



**NORTH CAROLINA  
PUBLIC STAFF  
UTILITIES COMMISSION**

April 5, 2024

Ms. A. Shonta Dunston, Chief Clerk  
North Carolina Utilities Commission  
4325 Mail Service Center  
Raleigh, North Carolina 27699-4300

Re: Docket No. W-1343, Sub 1 – Application by GWWTP, LLC for a Certificate of Public Convenience and Necessity to Provide Wastewater Utility Service to Southern Shores Landing and Ginguite Mixed Use Development in Dare County, North Carolina, and for Approval of Rates

Dear Ms. Dunston,

Attached for filing on behalf of the Public Staff in the above-referenced dockets is the testimony and exhibits of Lindsay Q. Darden, Public Utilities Engineer, Water, Sewer, and Telephone Division of the Public Staff – North Carolina Utilities Commission.

By copy of this letter, I am forwarding a copy to all parties of record by electronic delivery.

Sincerely,

Electronically submitted  
/s/ Davia A. Newell  
Staff Attorney  
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/s/ James Bernier, Jr.  
Staff Attorney  
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cc: Parties of Record

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**CERTIFICATE OF SERVICE**

I certify that a copy of the Testimony and exhibits have been served on all parties of record or their attorneys, or both, in accordance with Commission Rule R1-39, by United States Mail, first class or better; by hand delivery; or by means of facsimile or electronic delivery upon agreement of the receiving party.

This the 5th day of April, 2024.

Electronically submitted  
/s/ Davia A. Newell  
Staff Attorney

**BEFORE THE NORTH CAROLINA UTILITIES COMMISSION**

**DOCKET NO. W-1343, SUB 1**

In the Matter of	)	
Application by GWWTP, LLC for a	)	
Certificate of Public Convenience and	)	<b>TESTIMONY OF</b>
Necessity to Provide Wastewater Utility	)	<b>LINDSAY Q. DARDEN</b>
Service to Southern Shores Landing and	)	<b>PUBLIC STAFF –</b>
Ginguite Mixed Use Development in Dare	)	<b>NORTH CAROLINA</b>
County, North Carolina, and for Approval	)	<b>UTILITIES COMMISSION</b>
of Rates	)	

**April 5, 2024**

1   **Q.   Please state your name, business address, and present**  
2       **position.**

3   A.   My name is Lindsay Q. Darden. My business address is 430 North  
4       Salisbury Street, Dobbs Building, Raleigh, North Carolina. I am a  
5       Public Utilities Engineer with the Water, Sewer, and Telephone  
6       Division of the Public Staff – North Carolina Utilities Commission  
7       (Public Staff).

8   **Q.   Please state your qualifications and duties.**

9   A.   My qualifications and duties are included in Appendix A.

10   **Q.   What is the purpose of your testimony?**

11   A.   The purpose of my testimony is to provide the North Carolina Utilities  
12       Commission (Commission) with the results of my investigation of  
13       specific areas of the application filed on January 11, 2024, by  
14       GWWTP, LLC (GWWTP), in Docket No. W-1343, Sub 1, for a  
15       Certificate of Public Convenience and Necessity (CPCN) to provide  
16       wastewater utility service to Southern Shores Landing and Ginguite  
17       Mixed Use Development (collectively Ginguite Woods) in Dare  
18       County, and for approval of rates. I also discuss whether issuing a  
19       CPCN to GWWTP is in the best interest of the using and consuming  
20       public.

21       The specific areas of my investigation include reviewing consumer  
22       statements of position filed in the docket and Notices of Violation

1 (NOVs) and Notices of Deficiency (NODs) issued by the North  
2 Carolina Department of Environmental Quality (DEQ). I also assisted  
3 the Public Staff's Accounting Division with reviewing expenses,  
4 recommended rates, and plant in service.

5 **Q. Please describe the Ginguite Woods service area and**  
6 **wastewater utility system.**

7 A. The Ginguite Woods service area consists of Southern Shores  
8 Landing, a subdivision with 38 single-family homes, and Ginguite  
9 Mixed Use Development, a future development consisting of retail  
10 and residential townhomes. The subdivision and the mixed-use  
11 property are adjacent to each other and are along North Carolina  
12 Highway 158 at the intersection of Landing Trail in Dare County.

13 Southern Shores Landing consists of single-family homes and  
14 townhomes. The Ginguite Mixed Use Development is planned to be  
15 constructed within the next two years, and the plan currently includes  
16 36 townhomes as well as office and retail spaces and a restaurant.  
17 The site of the Ginguite Mixed Use Development was formerly  
18 referred to as The Ginguite Center in Docket No. W-1139.

19 The Ginguite Woods wastewater system currently serves the 38  
20 residential customers in Southern Shores Landing and consists of  
21 32,500 gallons-per-day (GPD) wastewater collection, treatment, and  
22 spray irrigation facilities. The wastewater collection facilities consist

1 of gravity sewer lines, lift stations, and force main. The wastewater  
2 treatment plant (WWTP) and system is permitted by DEQ under  
3 Permit No. WQ0017224 for a bar screen; a 9,861-gallon aerated  
4 equalization tank; a flow splitter/control box; two aeration tanks, each  
5 with 16,420-gallon capacity; two clarifiers, each with 2,775 gallons of  
6 usable volume; a 3,211-gallon aerated sludge holding tank; blowers;  
7 a gravity-fed tertiary filter unit; a 1,840-gallon clear well; a 2,065-  
8 gallon mudwell; tablet chlorination unit; a 922-gallon chlorine contact  
9 tank; a reclaimed water utilization system including spray irrigation;  
10 a 23,114-square foot infiltration pond; piping; valves; and  
11 appurtenances. A copy of the permit is included in Exhibit 5 of the  
12 Application.

13 **Q. Please provide a brief history of the ownership and operation of**  
14 **the WWTP.**

15 A. The WWTP serving the Ginguite Woods service area has gone  
16 through periods of time when the ownership and plant operation  
17 responsibilities were not reported to, nor approved by, the  
18 Commission.

19 By order dated August 13, 2003, in Docket No. W-1139, Sub 0,  
20 Ginguite Woods Water Reclamation Association, Inc. (GWWRA),  
21 was granted a CPCN to provide sewer service in Ginguite Woods.  
22 GWWRA contracted with Enviro-Tech of North Carolina, Inc. (Enviro-

1 Tech) (formerly William G. Freed, Inc.), to operate the WWTP. On  
2 November 6, 2009, GWWRA's owner, Mr. Neal Blinken, notified the  
3 Public Staff that he did not have the necessary capital to adequately  
4 fund sewer operations. By order dated November 20, 2009, in  
5 Docket No. W-1139, Sub 4, the Commission appointed Enviro-Tech,  
6 the public utility, as emergency operator.<sup>1</sup>

7 On March 3, 2010, Paragon Utilities Inc. (Paragon), acquired  
8 ownership of GWWRA through foreclosure of assets of the Ginguite  
9 Woods system. GWWRA and Paragon did not seek or receive  
10 permission to transfer the assets or inform the Commission of the  
11 transfer.

