



ORANGE WATER AND SEWER AUTHORITY

A public, non-profit agency providing water, sewer and reclaimed water services to the Carrboro-Chapel Hill community.

August 21, 2018

Mayor Pam Hemminger
Town of Chapel Hill
405 Martin Luther King Jr.
Boulevard
Chapel Hill, NC 27514

Mayor Lydia Lavelle
Town of Carrboro
301 West Main Street
Carrboro, NC 27510

Chair Mark Dorosin
Orange County Board of
Commissioners
Post Office Box 8181
Hillsborough, NC 27278

Dear Mayor Hemminger, Mayor Lavelle and Chair Dorosin:

We are pleased to submit this report on our services, projects and initiatives from April through July 2018. This report includes an update on the following items:

1. OWASA Welcomes New Board Members
2. Agua Visa/Advanced Metering Infrastructure
3. Sewers for the Historic Rogers Road Area
4. Water Quality Report Card
5. Fiscal Year 2019 Budgets and Rates Including New System Development Fees
6. Fiscal Year 2018 Financial Forecast
7. Affordability Outreach Program/Care to Share
8. Diversity and Inclusion Program
9. Communications and Community Engagement
10. Infrastructure Investments

1) OWASA Welcomes New Board Members

We are pleased to welcome Jody Eimers and Bruce Boehm to our Board of Directors, both of whom took the oath of office in early July. Mrs. Eimers, Scientist Emeritus at the U.S. Geological Survey, is an Orange County appointee. Mr. Boehm has led venture capital investments in technology and healthcare companies for more than 35 years; he is an appointee of the Town of Chapel Hill.

2) Agua Vista/Advanced Metering Infrastructure

OWASA reached a major milestone in July: we surpassed 50% of our installation target for our [new advanced meters](#). Over 52% of the meter population has been upgraded. The project is on time and on budget.

The real-time data analysis made possible by the new meters has enabled our team to proactively reach out to customers when we see their water use increase significantly, i.e., out of their

normal pattern of water consumption, which sometimes can be the result of a tap/hose not quite turned off or leaking toilet or another issue. This early notification supports community water conservation and has helped customers to keep their water bills from increasing due to such leaks. With the previous meters, we would not have been able to provide this proactive service.

A web portal for customers, which will empower them to track their own water use with real-time meter data, as well as learn tips on water conservation, is currently in development. The Advanced Metering Initiative is scheduled to wrap up in June 2019.

3) Sewers for the Historic Rogers Road Area

The [Historic Rogers Road Area Sewer Extension project](#) also reached its halfway milestone in July with approximately 50% of the sewers having been installed. Due to a significant amount of rock being encountered on the Carrboro side of the project, construction is taking longer than expected which has cost implications. We are currently negotiating a change order with the contractor to address the additional rock removal costs; the total project cost is not expected to exceed the total amount within the interlocal agreement.

Residents on the Carrboro and northern Chapel Hill sides of the project may not be able to connect to public sewer until early 2019. To increase production and minimize schedule impact, we approved Saturday work in certain locations throughout July and the beginning of August. Residents in areas where sewer has already been installed and certified may connect at any time, upon payment of OWASA fees and installation of private home plumbing. The Rogers Road project is anticipated to be complete in February 2019.

4) Water Quality Report Card

At the end of June, OWASA issued its annual [Water Quality Report Card](#). We are pleased to share that our drinking water quality continued to meet or surpass all Federal and State standards in 2017. The report card includes information about our community's water sources, watershed protection, drinking water treatment processes, results from laboratory testing of OWASA drinking water for more than 150 substances, and much more. It was mailed to all OWASA account holders and can also be viewed on the [OWASA website](#).

5) Fiscal Year 2019 Budgets and Rates Including New System Development Fees

On June 14th, OWASA's Board of Directors adopted the budget for July 2018 through June 2019. It includes a 2% increase in [monthly water and sewer \(wastewater\) rates](#) starting October 1, 2018. A monthly water and wastewater bill for a single-family residence (using 4,000 gallons each month) will increase \$1.41 per month. This was the first change to monthly rates at OWASA in over six years. Effective July 1, 2018, system development fees have been reduced between 10% and 40%, depending on meter size and property type. A new tier for single family homes less than 800 square feet in size has also been added. System development fees are one-time charges for new connections (new development) to the water or sewer system.

The budget includes a \$21 million Capital Improvements Plan which will make possible the rehabilitation of infrastructure such as water and wastewater lines and wastewater pump stations to ensure reliable service to customers.

6) Fiscal Year 2018 Financial Forecast

The audit of our financial statements for Fiscal Year 2018 is underway and is expected to be complete in late September. Preliminary unaudited results for Fiscal Year 2018 are shown below.

