



## Orange Water and Sewer Authority

Our community's trusted partner for clean water and environmental protection.

February 1, 2024

Mayor Jessica Anderson  
Town of Chapel Hill  
405 Martin Luther King Jr. Blvd  
Chapel Hill, NC 27514

Mayor Barbara Foushee  
Town of Carrboro  
301 West Main Street  
Carrboro, NC 27510

Chair Jamezetta Bedford  
Orange County Board of  
Commissioners  
Post Office Box 8181  
Hillsborough, NC 27278

Dear Mayor Anderson, Mayor Foushee, and Chair Bedford:

We are pleased to submit this report on our services, projects, and initiatives since October 2024. This report includes updates on the following items:

1. Annual Water Quality and Wastewater Report Cards
2. Temporary Drinking Water Disinfection Changeover
3. Care to Share Program
4. PFAS Treatment and Monitoring
5. Drinking Water Service Line Inventory
6. Jordan Lake Western Intake Partnership
7. WSMPBA - Water and Sewer Management, Planning, and Boundary Agreement
8. Key Infrastructure Investments
9. Diversity, Equity, Inclusion and Belonging Program
10. OWASA Board of Directors

---

**Annual Water Quality and Wastewater Report Cards:** Every year, OWASA shares report cards with the community that detail our prior year's compliance with federal and state water quality and wastewater treatment rules. These reports include information to help customers understand how their drinking water and wastewater are managed, treated, and tested, and guide customers to further information on topics of interest. The 2023 report cards on wastewater and water quality will be available online at [owasa.org](http://owasa.org) on February 28 and March 21, respectively. OWASA customers will receive notice about the availability of these reports on their monthly bill.

**Temporary Drinking Water Disinfection Changeover:** In our continued commitment to provide high-quality drinking water, OWASA will temporarily change our drinking water disinfection process during the month of March from the use of chloramines to the use of chlorine only. Customers may notice a change in taste or odor due to the use of chlorine, rather than

chloramine, for drinking water disinfection during this time. This annual system disinfection switch is recommended by the N.C. Department of Environmental Quality and is standard practice among water providers. Customers can continue enjoying their drinking water during this time. If you hear from concerned residents of your town or county, please share our contact information and we will be happy to help them: [info@owasa.org](mailto:info@owasa.org) or 919-537-4343.

**Care to Share Program:** As in years past, OWASA promoted donations to the Care to Share Customer Assistance Program at the onset of the 2023 holiday season. We are grateful for the assistance provided by the Towns and County in promoting this important program. In 2023, community members donated a total of \$27,758 to the Care to Share Program, one of the highest years of giving in the program's history. The program continues to be a critical lifeline for households experiencing financial hardship. Last year, over 900 households received assistance paying their water and sewer bill. OWASA's Strategic Plan includes an initiative to evaluate and update the Care to Share Program with the goal of increasing the adequacy and accessibility of customer assistance funding. The OWASA Board of Directors will be working with OWASA staff in the coming years to advance this initiative.

**PFAS Monitoring and Treatment:** Per- and Poly-fluoroalkyl substances (PFAS) remain a frequently covered topic in news, continuing to spark discussions about how we can reduce PFAS exposure in all areas of our lives to protect public health. The EPA's proposed drinking water regulations would set the first limits on PFAS in treated drinking water.

This quarter, following testing completed this past summer, OWASA made an adjustment at our Jones Ferry Water Treatment Plant (WTP) that is expected to optimize our ability to reduce PFAS levels using our current treatment process without sacrificing other treatment objectives. We also finalized plans for a new treatment process, including completion of small-scale testing of two industry-proven technologies for PFAS reduction in drinking water—Granular Activated Carbon (GAC) and Ion Exchange (IX). This testing simulated the long-term performance of each technology, and showed the duration of effectiveness of each before changeout of the materials would be necessary.

With planning work completed, OWASA will soon engage an engineering consultant to begin detailed design of the new treatment process, including a pilot study to identify the best technology or combination of technologies. This study will run for six to 14 months at the Jones Ferry Road Water Treatment Plant, and the results will help identify the best long-term treatment option for PFAS. We expect that construction may start in late 2025 and take 24 to 30 months to complete.

While our primary focus is on drinking water at this time, we continue to study PFAS holistically through our treatment processes—from our source waters to our biosolids—and participate in research that will support the science needed to reduce PFAS throughout our operations.