12 Between November 13, 2015, and March 24, 2017, GWWTP  
13 acquired the system assets associated with the Ginguite Woods  
14 system and gained full ownership. GWWTP acquired and gained  
15 control of the Ginguite Woods system without seeking or receiving  
16 Commission approval. Enviro-Tech continued to operate the system  
17 after GWWTP gained ownership. On or about April 2021, Envirolink,  
18 Inc. (Envirolink), acquired the Enviro-Tech operations company, but  
19 not the public utility, and took over its operation contracts, including

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<sup>1</sup> By order dated March 1, 2002, in Docket No. W-1165, the Commission approved the transfer of the franchise to provide sewer utility service in the Villages at Ocean Hill Subdivision in Currituck County, North Carolina, from Corolla North Utilities to Enviro-Tech of North Carolina, Inc.

1           those providing service in Ginguite Woods. On or about August 2021,  
2           Enviro-Tech ceased operation of the Ginguite Woods system. The  
3           Commission was not notified of the relinquishment of service by the  
4           emergency operator as required by statute. In April 2022, GWWTP  
5           terminated the services of Envirolink and contracted Atlantic OBX,  
6           Inc. (Atlantic OBX), to operate the system and perform billing and  
7           customer service.

8           Enviro-Tech filed a Petition with the Commission on September 15,  
9           2023, to terminate its role as emergency operator, a role Enviro-Tech  
10          had relinquished in 2021. The Commission appointed GWWTP as  
11          the emergency operator by order dated January 12, 2024. The order  
12          discharged Enviro-Tech as the emergency operator, appointed  
13          GWWTP as the new emergency operator, approved increased rates,  
14          and required customer notice. In addition, Ordering Paragraph No. 2  
15          states “[t]hat pursuant to N.C.G.S. § 62-110.3(d), the \$20,000 bond  
16          posted by Enviro-Tech for Ginguite Woods is hereby declared  
17          forfeited.”

18          During periods of time in which there was inadequate operation,  
19          violations occurred, and standard maintenance work was not  
20          performed. This resulted in the degradation of the WWTP, and  
21          extensive capital improvement projects are now needed, some of



1           which GWWTP has already undertaken and others that GWWTP  
2           plans to complete.

3   **Q.     Briefly describe the results of your investigation of DEQ NOV's,**  
4           **NODs, and Civil Penalties.**

5   A.     The Ginguite Woods wastewater system operates under DEQ permit  
6           WQ0017224, which applies to the WWTP and the reclaimed water  
7           utilization system. GWWTP and the North Carolina Environmental  
8           Management Commission entered into a Settlement Agreement in  
9           June of 2022 to address noncompliance violations occurring at the  
10          WWTP from January through August 2021. The Settlement  
11          Agreement is included as Exhibit 5 of the Application. GWWTP  
12          included supporting documentation showing that they fulfilled the  
13          Settlement Agreement. The Settlement Agreement resolved the  
14          violations through August 2021. My investigation included all NOV's  
15          and NODs from September 1, 2021, through December 31, 2023.

16         Between September 1, 2021, and December 31, 2023, the Ginguite  
17         Woods WWTP received seven NOV and three NOD letters. The  
18         NOV's and NODs were the result of the following: (1) Limit  
19         Exceedances of Total Suspended Solids, Ammonia Total Nitrogen,  
20         Fecal Coliform, and/or Turbidity; (2) Monitoring Violations of Total  
21         Phosphorous, Turbidity, Total Nitrogen, Total Dissolved Solids,  
22         and/or Chloride; and (3) Reporting Violations of Total Nitrogen and/or

1 Total Dissolved Solids that occurred on September 30, 2021 (NOV-  
2 2021-LM-0093), March 14, 2022 (NOD-2022-LV-0026), October 25,  
3 2022 (NOV-2022-MV-0146), April 3, 2023 (NOV-2023-LV-0240 and  
4 NOV-2023-LM-0023), May 8, 2023 (NOV-2023-LV-0315), July 25,  
5 2023 (NOD-2023-PC-0206), August 3, 2023 (NOV-2023-LV-0533),  
6 and December 11, 2023 (NOD-2023-LV-0161). One NOV was the  
7 result of missing the Groundwater Quality Monitoring Report for  
8 August 2021, issued March 14, 2022 (NOV-2022-PC-0107).

9 An inspection of the WWTP was performed by Robert Tankard and  
10 Victoria Herdt of the Washington Regional Office of DEQ on March  
11 14, 2023. The inspection resulted in DEQ finding the facility to be  
12 non-compliant with regard to Permit WQ0017224. According to the  
13 DEQ summary report of the compliance inspection, the following  
14 issues were observed: (1) one of the blowers needed to be replaced  
15 or repaired; (2) the tankage for the clarifier, filters, and disinfection  
16 were in bad shape and need to be replaced within the next two to  
17 five years; (3) the weir and skimmer of the clarifier appeared to be  
18 nearing the end of their useful service life; (4) the tertiary filters only  
19 worked in manual mode; (5) the disinfection system needed to be  
20 repaired due to fecal result limits; (6) the reclaimed valve was  
21 questionable; (7) the irrigation system did not work; (8) new pumps  
22 and controller were probably needed; (9) the generator needed to be  
23 replaced; and (10) vegetation was needed on the infiltration pond

1 bank. The report also stated the following observations: (1) the EQ  
2 basin tanks, digester, and aeration basins were new; (2) the turbidity  
3 meter had been replaced and calibrated; and (3) the infiltration pond  
4 was cleaned and in great condition.

5 **Q. Have you conducted a site visit of the Ginguite Woods**  
6 **wastewater system and, if so, what were your observations?**

7 A. On March 19, 2024, I, along with Public Staff Attorney, Davia Newell,  
8 visually inspected the wastewater system while accompanied by  
9 GWWTP representative Bob Howsare and Atlantic OBX  
10 representative Dave Robinson. A reporter with the Outer Banks  
11 Voice, Kipp Tabb, was also present at the inspection.