FY 2018 Preliminary Results	Actual (Preliminary)	Budget	Variance Pct
Revenue	\$39,199,150	\$37,346,390	4.96%
Expenses	21,614,356	21,920,478	-1.40%
Net Revenues over expenses	17,584,794	15,425,912	14.00%

As planned, net revenues will be used to fund capital improvement projects to maintain critical water and wastewater infrastructure, debt service payments on outstanding bonds, and reserves. OWASA is a community-owned nonprofit agency.

7) Affordability Outreach Program/Care to Share

As part of our [Affordability Outreach Program](#) we remain committed to partnering with the community to increase awareness of options to manage and reduce water and sewer bills, and to empower low-income customers (and the local agencies that serve them) with information and tools to manage and reduce water and sewer bills. Currently underway is the Save2Gain Water Conservation Challenge being implemented in partnership with the Town of Chapel Hill's Public Housing. Together we are piloting a bill deferment/financial coaching partnership with the Community Empowerment Fund. We are also utilizing water use data from the Agua Vista Metering Initiative to proactively alert customers about leaks.

We have seen a 39% increase (from \$455/month to \$634/month) in monthly contributions to the [Care to Share](#) customer assistance program after sending out "Thank You" letters to contributing customers in March 2018. Our customer service team has and will continue to work hard to sign up new contributing customers, particularly during the late summer/early fall months when we have higher levels of service initiation.

8) Diversity and Inclusion Program

OWASA aims to be a “best in class” organization with respect to employee diversity and inclusion. With this aim in mind, we have two goals: 1) to foster diversity in our workforce reflecting the communities we serve, and 2) enable an inclusive environment that encourages and supports each team member to contribute to their full ability towards OWASA’s mission.

A draft plan for improvements identified by an Organizational Assessment was prepared, received and accepted by the Board on April 12, 2018. The Organizational Assessment consisted of inviting employees to participate in two types of focus group sessions: 1) Work Group, and 2) Demographic and Cultural. Employees voluntarily attended sessions with 56% of the work force attending one of the fifteen available Work Group sessions, and 36% attending one of the nine (9) Demographic and Cultural sessions. The Board was also provided with training and participated in the Focus Group Assessment meetings or telephone calls.

Moving forward, the plan includes prioritizing and delegating two types of recommendations: 1) General, and 2) Recruitment. Along with our consultant, OWASA’s Diversity Leadership, Resource and Recruitment Groups have been evaluating recruitment, career development, and promotion processes for improvements. In June and July, employees were invited to dialogue sessions in order to provide feedback on the Organizational Assessment and supporting recommendations. Additionally, OWASA’s newly appointed board members will receive Diversity and Inclusion training in the near future.

9) Communications and Community Engagement

In early June, OWASA appointed Linda Low as the organization’s Communications and Community Relations Officer. Previously Linda served the International Red Cross supporting sustainable community development, and was a Duke-UNC Rotary Peace Fellow facilitating dialogue in North Carolina to promote civil discourse and decrease polarization. She is in the process of meeting with community members and groups in Carrboro, Chapel Hill, Orange County, the University and neighboring communities with the goal of providing timely service information and fostering meaningful dialogue on water stewardship and conservation.

10) Infrastructure Investments

OWASA maintains 750 miles of water and wastewater pipes, a water treatment plant, a wastewater treatment plant, pump stations, and other infrastructure. Meeting the community's needs requires periodic expansion and ongoing rehabilitation of the water, wastewater, and reclaimed water systems. Capital investments, including debt payments for capital projects, account for about half of our costs.

Recently completed projects:

- Completion of an assessment at our treatment plants to identify and assess risks that would prevent OWASA from providing services that meet or exceed federal, state and local quality requirements.

- Upsizing of a sanitary sewer main across Hillsborough Street near Bolinwood Drive.

Key projects underway:

- Rehabilitation and improvements to the wastewater pump station near Cleland Drive, our largest remote wastewater pump station.
- Replacement of filter media and rehabilitation and improvements to the filtration system used at the Jones Ferry Road Water Treatment Plant.
- Enhancements to security systems at various remote water supply and storage facilities.
- Work in the Heritage Hills Neighborhood, including replacement of water mains on portions of Brandywine and Lexington Roads, and rehabilitation of sewer mains and manholes throughout the neighborhood.

Key upcoming projects:

- Replacement of a water main on Pritchard Avenue and Noble Street.
- Replacement of small-diameter galvanized water mains at 22 locations throughout the service area, typically at dead end streets or other smaller sites.
- Electrical and ventilation improvements to a pumping station at the Mason Farm Wastewater Treatment Plant (WWTP).
- Cleaning and inspection of a large enclosed concrete tank at the WWTP.

We would be happy to provide you more detailed information on the items above or other topics of interest as desired. Please feel free to contact Ed Kerwin, Executive Director (ekerwin@owasa.org or 919-537-4211), or me.