OWASA's Board of Directors approved a PFAS community communications plan in December 2023 that will guide OWASA's community engagement and education around PFAS. The plan is intended to establish a common understanding of OWASA's actions to address PFAS in our community's drinking water with three primary objectives:

- Our community knows how to access accurate, timely information on PFAS in drinking water;
- PFAS information shared with the community is accurate; and
- PFAS information we share is valuable to our community.

The plan, which will launch this month, includes collaborations, public meetings, publications, and web content.

**Drinking Water Service Line Inventory:** The EPA's Lead and Copper Rule was revised in 2023 and requires all water systems to inventory both the public and private service lines in their service and develop a plan for the replacement of any lead pipes discovered through this process. Service lines are the drinking water pipes that connect properties to the water main that is typically under the street. The rule also requires the identification and replacement of any galvanized lines that might have potentially been downstream of lead pipes in the distribution system at some point in time.

Based on our work so far, we confirmed that about 48% of private service lines are not lead, and we launched an effort to verify the material make-up of the remaining 11,962 private service lines. To date, OWASA has verified the material for over 2,230 these unknown service lines, informed customers when galvanized material was found, and provided information on what actions to take to protect their health. Since the beginning of the inventory program, OWASA has received over 100 reports from customers who have self-verified their service line material using instructions in mailings and on our website. To date, no lead lines have been identified in our service area through this effort. A comprehensive online map is under development that will allow customers to access information about their property's service line materials. In December 2023, OWASA was awarded a \$1 million no-interest loan by the N.C. Department of Environmental Quality to support our inventory of service line materials across our service area.

**Jordan Lake Western Intake Partnership:** OWASA joined the Jordan Lake Western Intake Partnership in 2022, partnering with the Town of Pittsboro, City of Durham, and Chatham County to ensure a secure water future for our communities. Although there is no near-term need for additional water supply in our community, OWASA's engagement in the partnership makes certain that we will have access to our allocation of Jordan Lake water when needed.

The project is in early design and permitting stages for a new raw water intake, raw water transmission, water treatment, and drinking water transmission infrastructure. The Partners are

also developing an interlocal agreement, to be completed this spring, regarding the operation of the facilities that will deliver treated drinking water from the reservoir.

A rezoning application was submitted to the Chatham County Planning Department by the Partners. If approved, it would allow water treatment facilities to be constructed at Jordan Lake. The Partnership anticipates public hearings on the application this quarter and completion of the rezoning process in the first or second quarter of this calendar year.

**Water and Sewer Management, Planning, and Boundary Agreement (WSMPBA):** In fall 2023, OWASA provided analysis to help inform consideration of the proposed WSMPBA expansion. The analysis estimated the impact of the proposed WSMPBA expansion on the available capacity in our water and sewer systems. Using development density assumptions made in conjunction with Town of Chapel Hill planning staff, this analysis found that the buildout development of the proposed expansion area would require 7,700 feet of sewer segments to be upsized along Morgan Creek, and 4,800 feet of water main to be installed along Highway 15-501. These two improvements would be completed as part of OWASA's Capital Improvements Program some time before buildout. Extensions of sewer mains to the proposed expansion area would be completed and paid for by developers.

**Key Infrastructure Investments:** As we head into 2024, OWASA is preparing for several capital improvement projects.

Construction for the West Rosemary Street Water Main Replacement project will begin in summer 2025. Preparatory work, including utility location and surveying, will begin this year. The improvements include replacing 3,100 feet of 70-year-old pipe between Merritt Mill Road and North Columbia Street. Brief water outages will occur as services are switched from temporary lines to the new line. A public meeting will be scheduled for fall 2024 to hear community questions and concerns about the project.

Construction on the Morgan Creek Sewer Interceptor pipeline will begin in spring 2025. Approximately 2,300 feet of large gravity sewer mains will be upsized to accommodate increased flows. OWASA coordinated with University of North Carolina Botanical Garden and the Town of Chapel Hill as well as neighbors in the area ahead of this project. We anticipate that construction will last 15 months, but a second phase of the project is in design and expected to follow shortly thereafter.