12 Contractors were on-site during the site visit, working on the  
13 electrical panels for the plant. The blowers were running  
14 intermittently during the site visit. GWWTP completed an upgrade to  
15 the front end of the plant earlier this year. The front end of the plant,  
16 including the equalization (EQ) basin tanks, digester, and aerations  
17 basins appeared in excellent condition. GWWTP plans to upgrade  
18 the back end of the plant in the fall of 2024. The back-end portion of  
19 the plant appeared to be in poor condition. The tanks, panels, and  
20 walkways were very worn and rusted. The back end of the plant is  
21 still operational, but, according to the operator, it does not operate as  
22 designed in certain conditions, such as excessive rainfall. The spray

1           irrigation system is not in use and has not been in use for  
2           approximately ten years. Mr. Robinson stated that the current flow  
3           through the plant does not generate the amount of reclaimed water  
4           needed for the spray irrigation to function properly and therefore the  
5           system has not been utilized. GWWTP plans to refurbish the spray  
6           irrigation system and add a computerized controller to the system.

7           Mr. Robinson pointed out the manhole location that had previously  
8           experienced overflows. Since Atlantic OBX has been operating the  
9           plant, overflow at the manhole has occurred three times, which is  
10          significantly less frequent than under previous operators, according  
11          to customer accounts. Each overflow that Atlantic OBX has  
12          experienced was not large enough to require reporting a Sanitary  
13          Sewer Overflow report to DEQ. Pictures from the site visit are  
14          included in **Darden Exhibit No. 1**.

15   **Q.    Did GWWTP provide Notice to Customers of the Application?**

16   A.    Yes. On February 24, 2024, the Commission issued the Order  
17          Approving Customer Notice (Notice Order). On March 1, 2024,  
18          GWWTP filed a Certificate of Service stating that the notice was  
19          mailed or hand delivered by the date specified in the Notice Order.

20   **Q.    Has the Public Staff received any customer complaints?**

21   A.    No customer complaints have been received by the Public Staff  
22          Consumer Services Division.

1   **Q.    Has the Public Staff received any consumer statements of**  
2       **position?**

3    A.    Yes. As of April 2, 2024, the Public Staff has received 19 consumer  
4       statements of position. All the statements opposed the proposed rate  
5       increase. One of the consumer statements described a service issue  
6       with the sprinkler irrigation system at their home not working for the  
7       past ten years. None of the other consumer statements of position  
8       expressed concerns with the service currently provided by GWWTP.

9   **Q.    Please summarize the public hearing conducted in this case.**

10   A.    The Commission conducted a hearing to receive testimony from  
11       public witnesses on March 18, 2024, at 7:00 p.m. at the Dare County  
12       Courthouse in Manteo, North Carolina. Approximately 21 customers  
13       attended as well as two reporters. Five customers testified on the  
14       record during the hearing. All customers who attended and those that  
15       testified were residents of Southern Shores Landing.

16       Wayne Avery testified that the majority of the residents of Southern  
17       Shores Landing are retirees and live on a fixed income, and that a  
18       large increase in rates would be a significant financial burden. Mr.  
19       Avery described that most of the homes in the community are  
20       occupied by only one or two residents, which results in low usage.  
21       Mr. Avery shared his frustration with the lack of communication from  
22       “the owners” to the residents concerning the future mixed-use

1 development. Mr. Avery stated that he has been a resident for 11  
2 years and has not had any service issues during that time.

3 Matthew Huband testified that he has experienced continual odor  
4 and effluent discharge from a manhole located on Landing Trail after  
5 excessive rain. Mr. Huband stated that the odor and the overflows  
6 through the manhole have been resolved since the tank replacement  
7 that occurred late last year. Mr. Huband has been a resident since  
8 2018.

9 Linda Sears addressed consumption amounts and stated that the  
10 Homeowners Association mandates homes to have a maximum  
11 occupancy of six people due to the WWTP capacity. Ms. Sears  
12 stated that, as of the morning of that day (March 18, 2024), there  
13 were no signs or contact information for the operator, Atlantic OBX,  
14 or owners, GWWTP, on the WWTP site. Ms. Sears also stated that  
15 the irrigation sprinkler system that is included in the property deed  
16 does not work. The sprinkler system is part of the Ginguite system,  
17 and GWWTP is responsible for maintaining it.

18 Susan Johnson testified that she has not received any notices of  
19 noncompliance from GWWTP. She also stated that the odor from the  
20 plant is strong during the summer. Ms. Johnson has been a resident  
21 of Southern Shores Landing for ten years.

1 Caroline Haas testified against the increase of rates. She mentioned  
2 the average sewer bill of municipalities. Ms. Haas described an  
3 instance when an overflow resulted in sewage running along  
4 Highway 158, located in front of the plant. Ms. Haas also pointed out  
5 the constant issuance of fines by DEQ to the owners.

6 GWWTP filed a Report on the Customer Hearing on April 2, 2024, in  
7 the docket. In reference to the odor complaints, GWWTP stated that  
8 it is not possible to eliminate all odor at a sewage treatment plant.  
9 Mr. Howsare stated that he has been on site at the plant dozens of  
10 times in the last year or more, and while standing on top of or close  
11 by the plant, he has noticed the earthy odor that can be expected of  
12 a sewage treatment plant that is properly operating. The Company  
13 stated it will continue to monitor the sewage treatment plant to  
14 identify and address any odor-related issues that result in an odor  
15 that arises from inappropriate treatment. In reference to the irrigation  
16 system, the Company stated that it is in the process of refurbishing  
17 the irrigation system and that when the flow from the Ginguite Mixed  
18 Use Development is added to the plant, there should be sufficient  
19 effluent to operate the irrigation system. In reference to Ms. Hass'  
20 testimony describing an overflow of effluent from the irrigation pond  
21 onto Highway 158, the Company stated that the total flow for the  
22 plant per day would not raise the water level by a quarter of an inch  
23 and that it would require a substantial flow in excess of the total flow

1 of the plant per day to cause the infiltration pond to overflow onto the  
2 highway. The Public Staff will be filing a response to GWWTP's  
3 customer hearing report on April 16, 2024, as ordered by the  
4 Commission.

5 The Public Staff has given this customer testimony proper  
6 consideration in formulating its recommendations.

7 **Q. Is GWWTP providing safe and reliable service?**

8 A. Yes. Based on my site visit, review of environmental records, the  
9 minimal amount of NOVs issued by DEQ recently, and the lack of  
10 customer complaints regarding service quality or customer service  
11 issues over the past three years, I conclude that GWWTP is  
12 providing adequate service to its sewer customers.

