



**NORTH CAROLINA
PUBLIC STAFF
UTILITIES COMMISSION**

April 12, 2024

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

Re: Docket No. W-1034, Sub 13 – Application by Water Resources, Inc., for Authority to Adjust and Increase Rates for Water Utility Service in Rocky River Plantation Subdivision in Cabarrus County and River Walk Subdivision in Mecklenburg County, North Carolina

Dear Ms. Dunston,

Attached for filing on behalf of the Public Staff in the above-referenced dockets is the testimony and exhibits of Evan M. Houser, 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/ Gina Holt
Staff Attorney
gina.holt@psncuc.nc.gov

cc: Parties of Record

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Transportation
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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 12th day of April, 2024.

Electronically submitted
/s/Gina Holt
Staff Attorney

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. W-1034, SUB 13

In the Matter of
Application of Water Resources, Inc.,)
for Authority to Adjust and Increase Rates)
for Water Utility Service in Rocky River)
Plantation Subdivision in Cabarrus County)
and River Walk Subdivision in)
Mecklenburg County, North Carolina)

**TESTIMONY OF
EVAN M. HOUSER
PUBLIC STAFF –
NORTH CAROLINA
UTILITIES COMMISSION**

April 12, 2024

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

3 A. My name is Evan M. Houser. 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. Briefly state your qualifications and duties.**

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

10 **Q. What is the nature of the Company's application in this rate**
11 **case?**

12 A. On December 29, 2023, Water Resources, Inc. (WRI or Company),
13 filed an application seeking authority to increase rates for water utility
14 service in its Rocky River Plantation (Rocky River) and River Walk
15 service areas in Cabarrus and Mecklenburg Counties, North
16 Carolina (Application). The Company amended its Application on
17 January 3, 2024. The test year for this rate case is the 12-month
18 period ended December 31, 2022.

19 On January 30, 2024, the North Carolina Utilities Commission
20 (Commission) issued an order establishing a general rate case and
21 suspending rates. On March 1, 2024, the Commission issued an

1 order scheduling a public witness hearing, an evidentiary hearing,
2 and requiring customer notice. WRI filed a certificate of service on
3 March 7, 2024, stating that the required customer notice was mailed
4 or hand-delivered to all affected customers.

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

6 A. The purpose of my testimony is to provide the Commission with (1)
7 the results of my investigation, and (2) recommendations regarding
8 specific areas of the Application, including customer complaints,
9 Notices of Violation (NOVs) and Notices of Deficiency (NODs) issued
10 by the North Carolina Department of Environmental Quality (DEQ),
11 certain expenses, plant in service, revenues, and rate design.

12 **Q. Please describe the WRI service areas and water utility**
13 **systems.**

14 A. WRI provides water utility service to approximately 114 residential
15 customers in its Rocky River service area in Cabarrus County. The
16 Rocky River system consists of a well, well house, treatment facility
17 building with a chlorination apparatus, a six-foot diameter sand filter,
18 a 100,000-gallon elevated storage tank, an eight-inch
19 interconnection to the Town of Harrisburg, and a distribution system
20 including various diameter piping, valves and other appurtenances.
21 The system provides bulk water service to McMillan Acres through a
22 four-inch master meter.

1 WRI provides water utility service to approximately 39 residential
2 customers in its River Walk service area in Mecklenburg County. The
3 River Walk system consists of two wells, well houses, chlorination
4 apparatus, a 15,000-gallon ground storage tank, two booster pumps,
5 a 2,000-gallon hydropneumatic storage tank, and a distribution
6 system with various diameter piping, valves, and other
7 appurtenances.

8 **Q. Have you performed a site visit of the WRI water systems and,**
9 **if so, what were your observations?**

10 Yes, on March 21, 2024, I inspected the WRI water systems. I was
11 accompanied by Raymond Whitner from DEQ's Public Water Supply
12 Section (PWS), a section within the Division of Water Resources,
13 and Dennis Abbott from WRI. My observations of the systems'
14 conditions as of March 21, 2024, are described below.

15 The water systems appeared to be in fair condition. The elevated
16 storage tank in the Rocky River system appeared to have some
17 visible corrosion, as well as some discoloration on the underside of
18 the tank bowl. The gate was unlocked and the fence, which
19 surrounds the elevated storage tank, was damaged in one corner,
20 allowing access to the storage tank.

21 One of the River Walk system's well enclosures was damaged,
22 compromising the structure. Mr. Abbott discussed the possibility that

1 a vehicle moving tree debris had struck the enclosure, which
2 appeared to be reasonable based on the damage observed. The well
3 components inside the structure did not appear to be damaged.

4 **Q. Briefly describe the results of the American Tank Maintenance**
5 **inspection of the water tower.**

6 A. On February 10, 2020, American Tank Maintenance (ATM)
7 performed a visual inspection of the 100,000-gallon elevated storage
8 tank.

9 ATM noted that the exterior had corrosion forming on the tank legs,
10 riser, bowl, and roof. It was noted that the millage, or thickness, of
11 the exterior coating was good in all areas tested, and that an exterior
12 overcoat was recommended. ATM noted that the interior surfaces
13 had corrosion forming on all welded seams, that light sediment was
14 found in the tank, and that an interior sandblast and two coats of
15 epoxy were recommended. ATM additionally recommended
16 installation of a new hatch and roof vent, as well as a ladder gate on
17 the access ladder.

18 ATM reported that the tank was structurally sound and that no
19 defects were noted.

20 **Q. Briefly describe the most recent DEQ inspection of Rocky River.**

21 A. DEQ most recently inspected the Rocky River system on February
22 17, 2023. The inspection report noted that the water system had

1 recently been “plagued” by multiple water outages when an internet
2 contractor broke pipes during an underground fiber optic line
3 installation. The inspection report noted that the elevated tank lot was
4 not locked, and that the lot was overgrown with saplings. The report
5 stated that no water was observed running down the street from the
6 meter boxes with the exception of one home next to the Well #2
7 access. The inspection noted that in regard to whether WRI had
8 followed the recommendations from DEQ’s previous report, the
9 leaking Well #2 meter and the Well #2 cover had been replaced, but
10 the tank gate had not been locked. The inspection report
11 recommended that the Company clear a path and the storage tank
12 lot of saplings. The saplings had not been cleared at the time of my
13 March 2024 site visit.

