

**STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH**

DOCKET NO. W-218 SUB 573

IN THE MATTER OF APPLICATION BY AQUA NORTH CAROLINA, INC., FOR AUTHORITY TO ADJUST AND INCREASE RATES FOR WATER AND SEWER UTILITY SERVICE IN ALL SERVICE AREAS IN NORTH CAROLINA	DIRECT TESTIMONY OF DEAN R. GEARHART ON BEHALF OF AQUA NORTH CAROLINA, INC.
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APPENDIX 3  
SCHEDULE 3



STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH

DOCKET NO. W-218, SUB 573

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

IN THE MATTER OF  
APPLICATION BY AQUA NORTH CAROLINA, INC.,  
202 MACKENAN COURT, CARY, NORTH CAROLINA 27511  
FOR AUTHORITY TO ADJUST AND INCREASE RATES FOR WATER  
AND SEWER UTILITY SERVICE IN ALL SERVICE AREAS IN  
NORTH CAROLINA

PREFILED DIRECT TESTIMONY OF  
**DEAN R. GEARHART**  
ON BEHALF OF  
AQUA NORTH CAROLINA, INC.

1

June 30, 2022

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is Dean R. Gearhart. My business address is 202 MacKenan  
3 Court, Cary, NC 27511.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am employed by Aqua North Carolina, Inc. (Aqua or Company) as the  
6 Rates and Planning Manager; as such, I provide financial supervision and  
7 guidance to the controller and president of the state organization.

8 **Q. PLEASE BRIEFLY DESCRIBE YOUR BUSINESS EXPERIENCE.**

9 A. I joined the Company in 2007 as the State Controller. I have served as the  
10 Rates and Planning Manager since 2010. Prior to joining Aqua, I had been  
11 employed in the mortgage industry since 1992 – working at several  
12 institutions such as a savings and loan in Maryland, the Federal Home Loan  
13 Mortgage Company (Freddie Mac), as well as the mortgage company of a  
14 home builder (NVR) in Virginia. In Florida, I was employed by the mortgage  
15 company of a home builder (Mercedes Homes) as well as by Pinnacle  
16 Financial, a mortgage company. At these companies I held various  
17 accounting positions, including Accounting Manager and Assistant  
18 Controller.

19 **Q. PLEASE DISCUSS YOUR EDUCATIONAL BACKGROUND.**

20 A. I am a graduate of the University of Maryland at College Park with a  
21 Bachelor of Science degree in Accounting and am an inactive Certified  
22 Public Accountant in North Carolina.

1 **Q BEFORE WHAT REGULATORY AGENCIES HAVE YOU PREVIOUSLY**  
2 **APPEARED AND PRESENTED EXPERT TESTIMONY?**

3 A. I have assisted in the preparation of exhibits, discovery responses, and  
4 testimony, and appeared as a witness before the North Carolina Utilities  
5 Commission (NCUC or Commission) in evidentiary hearings in previous  
6 cases for Aqua North Carolina since 2007.

7 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

8 A. The purpose of my testimony is to summarize Aqua's adjustments  
9 to Operating and Maintenance Expenses, Miscellaneous Expenses, and  
10 Miscellaneous Revenue and Expenses. Detailed calculations for each of  
11 these adjustments are found within the Exhibits to "W-1, ITEM 10,  
12 REVENUE AND EXPENSE ADJUSTMENTS" of the Company's Application  
13 for the following rate entities: a) Aqua North Carolina Water, b) Aqua North  
14 Carolina Sewer; c) Fairways Utilities Water, d) Fairways Utilities Sewer; and  
15 e) Brookwood Water.

16 Test year expenses have been analyzed and adjusted to reflect any known  
17 and measurable changes. In addition, new adjustments have been made  
18 as part of the Company's first Water and Sewer Investment Plan (WSIP),  
19 or Multi-Year Rate Plan (MYRP) filing. These additional multi-year  
20 adjustments are discussed below.

21 I also summarize the Company's adjustments to rate base included in the  
22 Application for Increased Rates filed in this docket. Detailed calculations  
23 for each of these adjustments are found within the Exhibits to "W-1, ITEM

1 10, RATE BASE ADJUSTMENTS.”

2 **Q. WHAT ROLE HAVE YOU PLAYED IN THE PREPARATION OF THIS**  
3 **FILING?**

4 A. The schedules and exhibits in the Application were coordinated  
5 and prepared by me or someone working in the Company’s Accounting  
6 Department or by an outside consultant under my direction.

7 **Q. WHAT TEST YEAR PERIOD DOES YOUR PREFILED TESTIMONY**  
8 **ADDRESS?**

9 A. My testimony addresses amounts related to the test year in this  
10 docket, which ended December 31, 2021, as well as certain  
11 adjustments that extend into the post-test year that are known and  
12 measurable and pro forma in nature.

13 Additional adjustments have been made as part of this WSIP filing to get  
14 from the test year “per books” amounts for expenses and rate base using  
15 projected costs based on reasonably known and measurable capital  
16 investments and anticipated reasonable and prudent expenses for the  
17 period following the test year through to the start of Rate Year 1, as well as  
18 for each of the three Rate Years (2023 – 2025). These adjustments are  
19 based on projections and historical cost drivers intended to represent  
20 Aqua’s operations over the plan term. These will be discussed at a high-  
21 level in this testimony and described in more detail in the individual Item 10  
22 narratives for the specific cost or rate base element.

- 23
- For several categories, a three-year Operating and Maintenance

Compound Annual Growth Rate (O&M CAGR) factor of 3.04% was applied to the test year amounts to get to the “Base Year” level for this expense. This CAGR represents the three-year average growth rate for the consolidated company operations and maintenance expenses for the calendar years 2018 – 2021 [See *Gearhart Exhibit 1* and *Exhibit 1A* for these CAGR calculations]. These exhibits also contain some non-O&M CAGR calculations which apply to certain non-O&M expenses in this filing.

- Unless otherwise noted, for Multi-Year Rate Plan purposes, all expenses have also been adjusted for Rate Years 1, 2, and 3 based on the same CAGR rates.
- Capital additions to rate base are provided in detail for all the years/period of this WSIP.

**Q. PLEASE EXPLAIN YOUR ADJUSTMENTS TO LABOR EXPENSE – SALARY AND WAGES.**

A. For purposes of this rate filing, I utilized the Company’s current staffing level as of April 15, 2022, adjusted for necessary employee resource additions to be made during 2022. As of April 15, 2022, Aqua’s position count consists of 186 positions, one (1) of which is part time and three (3) of which are seasonal/summer positions. Each of the positions is identified with the person holding the position at the time, or as “OPEN” if the position was not filled at the time the labor file was created.

1 The elements of the Labor Expense Calculation are as follows:

- 2 • Each full-time position is allocated a full year (2,080) of hours except  
3 for the part-time position, which reflects 20 hours a week. The  
4 seasonal employees were included with a total of 560 hours (14  
5 weeks at 40 hours per week).
- 6 • Each position is calculated using their actual salary effective April 15,  
7 2022, other than OPEN positions which have an estimated salary.
- 8 • The number of overtime (OT) hours in this filing is the exact amount  
9 incurred during the test year by department. The projected April  
10 2022 hourly overtime rate for all OT-eligible positions within each  
11 department has been applied to those actual OT hours to calculate  
12 the annual overtime cost.
- 13 • Stand-By Pay has been adjusted for an increase to the stand-by  
14 rates that went into effect early 2022. This annual amount has  
15 increased from \$26,520 during the test year to the current level of  
16 \$65,520 per year.
- 17 • The process, outlined above, calculates a total annual cost for regular  
18 labor and overtime labor. The actual test year expense percentages  
19 were then applied to calculate the proper amount of regular labor and  
20 overtime labor expense. Finally, these expense amounts were  
21 allocated to the five rate divisions based on their relative percentages  
22 during the test year. For example, if a rate division was 20% of the  
23 test year overtime expense, that rate division was allocated 20% of



1 the updated overtime expense amount calculated above. This  
2 established the Base Year, labor expense (calendar year 2022) used  
3 to calculate Rate Years 1-3 labor projections.