13 **BILLING ANALYSIS**

14 **Q. What are the present and proposed sewer utility service rates?**

15 A. The present rates were approved by the Commission's Order  
16 Discharging Emergency Operator Subject to Final Financial Review,  
17 Appointing New Emergency Operator, Approving Increased Rates,  
18 and Requiring Customer Notice issued on January 12, 2024, in  
19 Docket No. W-1139, Sub 4. The present and proposed rates are as  
20 follows:

21	<u>Present</u>	<u>Proposed</u>
22	<u>Monthly Sewer Utility Service:</u>	



1	Residential Flat Rate (per SFE <sup>2</sup> )	\$180.00	\$172.82
2	<u>Connection Charge:</u> (per SFE)	\$3,500	\$3,500
3	<u>Reconnection Charge:</u>		
4	If sewer utility service cut off by utility	\$15.00	\$15.00

5 **Q. Briefly explain your billing analysis.**

6 A. I reviewed and analyzed GWWTP's current and projected billing data  
7 and customer flow allocation. I performed a billing analysis to  
8 determine the level of annual service revenues produced at present  
9 and the Company's proposed rates utilizing the projected full buildout  
10 of customers for Ginguite Woods. I confirmed the billing determinants  
11 for end of period (EOP) customer counts, analyzed the plans for the  
12 future Ginguite Mixed Use Development, and agree with the billing  
13 determinants used by the Company in the Application.

14 The flat rates for Ginguite Woods are based on a per single-family  
15 equivalent (SFE). The present rates define SFE as 360 GPD. DEQ  
16 issues permits for wastewater treatment plants with required  
17 capacity amounts of gallons per day of usage determined by the 15A  
18 NCAC 02T .0014 rules. The 15A NCAC 02T .0014 rules were  
19 recently revised by the enactment of Session Law 2023-137, and the  
20 capacity amount required for the type of residential homes in the

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<sup>2</sup> Single-Family Equivalent (SFE)

1       Ginguite Woods service area has been reduced<sup>3</sup>. The minimum  
2       design capacity amount for a residential three-bedroom home was  
3       reduced from 360 GPD to 225 GPD. To account for this rule change,  
4       the rate design defines SFE as 225 GPD, and the capacity amounts  
5       for each type of customer is based on the current 15A NCAC 02T  
6       .0014 rules.

7       Based on the 15A NCAC 02T .0014 rules, the SFEs listed below in  
8       **Darden Table 1**, are calculated for the residential and commercial  
9       customers:

10       **Darden Table 1 – SFE Allocations per Customer Type**

	SFEs Allocated (SFE = 225 GPD)
Existing Customers	38
Future Residential Units	47
Future Restaurant	21
Future Commercial Space	7

11       The billing determinants are consistent with the Company's  
12       proposed billing determinants. The rates are based on the full  
13       buildout of the Ginguite Mixed Use Development. The Public Staff  
14       and the Company have discussed this methodology and agree that

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<sup>3</sup> See December 13, 2023 Memorandum issued by the NPDES Branch Chief describing Session Law 2023-137 – Changes to Wastewater Design Flow Rates in 15A NCAC 02T .0014(b). <https://www.deq.nc.gov/session-law-2023-137-changes-wastewater-design-flow-rates/download?attachment>

1 including the future customers in the rate calculations accurately  
2 distributes the cost of service amongst the customer base. Although  
3 the Company will not be recovering the total service revenue  
4 requirement until the future customers are added, by incorporating  
5 the future customers into the billing determinants, the cost of service  
6 for the entire plant and system is distributed equitably among all  
7 existing and potential customers. This methodology is a reasonable  
8 and preferred alternative to an excess capacity adjustment for  
9 overbuilt plant.

10 Furthermore, Southern Shores Landing customers have filed  
11 consumer statements about their concerns with having to pay for the  
12 plant associated with the future development. By including the future  
13 customers in the billing determinants, the recovery of the cost of  
14 service is shared and appropriately addresses the customers'  
15 concerns.

1     **Q.     What are the Public Staff's calculated annual service revenues**  
2           **under the present rates and the Company's proposed rates?**

3     A.     The Public Staff's calculated present and proposed service revenues  
4           for the 12-month period ended August 31, 2023, are shown below in  
5           **Darden Table 2.** The revenues were calculated using the Public  
6           Staff's recommended billing determinants, GWWTP's present rates  
7           approved in Docket No. W-1139, Sub 4, and GWWTP's proposed  
8           rates. The service revenues are based on the billing determinants at  
9           full buildout.

10           **Darden Table 2 - Public Staff's Calculated Service Revenues**

	Present Rates	Company Proposed Rates
PS Calculated Service Revenue	\$244,080	\$234,344

11                           **RATE DESIGN**

12     **Q.     What is your recommendation concerning GWWTP's proposed**  
13           **rates?**

14     A.     The Public Staff recommends a rate decrease for the Ginguite Woods  
15           service area. My revenue calculations are shown in **Darden Exhibit**  
16           **No. 2.** The Public Staff recommended rates are as follows:



1 Based on my review of the invoices, I agree with the amounts listed  
2 on the Application, for the following expenses:

3	<u>Expense</u>	<u>Amount</u>
4	Contract Operator	\$48,000
5	Chemicals	\$ 2,265
6	Electric Power	\$ 5,554

7 **Q. Have you recommended any adjustments to expenses related to**  
8 **sewer operations?**

9 A. Yes, I have provided Public Staff Financial Analyst Sun with  
10 recommendations for adjustments to expenses for M&R, testing, and  
11 sludge hauling.

12 MAINTENANCE AND REPAIR EXPENSE

13 The Public Staff reviewed GWWTP's M&R expenses for its sewer  
14 operations. The Company provided invoices and explanations for  
15 expenses in response to Public Staff Data Requests Nos. 1 and 3. I  
16 reclassified \$823 for testing equipment and supplies from M&R to the  
17 Testing expense. I reclassified \$450 for a vacuum truck to pump  
18 septage from a lift station from the Sludge Hauling expense to M&R.  
19 An invoice from Albetuck Land Development LLC for \$14,000 for  
20 cutting down trees, clearing, and mulch around Ginguite Trail Pond  
21 was included in the M&R expense. In response to Public Staff Data  
22 Request No. 3, the Company stated that the landscape work was a

1 requirement of the Division of Water Resources and included  
2 preparing the slopes for the infiltration pond, clearing of overgrown  
3 vegetation, and mowing around the pond. Typically, with regular,  
4 routine maintenance, landscape work is less expensive to maintain  
5 than the initial work needed to address an overgrown area. Therefore,  
6 it does not appear that this amount of work will be a recurring, annual  
7 expense. I annualized the total amount of \$14,000 over five years and  
8 included \$2,800 in the total M&R expense. The Public Staff  
9 recommends a reduced M&R expense of \$26,465.

