



ORANGE WATER AND SEWER AUTHORITY

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

October 17, 2016

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 Earl McKee
Orange County Board of
Commissioners
PO Box 8181
Hillsborough, NC 27278

Dear Mayor Hemminger, Mayor Lavelle and Chair McKee:

Subject: Orange Water and Sewer Authority (OWASA) Quarterly Report

We are pleased to submit this report on our services and initiatives from mid-August through early October 2016.

Sewer design for the Historic Rogers Road Area

As previously indicated, we expect the design and process of getting State and local permits for construction will be complete in November. We plan to propose this fall an interlocal agreement for OWASA's work in seeking bids and oversight of the sewer installation.

Mountains-to-Sea Trail (MST) on OWASA land near the Cane Creek Reservoir

On August 25th, we approved conditions for allowing the MST on OWASA land near the Cane Creek Reservoir. The conditions address water quality protection, risks related to hiking and ensuring that there will be no costs to OWASA due to the trail. The specific route of the trail on OWASA land is subject to our future approval. Links: [letter regarding the OWASA Board's decision and resolution](#) and [summary of conditions for MST route on OWASA land](#)

We have informed stakeholders about our decision and we encourage residents to participate in the County's continuing process for considering the MST.

Proposed change in water rates for multi-family master-metered (MFMM) accountholders

On October 27th at 7:00 P.M., in Chapel Hill Town Hall Council Chamber (405 Martin Luther King Jr. Boulevard), we will hold a public hearing on changing our seasonal rates for MFMM customers to a uniform, year-round rate.

As you may know, residents at some apartment complexes in Chapel Hill and Carrboro receive private water and sewer bills from property owners. Under rules of the NC Utilities Commission, these owners can pass through water/sewer costs to residents through private sub-meter and

billing arrangements. An administration fee of no more than \$3.75 per residence may also be charged.

In the past, residents have expressed concern about unexpected increases in the private water/sewer bills due to our peak seasonal rate in May, even though water use has not increased.

The proposed change would eliminate the bill fluctuations due to the changes in seasonal rates, so private bills should result in fewer questions and less confusion. Also, water demand at MFMM locations does not have the seasonal peaking pattern that seasonal rates were originally intended to address.

This modification in rates would not likely impact multi-family residents who do not receive private bills but pay for water and sewer service through rent. Link: [Letter to Mayors and Chair](#)

Drinking water disinfection and plumbing systems

On September 22nd, we received information from staff and recommendations from our Natural Resources and Technical Services Committee regarding chloramines, our disinfectant for drinking water, and its effect on certain types of rubber. We also received information about dezincification, a type of corrosion which can affect brass containing a high percentage of zinc but which is not related to our use of chloramines.

"We will continue working to inform our customers, plumbers and other stakeholders about the need to choose rubber items, such as toilet flappers, that are chloramine resistant and to choose brass that has less than 15% zinc or otherwise meets current national plumbing codes." Brass plumbing items with a high percentage of zinc are vulnerable to the release of zinc, which can appear in plumbing as a white powder with the potential to clog water pipes or weaken the brass.

We will provide more information about these items to your respective Boards/Council later this year.

Diversity and Inclusion Plan

We will hold a special Board meeting on Thursday, November 3, 2016 at 6:00 P.M. in the OWASA Community Room to discuss Diversity and Inclusion work.

A Strategic Approach to Energy Management

On September 8th, we approved the use of a social cost of carbon in the evaluation of cost effective energy projects to meet our energy reduction goals. The social cost of carbon is an economic calculation of the damages associated with greenhouse gas emissions, and we will be incorporating the central value developed and used by the Federal government into our business case evaluations.

Additionally, we approved a [plan](#) for engaging the community and other stakeholders (including the Towns of Carrboro and Chapel Hill, and Orange County) in our energy management efforts. These engagement efforts are underway. Over the past year, OWASA staff has been meeting

with staff from Chapel Hill, Carrboro, Orange County, Chapel Hill Carrboro City Schools and the University of North Carolina to collectively identify and evaluate opportunities to collaborate on clean energy projects. The intent is to identify and propose initiatives to each of the respective decision-making entities that improve the efficiency, impact, and community involvement of achieving common objectives in the region through collaboration.

We plan to have our first Energy Management Plan finalized in early 2017.

Long-Range Water Supply Plan (LRWSP) Update

We are beginning the process to update our LRWSP, and received background information at our September 22nd meeting. In November, we will begin to consider goals and financial and non-financial metrics to evaluate supply and demand management alternatives to meet future water demands.

We have also asked for consideration of including this matter on the agenda for the November 17th Assembly of Governments. Link: [October 3, 2016 letter to Mayors and Chair](#)

Advanced Metering Infrastructure (AMI)

As previously reported, we decided on March 24th to proceed with [AMI](#), which will give OWASA and customers access to water use data which may indicate a leak. AMI will send meter readings via antennas to a database, and thus reduce personnel and vehicle/fuel costs and lower greenhouse gas emissions.

Staff plans to receive and review AMI system proposals this winter so we can approve an installation contract in the spring of next year. Installation will occur over about 18 months and we will engage customers with information and opportunities to comment and ask questions.