- 4 • The Base Year labor expense was then increased by 3%, consistent  
5 with Aqua's merit increase history, to calculate the Rate Year 1  
6 expense projection and then 3% per year for each of the following two  
7 years – Rate Years 2 – 3. Test year Labor Expense for corporate  
8 service and sundry and ACO<sup>1</sup> employees was increased by 3%,  
9 consistent with Aqua's merit increase history, for the Base Year  
10 amount and then 3% per year for each of Rate Years 1 – 3.

11 **Q. PLEASE EXPLAIN YOUR ADJUSTMENTS TO LABOR EXPENSE –**  
12 **EMPLOYEE PENSIONS AND BENEFITS.**

13 A. For purposes of this rate filing, the Company used the “benefits expense” in  
14 effect as of April 2022 for North Carolina employees. The calculation  
15 includes person-by-person information for Medical, Dental, Life Insurance,  
16 Accidental Death & Dismemberment (AD&D), Long-Term Disability (LTD),  
17 401K and Year End Contribution (Profit Sharing ). The detail is provided by  
18 position. The benefits total includes the current approved staffing level of  
19 186, less one part-time position and the three seasonal employees, who are  
20 not eligible for benefits, for a total of 182 benefits-eligible employees. The  
21 estimates for the positions that were “newly hired” or OPEN at the time of  
22 the filing (thus not having benefits) were based on the average of actual

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<sup>1</sup> ACO refers to Aqua Customer Operations, a department of Aqua Services, Inc.

benefits costs for the positions with benefits.

- A calculation was done for each of these benefits categories to determine the annual amount. Since Aqua capitalizes a portion of benefits costs, the labor expense rate (from the Item 10 Labor calculation) was applied to derive the total annual expense amount.
- The current annual amount in each category was then compared to the test year amounts to determine the pro forma adjustment amounts needed. A percentage increase was calculated and then applied to the test year amounts to properly allocate the final cost by rate division. This established the Base Year expense (calendar year 2022).
- Multi-Year Rate Plan - Pension and Benefits Expense has been increased for each of Rate Years 1 - 3 by the O&M CAGR rate of 3.04% per year.
- Test year Pension and Benefits Expense for corporate service and sundry and ACO employees was increased by 3.04% for the Base Year (2022) amount and then 3.04% per year for Rate Years 1 - 3.

**Q. PLEASE EXPLAIN YOUR ADJUSTMENTS TO PURCHASED WATER EXPENSE.**

A. For purchased water systems, the test year actual volumes of water purchased were used, and current or known pending vendor pricing was applied to that volume. In this filing, certain purchased water vendors/systems experienced more than 20% water loss. Water loss is the difference between gallons purchased by Aqua and gallons billed to

1 those customers. For any such vendor/system, the expense recovery  
2 was adjusted to not exceed 20% water loss in accordance with the  
3 Memorandum of Understanding between the Public Staff – North  
4 Carolina Utilities Commission and Aqua North Carolina, Inc. in Support  
5 of Accounting Treatment of Purchased Water Expenses Docket No. W-  
6 218, Sub 526.

- 7 • Multi-Year Rate Plan - Purchased Water Expense has not been  
8 adjusted because the Company will continue to request the pass-  
9 through of actual purchased water rates through the current pass-  
10 through approval process in place with the Commission today.

11 **Q. PLEASE EXPLAIN YOUR ADJUSTMENTS TO PURCHASED**  
12 **WASTEWATER TREATMENT EXPENSE.**

13 A. Aqua proposes to eliminate the purchased sewer pass-through process for  
14 the two systems previously in effect (see witness Haddad testimony).  
15 Because no pass-through process is expected to remain in place for  
16 increases in purchased sewer expenses, unlike purchased water, a three-  
17 year O&M CAGR factor of 3.04% was applied to the test year to get to  
18 the Base Year level for this expense.

- 19 • Multi-Year Rate Plan - Purchased Wastewater Expense has been  
20 adjusted for each of Rate Years 1 - 3 by the same 3.04% O&M CAGR  
21 factor.

22 **Q. PLEASE EXPLAIN YOUR ADJUSTMENTS TO PURCHASED**  
23 **POWER/FUEL.**

1 A. A three-year O&M CAGR factor of 3.04% was applied to the test year to  
2 get to the Base Year level for this expense.

- 3 • Multi-Year Rate Plan - Purchased Power/Fuel Expense has been  
4 adjusted for each of Rate Years 1 - 3 by the same 3.04% O&M CAGR  
5 factor.

6 **Q. PLEASE EXPLAIN YOUR ADJUSTMENTS TO SLUDGE EXPENSE.**

7 A. A three-year O&M CAGR factor of 3.04% was applied to the test year  
8 amount to get to the Base Year level for this expense.

- 9 • Multi-Year Rate Plan - Sludge Hauling Expense has been adjusted  
10 for each of Rate Years 1 - 3 by the same 3.04% O&M CAGR factor.

11 **Q. PLEASE EXPLAIN YOUR ADJUSTMENTS TO CHEMICAL EXPENSE.**

12 A. A three-year O&M CAGR factor of 3.04% was applied to the test year  
13 amount to get to the Base Year level for this expense.

- 14 • Multi-Year Rate Plan - Chemical Expense has been adjusted for each  
15 of Rate Years 1 - 3 by the same 3.04% CAGR factor.

16 **Q. PLEASE EXPLAIN YOUR ADJUSTMENTS TO CORPORATE**  
17 **SERVICES, SUNDRIES, AND AQUA CUSTOMER OPERATIONS (ACO)**  
18 **ALLOCATED CHARGES.**

19 A. A three-year O&M CAGR factor of 3.04% was applied to the test year  
20 amounts to get to the Base Year level for this expense. The only  
21 exception to this is for labor expense, which has a growth factor of 3.00%  
22 per year.

- Multi-Year Rate Plan - Corporate Service and Sundries and ACO Expense has been adjusted for each of Rate Years 1 - 3 by the same 3.04% CAGR factor, except for labor amounts, which were adjusted by 3.00% each year.

**Q. DID YOU MAKE ANY ADJUSTMENTS TO MATERIALS AND SUPPLIES EXPENSE?**

A. A three-year O&M CAGR factor of 3.04% was applied to the test year amount to get to the Base Year level for this expense.

- Multi-Year Rate Plan - Materials and Supplies Expense has been adjusted for each of Rate Years 1 – 3 by the same 3.04% O&M CAGR factor.

**Q. PLEASE EXPLAIN YOUR ADJUSTMENTS TO CONTRACTUAL SERVICES.**

A. **Accounting** – A three-year O&M CAGR factor of 3.04% was applied to the test year to get to the Base Year level for this expense and the same factor was used to calculate the projected expenses for each of Rate Years 1 - 3.

**Legal** - For Item 10, the test year amounts were adjusted to reflect the full year of invoices for qualifying services provided by outside legal counsel. In addition, a three-year O&M CAGR factor of 3.04% was applied to the test year to get to the Base Year level for this expense and the same factor was used to calculate the projected expenses for each of Rate Years 1 - 3.

1       **Lab Testing** – A three-year O&M CAGR factor of 3.04% was applied to  
2       the test year to get to the Base Year level for this expense and the same  
3       factor was used to calculate the projected expenses for each of Rate Years  
4       1 - 3.

5       **Contractual Services – Other** includes the following Aqua categories:  
6       ACO DIRECT Expenses & Allocations, Outside Services IT, Outside  
7       Services Operations, Outside Services Maintenance, and Outside Services  
8       “Other.”

9       The factors considered to adjust Contractual Services – Other expenses  
10      necessary to arrive at the Base Year (2022) expense amounts include:

- 11           • An adjustment for a full year of the current cost of the Water  
12           Remediation Treatment (WRT) units located in the Fayetteville and  
13           Cary regions from leased equipment to Contract Services-  
14           Operations.
- 15           • An adjustment for United States Postal Service (USPS) postage  
16           increases effective in January 2022.
- 17           • An adjustment has been made to reflect a 2022 increase of 7.5%  
18           announced by United States Infrastructure Company (USIC) for its  
19           services. This increase was applied to the test year level.
- 20           • Finally, an adjustment has been made to remove all Temporary  
21           Labor incurred during the test year. Since the Labor Expense  
22           amounts (above) assume no open positions, the Company is  
23           removing test year temporary labor charges used to fill such

positions. If labor expense is reduced for vacancies, then these Temporary Labor charges would need to be added back to reflect the cost of vacancies.