14 However, Mr. Abbott stated his intention to have the saplings cleared
15 out, and subsequently provided me photos of the cleared tank lot and
16 new gate lock on April 5, 2024.

17 **Q. Briefly describe the most recent DEQ inspection of River Walk.**

18 A. DEQ most recently inspected the River Walk system on March 1,
19 2022. The inspection report noted that both booster pumps had been
20 replaced and made several recommendations. DEQ recommended
21 (1) modifying the roof over Well #2 to allow the operator in
22 responsible charge (ORC) to lift it by themselves; (2) cleaning and

1 painting of the ground and hydropneumatic storage tanks; (3)
2 screening or providing a solid weather resistant cover for the holes
3 in the doors, or replacing the doors for the Well #1 and treatment
4 plant rooms to prevent animal or vermin infiltration; (4) removing
5 trash, debris, and unused equipment from the wellhouse and
6 treatment plant rooms; (5) replacing the broken meter on Well #1;
7 and (6) replacing or repairing the injection parts to stop leaking at the
8 chemical injection site. At the time of my site visit, the roof had not
9 been modified, the holes in the doors had not been covered, there
10 were some old components and debris present in the treatment
11 building, and there appeared to be some fluid leaking in the room
12 that contained the chemical injection point. Each of the tanks has
13 recently been painted.

14 During the site visit and subsequently via email, Mr. Abbott notified
15 me of his intention to replace the Well #2 well structure with a fiber
16 glass cover to allow the ORC easy access and resolve the damage
17 to the structure.

18 **Q. Briefly describe the results of your investigation of DEQ**
19 **actions.**

20 A. Between February 1, 2021, and February 1, 2024, WRI's Rocky
21 River water system was issued two NOVs and WRI's River Walk
22 water system was issued four NOVs.

1 Both NOVs issued for the Rocky River water system were reporting
2 violations, issued for not providing the annual consumer confidence
3 report (CCR) within the required timeframe. The first CCR violation
4 was issued on October 14, 2021, and was marked as returned to
5 compliance on the same date the violation was issued. The second
6 CCR violation was issued on November 13, 2023, and was marked
7 as returned to compliance on November 22, 2023.

8 WRI's River Walk system was issued four NOVs between February
9 1, 2021, and February 1, 2024. The first violation was issued on
10 October 14, 2021, for failure to submit a CCR within the required
11 timeframe and was returned to compliance on the date it was issued.
12 The second NOV was issued on November 10, 2021, for failure to
13 monitor for lead and copper. WRI collected four of the five required
14 lead and copper samples during the 2021 sampling period. The lead
15 and copper monitoring violation was returned to compliance on
16 October 1, 2022. WRI received two NOVs on February 22, 2023, for
17 failing to sample for Oxamyl and Carbofuran – both synthetic organic
18 compounds – between 2020 and 2023. WRI is required to collect one
19 sample of each compound every three years.

20 On February 3, 2021, PWS issued an Administrative Penalty against
21 WRI for failing to provide at least two wells in the Rocky River system.

1 This penalty was associated with the Consent Judgement, which is
2 outlined in further detail below.

3 **Q. Please discuss the circumstances leading to the Consent**
4 **Judgment.**

5 A. On December 17, 2018, April 15, 2019, and Jun 13, 2019, DEQ
6 issued NOVs to WRI for violation of the combined radium standard
7 in its Well #1. The December 17, 2018 violation notice ordered WRI
8 to return to compliance by June 30, 2019, submit quarterly status
9 reports, and advise residents of the violation.

10 PWS staff recommended, as a short-term solution, that Well #1 be
11 taken out of service to protect the community. Well #1 was taken out
12 of service on June 30, 2019. At the time that Well #1 was taken out
13 of service, WRI was aware that the system was required to operate
14 two wells, because its system served more than 50 customers. DEQ
15 formally approved WRI's request to inactivate Well #1 in September
16 of 2019, and notified WRI that an NOV would be forthcoming for
17 failure to have at least two wells or another approved water supply
18 source.

19 On August 12, 2019, PWS received a status report from WRI, which
20 stated that the violation would be resolved by installing a new
21 connection with the Town of Harrisburg.

1 On September 17, 2019, WRI sent another status report to PWS
2 outlining the steps to the interconnection to the Town of Harrisburg
3 and requesting additional time to come into compliance. The request
4 for additional time was subsequently granted on November 21, 2019,
5 and the deadline for coming into compliance was moved from June
6 30, 2019, to September 30, 2020.

7 On September 21, 2020, nine days before the September 30, 2020
8 deadline, WRI claimed that the new connection could not be
9 constructed due to WRI's inability to obtain an easement from one of
10 the property owners. On October 22, 2020, PWS issued an NOV to
11 WRI due to the operation of the water system in continued violation
12 of state regulations, noting that if connection to the town could not be
13 completed, WRI must take other action to resolve the violation. On
14 February 3, 2021, PWS assessed an Administrative Penalty against
15 WRI in the amount of \$4,500. As of the date of the penalty, the
16 system had not returned to compliance.

17 On June 17, 2021, the North Carolina Attorney General's Office
18 (AGO) filed on behalf of DEQ a Complaint and Motion for Injunctive
19 Relief against WRI for its continued violation. On July 15, 2021, DEQ
20 and WRI entered into a Consent Judgment in order to resolve WRI's
21 non-compliance with state drinking water requirements after taking
22 one of its two wells (Well #1) out of service and failing to provide

1 another source of drinking water within a reasonable period of time.
2 The terms of the Consent Judgement required (1) WRI to submit a
3 plan for approval to interconnect, or an alternative means of returning
4 the system to compliance, within 30 days of entry of the Consent
5 Judgement; and (2) that once the work set forth in the plan was
6 completed, WRI was required to submit a final report documenting
7 the results of the activities set forth in the plan.