In the Ridgefield-Briarcliff neighborhood (off of Ephesus Church Road), 17,600 feet of pipe will be replaced beginning fall 2024. Construction is expected to take 18 months. A public meeting will be held this summer to discuss the project. Survey and utility locate work to prepare for the project is underway.

Several other smaller infrastructure upgrades will be made across the service area in the coming year. OWASA's standard of service is to notify affected customers before work begins to

ensure they are prepared for any impacts to their daily lives and know who to contact with questions or concerns.

**Diversity, Equity, Inclusion, and Belonging Program:** OWASA held organization-wide training sessions on Diversity, Equity, Inclusion and Belonging (DEIB) in the last quarter of 2023 and in January, including a specialized session for board members and the first sessions of new training for employees. Training was led by consultants and OWASA's new Diversity, Equity, Inclusion, and Belonging Specialist. OWASA's updated action plan for growing DEIB across the organization is expected to launch this spring, which will seek to advance equity and inclusion for OWASA employees through programming, policy and practice.

**OWASA Board of Directors:** The Board of Directors welcomed new board member Susana Dancy in December. Appointed by the Town of Chapel Hill, Susana took her oath of office on December 6. Susana's career spans work in real estate investment, restoration, and rehabilitation. She is a founding board member of the Incremental Development Alliance and is former chair of Chapel Hill's Community Design Commission. She holds a graduate degree in city and regional planning from UNC-Chapel Hill.

OWASA will have openings on its Board of Directors this year to be appointed or reappointed by each local jurisdiction – Carrboro, Chapel Hill, and Orange County. Letters were sent to local government partners on January 16 with information to assist with recruiting and selecting members for appointment. You can also find information on our website.

We appreciate your interest and action in appointing Board members as we continue critical work in the months ahead. OWASA embraces diversity and inclusion in everything we do, and we encourage all interested candidates to apply for Board appointments. The only qualification needed is a genuine commitment to serve the community.

We would be happy to provide more detailed information on the items above or other topics of interest as desired. Please feel free to contact our Executive Director, Todd Taylor ([ttaylor@owasa.org](mailto:ttaylor@owasa.org) or 919-537-4216), or me.

Sincerely,



Bruce Boehm, Chair  
Board of Directors

#### Attachments

cc: Mr. Chris Blue, Chapel Hill Town Manager  
Ms. Bonnie Hammersley, Orange County Manager  
Ms. Marie Parker, Interim Carrboro Town Manager  
OWASA Board of Directors  
Todd Taylor, OWASA Executive Director

MONTHLY SUMMARY OF CALLS AND E-MAILS TO OWASA  
FROM NEIGHBORS REPORTING ODOR  
FROM THE MASON FARM WASTEWATER TREATMENT PLANT

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
January	3	9	0	8	3	8	1	3	3	4	0	3	0	0	0	0	0	0	0	0	0
February	5	2	0	8	0	4	1	0	3	3	0	4	0	0	1	0	0	0	0	0	0
March	0	7	1	10	4	1	1	0	2	8	0	0	1	0	0	0	0	0	0	1	0
April	2	4	0	9	3	1	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0
May	0	2	5	8	3	2	5	4	0	1	3	0	0	0	0	0	0	0	0	0	0
June	1	1	1	5	1	8	8	1	2	2	0	0	0	0	0	0	0	1	0	0	0
July	0	2	0	0	2	6	3	2	4	0	0	2	0	0	0	0	0	0	0	0	0
August	0	4	3	11	2	9	0	1	1	2	0	2	2	0	0	1	0	0	0	0	0
September	5	2	2	9	3	1	1	5	1	1	0	3	0	0	0	2	0	0	0	0	0
October	6	1	1	8	8	2	0	3	3	2	2	3	0	0	0	0	0	0	0	0	0
November	0	1	7	2	6	7	1	1	4	0	1	0	0	0	0	0	0	0	0	0	0
December	3	2	5	8	10	2	1	1	6	3	5	0	0	0	1	0	0	0	0	0	1
<b>TOTAL</b>	<b>25</b>	<b>37</b>	<b>25</b>	<b>86</b>	<b>45</b>	<b>51</b>	<b>23</b>	<b>23</b>	<b>30</b>	<b>27</b>	<b>11</b>	<b>17</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>

**January-2003 to December-2023 History and Present (2023)**

An “odor event” is defined as: One or more odor reports received during a 24 hour period from WWTP neighbor(s). Each odor event shall be considered to be “verified” unless OWASA determines conclusively that an alternative source other than the WWTP created the odor.