Multi-Year Rate Plan for Contractual Services – Other has been adjusted for each of Rate Years 1 – 3 by the O&M CAGR factor of 3.04%.

**Q. PLEASE EXPLAIN YOUR ADJUSTMENTS TO RENTAL OF BUILDINGS/LAND.**

A. Adjustments to calculate the Base Year (2022) expense reflect the current 2022 rental fees for all Aqua regional offices and well lots in the Brookwood Water area.

- Multi-Year Rate Plan - Outside Services Expense has been adjusted for each of Rate Years 1 – 3 by the 3.04% O&M CAGR factor.

**Q. PLEASE EXPLAIN YOUR ADJUSTMENTS TO TRANSPORTATION EXPENSE-FUEL.**

A. An adjustment has been made to reflect the current fuel price of \$4.566 per gallons [per the Energy Information Administration (EIA) website as of June 6, 2022], which was applied to the test year fuel volume to calculate the Base Year expense.

- Multi-Year Rate Plan Transportation Expenses – Fuel was not adjusted by the 3.04% O&M CAGR factor for each of Rate Years 1 – 3 since the current actual price is used for this line item.

**Q. PLEASE EXPLAIN YOUR ADJUSTMENTS TO TRANSPORTATION**

**EXPENSE (OTHER THAN FUEL).**

A. A three-year O&M CAGR factor of 3.04% was applied to the test year to get to the Base Year level for this expense.

- Multi-Year Rate Plan - Transportation Expense (Other than Fuel) has been adjusted for each of Rate Years 1 – 3 by the 3.04% O&M CAGR factor.

**Q. PLEASE EXPLAIN YOUR ADJUSTMENTS TO BAD DEBT EXPENSE.**

A. Historically, the Company has applied the test year bad debt expense amount, as a percentage of the test year service revenue, to the requested revenue increase to calculate as adjusted bad debt amount. Because of the impacts of COVID-19 that drove abnormal fluctuations in both 2020 and 2021 bad debts expense, the Company chose to apply the 2019 bad debt expense as a percentage of 2019 service revenue to the 2022 revenues to calculate the Base Year bad debt expense. This percentage is calculated in Exhibit E in the application and applied to the requested increase in revenues.

- Multi-Year Rate Plan-Bad Debt Expense - the 2019 bad debt percentages are applied to the revenue requirements for the Base Year as well as each of Rate Years 1 – 3.

**Q. PLEASE EXPLAIN YOUR ADJUSTMENTS TO LIABILITY INSURANCE EXPENSE.**

A. The Company adjusted the test year amounts to include the liability insurance cost that Aqua will incur during 2022. The labor expense



percentage was applied to certain items related to labor (workers compensation) and transportation (auto insurance premiums) to reflect the fact that the Company capitalizes a portion of these costs.

- For this filing, Aqua is requesting the five-year average of actual claims paid for the years 2017-2021. This matches the methodology applied by the Public Staff and approved by the Commission to calculate the insurance adjustment in previous rate cases.
- Per the agreed upon treatment related to insurance expense in the W-218, Sub 526, rate case, the Company request includes a deferred regulatory asset for one-half of the difference between actual insurance claims paid during the test year that were in excess of the authorized annual claim expense as approved by the NCUC in the rate case order for W-218, Sub 526. The amount of this asset for 2021 is \$195,933, which has been included in the Base Year expense.
- Multi-Year Rate Plan - Liability Insurance Expense has been adjusted for each of Rate Years 1 – 3 by the 3.04% O&M CAGR factor.

**Q. PLEASE EXPLAIN YOUR ADJUSTMENTS TO MISCELLANEOUS EXPENSE.**

**A.** Base year (2022) Miscellaneous expense has been adjusted for the following:

- The removal of all test year amounts for Fines & Penalties, as these costs are not requested for recovery.

- The removal of the portion of the Company's NAWC annual dues that are attributed to Lobbying. These costs were coded to dues expense in the test year, but have been reclassified as non-utility expense, which is non-recoverable in this proceeding.

For all other miscellaneous expense items, the O&M CAGR factor was applied to the test year amount to get the Base Year expense.

Multi-Year Rate Plan - Miscellaneous Expense has been adjusted for each of Rate Years 1 – 3 by the 3.04% O&M CAGR factor.

**Q. PLEASE EXPLAIN YOUR ADJUSTMENTS TO DEPRECIATION AND CONTRIBUTIONS IN AID OF CONSTRUCTION (CIAC) AMORTIZATION EXPENSE.**

**A.** Utility Plant in Service (UPIS) depreciation and CIAC amortization expense for each period is summarized below:

- The Base Year (2022):
  - For all assets on the books as of 12/31/2021, a full year of depreciation/CIAC amortization is calculated.
  - 2022 post-test year additions (PTYA) are assumed to have been added evenly throughout the year, so one-half year of depreciation is calculated.
- Rate Years 1 (2023), 2 (2024), and 3 (2025) are treated in the same fashion:
  - A full year expense/amortization is calculated for the beginning balance of each rate year.

- 1                   ○ The PTYA amounts are again assumed to have been added  
2                   evenly throughout the year, resulting in one-half year of  
3                   depreciation being calculated and included in the revenue  
4                   requirement for each Rate Year.

5           The depreciation/CIAC rates used in this rate proceeding are the same as  
6           those approved in W-218, Sub 526, with one exception as follows:

- 7           • With the conversion to SAP<sup>2</sup>, effective January 1, 2022, the  
8           Company has a significant asset that does not fall under its current  
9           IT depreciable life options of 5 or 10 years. The Company employed  
10          John Spanos of Gannett Fleming to analyze this asset and he  
11          proposes a 15-year life (6.67% depreciation rate) for the SAP asset  
12          (see direct testimony by witness Spanos).
- 13          • Multi-Year Rate Plan - Depreciation Expense has been calculated  
14          based on the applicable projected capital projected to be placed into  
15          service in Rate Years 1 - 3.

16   **Q. PLEASE EXPLAIN YOUR ADJUSTMENT TO GAIN ON SALE OF**  
17   **ASSETS.**

18   A. An adjustment was made to remove the gain on two systems sold to Nash  
19   County during the test year. These were sales of entire water systems for  
20   which the gains have typically been allocated 100% to shareholders in  
21   similar past transactions. The remaining credit amounts in this line item

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<sup>2</sup> SAP, or Systems Applications and Products, is a widely used enterprise resource planning (ERP) software used to manage business operations and customer relations. SAP creates a centralized system for businesses that enables departments to access and share common data.

1 relate to the annual amortization of three well lots sold for a gain during  
2 2021. This sale was related to utility assets in an active water system, which  
3 are historically allocated to benefit customers through a reduction of the  
4 revenue requirement over a five-year amortization period. The annual gain  
5 amortization related to these asset sales will remain constant throughout  
6 Rate Years 1 - 3.

7 **Q. DID YOU MAKE ANY ADJUSTMENTS TO NON-UTILITY REVENUE?**

8 A. Non-Utility Revenue consists of antenna revenue, fees collected for billing  
9 of select Company water customers for their sewer service (on behalf of the  
10 sewer provider), and a small amount of miscellaneous non-utility revenue.  
11 Aqua proposes that approximately 5%, or \$45,000, of its antenna revenues  
12 be utilized to fund its proposed Customer Assistance Program, per witness  
13 Becker's testimony. Therefore, \$45,000 has been removed from the  
14 antenna revenue requirement impact. Aside from the aforementioned  
15 adjustment, the test year amounts for these items have not been further  
16 adjusted. However, it should be noted that:

- 17 • A three-year CAGR factor of 3.70% was applied to the test year to  
18 get to the "Base Year" level for this expense (see *Gearhart Exhibit*  
19 *1* for CAGR calculations).
- 20 • Multi-Year Rate Plan-Non-Utility Revenue has been adjusted for each  
21 of Rate Years 1 – 3 by the same 3.70 CAGR factor.