#### 10 TESTING EXPENSES

11 The Public Staff has reviewed GWWTP's sewer testing expenses. I  
12 included the total from the invoices provided in response to Public Staff  
13 Data Request No. 1. As stated above, I reclassified \$823 for testing  
14 equipment and supplies from the M&R expense to Testing. The Public  
15 Staff recommends testing expenses of \$12,625.

#### 16 SLUDGE HAULING EXPENSE

17 The Public Staff has reviewed the sludge hauling quantities and  
18 expenses provided by GWWTP. Sludge hauling amounts are  
19 included on the invoices from Atlantic OBX. The invoices from  
20 Atlantic OBX that included sludge hauling during the test year were  
21 for hauling in October, November, and December 2022. Sludge  
22 hauling charges did not appear any other time during the test year.

1 Two Atlantic OBX invoices from October 2022 identified a total  
2 amount of \$16,841.67 and described it as: "Sludge Removal to Start  
3 Construction at Plant," and included a charge for "Holding Tank  
4 Rental." The Atlantic OBX invoice from November 2022 identified a  
5 total amount of \$9,991.56 and described it as a charge for "Holding  
6 Tank Rental, Pickup and Cleaning" and "Transfer from KDHWTP  
7 to Plant in Order to have Good Biology in Tank After Construction."  
8 The Atlantic OBX invoice from November 28, 2022, identifies a total  
9 amount of \$1,675 for sludge hauling.

10 Sludge hauling can vary from year to year depending on operational  
11 changes or system maintenance requirements needed in addition to  
12 routine sludge hauling. The Company was not able to provide sludge  
13 hauling data for the 24 months prior to the start of the test year due  
14 to the previous operator not providing records to GWWTP.

15 The sludge hauling events that occurred during the construction of  
16 the front end of the plant replacement in October and November  
17 2022 do not provide a representative annual level for sludge hauling.  
18 I capitalized the \$26,833.23 amount of sludge hauling as plant in  
19 service to be included with the WWTP Steel Tank  
20 Replacement/Front End Upgrade project. Based on my review of the  
21 invoices, it appears that the November 28, 2022, invoice totaling  
22 \$1,675 represents an expected amount of sludge hauling associated



1 with typical operation of the plant. During my site visit, Mr. Robinson,  
2 the operator, stated that, currently, sludge hauling typically occurs on  
3 a quarterly basis. Although the test year invoices do not show sludge  
4 hauling occurring quarterly, the construction sludge hauling activity  
5 may have affected the expected frequency of sludge hauling.  
6 Therefore, based on the invoices and Mr. Robinson's input, I  
7 determined that the \$1,675 invoice amount served as a  
8 representative level for sludge hauling that is expected to occur  
9 quarterly. The Public Staff recommends an ongoing sludge hauling  
10 expense of \$6,700.

11 **PLANT IN SERVICE**

12 **Q. What adjustments have you made to plant additions since the**  
13 **Docket No. W-1139, Sub 3 case?**

14 A. In response to Public Staff Data Requests Nos. 1 and 4, GWWTP  
15 provided invoices and supporting documentation for plant additions  
16 made since October 2009, which was the last rate case associated  
17 with the WWTP in Docket No. W-1139, Sub 3. With the exception of  
18 the acquisition adjustment related to purchase, the Public Staff  
19 agrees with the plant amounts and service lives associated with the  
20 plant in service items included in the Application. As stated  
21 previously, the Public Staff recommends including the \$26,833.23  
22 sludge hauling amount, originally included in the Sludge Hauling

1 expense, with the WWTP Steel Tank Replacement/Front End  
2 Update project plant in service amount.

3 **Q. Briefly describe GWWTP's plans for capital improvements.**

4 A. GWWTP intends to replace the back end of the WWTP in the fall of  
5 2024 for an estimated cost of \$500,000. In addition to the  
6 replacement of the back end of the plant, GWWTP has estimated  
7 approximately \$100,000 worth of additions and upgrades to be  
8 completed after the back end of the plant replacement. The  
9 Company states that the back end of the plant replacement and the  
10 additional upgrades will be financed using the owner's equity.

11 The total estimated cost of these capital improvements is \$600,000.  
12 I provided the estimated service lives shown in **Public Staff Sun**  
13 **Exhibit 1, Schedule 2-2**. The estimated service lives are based on  
14 preliminary information since the identified improvements are  
15 planned and not installed. The estimated service lives were primarily  
16 based on lives from other proceedings with similar equipment types.  
17 The resulting revenue requirement determination, identified in  
18 **Public Staff Sun Exhibit 1, Schedule 2-2**, provides the Commission  
19 with an estimate, based on currently known information, of the  
20 revenue requirement and rate impact associated with the planned  
21 improvements.

1 It will be incumbent upon GWWTP to ensure the improvements are  
2 reasonable and prudent for the capital investment associated with  
3 the improvements to be added to rate base and included in rates in  
4 a future rate case proceeding. At that time, depreciation lives and  
5 associated rates may be adjusted to account for the actual  
6 improvements made, including details on the specific equipment and  
7 materials used. Inclusion of the currently planned capital  
8 improvements totaling \$600,000 for the sewer system, based on the  
9 resulting revenue requirements to support the improvement costs, as  
10 identified in **Public Staff Sun Exhibit 1, Schedule 2-2**, would result  
11 in a \$53.72 per month increase in sewer flat rates.<sup>5</sup> This is equivalent  
12 to a 42% increase in the sewer monthly flat rate of \$129.33  
13 recommended by the Public Staff.

14 **Q. What is your recommendation concerning the acquisition**  
15 **adjustment proposed by GWWTP?**

16 A. The Public Staff does not support recovery of an acquisition  
17 adjustment. As a general proposition, when a public utility buys  
18 assets that have previously been dedicated to public service as utility  
19 property, the acquiring utility is entitled to include in rate base the  
20 lesser of the purchase price or the net original cost of the acquired

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<sup>5</sup> Rate impact is determined by dividing the revenue requirement included in the prefiled testimony of Public Staff witness Sun by the number of sewer SFEs (113) and then by the number of months in a year and reflecting that amount in the sewer flat rate.

1 facilities owned by the seller at the time of the transfer. See W-1000,  
2 Sub 5 Order. Typically, companies seek acquisition adjustments to  
3 facilitate the sale or transfer of a utility before closing occurs.