8 The terms of the Consent Judgment also required WRI to complete
9 construction of the interconnection to the Town of Harrisburg's
10 drinking water system by September 9, 2022. Construction had not
11 begun as of September 9, 2022. On September 12, 2022, DEQ filed
12 a Motion for Entry of Order to Show Cause (Show Cause Motion),
13 and on November 7, 2022, the Cabarrus County Superior Court
14 issued an Order directing WRI to appear and show cause why it
15 should not be held in contempt because of its failure to abide by the
16 terms of the Consent Judgment and complete the interconnection
17 with the Town of Harrisburg as ordered. After a hearing on the Show
18 Cause Motion for alleged contempt, WRI showed the Court that
19 some progress had been made on obtaining a necessary easement
20 and stated that construction was delayed due to supply chain issues.

21 On November 8, 2022, DEQ and WRI entered into an Amended
22 Consent Judgment, which required WRI, among other things, to

1 provide weekly reports detailing its efforts and progress regarding
2 completing the interconnect with the Town of Harrisburg.

3 On January 18, 2024, following the interconnection with the Town of
4 Harrisburg, DEQ sent a letter to WRI stating that the administrative
5 penalty amounting to \$4,500 had been rescinded following DEQ's
6 review of the actions taken by WRI.

7 **Q. Is Rocky River's Well #1 currently in use?**

8 A. No. Well #1 was taken offline on June 30, 2019, due to repeated
9 exceedances of the combined radium Maximum Contaminant Level
10 (MCL) and is not used and useful. I recommend that all costs
11 associated with the well be removed.

12 **Q. Did WRI provide Notice to Customers?**

13 A. Yes, on March 1, 2024, the Commission issued its Order Scheduling
14 Hearings, Establishing Procedural and Filing Requirements and
15 Requiring Customer Notice (Scheduling Order). The Scheduling
16 Order directed WRI to provide Notice to Customers no later than ten
17 days after the date of the Scheduling Order and to submit a signed
18 and notarized certificate of service not later than 20 days after the
19 date of the Scheduling Order. On March 7, 2024, WRI filed a
20 Certificate of Service that the Notice to Customers was mailed or
21 hand delivered as of March 5, 2024.

1 **Q. Were consumer statements received following WRI's Notice to**
2 **Customers?**

3 A. Yes, approximately 56 consumer statements were received and filed
4 in Docket No. W-1034, Sub 13CS, prior to the start of the customer
5 hearing. Consumer statements are still being received as of the date
6 of writing, and approximately 68 consumer statements have been
7 received in total. Some consumer statements are duplicates.

8 The consumer statements generally express concerns related to the
9 extremely high percentage increase in rates proposed by the
10 Company in the Rocky River service area, water outages in the
11 system, poor water quality provided by WRI, and poor customer
12 service. Additionally, some customers expressed concerns related to
13 the timeliness of the customer notice, the maintenance of the system,
14 and leaking meters.

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

16 A. From February 1, 2021, through March 1, 2024, the Public Staff
17 Consumer Services Division received seven customer complaints
18 related to WRI.

19 One customer complaint was received in September 2021 and was
20 related to low water pressure over a month-long period in the River
21 Walk system. WRI responded, stating that the reduction in water
22 pressure during a peak usage period was due to booster pumps on

1 the system that were not operating efficiently. WRI's response went
2 on to state that one pump would be repaired, and another would be
3 replaced. WRI's plant in service records show that one pump was
4 repaired in September 2021, and the other was replaced in early
5 2022.

6 Six additional customer complaints were received between June 27,
7 2022, and July 11, 2022. The six complaints from 2022 were
8 predominantly concerned with water outages over a multiple-day
9 period, with poor water quality and pressure issues afterwards. WRI
10 responded to the customer complaints, noting that a pipe on the
11 system's filter broke on June 27, 2022, and that the system was
12 returned to service on June 29, 2022. The system's storage tank was
13 reported to have reached full capacity on July 5, 2022, at which point
14 WRI attempted to blow air out of the system's lines. In response to a
15 complaint on July 11, 2022, the Company stated that the operator
16 had turned off the pump to stop air from entering the system and let
17 the well recover.

18 **Q. Was a public witness hearing held on March 25, 2024?**

19 A. Yes, on March 25, 2024, a public witness hearing was held at the
20 Mecklenburg County Courthouse, and 13 customers testified. The
21 customers were primarily concerned with the large rate increase
22 requested by the Company, water outages over the years, poor

1 water quality, poor communication with customers, poor customer
2 service, and inaccurate billing. A petition was signed by
3 approximately 133 residents to have WRI removed as their water
4 utility provider. One customer submitted two bottles of discolored
5 water, which he testified came from his home spigot.

6 Customers generally acknowledged that minor improvements had
7 taken place recently regarding frequency of outages and customer
8 service following a water outage. One customer explained that given
9 the long history of frustration, customers do not have any confidence
10 in the Company, and though things had improved somewhat,
11 customers were still very frustrated.

12 Customers described boil water notices that had been hung recently
13 on their doors and had been provided by mail following outages¹.

14 In response to cross examination asking if there are any
15 communications via email or message boards, one customer stated
16 that communication had only been received through the mail or hung
17 on the door.

18 Another customer described having to replace appliances, including
19 refrigerators and dishwashers, several times due to the water quality,

¹ It is possible that customers are receiving system pressure advisories, which generally direct customers to boil water, similar to a boil water notice.

1 and also reported having muddy water, which multiple customers
2 echoed when they spoke.

3 One customer described billing issues, including being notified
4 erroneously that he had not paid a bill, and then receiving a bill credit
5 the following month. The customer also stated that the Company
6 does not accept web payment.

7 Another customer brought a petition, which had been signed by a
8 number of residents in the Rocky River system. The petition outlined
9 the experiences of the customers regarding the system and stated
10 that the rate increase requested by WRI should not be considered.

11 **Q. Are the Company and the Public Staff required to file reports on**
12 **the customer hearing?**

13 A. Yes, the Scheduling Order requires the Company to file a verified
14 report addressing all customer service and service quality complaints
15 expressed during the public witness hearing. The Company's report
16 should be filed no later than 14 days after the conclusion of the public
17 witness hearing. The Scheduling Order additionally requires the
18 Public Staff to file a verified response and any comments to WRI's
19 report on or before April 22, 2024.