22 Test year amounts in General Ledger (GL) account 421960, related to the  
23 Tax Cuts and Jobs Act (TCJA) Tax Gross up of CAC/CIAC have been

1 adjusted out of the test year, since these are no longer applicable. These  
2 are not included in any of the WSIP calculations.

3 **Q. PLEASE EXPLAIN YOUR ADJUSTMENTS TO RATE CASE EXPENSE.**

4 A. Rate case expense has been calculated by estimating total costs for the  
5 current rate filing. These costs include:

- 6 • Legal Services provided by Aqua's primary regulatory attorneys;
- 7 • Labor from Service Company employees as well as Aqua  
8 Contractors (Billing & Rates Departments);
- 9 • Expenses, including printing, customer notices, filing fees, necessary  
10 travel, and other administrative costs;
- 11 • Cost of outside consultant for work on Rate of Return and Capital  
12 Structure Issues;
- 13 • Cost of outside consultant for work on Depreciation Analysis;
- 14 • Cost of outside consultant for work in building the new Multi-Year  
15 Rates Model, preparing the application, and providing testimony.

16 These costs are amortized over a three-year period (in-line with the WSIP).

17 The amounts resulting from this case will be combined with the unamortized  
18 balance from the W-218, Sub 526, rate case and amortized over that same  
19 three-year rate period. Rate case expenses are typically trued-up to actual  
20 as the case progresses.

- 21 • Multi-Year Rate Plan Rate Case Expense Amortization for Rate Years  
22 1 – 3 are also based on the amortization of the estimated rate case  
23 expenses above using a proposed three-year period.

1 **Q. PLEASE EXPLAIN YOUR ADJUSTMENTS TO TAXES OTHER THAN**  
2 **INCOME.**

3 A. First, the North Carolina Utilities Commission/Public Staff Regulatory Fee  
4 Assessment has been calculated for the test year and adjusted to  
5 correspond to the Company's "applied for" rate increases.

6 Second, payroll taxes have been adjusted for the pro forma increase in  
7 labor expense. NOTE – these adjustments are calculated in Application  
8 Exhibit E.

9 Finally, property tax expense for the test year was not specifically adjusted,  
10 therefore, a three-year property tax calculated CAGR factor of 3.31%  
11 (see *Gearhart Exhibit 1* for CAGR calculations) was applied to the test  
12 year amounts to get to the Base Year level for this expense.

- 13 • For WSIP, property tax has been adjusted for Rate Years 1 - 3 by the  
14 same 3.31% CAGR factor.

15 **Q. PLEASE EXPLAIN YOUR ADJUSTMENTS TO AMORTIZATION**  
16 **EXPENSE.**

17 A. This expense has been adjusted to reflect the level of tank painting  
18 amortization as of the end of the test year.

- 19 • Multi-Year Rate Plan amounts have not been adjusted for this  
20 category.

21 **Q. PLEASE EXPLAIN THE MISCELLANEOUS ADJUSTMENTS TO REVENUE**  
22 **AND EXPENSE LOCATED IN EXHIBIT E OF THE CURRENT RATE FILING.**

23 A. The late payment fees percentage incurred during 2019 has been applied

1 to pro forma service revenues to produce the amount of pro forma late  
2 payment fees to be included in revenue. The year 2019 – rather than the  
3 test year - was selected because it is the latest year that shows no impact  
4 from Covid-19 on late payments.

- 5 • The same treatment was given to Abatements, using the percentage  
6 from 2019 and applying it to the requested service revenue amounts  
7 for the appropriate revenue reduction.
- 8 • The adjustment to Bad Debt Expense/Uncollectibles (discussed  
9 above) is calculated in Application Exhibit E by applying the 2019  
10 percentage to the updated revenue amounts. Once again, 2019 was  
11 selected for this since it is the latest year that shows no impact from  
12 Covid-19 on uncollectible revenues.
- 13 • For ratemaking purposes, the Company's interest expense claim has  
14 been synchronized with rate base in this proceeding, which is  
15 supported by W-1, Item 3, and Exhibit M of the Company's Application  
16 for Rate Increase. The per books amounts for Interest on Long-Term  
17 Debt, Short-Term Debt, Pushdown Debt, Interest Expense - Other  
18 and the Amortization of Debt Issuance costs have been adjusted to  
19 zero as part of this process. These per books adjustments are  
20 reflected in Application Exhibit E. NOTE - Interest expense on  
21 customer deposits for the test year was left unchanged.
- 22 • Taxes (such as payroll taxes, NCUC regulatory fees, and per books  
23 income taxes) are updated in Application Exhibit E.

1 • Miscellaneous non-utility expenses, which should not be considered  
2 for ratemaking purposes, have also been removed from Application  
3 Exhibit E.

4 • Annualization and adjustment factors are calculated and applied in  
5 Application Exhibit E and applied to certain variable expenses.

6 **Q. PLEASE EXPLAIN YOUR ADJUSTMENT TO STATE AND FEDERAL**  
7 **INCOME TAXES.**

8 A. State and federal income taxes are based on the statutory corporate rates  
9 of 2.5% and 21.0%, respectively, applied to the pro forma level of pre-tax  
10 income.

11 • Multi-Year Rate Plan – State and Federal Tax Expense has been  
12 adjusted only for Rate Year 3, based on a projected decrease in NC  
13 Corporate tax from 2.5% to 2.25% in 2025.

14 **Q. DOES THE INCOME TAX PROVISION INCLUDE A PASS BACK OF**  
15 **EXCESS DEFERRED INCOME TAXES RESULTING FROM THE**  
16 **REDUCTION IN THE FEDERAL TAX RATE FROM 35% TO 21% DUE TO**  
17 **THE TAX CUTS AND JOBS ACT OF 2017 (TCJA)?**

18 A. Yes, included in Exhibit G, Line 32, is an amount for the annual  
19 amortization. Pursuant to the Order in Docket No. W-218, Sub 497, the  
20 Company's Federal unprotected excess deferred income tax (EDIT) and the  
21 Company's State EDIT were required to be returned to customers over  
22 three years and have been fully refunded, so there is no amortization for  
23 Federal unprotected EDIT or State EDIT reflected in this case. The



1 remaining annual amortization is comprised entirely of Federal protected  
2 EDIT amortization. This benefit will occur over the remaining book life of the  
3 property in service at the time of the tax rate decrease. In accordance with  
4 the Order in Docket No. W-218, Sub 497, the Company is to return the  
5 Federal protected EDIT to customers under the IRS normalization rules  
6 using the average rate assumption method (ARAM). Subsequent to the  
7 issuance of the Order, the Company discovered that after its fixed asset  
8 system conversion, the Company's tax depreciation and plant related  
9 deferred tax system lacked sufficient vintage account data necessary to  
10 calculate the amount of annual amortization using the ARAM. In such a  
11 circumstance, the IRS allows Companies to use the Reverse South Georgia  
12 Method (RSGM) (Rev. Proc. 2020-39 and Sections 3 and 4.01 of Rev. Proc.  
13 88-12) to return to customers the protected EDIT. This is the actual method  
14 the Company has been utilizing since the Order was issued. The RSGM  
15 computes the excess tax reserve on all public utility property included in the  
16 plant account based on the weighted average life or composite rate used to  
17 compute depreciation for regulatory purposes and reduces the excess tax  
18 reserve ratably over the remaining regulatory life of the property in  
19 compliance with the IRS normalization rules. The balance of the regulatory  
20 liability EDIT including tax gross up is \$2,793,442 at December 31, 2021.

21 **Q. PLEASE DESCRIBE YOUR ADJUSTMENT TO UTILITY PLANT IN**  
22 **SERVICE.**

23 **A.** The historical UPIS balance as of 12/31/2021 was adjusted to include post-

1 test year additions and allocated general plant projected through 12/31/22,  
2 the Base Year. Similar detailed projections were made to project the UPIS  
3 balances for Rate Years 1 – 3. The UPIS additions represent capital  
4 expenditures that were not in service at the conclusion of the test year, but  
5 projects expected to be completed and in service (used and useful) during  
6 the Base Year and each of the following Rate Years 1 – 3. Support for the  
7 adjustments specific to additional new spending is identified in schedules  
8 as part of Exhibit A for Water and Exhibit A for Sewer, within the Company's  
9 Application for Rate Increase Form W-1, Item 10.