**LOG OF CALLS AND E-MAILS TO OWASA  
FROM NEIGHBORS REPORTING ODOR IN THE MASON FARM  
WASTEWATER TREATMENT PLANT (WWTP) AREA**

January – December 2023

<b>Date call received</b>	<b>Time call received</b>	<b>Location</b>
January 2023	No Reported Odors	N/A
February 2023	No Reported Odors	N/A
March 2023	No Reported Odors	N/A
April 2023	No Reported Odors	N/A
May 2023	No Reported Odors	N/A
June 2023	No Reported Odors	N/A
July 2023	No Reported Odors	N/A
August 2023	No Reported Odors	N/A
September 2023	No Reported Odors	N/A
October 2023	No Reported Odors	N/A
November 2023	No Reported Odors	N/A
December 8, 2023	09:59 pm	Highland Rd, Chapel Hill,

## DISTRIBUTION OF OWASA E-MAILS ABOUT OFF-SITE ODOR ELIMINATION

<b>Location</b>	<b>Name</b>
Highland Woods	Paul Neebe
	Mary Turner
	Malcolm Forbes
	Natalia Lebedeva
	Gary Richman
	Gail Wood
	Robert and Melissa Porter
	Robin Casey
	Joseph Clancy
	Ann Schwab
	Seth Kingsbury
	Amanda Kingsbury
	Freeman and Angela Kirby
	Reed Johnson
	Kay Johnson
	Rex Bartles
	Lisa Bartles
	Ann Alexander
	Nortin Hadler
	Carol Hadler
	Frank P. Rexford
	Scott Brees
	Kendall Brees
	Rainer Blaesius
	Elisabeth Schweins
	Susannah Shearer
	Fred Hall
	Lawanda Rainey-Hall
	Katie Jamieson
	Richard Harrill
	Angel Smith
	Jordon Sharome
	Cameron Williams
Marian Rice	
Janet McLamb	
Michael Henning	
Benjamin Duan-Porter	
Matthew Mauck	
Finley Forest	Adam Kimplead
	Cindy Underwood
	Dan Puckett
	David J. Polewka
	Kathryn Conard
Laurel Hill	Michael Sharpe
	Julie Maness
	Bob Wendell
	Carol David



Location	Name		
St. Thomas More Church and School Morgan Creek area	Pat Evans Ewan Rodewald and Sharon Hodge Marcella Grendler Kay Goldstein Ann Wilson Louis Fogleman St. Thomas More Church staff		
	Ellen Johnson Aldersgate United Methodist Church Betsy Malpass Hanson Malpass Jeannie Cox Laura King Moore Jeanne Langley AW Carr Marilyn and Don Hartman		
	Ronald McDonald House Family House	Robert Huls Shelly Day Greg Kirkpatrick, Executive Director Janice Ross, Operations Manager	
		Reserve	Matt Hapgood Steve McPhail James F. Howard Steven and Susan Frye Doug Longman Barbara and Edward Paradise Jeanne and David Jarrett Nadine O'Malley Mark Witcher Ralph Abrahams Kathy Abrahams
	Bayberry Drive area UNC		William Ware Johnny Randall, NC Botanical Garden Jennifer Peterson, NC Botanical Garden Phil Barner, Energy Services Director Margaret Holton, Water, Sewer & Stormwater Coordinator Mary Beth Koza, Director, Environment, Health and Safety Ross Fowler, Finley Golf Course Michael Wilkinson, golf pro Andrew Sapp, Men's Golf Coach UNC Tennis Center UNC parking Mike McFarland, University Communications Scott Ragland, News Services Linda Convisor, Director of Local Relations UNC Farm (Faculty Staff Recreation Association) Frank Maynard, Athletics/ Finley Golf Course