Capital investment projects

Current projects

- Water line replacement on part of East Rosemary, Henderson and Hillsborough Streets
- Water line replacement on Emory Drive
- Sewer replacement near Emory Drive and Brigham Road
- Renovation of two solids treatment tanks at our Mason Farm Wastewater Treatment Plant
- Construction of new chemical addition facility at our Cane Creek Reservoir Pump Station

Upcoming projects

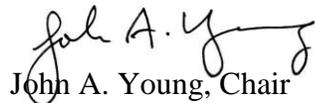
- Water and sewer line replacement on Dobbins Drive
- Sewer line replacement on Bolinwood Drive
- Rehabilitation of the pressurized sewer on Prestwick Road near Hamilton Road
- Rehabilitation of a wastewater pump station near Providence Road

Projects completed since mid-August

- Water line replacement on Chase Avenue
- Pump station rehabilitation in the Piney Mountain neighborhood (north of I-40)
- Rehabilitation of electrical items at the Mason Farm Wastewater Treatment Plant's stormwater pump station
- Replacement of the storage tank for sodium hypochlorite (chlorine in the form of bleach) at the Jones Ferry Road Water Treatment Plant

We welcome the opportunity to give you more information and to arrange tours of OWASA facilities. To arrange this, please contact Ed Kerwin, Executive Director (ekerwin@owasa.org or 919-537-2411) or me.

Sincerely,



John A. Young, Chair
OWASA Board of Directors

c: Ms. Bonnie Hammersley, Orange County Manager
Mr. Roger 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**

January-2002 to December-2015 History and 2016 present

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016 Reports	2016 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	0
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	0
May	6	0	2	5	8	3	2	5	4	0	1	3	0	0	0	0
June	4	1	1	1	5	1	8	8	1	2	2	0	0	0	1	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		
November	0	0	1	7	2	6	7	1	1	4	0	1	0	0		
December	3	3	2	5	8	10	2	1	1	6	3	5	0	0		
TOTALS	55	25	37	25	86	45	51	23	23	30	27	11	17	3	1	0

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 2016 – December 2016

Date call received	Time call received	Location
January 2016	No Reported Odors	N/A
February 2016	No Reported Odors	N/A
March 2016	No Reported Odors	N/A
April 2016	No Reported Odors	N/A
May 2016	No Reported Odors	N/A
June 2016	7:30pm	1016 Highland Woods determined a collection system odor NOT odor from WWTP
July 2016	No Reported Odors	N/A
August 2016	No Reported Odors	N/A
September 2016	No Reported Odors	N/A
October 2016		N/A
November 2016		N/A
December 2016		N/A

**E-MAILS FROM OWASA TO NEIGHBORS OF THE MASON FARM
WASTEWATER TREATMENT PLANT (WWTP) REGARDING
OFF-SITE ODOR ELIMINATION MATTERS**

August 12- October 4, 2016

Date	Topic
August 23, 2016	Quarterly report to the Town of Chapel Hill
September 16, 2016	Notice of potential for odor releases due to renovation of solids treatment tank

**DISTRIBUTION LIST FOR OWASA E-MAILS ABOUT
OFF-SITE ODOR ELIMINATION**

October 4, 2016

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 Matthew and Krista Mauck Angel Smith Jordon Sharome
Finley Forest	Adam Kimplead Cindy Underwood Dan Puckett David J. Polewka Kathryn Conard Michael Sharpe Rima Wehbe Julie Maness Rima Wehbe

Laurel Hill	Bob Wendell Carol David Pat Evans Ewan Rodewald and Sharon Hodge Marcella Grendler Kay Goldstein Ann Wilson Anne Fogleman Louis Fogleman
St. Thomas More Church and School	St. Thomas More Church staff
Morgan Creek area	Carlos Lima Ellen Johnson Betsy Malpass Hanson Malpass Jeannie Cox Laura King Moore Jeanne Langley AW Carr Marilyn and Don Hartman Robert Huls
Ronald McDonald House	Shelly Day
Family House	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 & 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 Willie Scroggs, Athletic Department Michael Wilkinson, golf pro Andrew Sapp, Men's Golf Coach Ms. Jan Mann, Women's Golf Coach

UNC Tennis Center
 UNC parking
 Mike McFarland, University Communications
 Scott Ragland, News Services
 Linda Convissor, 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
 UNC Healthcare Mel Hurston
 Karen McCall
 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 Supt.
 Catherine Lazorko, Public Information Officer
 Jeanne Brown
 David Bonk, Planner
 Phil Mason, Planner
 Sabrina Oliver, Town Clerk
 Amy Harvey, Public Affairs and Communications
 Larry Tucker, Engineering
 Chris Blue, Police Chief
 Jeff Clark, Patrol Captain
 Bryan Walker, Captain/Police Information
 Josh Mecimore, Police Information Officer
 Allison Weakley
 Dave Milkereit
 Kiel Harms
 Ran Northam
 Ross Tompkins
 City Schools Bill Mullin
 Todd LoFrese, Assistant Superintendant 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

Other
Connie Pixley, Environmental Health Supervisor
Bill Ferrell, Meadowmont Community Association
Chamber of Commerce
Michael Hughes

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)
July 2016	0.0000	0.0000	0.0000 ¹	0.0000	0.0000	0.0000 ²	0.0000	0.0000	0.0000 ³	0.0008	0.0000	0.0117 ⁴
August 2016	0.0000	0.0000	0.0000 ⁵	0.0000	0.0000	0.0000 ⁶	0.0000	0.0000	0.0000 ⁷	0.0008	0.0000	0.0000 ⁸
September 2016	0.0000	0.0000	0.0000 ⁹	0.0000	0.0000	0.0000 ¹⁰	0.0000	0.0000	0.0000 ¹¹	0.0001	0.0000	0.0000 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 zero all of July 2016

² Maximum reading zero all of July 2016

³ Maximum reading zero all of July 2016

⁴ Maximum reading occurred on July 21st 2016

⁵ Maximum reading zero all of August 2016

⁶ Maximum reading zero all of August 2016

⁷ Maximum reading zero all of August 2016

⁸ Maximum reading zero all of August 2016

⁹ Maximum reading zero all of September 2016

¹⁰ Maximum reading zero all of September 2016

¹¹ Maximum reading zero all of September 2016

¹² Maximum reading zero all of September 2016