20 WRI filed its report addressing customer concerns on April 8, 2024.

21 The Public Staff will review the Company's report and file its
22 response on or before April 22, 2024.

1 **Q. What recommendations do you have to address the issues**
2 **regarding the Rocky River system raised at the customer**
3 **hearing?**

4 A. I have several actions that I recommend the Commission order WRI
5 complete with fixed timelines and reporting requirements, as well as
6 a general recommendation that the Commission impose penalties on
7 the Company if deadlines or reporting requirements are not met.

8 I recommend that the Company be required to evaluate the
9 effectiveness of the filter in the Rocky River system, which should
10 include taking source and treated water samples, and also
11 investigate the need for interior cleaning of the elevated storage tank.
12 A 12-month deadline following the date of a Commission order in this
13 docket would be a reasonable time period for completion of these
14 tasks. The Company stated in response to a Public Staff data request
15 that it had never replaced the media in its filter, but that field tests
16 show that the iron and manganese are being removed effectively.
17 The Company went on to state that the internal portion of the tank
18 has not been cleaned because the water in the tank is chlorinated
19 and disinfected. Notwithstanding the Company's responses,
20 customer concerns related to muddy or discolored water outside of
21 periods related to a line break or water outage could suggest that the
22 tank or filter are causing the water discoloration.

1 I also recommend that the Company be ordered to create an opt-in
2 customer email communication to regularly send announcements to
3 customers in each service area. The customer email list can be used
4 to notify customers of system pressure advisories, outages, or other
5 necessary information in addition to WRI's current door hanger
6 notifications. Multiple customers expressed concerns with the lack of
7 regular or proactive communication by the Company, and a regularly
8 scheduled email communication would be a cost-effective method to
9 inform and notify customers in a timely manner of events such as
10 system pressure advisories and outages. The Company should be
11 ordered to establish an email communication system within three
12 months of a Commission order in this docket and further be ordered
13 to report to the Commission and the Public Staff when the
14 communication system is in place.

15 I recommend a deadline be set for the Company's implementation of
16 its website. WRI stated in a response to a data request that it
17 expected to introduce customers to its website in May 2024. WRI
18 expects its website to provide (1) customer usage information,
19 customer billing for the current billing cycle, customer payment
20 options including credit card or automated clearing house for
21 electronic funds transfer payments; (2) the ability for customers to
22 initiate service requests; and (3) announcements and notices to
23 customers regarding line breakage, boil water notices, and system

1 flushing. Given that the Company intends to introduce its customers
2 to the website within a month, a six-month deadline for the Company
3 to fully implement the website is reasonable.

4 I recommend that the Commission order the Company to continue
5 its three-month reporting of customer contacts, including brief
6 updates on its compliance with my recommendations above. Once
7 the Company complies with each recommendation above, the
8 reporting period could be extended to require bi-annual or annual
9 reporting.

10 **Q. Describe customer concerns related to service reliability.**

11 A. Based on my review of customer complaints, consumer statements
12 of position, and the record of customer concerns voiced at the public
13 witness hearing, it appears that WRI has had several water service
14 outages and lack of pressure in the Rocky River system. The recent
15 customer complaints related to water service outages appear to be
16 primarily related to a three-day water outage that began on June 27,
17 2022, due to a mechanical failure. Following the event, the system
18 did not reach full pressure until July 5, 2022. Multiple customers had
19 concerns related to system pressure, which may have been the
20 result of an oversized pump being operated manually in the
21 operational Well #2 in the Rocky River service area. WRI stated that
22 it had been manually operating the system's pump to avoid

1 overdrawing the well, and for that reason the well would not be
2 automatically turned on in the event of low tank volume.

3 WRI reported that two subsequent water outages occurred on
4 February 7 and 22, 2023, due to lines being cut by a fiber optic
5 installer. In both cases WRI reported resolving the issue within the
6 day; however, due to an error with a valve, some customers were not
7 returned to service after the first outage until the following afternoon.

8 Most of the customers who spoke at the public witness hearing
9 expressed, in response to questions from the Public Staff, that they
10 had not experienced water outages since December 2023, and WRI
11 stated, in response to Public Staff data requests, that the utility has
12 not experienced any water outages since completing the
13 interconnect with the Town of Harrisburg in December 2023. I believe
14 that the issues caused by pump failures or a lack of pumping capacity
15 in the system should be resolved, going forward, by the recent
16 interconnection project; however, issues related to line breaks and
17 mechanical failures may be beyond the Company's control. The
18 Company is expected, however, to attempt to resolve the issues as
19 quickly as possible and to communicate in a timely manner with
20 customers when unavoidable issues arise.

21 The Public Staff reviewed the Customer Contact Logs filed quarterly
22 by WRI in Docket No. W-1034, Sub 8, and identified that the volume

1 of customer calls generally increased heavily during the outages
2 reported by WRI staff. I believe the Customer Contact Logs were
3 generally indicative of water service outages based on the volume of
4 calls. Customer Contact Logs from the first quarter of 2024 appear
5 to be generally unrelated to service quality issues, suggesting there
6 had not been significant service issues during that time period.

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

8 A. Based on my review of environmental compliance records issued by
9 DEQ and customer discussion related to recent water outages, WRI
10 is providing reasonably safe and reliable service in the River Walk
11 system. Furthermore, considering the interconnection and recent
12 performance, WRI is now providing safe and fairly reliable service in
13 the Rocky River system. However, there are some outstanding
14 customer concerns related to service reliability in the Rocky River
15 system, and it will require time to determine whether those issues
16 have been properly addressed and whether future equipment
17 failures and main breaks are resolved in an effective and timely
18 manner.

1 **Q. Is Mr. Abbott correct in arguing that the Rocky River system was**
2 **not impaired between the time of the Well #1 disconnection and**
3 **the interconnection completion?**

4 A. No. On page 12 of Mr. Abbott's testimony, he appears to argue that
5 because the system experienced outages that were not due to a lack
6 of water supply availability, the system should not be considered to
7 have been impaired.