Sincerely,



Yinka Ayankoya, Chair
OWASA Board of Directors

Attachments

c: Mr. David Andrews, Carrboro Town Manager
Ms. Bonnie Hammersley, Orange County Manager
Mr. Roger L. Stancil, Chapel Hill Town Manager
OWASA Board of Directors
Ed Kerwin, OWASA Executive Director

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 Events
January	11	3	9	0	8	3	8	1	3	3	4	0	3	0	0	0	0
February	7	5	2	0	8	0	4	1	0	3	3	0	4	0	0	1	0
March	9	0	7	1	10	4	1	1	0	2	8	0	0	1	0	0	0
April	9	2	4	0	9	3	1	1	2	1	1	0	0	0	0	0	0
May	6	0	2	5	8	3	2	5	4	0	1	3	0	0	0	0	0
June	4	1	1	1	5	1	8	8	1	2	2	0	0	0	0	0	0
July	1	0	2	0	0	2	6	3	2	4	0	0	2	0	0	0	-
August	1	0	4	3	11	2	9	0	1	1	2	0	2	2	0	0	-
September	2	5	2	2	9	3	1	1	5	1	1	0	3	0	0	0	-
October	2	6	1	1	8	8	2	0	3	3	2	2	3	0	0	0	-
November	0	0	1	7	2	6	7	1	1	4	0	1	0	0	0	0	-
December	3	3	2	5	8	10	2	1	1	6	3	5	0	0	0	1	-
TOTAL	55	25	37	25	86	45	51	23	23	30	27	11	17	3	0	2	0

January-2002 to December-2017 History and 2018 present

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 2018 – June 2018

Date call received	Time call received	Location
January 2018	No Reported Odors	N/A
February 2018	No Reported Odors	N/A
March 2018	No Reported Odors	N/A
April 2018	No Reported Odors	N/A
May 2018	No Reported Odors	N/A
June 2018	No Reported Odors	N/A
July 2018	-	-
August 2018	-	-
September 2018	-	-
October 2018	-	-
November 2018	-	-
December 2018	-	-

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

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
Adam Kimplead
Cindy Underwood
Dan Puckett
David J. Polewka
Kathryn Conard
Michael Sharpe

Finley Forest

Laurel Hill	Julie Maness Bob Wendell Carol David Pat Evans Ewan Rodewald and Sharon Hodge Marcella Grendler Kay Goldstein Ann Wilson Louis Fogleman
St. Thomas More Church and School	St. Thomas More Church staff
Morgan Creek area	Ellen Johnson Aldersgate United Methodist Church Betsy Malpass Hanson Malpass Jeannie Cox Laura King Moore Jeanne Langley AW Carr Marilyn and Don Hartman Robert Huls
Ronald McDonald House Family House	Shelly Day Greg Kirkpatrick, Executive Director Janice Ross, Operations Manager Matt Hapgood
Reserve	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
	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	Roger Stancil, Town Manager
	Florentine A. Miller, Deputy Town Manager
	Ralph Karpinos, Town Attorney
	Lance Norris, Public Works Director
	Chris Roberts, Town Engineer
	Richard Terrell, Public Works Operations Superintendent
	Catherine Lazorko, Public Information Officer
	Jeanne Brown, Assistant to the Mayor
	Phil Mason, Planner
	Sabrina Oliver, Town Clerk
	Amy Harvey, Public Affairs and Communications
	Chris Blue, Police Chief
	Bryan Walker, Captain/Police Information
	Josh Mecimore, Police Information Officer
	Allison Weakley
	Kiel Harms
	Ran Northam
	Ross Tompkins
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 (H₂S)
ODOR MONITORING**

Month and year	Headworks Monitor			UNC Monitor			Digester Monitor			Switchgear Monitor		
	Average H ₂ S Reading (ppm)	Minimum H ₂ S Reading (ppm)	Maximum H ₂ S Reading (ppm)	Average H ₂ S Reading (ppm)	Minimum H ₂ S Reading (ppm)	Maximum H ₂ S Reading (ppm)	Average H ₂ S Reading (ppm)	Minimum H ₂ S Reading (ppm)	Maximum H ₂ S Reading (ppm)	Average H ₂ S Reading (ppm)	Minimum H ₂ S Reading (ppm)	Maximum H ₂ S Reading (ppm)
April 2018¹	-	-	-	-	-	-	-	-	-	-	-	-
May 2018	0.0002	0.0000	0.0547 ²	0.0004	0.0000	0.00161 ³	0.0000	0.0000	0.0000 ⁴	0.0001	0.0000	0.0098 ⁵
June 2018	0.0000	0.0000	0.0000 ⁶	0.0005	0.0000	0.0147 ⁷	0.0000	0.0000	0.0000 ⁸	0.0000	0.0000	0.0000 ⁹

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.

¹ Monitors were out of service for Maintenance during April 2018

² Maximum reading occurred on May 23, 2018

³ Maximum reading occurred on May 21, 2018

⁴ Maximum reading zero all of May 2018

⁵ Maximum reading occurred on May 23, 2018

⁶ Maximum reading zero all of June 2018

⁷ Maximum reading occurred on June 14, 2018

⁸ Maximum reading zero all of June 2018

⁹ Maximum reading zero all of June 2018