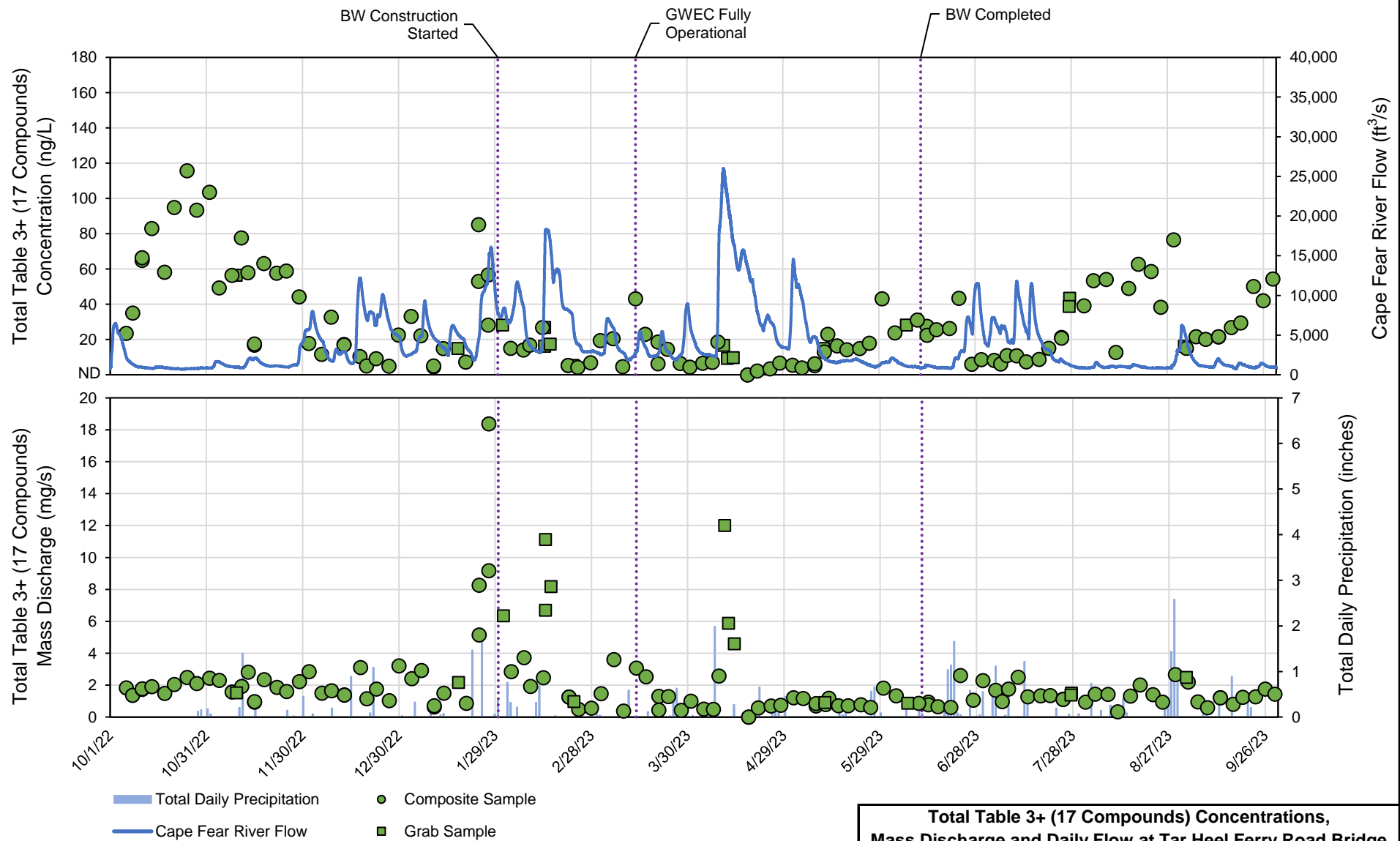


█ Total Daily Precipitation ● Composite Sample
— Cape Fear River Flow ■ Grab Sample

Notes:
 - A concentration of 0 ng/L and mass discharge of 0 mg/s indicate that all the compounds were not detected above the reporting limit.
 - Flow and precipitation data are from the USGS gauging station #02105500 located at the W.O. Huske Dam.

Abbreviations:
 BW - Barrier Wall mg/s - milligrams per second
 ft³/s - cubic feet per second ND - not detected above the detection limit
 FTC - Flow-through cell ng/L - nanograms per liter
 GWEC - Groundwater extraction and conveyance system

Total Table 3+ (17 Compounds) Concentrations, Mass Discharge and Daily Flow at Tar Heel Ferry Road Bridge Chemours Fayetteville Works, North Carolina	
	Geosyntec Consultants of NC, P.C. NC License No.: C 3500 and C 295
Raleigh	December 2023
Figure 6	



Notes:
 - A concentration of 0 ng/L and mass discharge of 0 mg/s indicate that all the compounds were not detected above the reporting limit.
 - PFAS concentrations calculated by summing over Attachment C compounds and Table 3+ (20 compounds) are provided in Appendix B.
 - Flow and precipitation data are from the USGS gauging station #02105500 located at the W.O. Huske Dam.

Abbreviations:
 BW - Barrier Wall
 ft³/s - cubic feet per second
 GWEC - Groundwater extraction and conveyance system
 mg/s - milligrams per second
 ND - not detected above the detection limit
 ng/L - nanograms per liter

Total Table 3+ (17 Compounds) Concentrations, Mass Discharge and Daily Flow at Tar Heel Ferry Road Bridge (Previous 12 Months) Chemours Fayetteville Works, North Carolina		Figure 7
Geosyntec consultants	Geosyntec Consultants of NC, P.C. NC License No.: C 3500 and C 295	
Raleigh	December 2023	