8 I disagree with Mr. Abbott's interpretation of the situation. The
9 Company reported three water outages during this time period, one
10 due to a mechanical failure, and two due to line breaks. Based on
11 conversations with Mr. Abbott, I understand that, for some amount of
12 time, the system was operating with a larger pump than the pump
13 size for which the system was designed, so this oversized pump had
14 to be operated manually to prevent the well from being overdrawn.
15 Thus, during this period, the system was not operating as intended,
16 and while mechanical failures and line breaks may not have been
17 entirely preventable, I believe that the system was impaired between
18 the Well #1 disconnection and the interconnection completion.

19 **Q. What are the existing and proposed water utility service rates in**
20 **the Rocky River service area?**

21 A. The Commission approved a rate increase for WRI on November 21,
22 2018, in its Recommended Order Approving Agreed Upon Rates and

1 Requiring Customer Notice, in Docket No. W-1034, Sub 8 (Sub 8).
2 The present base charge in the Rocky River service area is \$11.20
3 per month, and the present usage rate is \$3.10 per 1,000 gallons of
4 water.

5 The Application proposes to raise the monthly base charge to \$54.01
6 per month, and the usage rate to \$15.04 per 1,000 gallons of water
7 usage, a proposed increase of over 370%².

8 **Q. What are the existing and proposed water utility service rates in**
9 **the River Walk service area?**

10 A. In Sub 8, the Commission approved a base charge in the River Walk
11 service area of \$37.50 per month, and the present usage rate of
12 \$9.07 per 1,000 gallons of water.

13 The Application proposes to raise the monthly base charge to \$48.69
14 per month, and the usage rate to \$17.50 per 1,000 gallons of water
15 usage, a proposed increase of over 60%.

16 **Q. Describe your review of WRI's expenses.**

17 A. I reviewed WRI's maintenance and repair, contract operator, electric
18 power, water testing, chemicals, and purchased water expenses. I
19 made adjustments to WRI's expenses, which included (1) the

² This figure has been revised from 384% to approximately 373% following Public Staff adjustments to usage.

1 removal of some costs associated with a well that is not in service,
2 annualization of ongoing testing, chemicals, and purchased water
3 expenses; and (2) changing certain customer count allocated
4 expenses to directly allocate those costs to the appropriate service
5 area.

6 **Q. Did you determine that the Company's test year expense level**
7 **for contract operator expense was reasonable?**

8 A. Yes, the test year expense levels for Contract Operator expense
9 represent a reasonable ongoing level of expense and are \$29,412
10 for Rocky River and \$9,974 for River Walk.

11 **Q. Describe the supporting documentation provided by the**
12 **Company for each of the expense categories you reviewed.**

13 A. Supporting documentation for certain expenses such as contract
14 services, chemicals, electric power, and purchased water provided
15 by the Company did not include all expenses incurred during the test
16 year.

17 Chemical costs are located on the contractor services invoices.
18 Supporting documentation for both spanned a period between
19 September 2021 and May 2022.

20 Supporting documents for electric power and purchased water
21 spanned a 12-month period between December 2021 and November
22 2022.

1 However, supporting documents for testing were provided for the test
2 year.

3 **Q. Describe your expense adjustments by account.**

4 A. Maintenance and Repair – The Company requested \$9,106 and
5 \$3,071 for the Rocky River and River Walk maintenance and repair
6 expense, respectively. The Company used customer count
7 allocation of nearly all expenses that were not reclassified to plant in
8 service.

9 I modified the Company's allocation from being based on customer
10 count to directly assigning costs for expenses associated with
11 repairing the Rocky River filter piping and for permitting costs for
12 each service area. I reclassified additional costs related to the
13 Harrisburg interconnection project and the work for recoating the
14 River Walk tanks to their respective plant in service records, which
15 was consistent with the Company's treatment of a portion of the
16 costs. I removed costs associated with the Company's public storage
17 unit following Mr. Abbott stating, in a phone call on April 5, 2024, that
18 the storage unit is not used for Company purposes.

19 I annualized costs related to repair of the piping in the filter building
20 at Rocky River's Well #2 over a three-year period to reach a
21 reasonable ongoing level of expense. Given the magnitude and

1 atypical frequency of this event, this type of repair should not be
2 expected on an annual basis.

3 Based on my adjustments, I recommend maintenance and repair
4 expense be adjusted from \$9,106 to \$6,054 for Rocky River and from
5 \$3,071 to \$1,800 for River Walk.

6 Testing Fees – The Company requested \$3,433 and \$914 for the
7 Rocky River and River Walk testing fees expense, respectively. The
8 Company allocated a total of \$3,610 to its service areas by customer
9 count. It appears that the Company made an error in its allocation
10 calculation, resulting in a requested amount of \$3,433 for Rocky
11 River rather than the \$2,696 that it may have intended to request.

12 I disagree with the Company's allocation of total testing costs by
13 customer count, because each water system and well must be
14 sampled according to its own sample schedules.

15 I annualized testing costs based on WRI's lab's current fees and the
16 sampling requirements detailed in DEQ's Drinking Water Watch
17 portal for each of the service areas. Based on this analysis, I
18 determined that \$1,657 is a reasonable annual level of testing
19 expense for each service area, which currently have identical
20 sampling requirements. I recommend water testing expense be
21 adjusted from \$3,433 to \$1,657 for the Rocky River service area and
22 from \$914 to \$1,657 for the River Walk service area.

1 Electric Power – The Company requested \$6,938 and \$3,451 for
2 electric power expense, which does not correlate to the invoices the
3 Company provided as supporting documentation. The Company
4 provided 12 months of invoices for each of its five electric power
5 accounts between December 2021 and November 2022. I removed
6 the invoices associated with Rocky River’s Well #1, which is no
7 longer in service, as well as six late fees. I believe that this 12-month
8 period represents a reasonable ongoing level of expense. I
9 recommend that the electric power expense be adjusted from \$6,938
10 to \$6,211 for the Rocky River service area and from \$3,451 to \$3,046
11 for the River Walk service area.