10 Adjustments were also made for allocated general plant, which are assets  
11 that benefit all the operating units of Aqua statewide and are recorded on  
12 the Company's books in an "Administrative" accounting unit for accounting  
13 purposes, and thus not reflected within the historic test year balances of  
14 UPIS within each rate division. These types of assets include both  
15 "Common" and Information Technology (IT) and are further detailed in  
16 Exhibit A for Water and Exhibit A for Sewer, within the Company's  
17 Application for Rate Increase, Form W-1, and Item 10.

18 A detailed description, including the reason for and scope of each  
19 proposed capital investment project for the Base Year and each of Rate  
20 Years 1 – 3 have been provided for rate base calculations for those rate  
21 years and is located in the W-1, Item 10, Rate Base section of the  
22 application. These are provided as a detailed schedule as well as a  
23 summary by year and rate entity.

1 Retirements are incorporated in these post-test year projections, shown as  
2 reductions to UPIS as well as updated accumulated depreciation.

3 **Q. PLEASE DESCRIBE YOUR ADJUSTMENT TO THE LEVEL OF**  
4 **MATERIALS AND SUPPLIES USED IN THE RATE BASE**  
5 **CALCULATION.**

6 A. Three adjustments were made to the level of materials and supplies (M&S)  
7 included in pro forma rate base. First, a 13-month average was calculated  
8 of outstanding inventory balances as of December 31, 2021. These  
9 adjustments are allocated based on the customer counts as shown on  
10 Appendix 3. The supporting calculation for the 13-month average inventory  
11 is as referenced in Exhibit A-1 for Water and Exhibit A-2 for Sewer within  
12 the Company's Application for Rate Increase Form W-1, Item 10.  
13 The amounts used for Rate Years 1 – 3 have been increased by the 3.04%  
14 O&M CAGR factor mentioned above.

15 **Q. PLEASE EXPLAIN YOUR WORKING CAPITAL ALLOWANCE**  
16 **SUPPLIES USED IN THE RATE BASE CALCULATION.**

17 A. Cash working capital (Exhibit L of the Application) is calculated as 1/8 of  
18 operating and maintenance expense, excluding purchased water and  
19 sewer, plus customer deposit interest. In addition, the Company added the  
20 average prepayments such as unamortized tank painting, rate case  
21 expense, unamortized depreciation study costs, and unamortized repair tax  
22 credit costs. Deducted from these amounts are the average tax accruals  
23 calculated as 1/6 of unemployment tax and regulatory assessment fee, and

1 1/2 of property taxes. The amounts used for Rate Years 1 – 3 are consistent  
2 with balances projected as described above and include a roll-forward of  
3 the amounts as they are amortized over that timeframe.

4 **Q. PLEASE DESCRIBE YOUR TREATMENT OF UTILITY PLANT**  
5 **ACQUISITION ADJUSTMENT (UPAA).**

6 A. Adjustments have not been made to the UPAA balance and Aqua does  
7 not anticipate any additions by the end of Rate Year 3 at this time. The  
8 annual amortization for UPAA is included in the base and Rate Years 1  
9 – 3 revenue requirement as calculated (no CAGR applied).

10 These balances continue to be amortized at their test year levels for  
11 Rate Years 1 - 3 during the WSIP period.

12 **Q. PLEASE EXPLAIN YOUR ADJUSTMENTS TO ACCUMULATED**  
13 **AMORTIZATION OF CONTRIBUTIONS IN AID OF**  
14 **CONSTRUCTION.**

15 A. CIAC begins with the actual balances as of 12/31/2021. These  
16 balances are amortized a full year for the Base Year as well as  
17 rolled-forward for each of Rate Years 1 - 3. Future contributions  
18 are assumed to be rate base neutral. These balances are detailed  
19 in Exhibit A for Water and Exhibit A for Sewer, within the Company's  
20 Application for Rate Increase Form W-1, Item 10.

21 **Q. PLEASE EXPLAIN THE COMPANY'S CALCULATIONS REGARDING**  
22 **REVENUES.**

23 A. The Company has provided an analysis of the test year consumption and

1 number of bills from January of 2021 — December of 2021 for each rate  
2 entity in Application Exhibit F of this filing. The three-year average  
3 consumption (from the calendar years 2019-2021) per customer is being  
4 utilized throughout this WSIP filing.

5 Customer count/bill count is *projected* through each of the next four calendar  
6 years:

- 7 • Base Year (as of 12/31/2022)
- 8 • Rate Year 1 (12/31/2023)
- 9 • Rate Year 2 (12/31/2024)
- 10 • Rate Year 3 (12/31/2025)

11 The assumed growth is based on the three-year average customer growth  
12 for the years 2019-2021.

13 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

14 **A.** Yes.