Distribution of OWASA E-mails About Off-Site Odor Elimination

Page 3

<b>Location</b>	<b>Name</b>
	Robert Costa, Athletics/ Finley Golf Course
	Mark Steffer, Athletics/ Finley Golf Course
	Jeff McCracken, Public Safety
	Kate Luck
UNC Healthcare	Mel Hurston
	Karen McCall
	Keith Morris
Town of Chapel Hill	Chris Blue, Town Manager
	Loryn Clark, Deputy Town Manager
	Ann Anderson, Town Attorney
	Lance Norris, Public Works Director
	Richard Terrell, Public Works Assistant Director
	Chris Roberts, Public Works, Manager of Engineering & Infrastructure
	Jeanne Brown, Mayoral Aide
	Sheila Stains-Ramp, Development Services Planning
	Sabrina Oliver, Town Clerk
	Amy Harvey, Deputy Town Clerk
	Celisa Lehew, Police Chief
	Bryan Walker, Captain/Police Information
	Josh Mecimore, Police – Emergency Management Capitan
	Allison Weakley, Public Works
	Christina Strauch, Public Information Officer
	Ross Tompkins, Assistant to the Town Manager
City Schools	Bill Mullin
	Todd LoFrese, Assistant Superintendent for Support Services
	Jeff Nash, Community Relations
	Crystal Jones
	Chris Liles
	Darlene Ryan
Other Utilities	Indira Everett, Duke Energy
	Brenda Duke, Duke Energy
	Steve Small, Duke Energy
	Billy Miller, PSNC
	Time Warner Cable
Orange County	Orange 911 Center Supervisor on duty
	Connie Pixley, Environmental Health Supervisor
Other	Bill Ferrell, Meadowmont Community Association
	Chamber of Commerce
	Michael Hughes
	Post Office

**SUMMARY OF ON-SITE HYDROGEN SULFIDE (H<sub>2</sub>S)  
ODOR MONITORING**

Month and year	Headworks Monitor			UNC Monitor			Digester Monitor			Switchgear Monitor		
	Average H <sub>2</sub> S Reading (ppm)	Minimum H <sub>2</sub> S Reading (ppm)	Maximum H <sub>2</sub> S Reading (ppm)	Average H <sub>2</sub> S Reading (ppm)	Minimum H <sub>2</sub> S Reading (ppm)	Maximum H <sub>2</sub> S Reading (ppm)	Average H <sub>2</sub> S Reading (ppm)	Minimum H <sub>2</sub> S Reading (ppm)	Maximum H <sub>2</sub> S Reading (ppm)	Average H <sub>2</sub> S Reading (ppm)	Minimum H <sub>2</sub> S Reading (ppm)	Maximum H <sub>2</sub> S Reading (ppm)
<b>October 2023</b>	0.0299	0.0000	0.3678 <sup>1</sup>	0.0007	0.0000	0.0024 <sup>2</sup>	0.0000	0.0000	0.0000 <sup>3</sup>	0.0038	0.0000	0.0908 <sup>4</sup>
<b>November 2023</b>	0.0004	0.0000	0.0225 <sup>5</sup>	0.0000	0.0000	0.0000 <sup>6</sup>	0.0000	0.0000	0.0000 <sup>7</sup>	0.0006	0.0000	0.0410 <sup>8</sup>
<b>December 2023</b>	0.0000	0.0000	0.0000 <sup>9</sup>	0.0000	0.0000	0.0000 <sup>10</sup>	0.0000	0.0000	0.0000 <sup>11</sup>	0.0014	0.0000	0.0821 <sup>12</sup>

**Monitor Locations:**

Headworks Monitor (#1) – Monitor located at Headworks Facility

Digester Monitor (#2) – Monitor located between Digester #1 and Digester #4

UNC Monitor (#3) – Monitor located at Primary Sludge PS

Switchgear Monitor (#4) – Monitor located at Switchgear Building

<sup>1</sup> Maximum reading occurred on October 5, 2023

<sup>2</sup> Maximum reading occurred on October 9, 2023

<sup>3</sup> Maximum reading zero all of October 2023

<sup>4</sup> Maximum reading occurred on October 22, 2023

<sup>5</sup> Maximum reading occurred on November 13, 2023

<sup>6</sup> Maximum reading zero all of November 2023

<sup>7</sup> Maximum reading zero all of November 2023

<sup>8</sup> Maximum reading occurred on November 23, 2023

<sup>9</sup> Maximum reading zero all of December 2023 \*Monitors out for calibration\*

<sup>10</sup> Maximum reading zero all of December 2023 \*Monitors out for calibration\*

<sup>11</sup> Maximum reading zero all of December 2023 \*Monitors out for calibration\*

<sup>12</sup> Maximum reading occurred on December 5, 2023