12 Chemicals – The Company requested a total of \$4,708 for chemical
13 expense, which it then allocated by customer count resulting in a
14 request of \$3,516 and \$1,192 for the Rocky River and River walk
15 service area chemicals expenses, respectively. The total amount
16 requested does not directly correlate with the chemical costs on the
17 invoices provided as supporting documentation.

18 WRI’s contract operator notified me that the current cost of sodium
19 hypochlorite (bleach) used to treat each of the systems is \$78 per
20 case. In a typical month, four cases were used for the Rocky River
21 system and one case for the River Walk system during the test year.

1 I recommend that the chemicals expense be adjusted from \$3,516
2 to \$3,744 for the Rocky River service area and from \$1,192 to \$936
3 for the River Walk service area.

4 Purchased Water – The Company requested \$1,245 for the
5 purchased water expense, which does not directly correlate to the
6 invoices provided as supporting documentation.

7 WRI utilizes a sewer connection to the Town of Harrisburg for
8 backwashing its filter. The flat charge for the sewer connection is
9 currently \$66.18 per month, and the base charge for the
10 interconnection with Harrisburg is \$38.76 per month. These amounts
11 represent a reasonable ongoing level of monthly expense. I
12 recommend that the purchased water expense, including the sewer
13 charges, be adjusted from \$1,245 to \$1,259 for the Rocky River
14 service area.

15 **Q. What adjustments have you made to plant additions in the**
16 **Rocky River service area since the last rate case?**

17 I changed the service life of a Meter & Ball Valve replacement from
18 seven to 15 years. Further, I removed an item associated with pump
19 repairs from 2022 test year costs, because the pump and motor were
20 later replaced in 2023, and the repaired equipment is no longer used
21 and useful.

1 I made specific adjustments to the Harrisburg Interconnection
2 project, which are detailed below.

3 **Q. Describe the Company's treatment of the interconnection**
4 **project.**

5 A. The primary driver of the Company's Application is to pay for the
6 completion of the interconnection with the Town of Harrisburg, which
7 was required by DEQ to maintain the provision of adequate water
8 service and ensure safe drinking water in the Rocky River service
9 area. The Company's delay in completing this interconnect was the
10 basis for the NOVs, Motions to Show Cause, and Consent
11 Judgments, which are discussed in more detail below. The total cost
12 the Company seeks to recover in its Application for the
13 interconnection is approximately \$460,000. The Company seeks to
14 recover costs related to (1) the interconnection project, including
15 legal fees; (2) permitting with Town of Harrisburg and DEQ; (3)
16 acquiring an easement; (4) design and construction; (5) evaluation
17 of alternative options; (5) survey; and (6) landscaping. The legal fees
18 included work for what appears to be potential condemnation of
19 easement land, DEQ Compliance reporting, correspondence and
20 weekly reporting to the AGO, and filings to NCUC.

21 The Company used an in-service date of 2023 and an expected
22 lifetime of 20 years for the project.

1 **Q. Describe your specific adjustments to the Harrisburg**
2 **Interconnection project.**

3 A. I adjusted the service life of the Harrisburg interconnection project
4 from 20 to 50 years, which I believe is more representative of the
5 expected life of the assets, primarily pipe and encasement.

6 As noted earlier in the history of WRI's violations, WRI incurred legal
7 fees associated with responding to DEQ's Injunctive Complaint and
8 Show Cause Motion alleging possible contempt, making court
9 appearances, and engaging in discussions regarding these actions.
10 In consultation with the Public Staff Legal Division, I removed (1)
11 unsupported legal fees from 2021; (2) all legal fees related to
12 preparing for hearing, consulting with WRI and other parties, and
13 representing WRI in contempt and other proceedings relating to
14 WRI's failure to comply with the Consent Judgment entered into
15 between WRI and DEQ on July 15, 2021; and (3) half of all legal
16 invoices related to the Consent Judgment and Amended Consent
17 Judgment dated November 8, 2022, issued by the Court. Legal fees
18 related to the Consent Judgment were incurred due to a prolonged
19 period of noncompliance when Well #1 was taken offline for an
20 extended period, and should not solely be borne by WRI's
21 customers. However, I recommend that a portion of the Company's
22 legal fees related to reporting to the Cabarrus County Superior Court,
23 the Commission, and DEQ on the progress of the interconnect with

1 the Town of Harrisburg be allowed. I also removed legal fees
2 associated with the proceeding to increase WRI's bond, which was
3 filed by the Public Staff due to WRI's non-compliance.³ From the
4 interconnection project costs, I reclassified the one-time \$97,565
5 Harrisburg development fee as a plant in service item with an in-
6 service date of 2023. WRI was required to pay a one-time
7 development fee to the Town of Harrisburg in order to connect to
8 their system. The development fee allows the Company perpetual
9 access to purchase water from the Town of Harrisburg and should
10 be nondepreciable. I also reclassified \$3,575 in costs related to the
11 meter fee paid to the Town of Harrisburg as a plant in service item
12 and assigned it a 15-year life, consistent with the Public Staff's typical
13 recommendation for meters.

14 After my adjustments, my recommended interconnection project cost
15 is \$310,176.

³ On September 29, 2022, the Public Staff filed a motion to post an additional bond in the amount of \$200,000, to be allocated to water utility service in the Rocky River Plantation subdivision. The Public Staff filed the motion to raise the amount of WRI's bond from \$35,000 to a total of \$235,000. On July 10, 2023, the Commission issued an Order in Sub 8, requiring WRI to supplement its current bond on file with the Commission with an appropriate new bond and surety in the amount of \$200,000, allocated to the Rocky River Plantation system, for a total bond amount posted by the Company of \$235,000. A primary factor taken into consideration was the continued failure of WRI to comply with DEQ regulations requiring a second water supply for Rocky River.

1 **Q. What adjustments have you made to plant additions in the River**
2 **Walk service area since the last rate case?**

3 A. I increased the service lives of five pump-related projects from five
4 to seven years to move them more in line with the pump repairs
5 lifetime used by the Company in the Rocky River service area, a
6 seven-year service life for pump repairs, and a ten-year service life
7 for a pump and motor replacement.