## CAGR Calculations

W-218 SUB 573

GEARHART EXHIBIT 1

L#	(a)	(b)	(c)	(d)	(e)	(f)	(g)
1	AQUA NC - CONSOLIDATED PER BOOKS P&L						
2	<b>Row Labels</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>CAGR [1]</b>	
3	01-OPREV-WTR	\$38,886,739.84	\$39,573,414.37	\$41,297,252.53	\$44,642,465.40		
4	02-OPREV-SWR	\$14,628,273.30	\$15,990,667.11	\$17,043,843.67	\$18,384,639.37		
5	03-NON OPER REV	\$829,170.90	\$887,527.55	\$1,382,750.66	\$1,342,879.42		
6	28- BAD DEBT	(\$252,000.44)	(\$261,934.28)	(\$486,405.82)	(\$274,715.16)		
7	<b>NET REVENUE</b>	<b>\$54,092,183.60</b>	<b>\$56,189,674.75</b>	<b>\$59,237,441.04</b>	<b>\$64,095,269.03</b>		
8							
9	04.1- REG LABOR	\$7,437,417.86	\$7,746,472.28	\$7,862,215.66	\$8,231,074.85		
10	04.2- OT LABOR	\$670,160.61	\$573,578.68	\$550,338.38	\$589,869.47		
11	04.3- LABOR BON/OPT	\$442,730.34	\$558,145.17	\$735,610.21	\$573,394.79		
12	05- EMP BEN	\$3,028,558.53	\$3,077,020.40	\$3,097,318.57	\$3,202,015.97		
13	06-PRCH WTR	\$1,906,833.09	\$2,128,067.56	\$2,249,983.65	\$2,544,152.09		
14	07-PRCH WW T	\$414,346.48	\$539,410.53	\$703,901.38	\$880,375.33		
15	08-SLUDGE	\$673,410.84	\$781,247.08	\$732,882.91	\$815,442.50		
16	09-PRCH PWR	\$3,722,339.30	\$3,860,464.43	\$3,784,569.03	\$3,958,428.08		
17	10- CHEMICALS	\$1,459,417.32	\$1,380,057.67	\$1,342,552.50	\$1,435,311.52		
18	11-MGMT FEES-CORP	\$3,797,849.99	\$3,712,056.75	\$2,954,081.84	\$3,069,602.53		
19	12-MGMT FEES-ST	(\$47,488.70)	(\$14,733.09)	(\$15,926.11)	(\$15,750.20)		
20	13-CUST OPS-ACO	\$1,234,633.29	\$1,162,667.33	\$1,139,964.12	\$1,136,411.28		
21	14-CUST OPS-DIR	\$607,991.03	\$644,385.78	\$624,601.38	\$591,964.42		
22	16-OS SVCS-ENG	(\$69,336.45)	\$14,280.00	\$3,144.00	\$405.00		
23	17-OS SVCS-ACCT	\$152,716.00	\$180,025.41	\$159,287.70	\$188,790.61		
24	18-OS SVCS-LEGAL	\$137,167.37	\$365,785.97	\$326,337.72	\$304,502.28		
25	19-OS SVCS-LAB	\$1,082,030.72	\$1,064,350.95	\$1,149,959.42	\$1,021,893.21		
26	20-OS SVCS-IT	\$53,998.50	\$91,666.54	\$87,438.02	\$76,069.90		
27	21-OS SVCS-OPS	\$401,337.87	\$530,211.29	\$529,533.67	\$553,876.43		
28	22-OS SVCS-MAINT	\$1,735,247.52	\$1,724,474.43	\$1,929,233.63	\$2,145,943.21		
29	23-OS SVCS-OTH	\$589,346.75	\$784,878.63	\$773,776.82	\$945,744.33		
30	24.1- LEASES BLDG	\$162,529.14	\$160,912.34	\$166,970.93	\$169,836.21		
31	24.2- LEASES EQUIP	\$46,859.13	\$17,958.50	\$43,454.51	\$45,383.25		
32	25-SUPPLIES	\$484,258.37	\$513,309.00	\$591,983.41	\$664,849.43		
33	26.1-TRANS LEASE	\$32,245.99	\$39,088.82	\$8,834.74	\$19,393.16		
34	26.2-TRANS FUEL	\$888,207.54	\$829,872.13	\$694,997.81	\$887,594.90		
35	26.3-TRANS OTH	\$334,139.31	\$137,015.40	\$147,603.57	\$187,298.44		
36	26.4-TRANS MAINT	\$943.67	\$379,765.37	\$374,657.09	\$339,049.72		
37	27- INSURANCE	\$1,088,827.55	\$1,165,386.94	\$1,227,884.00	\$1,251,037.09		
38	29-A OTHER-BANK FEES	\$518.00	\$627.31	\$13,492.67	\$17,452.27		
39	29-B OTHER-COMM	\$364,712.29	\$401,755.17	\$422,565.16	\$388,338.72		
40	29-C OTHER-DUES	\$48,841.79	\$47,241.49	\$50,531.15	\$59,644.74		
41	29-D OTHER PUB REL	\$3,797.07	\$300.00	\$466.24	\$463.50		
42	29-F OTHER-LIC/PERM	\$427,584.17	\$455,431.58	\$291,116.38	\$372,763.62		
43	29-G OTHER-POST	\$7,957.62	\$18,768.15	\$31,893.09	\$18,563.00		
44	29-H OTHER-MISC	\$125,144.58	\$255,541.71	\$248,917.79	\$235,433.93		
45	29-I OTHER-OFF SUPP	\$47,428.41	\$54,020.31	\$69,042.95	\$56,220.86		
46	29-J OTHER-MAINT	\$33,363.60	\$29,344.40	\$34,649.13	\$36,526.30		
47	29-K OTHER-TRAVEL	\$97,364.01	\$86,851.63	\$29,086.79	\$40,629.02		
48	29-L OTHER-UNIFORMS	\$51,753.74	\$43,425.98	\$40,229.25	\$38,393.60		
49	29-M OTHER-CAP OH-BENEFITS	(\$622,373.71)	(\$688,046.13)	(\$701,377.43)	(\$746,296.07)		
50	29-N OTHER-CAP OH-LABOR	(\$296,241.84)	(\$341,869.35)	(\$371,639.41)	(\$459,229.21)		
51	29-O OTHER-CAP OH-OTHER	(\$418,958.48)	(\$460,371.79)	(\$374,624.12)	(\$479,318.90)		
52	29-P OTHER-CAP OH-PR TAX	(\$163,549.27)	(\$179,923.01)	(\$189,401.15)	(\$197,173.64)		
53	<b>O&amp;M EXPENSE</b>	<b>\$32,176,060.94</b>	<b>\$33,870,919.74</b>	<b>\$33,572,139.05</b>	<b>\$35,196,371.54</b>	<b>3.04% [2]</b>	
54							
55	29-E OTHER-FINES	(\$932.12)	(\$89,947.53)	\$10,604.71	\$15,577.95		
56	30-NON UTILITY EXP	\$360,267.44	\$174,160.71	\$553,941.35	\$67,276.89		
57	31-AMORTIZATION	\$323,627.82	\$532,382.64	\$661,656.63	\$990,586.41		
58	32-DEPRECIATION	\$8,549,243.61	\$9,926,071.52	\$10,446,977.46	\$11,362,565.46		
59	33.1-OTHER TAXES-PUC	\$77,731.69	\$75,012.63	\$75,481.34	\$82,708.95		
60	33.2-OTHER TAXES-PROP	\$672,383.30	\$680,378.83	\$700,986.39	\$741,331.23		
61	33.3-OTHER TAXES-PR	\$761,405.39	\$805,339.25	\$830,904.05	\$852,646.80		
62	33.4-OTHER TAXES-OTH	\$280,549.96	\$278,402.04	\$207,622.00	\$280,196.00		
63	36-ASSET SALE	(\$6,371.49)	(\$6,371.51)	(\$6,371.52)	(\$102,691.87)		
64	38-AFUDC	(\$744,719.29)	(\$636,970.27)	(\$701,677.10)	(\$1,501,561.21)		
65	39-BENEFIT COSTS	(\$24,399.00)	(\$18,483.00)	(\$23,642.03)	(\$27,966.00)		
66	40-INT EXP-STD	\$0.00					
67	41-INT EXP-LTD	\$4,300,275.01	\$4,720,017.47	\$5,007,816.33	\$5,440,477.86		
68	42-INT EXP-CUST DEP	\$31,511.67	\$30,371.53	\$27,879.03	\$24,819.91		
69	43-INT INCOME	(\$75,862.68)	(\$32,255.38)	(\$42,285.95)	(\$35,084.47)		
70	44-INT EXP-OTHER	\$124,929.81	\$179.00	(\$0.00)	\$0.00		
71	45-AMORT-DEBT ISSUANCE COSTS	\$63,774.66	\$73,492.30	\$278,042.88	\$285,500.72		

3.31% [3]

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Jun 30 2022

## W-218 SUB 573

## GEARHART EXHIBIT 1

L#	(a)	(b)	(c)	(d)	(e)	(f)	(g)
1	AQUA NC - CONSOLIDATED PER BOOKS P&L						
2	<b>Row Labels</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>CAGR [1]</b>	
72	TOTAL EXPENSE	\$46,869,476.72	\$50,382,699.97	\$51,600,074.62	\$53,672,756.17		
73							
74	PRE-TAX INCOME	\$7,222,706.88	\$5,806,974.78	\$7,637,366.42	\$10,422,512.86		
75	46-FEDERAL TAXES	\$1,531,417.40	(\$1,836,062.03)	(\$1,496,264.31)	(\$944,765.51)		
76	47-STATE TAXES	(\$31,798.69)	(\$184,399.94)	(\$227,542.89)	(\$73,476.21)		
77	<b>NET INCOME</b>	<b>\$ 5,723,088.17</b>	<b>\$ 7,827,436.75</b>	<b>\$ 9,361,173.62</b>	<b>\$ 11,440,754.58</b>		

78

79 [1] Compound Annual Growth Rate (CAGR). Formula  $((2021 \text{ amount} / 2018 \text{ amount})^{1/3}) - 1$