4 The Commission has indicated "a strong general policy against the  
5 inclusion of acquisition adjustments in rate base subject to  
6 exceptions in appropriate instances." *Id.* at 24. In the W-1000, Sub 5  
7 Order, the Commission discusses circumstances when the rate base  
8 treatment of acquisition adjustments was not applicable. The  
9 Commission stated:

10 After examining the relevant policy considerations and  
11 the prior decisions of the Commission, the Commission  
12 concludes that the outcome in an acquisition  
13 adjustment case should hinge upon whether the party  
14 seeking rate base treatment for an acquisition  
15 adjustment has established by the greater weight of the  
16 evidence that the purchase price which the purchaser  
17 has agreed to pay is prudent and that the benefits of  
18 including the acquisition adjustment in rate base  
19 outweigh any resulting burden to ratepayers. After  
20 conducting such an analysis, the Commission  
21 concludes that inclusion of the acquisition adjustment  
22 in North Topsail's rate base would be inappropriate  
23 because UI is obligated to purchase North Topsail  
24 regardless of our decision with respect to the  
25 acquisition adjustment issue and because UI has failed  
26 to meet its burden of proving that the benefits to  
27 affected customers from the inclusion of the acquisition  
28 adjustment in rate base outweigh the resulting harm.  
29 *Id.* at 22.

30 On page 11 of his prefiled direct testimony, witness Howsare testifies  
31 that the purchase price is prudent, the result of arm's length  
32 bargaining, and the benefits accruing to the customers materially

1           outweigh the costs of inclusion in the rate base of the purchase price.  
2           GWWTP did not provide any documentation or explanation to  
3           support witness Howsare's statement. The Public Staff requested  
4           support in Public Staff Data Request No. 3, and the Company did not  
5           provide further support for the prudence of the purchase price  
6           amount. In reference to the prudence of the purchase price, the  
7           Company stated that the utility had issues with the abandonment of  
8           the system by the prior franchise owner. This statement does not  
9           support the prudence of the \$110,000 purchase price amount. In  
10          reference to the benefits to customers outweighing the costs of  
11          inclusion in the rate base of the purchase price, the Company's  
12          response stated that the customers are benefited due to the  
13          operation of the system by a financially viable Company who desires  
14          to own and operate the system, and to provide safe, adequate, and  
15          reliable sewer service to the customers. Although the Public Staff  
16          believes that those outcomes are important and necessary, they are  
17          the expected standards and responsibilities of a utility company.  
18          Similar to the Commission's decision stated above, the Public Staff  
19          believes that GWWTP has failed to meet its burden of proving that  
20          the benefits to the affected customers from the inclusion of the  
21          acquisition adjustment in rate base outweigh the resulting harm.

22          The Commission also states above that the inclusion of the  
23          acquisition adjustment in rate base would be inappropriate because

1 the buyer was obligated to purchase the system regardless of the  
2 Commission decision with respect to the acquisition issue. GWWTP  
3 purchased the WWTP assets and gained ownership without  
4 Commission approval years prior to the filing of the Application.  
5 Therefore, the purchase of the system is complete and is not  
6 conditioned on the approval and inclusion of the requested  
7 acquisition adjustment in rates. The Public Staff does not support an  
8 acquisition adjustment applied retroactively to a purchase that is  
9 already complete. The criteria that the Commission is to consider and  
10 determine applicable to a request for an acquisition adjustment  
11 should be analyzed before a sale is complete, when negotiations and  
12 changes could still be completed if necessary. Section 110(a) of  
13 Chapter 62 states in pertinent part that “no public utility shall  
14 hereafter begin the construction or operation of any public utility plant  
15 or system or acquire ownership or control thereof, either directly or  
16 indirectly, without first obtaining from the Commission a certificate  
17 that public convenience and necessity requires, or will require, such  
18 construction, acquisition, or operation . . .”. Section 111(a) of  
19 Chapter 62 states in pertinent part that “[n]o franchise now existing  
20 or hereafter issued under the provisions of this Chapter . . . shall be  
21 sold, assigned, pledged or transferred, nor shall control thereof be  
22 changed through stock transfer or otherwise, or any rights  
23 thereunder leased, nor shall any merger or combination affecting any

1 public utility be made through acquisition of control by stock  
2 purchase or otherwise, except after application to and written  
3 approval by the Commission. . .”.

4 On page 11 of his prefiled direct testimony, witness Howsare testifies  
5 that the requested acquisition adjustment justification is consistent  
6 with the case filed by Heaters Utilities, Inc., for the transfer of the  
7 Hardscrabble water system in Docket No. W-274, Sub 122. The  
8 Public Staff disagrees with his opinion that the Hardscrabble docket  
9 is directly relatable to this one. In the Hardscrabble docket, the sale  
10 was pending and was waiting on the determination of an acquisition  
11 adjustment. Additionally, that docket involved a small utility being  
12 sold to a larger utility with more resources and a larger customer  
13 base, which provided the benefit of economies of scale to the existing  
14 customer base. In the W-274, Sub 122 Order, the Commission  
15 determined that an acquisition adjustment was appropriate, stating:

16 The Commission concludes that it is not reasonable,  
17 and would conflict with sound regulatory policy and  
18 practice, to send a signal to the water utility industry  
19 that a small system should be allowed to deteriorate so  
20 that it can command a higher sales price, since the  
21 acquiring company could then obtain rate base  
22 treatment on its purchase price. *Id.* at 11.

23 GWWTP acquired the WWTP assets and ownership between  
24 November 13, 2015, and March 24, 2017. The plant in service  
25 records provided by GWWTP show projects in 2019, 2022, and

1           2023. GWWTP owned and operated the WWTP for approximately  
2           two to four years before investing in any significant capital upgrades.  
3           The Public Staff believes that allowing an acquisition adjustment  
4           after an owner has purchased a plant and allowed it to continue to  
5           deteriorate for years before making any major capital improvements  
6           would, as the Commission described above, send a signal to the  
7           water utility industry that allowing a system to deteriorate could lead  
8           to justifying a higher sales price since an acquisition adjustment may  
9           be granted.

10          In the W-1000, Sub 5 Order, the Commission assessed whether an  
11          acquisition adjustment was appropriate with respect to the Carolina  
12          Water Service, Inc. of North Carolina systems, Chapel Hills and High  
13          Meadows. The Commission stated:

14               The Hearing Examiner reached the opposite  
15               conclusion with respect to the Chapel Hills and High  
16               Meadows systems since the record did not establish  
17               that the prior owner would have failed to make  
18               necessary system improvements in the absence of a  
19               transfer, the amount which Carolina Water Service had  
20               spent on service improvements was unclear, there had  
21               been no violations assessed against the High  
22               Meadows system, the record did not demonstrate that  
23               the sales had been conducted at arms length and that  
24               the purchase prices were reasonable, the  
25               circumstances surrounding the transfers were unclear,  
26               the purchases had been effectuated without prior  
27               Commission approval, and it was doubtful that the  
28               benefits to customers outweighed the costs. . *Id.* at 24.