8 **Q. Did the Public Staff correct any errors in the Company's Plant**
9 **in Service Records?**

10 A. Yes, Exhibit I Schedule 2-1(a) to the Application lists \$1,017 on line
11 3, column a, which should be corrected to \$10,017 per the last rate
12 case. This change, however, should not impact the net plant in
13 service amount, because it is fully depreciated.

14 Exhibit I, Schedule 2-1(b) to the Application lists service lives of 50
15 and 30 years on lines 2 and 3 in column c, respectively. The service
16 life of these plant items should be five and three years, respectively,
17 per the last rate case. This change reduces the net plant in service
18 amount by approximately \$384.

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

20 A. I reviewed and analyzed WRI's billing data for the test year ended
21 December 31, 2022. I performed a billing analysis to determine the
22 level of annual service revenues produced at present and proposed

1 rates utilizing the billing data provided for the test year. I normalized
2 the billing determinants for end of period customer counts and
3 analyzed the consumption data for the test year.

4 **Q. Did you make changes to the test year water usage?**

5 A. Yes. The Company confirmed in response to a Public Staff data
6 request that the meter that serves its bulk customer, McMillan Acres,
7 has been broken for some time, and further stated that it did not know
8 how long it has been in disrepair due to changing contractors. WRI
9 has a verbal agreement to continue billing McMillan Acres based on
10 its average usage at the time the meter broke. The approximation
11 used by WRI for McMillan Acres is 28,500 gallons per month.

12 A review of meter readings from WRI's Docket No. W-1034 Sub 8
13 rate case shows that WRI has been using 28,500 gallons per month
14 for the McMillan Acres usage since at least December 2016.

15 DEQ's Drinking Water Watch portal shows that McMillan Acres has
16 approximately 17 connections. I confirmed with WRI's operator, who
17 also operates the McMillan Acres' system, that this number is
18 reasonably accurate.

19 The average non-bulk customer in the Rocky River service area uses
20 approximately 5,157 gallons of water per month based on test year
21 data. Based on the average consumption of the customers in Rocky

1 River, I do not believe that 28,500 gallons per month, or 1,676
2 gallons per customer per month, is an accurate estimation of usage.
3 The approximation used by WRI for McMillan Acres' 17 connections
4 represents approximately 32% of the per household usage of the
5 other Rocky River customers. If the usage portion of the billing
6 determinants for McMillan Acres is under-accounted for, then rates
7 for all Rocky River customers would have to be set higher to
8 generate the revenue requirement. Given that WRI does not know
9 when the meter stopped functioning, I believe that it is reasonable to
10 utilize the average customer usage for the bulk connection.

11 I calculated a test year usage for McMillan Acres of 1,052,127
12 gallons, or approximately 87,677 gallons per month, resulting in a
13 total Adjusted Test Year Usage of 8,143,668 gallons. My
14 Calculations can be found in Houser Exhibit 1.

15 **Q. What is your recommendation for the McMillan Acres base**
16 **charge moving forward?**

17 A. Under the current rates, the McMillan Acres bulk connection has only
18 been charged a single \$11.20 base charge each month, the same
19 amount charged to individual residential customers. However, as
20 stated above, there are 17 connections served behind the meter for
21 the bulk customer. The meter will require replacement, and WRI will
22 incur costs related directly to the bulk connection.

1 The McMillan Acres interconnect utilizes a 4-inch connection per the
2 testimony of Public Staff Witness David Furr in Sub 8. Typically, the
3 Public Staff would recommend a base charge multiplier of 25 for a
4 connection of this size, however, due to the circumstances of WRI
5 having a single bulk customer, I believe a base charge multiplier of
6 17 is reasonable. If the customer count portion of the billing
7 determinants for McMillan Acres is under-accounted for, then rates
8 for all Rocky River customers would have to be set higher to
9 generate the revenue requirement.

10 I recommend that the McMillan Acres interconnect base charge be
11 assigned a 17 REU multiplier.

12 **Q. What are the Public Staff's annual service revenues under**
13 **present and proposed rates?**

14 A. The present and proposed service revenues for each service area
15 for the 12-month period ended December 31, 2022, are shown below
16 in **Houser Table 1**. The revenues were calculated using the Public
17 Staff's recommended billing determinants, WRI's present rates
18 approved in Sub 8, and WRI's proposed rates.

1 **Houser Table 1 - Public Staff's Calculated Service Revenues**

Service Area	Present Rates	Proposed Rates
Rocky River	\$42,852	\$207,384
River Walk	\$35,263	\$ 56,963
Total	\$78,115	\$264,348

2 **Q. Briefly describe the rate design proposed by WRI.**

3 A. WRI proposes a 40:60 (base facility charge: usage charge) rate
4 design for both service areas. The current rate design, calculated
5 based on adjusted test year usage at the Public Staff's Billing
6 Determinants, is 41:59 in Rocky River and 50:50 in River Walk.

7 **Q. What is the Public Staff's position on rate design?**

8 A. The Commission has previously said that it "seeks to strike an
9 appropriate balance between achieving revenue sufficiency and
10 stability to ensure quality, reliability, and long-term viability for [a
11 utility company] on the one hand and setting fair and reasonable
12 rates that effectively promote efficiency and conservation on the
13 other hand." See Order Approving Partial Settlement Agreement and
14 Stipulation, Deciding Contested Issues, Granting Partial Rate
15 Increase, and Requiring Customer Notice, Docket No. W-218, Sub
16 526. Based on this principle, the Public Staff recommends a service
17 revenue ratio of 30:70 (base facilities charge: usage charge) for each
18 of WRI's service areas.

1 A lower base facility charge reduces the cost burden to customers
2 for access to utility service before the use of any service. It allows
3 customers to have greater control over their total bill by adjusting
4 their usage through conservation and improved efficiency. The
5 Public Staff's recommended 30:70 rate design ratios have been
6 implemented in my recommended rates and supporting exhibits
7 detailing the billing analysis.

