



ORANGE WATER AND SEWER AUTHORITY

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

May 2, 2017

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
PO 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 January through April 2017.

Sewers for the Historic Rogers Road Area

Three construction bids to install the sewer system for the Historic Rogers Road Area were received on April 25th from prequalified contractors. Staff is currently evaluating the bids and we expect that the Orange County Commissioners will award the construction contract within the next month or so. If so, sewer installation should begin in June and be complete about a year later (weather permitting).

On April 21st, representatives of the Rogers-Eubanks Neighborhood Association, Orange County, Towns of Chapel Hill and Carrboro and OWASA met with more than 40 property owners and other stakeholders. OWASA staff provided information on the project schedule and location and types of construction activities, and answered questions about marking existing utilities during construction to avoid damaging them and about allowable use of OWASA's sewer easements on private property.

Budget and financial management

No increase in monthly water, wastewater and reclaimed water rates will be necessary next fiscal year (the sixth consecutive year with no increase in monthly rates). Staff has proposed some adjustments in one-time fees for water and sewer capacity ("availability" fees) and miscellaneous charges.

We have scheduled public hearings on Thursday, May 25th at 7 PM in the Chapel Hill Town Hall to receive comments on the proposed budget and rates.

Follow-up actions regarding the [water emergency in early February](#)

Due to a fluoride overfeed on Thursday, February 2nd which was contained within the Jones Ferry Road Water Treatment Plant (WTP) and a break in a major water line on Friday, February 3rd, it was necessary to direct no use of OWASA drinking water from mid-day on February 3rd to

early afternoon on Saturday, February 4th. The WTP went back into normal operation on the evening of the February 4th.

The OWASA Board and staff have investigated the causes of the emergency and developed action plans. On March 23rd, we approved an [improvement plan of follow-up actions regarding the water line break](#) and on April 13th we approved the [plan to improve safety and reliability of the fluoride feed system](#). (Please see related fluoridation item below.)

On April 27th, we approved the [plan to improve strategic communications in OWASA-related emergencies](#). OWASA staff will participate in Orange County's After Action Review of the water emergency in collaboration with local partners.

We deeply appreciate the cooperation and understanding of our customers, who experienced disruption and hardship. We sincerely thank the City of Durham, Chatham County and Town of Hillsborough for their support with water supply. We are also very grateful to Orange County, the Towns of Chapel Hill and Carrboro, the University and other agencies for partnering with us to inform and otherwise serve the community so well during the emergency.

Fluoridating drinking water

On March 9th, after receiving comments from several dozen people, we decided to continue our policy of fluoridating drinking water to help prevent tooth decay as recommended by the Orange County Health Department, US Centers for Disease Control, American Dental Association and others. We will continue to monitor scientific developments, best practices and recommendations regarding fluoridation.

The staff temporarily suspended fluoridation on February 2nd pending investigation of the overfeed, and staff expects to resume fluoridation when feed system improvements are complete in the fall.

Diversity and Inclusion Program

On March 9th, we approved the [initial implementation plan for the Employee Diversity and Inclusion Program](#). Staff will hire a consultant to assist in further developing and implementing the plan, and will provide status reports to us in June and September.

Advanced Metering Infrastructure (AMI)

On May 25th, we will consider awarding a contract to Mueller Systems for the AMI system. The capital cost of the system is about \$4.9 million, which is below the \$5.1 million estimate from our feasibility study. The project is expected to take about two years to complete.

AMI allows remote meter reading via radio transmissions, more frequent meter readings and faster detection of water leaks. We will continue to inform and engage our customers as we move forward with the installation and consider proposed policy changes related to AMI.

Energy management

On April 13th, we approved OWASA's first Energy Management Plan, which includes various projects to reduce conventional fuel use and greenhouse gas emissions. The Board of Directors plans to have additional discussion in the fall about options for converting biogas at the Mason Farm Wastewater Treatment Plant to useable fuel.

Our energy management goals include reducing use of purchased electricity by 35% and lowering natural gas use by 5% by the end of 2020, and evaluating opportunities for renewable energy generation.

Long-Range Water Supply Plan Update/Jordan Lake allocation

On March 9th, the NC Environmental Management Commission (EMC) approved our request to continue our Jordan Lake allocation of about 5 million gallons per day (for use if needed in severe droughts and operational emergencies).