1       The Commission clearly stated that an acquisition adjustment was  
2       not approved due to the following: the record did not establish that  
3       the prior owner would have failed to make necessary system  
4       improvements in the absence of a transfer; the circumstances  
5       surrounding the transfer were unclear; the purchases had been  
6       effectuated without prior Commission approval; and it was doubtful  
7       that the benefits to customers outweighed the costs. The same  
8       circumstances are applicable to GWWTP in this case. GWWTP was  
9       the owner before the request for an acquisition adjustment was  
10      submitted and had made necessary system improvements after a  
11      couple years of ownership. The circumstances surrounding the  
12      transfer and history of ownership and operation have been unclear  
13      due to the involved parties changing operations and ownership  
14      without Commission approval. GWWTP purchased the system  
15      without Commission approval and has stated that the purchase was  
16      not dependent on an acquisition adjustment. Lastly, GWWTP has not  
17      provided adequate support for how the acquisition adjustment  
18      benefits customers.

19      As stated above, GWWTP has not quantified “the impact of including  
20      the acquisition adjustment in rate base on the rates paid by  
21      customers of the acquired and acquiring utilities.” Allowing GWWTP  
22      to recover in rate base the entire difference between the purchase  
23      price of \$110,000 and the net plant in service of \$0 at the time of

1 purchase would equate to a \$10.90 increase in residential monthly  
2 wastewater flat rates<sup>6</sup> as shown in **Public Staff Sun Exhibit 1,**  
3 **Schedule 2-2.** This equates to an 8% increase in the residential  
4 sewer monthly flat rate of \$129.33 recommended by the Public Staff.

5 Approval of an acquisition adjustment is not appropriate to be  
6 determined after the system is purchased and is not in the public  
7 interest. Further, GWWTP has not established by the greater weight  
8 of the evidence that the benefits to Ginguite Woods customers  
9 resulting from the allowance of rate base treatment of an acquisition  
10 adjustment in this case would offset or exceed the resulting burden  
11 or harm to customers, including but not limited to, the future rate  
12 impact of the requested acquisition adjustment.

13 **Q. What is your recommendation concerning the bond for the**  
14 **wastewater utility system?**

15 A. North Carolina Session Law 2023-137, Section 24 revised N.C.G.S.  
16 § 62-110.3(a) to read that no franchise may be granted to any water  
17 or sewer utility company “until the applicant furnishes a bond,  
18 secured with sufficient surety as approved by the Commission, in an  
19 amount not less than twenty-five thousand dollars (\$25,000).” In

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<sup>6</sup> Rate impact is determined by dividing the respective revenue requirement included in the prefiled testimony of Public Staff witness Sun by the number of sewer SFEs (113), and then by the number of months in a year and reflecting that amount in the residential wastewater flat rate.

1 addition, the bond “shall be conditioned upon providing adequate  
2 and sufficient service within all the applicant's service areas.”  
3 Further, N.C.G.S. § 62-110.3(a) provides:

4 In setting the amount of a bond, the Commission shall  
5 consider and make appropriate findings as to the  
6 following:

- 7 (1) Whether the applicant holds other water  
8 or sewer franchises in this State, and if  
9 so its record of operation,
- 10 (2) The number of customers the applicant  
11 now serves and proposes to serve,
- 12 3) The likelihood of future expansion needs  
13 of the service,
- 14 (4) If the applicant is acquiring an existing  
15 company, the age, condition, and type of  
16 the equipment, and
- 17 (5) Any other relevant factors, including the  
18 design of the system.

19 Commission Rules R7-37 and R10-24 restate and reaffirm most of  
20 these provisions and requirements although the Commission Rules  
21 have not been updated to reflect the revised bond amount required  
22 by N.C.G.S. § 62-110.3. Bond is required to ensure the continued  
23 provision of adequate and sufficient wastewater services in the event  
24 a wastewater utility is unable to provide such service due to financial  
25 constraints, mismanagement, or other factors. The factors and  
26 findings set forth in N.C.G.S. § 62-110.3(a)(1) – (5) make clear that  
27 the bond amount depends heavily on the applicant's financial,  
28 managerial, and technical expertise; the applicant's prior  
29 performance where applicable; the number of current and projected

1 future wastewater customers; system expansion plans and needs;  
2 the complexity of the applicant's system and facilities; and any other  
3 factors that bear upon the risk of the applicant providing inadequate,  
4 inconsistent, and/or insufficient wastewater services. North Carolina  
5 Gen. Stat. § 62-110.3 and Commission Rules R7-37 and R10-24  
6 make it clear that a higher risk of deficient wastewater services  
7 necessitates a higher bond amount.

8 GWWTP does not have a history of operations and management in  
9 North Carolina under Commission regulation, and due to the  
10 customer size, the improvements planned by GWWTP, and the size  
11 of the WWTP and wastewater collection system, I recommend that a  
12 \$100,000 bond be posted by GWWTP.

13 **Q. What is your recommendation regarding the requested grant of**  
14 **a CPCN for Ginguite Woods?**

15 A. While the Public Staff has found that GWWTP has the financial,  
16 technical, and managerial ability to own and operate the Ginguite  
17 Woods wastewater system, the Public Staff's support of the request  
18 to grant a CPCN is contingent on the following conditions: (1)  
19 denying an acquisition adjustment; (2) requiring a bond of \$100,000;  
20 and (3) approving a monthly residential flat rate of \$129.33.

- 1    **Q.**     Does this conclude your testimony?
- 2    **A.**     Yes, it does.



**QUALIFICATIONS AND EXPERIENCE**

Lindsay Q. Darden

I graduated from North Carolina State University, earning a Bachelor of Science Degree in Civil Engineering. I am a licensed Professional Engineer (PE - State of North Carolina #042110). I am also certified as a B-Well Operator (#130281) by the North Carolina Water Treatment Facility Operators Certification Board. I worked for the North Carolina Department of Environmental Quality (DEQ), Public Water Supply Section for four years prior to joining the Public Staff in December 2016. Prior to working for DEQ, I worked for Smith Gardner, an engineering consulting firm.