8 **Q. What benefits are provided to WRI's customers by a 30:70 rate**
9 **design?**

10 A. WRI customers have filed consumer statements about the rising cost
11 of their water service. A rate design that is more heavily weighted to
12 the volumetric charges gives customers more control over their
13 monthly bill. With the continued rising cost of service, a rate design
14 that achieves an appropriate balance between attaining revenue
15 sufficiency and stability and setting fair and reasonable rates that
16 effectively promote efficiency and conservation, as the Public Staff
17 has proposed, could ease the effects of the rate increases for
18 customers.

19 **Q. What benefits are provided to WRI by a 30:70 rate design?**

20 A. WRI's Rocky River service area is operating its interconnection to
21 the Town of Harrisburg on an as-needed basis rather than as a full
22 purchase system. The interconnection may not be utilized regularly,

1 but if it is needed, WRI will purchase water from Harrisburg at a cost
 2 of \$11.97 per 1,000 gallons for consumption between 2,001 gallons
 3 and 15,000 gallons, and at \$13.10 per 1,000 gallons for consumption
 4 above 15,001 gallons.

5 Utilizing a higher usage rate near or above the purchased water rate
 6 has the effect of mitigating the difference between the price paid to
 7 the Town of Harrisburg, if the interconnection is utilized, and the
 8 amount charged to WRI's customers to recover that cost.

9 **Q. What is your recommendation concerning WRI's proposed**
 10 **rates?**

11 A. Using a service revenue ratio of 30:70, the Public Staff recommends
 12 a partial rate increase for each service area. My revenue calculations
 13 for each service area are shown in Houser Exhibit 2. The Public
 14 Staff's recommended rates are as follows:

15 Rocky River

16	Base Charge, zero usage:	
17	Residential	\$ 25.80
18	Bulk (McMillan Acres)	\$ 438.77
19	Usage Charge, per 1,000 gallons	\$ 11.63

20 River Walk

21	<u>Base Charge, zero usage:</u>	
22	Residential	\$ 24.15
23	Usage Charge, per 1,000 gallons	\$ 13.51

1 The Public Staff's proposed rates would result in an increase of
2 209% bill increase for a customer in the Rocky River subdivision and
3 a 7.5% bill increase for a customer in the River Walk subdivision.

4 **Q. Please address the magnitude of the Company's and the Public**
5 **Staff's proposed increase in rates.**

6 A. The Company has proposed a significant increase in rates in the
7 Rocky River service area of 373% and in the River Walk subdivision
8 of 62%⁴. The Public Staff has reviewed the Company's expenses
9 and rate base, and recommends amounts that are reasonable and
10 representative of WRI's cost of service. Based on this review of the
11 Company's expenses and rate base, the Public Staff recommends
12 rates that would result in an increase of 209% for a customer in the
13 Rocky River subdivision and an increase of 7.5% for a customer of
14 the River Walk subdivision. While the Public Staff's recommended
15 rates are less than those proposed of the Company, they would be
16 significantly higher than present rates. As noted above, the primary
17 driver of this rate case is the cost of the Company's required
18 secondary source of water supply, the interconnection with the Town
19 of Harrisburg. This cost alone constituted over a third of the
20 requested increase filed by WRI. Under North Carolina statute, the

⁴ Comparison calculated using the average bill at the present and proposed rates with the Public Staff's calculated average usage.

1 Company is entitled to recover its prudently incurred investment,
2 expenses, and a reasonable return.

3 **Q. Does this conclude your testimony?**

4 **A.** Yes, it does.

QUALIFICATIONS AND EXPERIENCE

Evan M. Houser

I graduated from North Carolina State University, earning a Bachelor of Science Degree in Environmental Engineering. I am a certified Engineering Intern in the state of North Carolina. I worked for DEQ's PWS for approximately three years before joining the Public Staff in 2022. Prior to working for DEQ, I worked for the engineering consulting firm Highfill Infrastructure Engineering, P.C.

My duties with the Public Staff include monitoring the operations of regulated water and wastewater utilities with regards to rates and service. These duties involve 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 Commission.

Water Resources, Inc.
 Docket No. W-1034 Sub 13
 For the 12 Months Ending December 31, 2022

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 Houser Exhibit 1
 Page 1 of 1

Adjusted Test Year Usage

1	<u>End of Period Customers</u>		
2	Residential	114	
3	4" McMillan Acres Interconnect	1	
4	Total	115	Sum of Lines 2 and 3
5			
6	<u>Company McMillan Estimated Usage</u>		
7	Company Estimation (Gallons)	28,500	
8	McMillan Connections	17	NC Drinking Water Watch
9	Company Per Connection Usage Gallons	1,676	Line 7 / Line 8
10			
11	<u>Average Residential Test Year Usage (Gallons)</u>		
12	Total Test Year Usage	7,433,541	Per Application
13	Total Test Year Usage McMillan (Company)	342,000	Line 7 * 12
14	Total Residential Test Year Usage	7,091,541	Line 12 - Line 13
15	Test Year Residential Customer Months	1,375	1387 test year bills less 12 McMillan Bills
16	Average Residential Usage Test Year	5,157	Line 14 / Line 15
17			
18	PS Estimated McMillan Usage Monthly	87,677	Line 8 * Line 18
19	PS Estimated McMillan Usage Annually	1,052,127	Line 18 * 12
20			
21	PS Adjusted Test Year Usage Gallons	8,143,668	Line 14 + Line 21

Water Resources, Inc.
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 Houser Exhibit 2
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Revenue at Public Staff Recommended Rates

PS Recommended Rates

WATER

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
Rocky River								
< 1"	7,091,541	\$11.63	\$82,475	114	1,368	\$25.80	\$35,294	\$117,769
4" Meter	1,052,127	\$11.63	\$12,236	1	12	\$438.60	\$5,263	\$17,499
Total Rocky River	8,143,668		\$94,711	115	1,380		\$40,558	\$135,268
River Walk								
< 1"	1,952,928	\$13.51	\$26,384	39	468	\$24.15	\$11,302	\$37,686
Total River Walk	1,952,928		\$26,384	39	468		\$11,302	\$37,686
Total Revenue:								\$172,955