The next step in updating the Long-Range Water Supply Plan will be developing future demand projections and system yield later this spring.

New water rate for Multi-Family Master-Metered customers

As previously reported, we approved a change to a year-round water rate to replace seasonal rates for Multi-Family Master-Metered (MFMM) customers such as apartment complexes. The rate change is designed to result in no change in the amount of revenue OWASA receives from customers. The new year-round rate will go into effect in May 2017.

Infrastructure investments

Capital investments, including debt payments for capital projects, account for about half of our costs and therefore half of our bills to customers.

Current projects

- Replacing sewer near Emory Drive and Brigham Road
- Renovating two of the four biosolids treatment tanks at the Mason Farm Wastewater Treatment Plant
- Constructing a facility at the Cane Creek Reservoir to store and pump sodium permanganate to improve water quality
- Renovating sewer pipes and manholes at various places in the service area

Upcoming projects

- Rehabilitating the pressurized sewer on Prestwick Road near Hamilton Road
- Renovating sewer pump stations near Cleland Drive, Eastowne Drive, Eubanks Road and Barbee Chapel Road
- Replacing water and sewer lines on Dobbins Drive

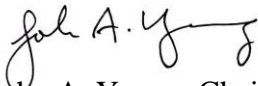
- Replacing sewer lines on Bolinwood Drive
- Replacing water line on Hillsborough Street
- Replacing water line on Brandywine Road

Completed from January through April 2017

- Replacing water lines on part of East Rosemary, Henderson and Hillsborough Streets
- Installing a new water line on part of Hilltop Street

We would be happy to give you more detailed information. Please let Ed Kerwin, Executive Director (ekerwin@owasa.org or 919-537-4211) or me know.

Sincerely,



John A. Young, Chair

OWASA Board of Directors

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

Attachments: Information about off-site odor elimination at the Mason Farm Wastewater Treatment Plant

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

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

January-2002 to December-2016 History and 2017 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 2017 – December 2017

Date call received	Time call received	Location
January 2017	1/27/17 @ 8:00pm	1002 Highland Woods Determined to be a collection system odor event – NOT WWTP odor
February 2017	2/12/17 @ 6:04am	1016 Highland Woods
March 2017	No Reported Odors	N/A
April 2017		
May 2017		
June 2017		
July 2017		
August 2017		
September 2017		
October 2017		
November 2017		
December 2017		

**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)
January 2017	0.0001	0.0000	0.0103 ¹	0.0002	0.0001	0.0020 ²	0.0000	0.0000	0.0000 ³	0.0003	0.0000	0.0151 ⁴
February 2017	0.0118	0.0000	0.2188 ⁵	0.0010	0.0005	0.0112 ⁶	0.0000	0.0000	0.0000 ⁷	0.0013	0.0000	0.0190 ⁸
March 2017	0.0061	0.0000	0.1392 ⁹	0.0003	0.0001	0.0122 ¹⁰	0.0000	0.0000	0.0000 ¹¹	0.0009	0.0000	0.0151 ¹²

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 Maximum reading occurred on January 25th 2017

² Maximum reading occurred on January 24th 2017

³ Maximum reading zero all of January 2017

⁴ Maximum reading occurred on January 28th 2017

⁵ Maximum reading occurred on February 22nd 2017

⁶ Maximum reading occurred on February 7th 2017

⁷ Maximum reading zero all of February 2017

⁸ Maximum reading occurred on February 4th 2017

⁹ Maximum reading occurred on March 28th 2017

¹⁰ Maximum reading occurred on March 6th 2017

¹¹ Maximum reading zero all of March 2017

¹² Maximum reading occurred on March 29th 2017

E-mails from OWASA to neighbors of the Mason Farm Wastewater Treatment Plant (WWTP)
regarding off-site odor elimination matters

January 10 – April 28, 2017

Date	Topic
January 23, 2017	Annual report to the Town of Chapel Hill

Distribution list for OWASA e-mails about off-site odor elimination

April 28, 2017

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
	Michael Sharpe
	Julie Maness

Laurel Hill	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 Morgan Creek area	St. Thomas More Church staff Carlos Lima 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
	Phil Mason, Planner
	Sabrina Oliver, Town Clerk
	Amy Harvey, Public Affairs and Communications
	Chris Blue, Police Chief
	Jeff Clark, Patrol Captain
	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