My duties with the Public Staff are to monitor the operations of regulated water and wastewater utilities with regard to rates and service. These duties include conducting field investigations, reviewing, evaluating, and recommending changes in the design, construction, and operations of regulated water and wastewater utilities, presenting expert testimony in formal hearings, and presenting information, data, and recommendations to the North Carolina Utilities Commission.





Front end of WWTP

Docket No. W-1343, Sub 1  
Darden Exhibit 1  
Photo 1





Docket No. W-1343, Sub 1  
Darden Exhibit 1  
Photo 2

Back end of WWTP





Docket No. W-1343, Sub 1  
Darden Exhibit 1  
Photo 3

Back end of WWTP





Docket No. W-1343, Sub 1  
Darden Exhibit 1  
Photo 4

Back end of WWTP





Docket No. W-1343, Sub 1  
Darden Exhibit 1  
Photo 5

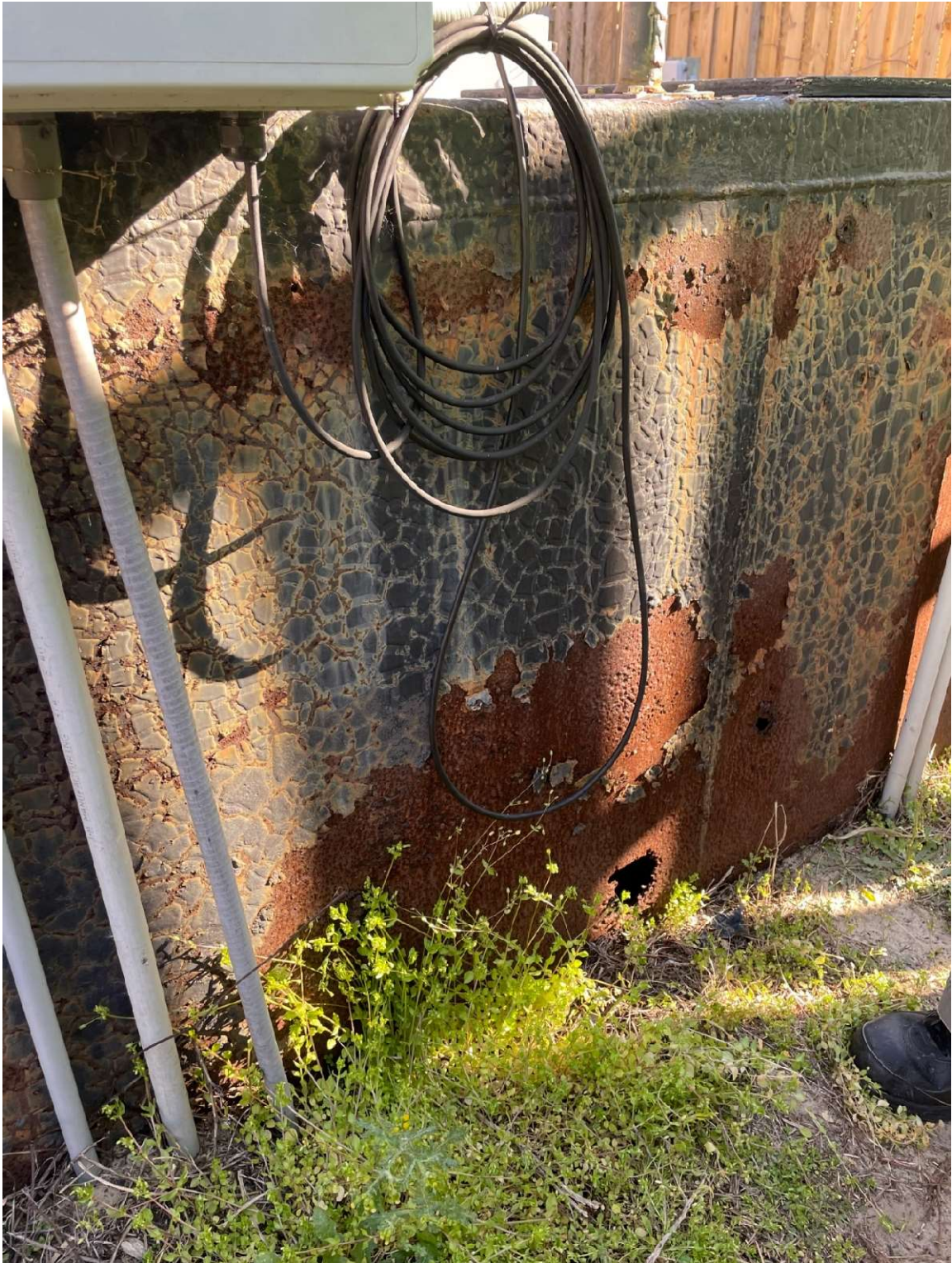
Back end of WWTP





Docket No. W-1343, Sub 1  
Darden Exhibit 1  
Photo 6

Back end of WWTP





Docket No. W-1343, Sub 1  
Darden Exhibit 1  
Photo 7

Lift Station



Docket No. W-1343, Sub 1  
Darden Exhibit 1  
Photo 8

Blowers





Docket No. W-1343, Sub 1  
Darden Exhibit 1  
Photo 9

Generator





Docket No. W-1343, Sub 1  
Darden Exhibit 1  
Photo 10

Infiltration Pond



Docket No. W-1343, Sub 1  
Darden Exhibit 1  
Photo 11

Site of the future Ginguite Mixed Use Development







GWWTP, LLC  
Docket No. W-1343, Sub 1  
For the 12 Months Ending August 31, 2023

Public Staff  
Darden Exhibit No. 2  
Page 1 of 1

Revenue at Public Staff Recommended Rates

**Public Staff Recommended Rates**

SEWER

Billing Type	Flow Allocation <sup>1</sup> (gallons per day)	SFE <sup>2</sup>	SFE x 12 months	Monthly Flat Rate <sup>5</sup>	Total Annual Revenue
				\$129.33	
Residential Customers <sup>3</sup>	8,550	38	456		\$58,974
Mixed Use Residential <sup>4</sup>	10,500	47	564		\$72,942
Mixed Use Restaurant	4,800	21	252		\$32,591
Mixed Use Retail Space	1,624	7	84		\$10,864
<b>Total</b>		113			\$175,371

Notes:

1. Flow Allocation based on the design standards determined by 15A NCAC 02T .0014 rules.
2. SFE = Single-Family Equivalent.
3. Residential Customers represents the 38 existing customers of Southern Shores Landing subdivision. SFE based off of design standards of 3-bedroom home.
4. Represents the 36 townhome units in the Ginguite Mixed Use Development. SFE based on 140 total bedroom units.
5. Monthly flat rate is per SFE.