80 [2] Applied to O&M expense lines unless otherwise noted for MYRP

81 [3] Applied to Property Tax Expense for MYRP

## W-218, SUB 573

## GEARHART EXHIBIT 1A

## Factors by Category and Year

Row Labels	Type	Base Year	Rate Yr1	Rate Yr2	Rate Yr3	Notes
03-NON OPER REV	Non OperRev	1.0370	1.0370	1.0370	1.0370	CAGR after removal of CAC/CIAC Tax Gross-Up
04.1- REG LABOR	NC Direct	1.0000	1.0300	1.0300	1.0300	NC TY Adj for 2022 positions, MYRP=Company policy of 3%
04.1- REG LABOR-ACO Alloc	ACO Alloc	1.0300	1.0300	1.0300	1.0300	Company policy of 3% annual merit increases
04.1- REG LABOR-Corp Serv	Corp Serv	1.0300	1.0300	1.0300	1.0300	Company policy of 3% annual merit increases
04.1- REG LABOR-Corp Sund	Corp Sund	1.0300	1.0300	1.0300	1.0300	Company policy of 3% annual merit increases
04.1- REG LABOR-NC Admin	NC Admin	1.0000	1.0300	1.0300	1.0300	NC TY Adj for 2022 positions, MYRP=Company policy of 3%
04.1- REG LABOR-PNG S&S	PNG S&S	1.0300	1.0300	1.0300	1.0300	Company policy of 3% annual merit increases
04.2- OT LABOR	NC Direct	1.0000	1.0300	1.0300	1.0300	Company policy of 3% annual merit increases
04.2- OT LABOR-ACO Alloc	ACO Alloc	1.0300	1.0300	1.0300	1.0300	Company policy of 3% annual merit increases
04.2- OT LABOR-Corp Serv	Corp Serv	1.0300	1.0300	1.0300	1.0300	Company policy of 3% annual merit increases
04.2- OT LABOR-NC Admin	NC Admin	1.0000	1.0300	1.0300	1.0300	Company policy of 3% annual merit increases
04.2- OT LABOR-PNG S&S	PNG S&S	1.0300	1.0300	1.0300	1.0300	Company policy of 3% annual merit increases
04.3- LABOR BON/OPT	NC Direct	1.0000	1.0300	1.0300	1.0300	Company policy of 3% annual merit increases
04.3- LABOR BON/OPT-ACO Alloc	ACO Alloc	1.0300	1.0300	1.0300	1.0300	Company policy of 3% annual merit increases
04.3- LABOR BON/OPT-Corp Serv	Corp Serv	1.0300	1.0300	1.0300	1.0300	Company policy of 3% annual merit increases
04.3- LABOR BON/OPT-Corp Sund	Corp Sund	1.0300	1.0300	1.0300	1.0300	Company policy of 3% annual merit increases
04.3- LABOR BON/OPT-NC Admin	NC Admin	1.0000	1.0300	1.0300	1.0300	Company policy of 3% annual merit increases
04.3- LABOR BON/OPT-PNG S&S	PNG S&S	1.0300	1.0300	1.0300	1.0300	Company policy of 3% annual merit increases
05- EMP BEN	NC Direct	1.0000	1.0300	1.0300	1.0300	NC TY Adj for 2022 benefits, MYRP 3-yr O&M CAGR
05- EMP BEN-ACO Alloc	ACO Alloc	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
05- EMP BEN-Corp Serv	Corp Serv	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
05- EMP BEN-Corp Sund	Corp Sund	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
05- EMP BEN-NC Admin	NC Admin	1.0000	1.0304	1.0304	1.0304	NC TY Adj for 2022 benefits, MYRP 3-yr O&M CAGR
05- EMP BEN-PNG S&S	PNG S&S	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
06-PRCH WTR	NC Direct	1.0000	1.0000	1.0000	1.0000	Purchased water pass thrus for future increases
06-PRCH WTR-NC Admin	NC Admin	1.0000	1.0000	1.0000	1.0000	Purchased water pass thrus for future increases
07-PRCH WW T	NC Direct	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
07-PRCH WW T-NC Admin	NC Admin	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
08-SLUDGE	NC Direct	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
09-PRCH PWR	NC Direct	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
09-PRCH PWR-ACO Alloc	ACO Alloc	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
09-PRCH PWR-NC Admin	NC Admin	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
10- CHEMICALS	NC Direct	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
11-MGMT FEES-CORP	NC Direct	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
11-MGMT FEES-CORP-Corp Serv	CORP	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
11-MGMT FEES-CORP-Corp Sund	CORP	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
11-MGMT FEES-CORP-PNG S&S	CORP	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
12-MGMT FEES-ST	NC Direct	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
12-MGMT FEES-ST-NC Admin	ST	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR



## W-218, SUB 573

## GEARHART EXHIBIT 1A

## Factors by Category and Year

Row Labels	Type	Base Year	Rate Yr1	Rate Yr2	Rate Yr3	Notes
13-CUST OPS-ACO	NC Direct	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
13-CUST OPS-ACO-ACO Alloc	ACO	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
14-CUST OPS-DIR	NC Direct	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
16-OS SVCS-ENG	NC Direct	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
17-OS SVCS-ACCT	NC Direct	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
17-OS SVCS-ACCT-Corp Sund	ACCT	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
18-OS SVCS-LEGAL	NC Direct	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
18-OS SVCS-LEGAL-Corp Sund	LEGAL	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
18-OS SVCS-LEGAL-NC Admin	LEGAL	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
19-OS SVCS-LAB	NC Direct	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
19-OS SVCS-LAB-NC Admin	LAB	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
20-OS SVCS-IT	NC Direct	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
20-OS SVCS-IT-ACO Alloc	IT	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
20-OS SVCS-IT-Corp Sund	IT	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
20-OS SVCS-IT-NC Admin	IT	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
21-OS SVCS-OPS	NC Direct	1.0000	1.0304	1.0304	1.0304	TY Adj for 2022 MYRP=3 yr O&M CAGR
21-OS SVCS-OPS-NC Admin	OPS	1.0000	1.0304	1.0304	1.0304	TY Adj for 2022 MYRP=3 yr O&M CAGR
22-OS SVCS-MAINT	NC Direct	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
22-OS SVCS-MAINT-ACO Alloc	MAINT	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
22-OS SVCS-MAINT-Corp Sund	MAINT	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
22-OS SVCS-MAINT-NC Admin	MAINT	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
23-OS SVCS-OTH	NC Direct	1.0000	1.0304	1.0304	1.0304	TY Adj for 2022 MYRP=3 yr O&M CAGR
23-OS SVCS-OTH-ACO Alloc	OTH	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
23-OS SVCS-OTH-Corp Sund	OTH	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
23-OS SVCS-OTH-NC Admin	OTH	1.0000	1.0304	1.0304	1.0304	TY Adj for 2022 MYRP=3 yr O&M CAGR
23-OS SVCS-OTH-PNG S&S	OTH	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
24.1- LEASES BLDG	NC Direct	1.0000	1.0304	1.0304	1.0304	TY Adj for 2022 MYRP=3 yr O&M CAGR
24.1- LEASES BLDG-ACO Alloc	ACO Alloc	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
24.1- LEASES BLDG-Corp Serv	Corp Serv	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
24.1- LEASES BLDG-Corp Sund	Corp Sund	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
24.2- LEASES EQUIP	NC Direct	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
24.2- LEASES EQUIP-ACO Alloc	ACO Alloc	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
24.2- LEASES EQUIP-NC Admin	NC Admin	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
25-SUPPLIES	NC Direct	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
25-SUPPLIES-ACO Alloc	ACO Alloc	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
25-SUPPLIES-NC Admin	NC Admin	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
25-SUPPLIES-PNG S&S	PNG S&S	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
26.1-TRANS LEASE	NC Direct	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
26.1-TRANS LEASE-Corp Serv	Corp Serv	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR

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## GEARHART EXHIBIT 1A

## Factors by Category and Year

Row Labels	Type	Base Year	Rate Yr1	Rate Yr2	Rate Yr3	Notes
26.1-TRANS LEASE-Corp Sund	Corp Sund	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
26.1-TRANS LEASE-NC Admin	NC Admin	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
26.2-TRANS FUEL	NC Direct	1.0000	1.0000	1.0000	1.0000	TY adj to 6/06/22 actual fuel price, no additional adjustments
26.2-TRANS FUEL-Corp Sund	Corp Sund	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
26.2-TRANS FUEL-NC Admin	NC Admin	1.0000	1.0000	1.0000	1.0000	TY adj to 6/06/22 actual fuel price, no additional adjustments
26.3-TRANS OTH	NC Direct	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
26.3-TRANS OTH-Corp Sund	Corp Sund	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
26.3-TRANS OTH-NC Admin	NC Admin	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
26.3-TRANS OTH-PNG S&S	PNG S&S	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
26.4-TRANS MAINT	NC Direct	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
26.4-TRANS MAINT-NC Admin	NC Admin	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
27- INSURANCE	NC Direct	1.0000	1.0304	1.0304	1.0304	TY Adj for 2022 MYRP=3 yr O&M CAGR
27- INSURANCE-GL	GL	1.0000	1.0304	1.0304	1.0304	TY Adj for 2022 MYRP=3 yr O&M CAGR
27- INSURANCE-NC Admin-VEH	NC Admin	1.0000	1.0304	1.0304	1.0304	TY Adj for 2022 MYRP=3 yr O&M CAGR
27- INSURANCE-NC Admin-WC	NC Admin	1.0000	1.0304	1.0304	1.0304	TY Adj for 2022 MYRP=3 yr O&M CAGR
27- INSURANCE-OTH	OTH	1.0000	1.0304	1.0304	1.0304	TY Adj for 2022 MYRP=3 yr O&M CAGR
27- INSURANCE-VEH	VEH	1.0000	1.0304	1.0304	1.0304	TY Adj for 2022 MYRP=3 yr O&M CAGR
27- INSURANCE-WC	WC	1.0000	1.0304	1.0304	1.0304	TY Adj for 2022 MYRP=3 yr O&M CAGR
28- BAD DEBT	NC Direct					Exhibit E - use 2019 percentage of revenue for all years
29-A OTHER-BANK FEES	NC Direct	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-A OTHER-BANK FEES-Corp Sund	BANK FEES	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-A OTHER-BANK FEES-NC Admin	BANK FEES	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-B OTHER-COMM	NC Direct	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-B OTHER-COMM-ACO Alloc	COMM	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-B OTHER-COMM-Corp Sund	COMM	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-B OTHER-COMM-NC Admin	COMM	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-B OTHER-COMM-PNG S&S	COMM	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-C OTHER-DUES	NC Direct	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-C OTHER-DUES-ACO Alloc	DUES	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-C OTHER-DUES-Corp Sund	DUES	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-C OTHER-DUES-NC Admin	DUES	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-C OTHER-DUES-PNG S&S	DUES	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-D OTHER PUB REL	NC Direct	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-D OTHER PUB REL-Corp Sund	Corp Sund	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-D OTHER PUB REL-NC Admin	NC Admin	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-E OTHER-FINES	NC Direct					Removed in Schedule E
29-E OTHER-FINES-NC Admin	FINES					Removed in Schedule E
29-F OTHER-LIC/PERM	NC Direct	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-F OTHER-LIC/PERM-Corp Sund	LIC/PERM	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR

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GEARHART EXHIBIT 1A

Factors by Category and Year

Row Labels	Type	Base Year	Rate Yr1	Rate Yr2	Rate Yr3	Notes
29-F OTHER-LIC/PERM-NC Admin	LIC/PERM	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-F OTHER-LIC/PERM-PNG S&S	LIC/PERM	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-G OTHER-POST	NC Direct	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-G OTHER-POST-ACO Alloc	POST	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-G OTHER-POST-Corp Sund	POST	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-G OTHER-POST-NC Admin	POST	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-H OTHER-MISC	NC Direct	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-H OTHER-MISC-ACO Alloc	MISC	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-H OTHER-MISC-Corp Sund	MISC	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-H OTHER-MISC-NC Admin	MISC	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-H OTHER-MISC-PNG S&S	MISC	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-I OTHER-OFF SUPP	NC Direct	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-I OTHER-OFF SUPP-ACO Alloc	OFF SUPP	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-I OTHER-OFF SUPP-Corp Sund	OFF SUPP	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-I OTHER-OFF SUPP-NC Admin	OFF SUPP	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-J OTHER-MAINT	NC Direct	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-J OTHER-MAINT-NC Admin	MAINT	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-K OTHER-TRAVEL	NC Direct	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-K OTHER-TRAVEL-ACO Alloc	TRAVEL	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-K OTHER-TRAVEL-Corp Sund	TRAVEL	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-K OTHER-TRAVEL-NC Admin	TRAVEL	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-K OTHER-TRAVEL-PNG S&S	TRAVEL	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-L OTHER-UNIFORMS	NC Direct	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-L OTHER-UNIFORMS-NC Admin	UNIFORMS	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-M OTHER-CAP OH-BENEFITS	NC Direct	1.0000	1.0304	1.0304	1.0304	NC TY Adj for 2022 benefits, MYRP 3-yr O&M CAGR
29-N OTHER-CAP OH-LABOR	NC Direct	1.0000	1.0304	1.0304	1.0304	NC TY Adj for 2022 positions, MYRP=Company policy of 3%
29-O OTHER-CAP OH-OTHER	NC Direct	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-O OTHER-CAP OH-OTHER-	CAP OH-Other	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-O OTHER-CAP OH-OTHER-INSURANCE	CAP OH-Insurance	1.0000	1.0304	1.0304	1.0304	NC TY Adj for 2022 actual, MYRP=Company policy of 3%
29-O OTHER-CAP OH-OTHER-NC Admin-	CAP OH-Other-NC Admin	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-O OTHER-CAP OH-OTHER-OTHER-MISC	CAP OH-Other-Misc	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-O OTHER-CAP OH-OTHER-OTHER-UNIFORMS	CAP OH-Other-Uniforms	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-O OTHER-CAP OH-OTHER-TRANS FUEL	CAP OH-Other-Trans Fuel	1.0000	1.0304	1.0304	1.0304	TY adj to 6/06/22 actual fuel price, no additional adjustments
29-O OTHER-CAP OH-OTHER-TRANS LEASE	CAP OH-Other-Trans Lease	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-O OTHER-CAP OH-OTHER-TRANS MAINT	CAP OH-Other-Trans Maint	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-O OTHER-CAP OH-OTHER-TRANS OTH	CAP OH-Other-Trans Oth	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
29-P OTHER-CAP OH-PR TAX	NC Direct	1.0304	1.0304	1.0304	1.0304	3 yr O&M CAGR
30-NON UTILITY EXP	NC Direct					Removed in Schedule E
30-NON UTILITY EXP-Corp Sund	Corp Sund					Removed in Schedule E

## Factors by Category and Year

Row Labels	Type	Base Year	Rate Yr1	Rate Yr2	Rate Yr3	Notes
31-AMORTIZATION	NC Direct	1.0000	1.0000	1.0000	1.0000	TY adj to 2022 actuals, no additional adjustments
32-DEPRECIATION	NC Direct					Based on Added Capital Schedules
33.1-OTHER TAXES-PUC	NC Direct					Ex. E - 0.13% of operating revenues
33.2-OTHER TAXES-PROP	NC Direct	1.0331	1.0331	1.0331	1.0331	3 yr CAGR for Prop Taxes
33.3-OTHER TAXES-PR	NC Direct					TY Payroll Tax calculation done on Ex. E
33.3-OTHER TAXES-PR-ACO Alloc	PR					TY Payroll Tax calculation done on Ex. E
33.3-OTHER TAXES-PR-Corp Serv	PR					TY Payroll Tax calculation done on Ex. E
33.3-OTHER TAXES-PR-PNG S&S	PR					TY Payroll Tax calculation done on Ex. E
33.4-OTHER TAXES-OTH	NC Direct	1.0000	1.0000	1.0000	1.0000	MYRP=no changes to TY amounts
33.4-OTHER TAXES-OTH-ACO Alloc	OTH	1.0000	1.0000	1.0000	1.0000	MYRP=no changes to TY amounts
33.4-OTHER TAXES-OTH-Corp Sund	OTH	1.0000	1.0000	1.0000	1.0000	MYRP=no changes to TY amounts
36-ASSET SALE	NC Direct	1.0000	1.0000	1.0000	1.0000	TY adj to 2022 actuals, no additional adjustments
38-AFUDC	NC Direct					Int Removed in Schedule E - Synch w Rate Base
39-BENEFIT COSTS	NC Direct	1.0000	1.0000	1.0000	1.0000	MYRP=no changes to TY amounts
39-BENEFIT COSTS-ACO Alloc	ACO Alloc	1.0000	1.0000	1.0000	1.0000	MYRP=no changes to TY amounts
40-INT EXP-STD	NC Direct					Int Removed in Schedule E - Synch w Rate Base
41-INT EXP-LTD	NC Direct					Int Removed in Schedule E - Synch w Rate Base
42-INT EXP-CUST DEP	NC Direct	1.0000	1.0000	1.0000	1.0000	
43-INT INCOME	NC Direct					Int Removed in Schedule E - Synch w Rate Base
44-INT EXP-OTHER	NC Direct					Int Removed in Schedule E - Synch w Rate Base
44-INT EXP-OTHER-Corp Sund	OTHER					Int Removed in Schedule E - Synch w Rate Base
45-AMORT-DEBT ISSUANCE COSTS	NC Direct					Int Removed in Schedule E - Synch w Rate Base
46-FEDERAL TAXES	NC Direct					Calculated in Exhibit K
47-STATE TAXES	NC Direct					Calculated in Exhibit K