



ORANGE WATER AND SEWER AUTHORITY

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

August 19, 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

Earl McKee, Chair
Orange County Board of
Commissioners
PO Box 8181
Hillsborough, NC 27707

Dear Mayor Hemminger, Mayor Lavelle and Chair McKee:

We are pleased to submit this report on our services and initiatives from April through early August.

Drinking water disinfection with chloramines and customers' inquiries

On April 28th, we received information from staff and comments from several customers about disinfection of our drinking water, the release of zinc from some brass plumbing fixtures (“dezincification”) and deterioration of rubber in toilet flappers, etc. We asked our Natural Resources and Technical Systems Committee to review this matter. (Links: [June 8th NRTS agenda](#) and [meeting summary](#)).

Chloramines are a compound of chlorine and ammonia which OWASA and many other utilities use for disinfection. Chloramines are often selected to reduce certain disinfectant byproducts, which can be harmful at high levels over time. Also, chloramines are more stable and therefore disinfect water longer than chlorine as water travels through pipes.

We will continue to engage with our customers and other stakeholders (such as plumbers) about choosing the right kinds of rubber and brass for plumbing systems. We recommend choosing flappers and other rubber items which are labelled as chloramine resistant. To avoid dezincification, brass items should have low levels of zinc and meet current standards in plumbing codes. We recently added information on these topics to the [water treatment and disinfection](#) page on our website.

Our next step will be to formally receive the Committee’s report and additional comments from customers at our September 22, 2016 meeting at 7 PM in the Chapel Hill Town Hall.

Sewer system design for the Historic Rogers Road Area

We expect design and permitting will be complete in November, about two months later than previously planned. The extended schedule is the result of adjustments made to the design as part of community engagement during easement acquisition and a hold on permitting while potential Community Development Block Grant funding was evaluated. As design, permitting, and

easement acquisition (being carried out by the County) near completion, we will request guidance from the County and Towns on when to proceed with the bidding process.

The estimated cost of design and construction remains at about \$5.8 million, excluding costs for easement acquisition, sewer connection fees, private sewer connection pipes and related plumbing work.

Possible part of Mountains-to-Sea Trail on OWASA land near the Cane Creek Reservoir

We are continuing to engage the community regarding the potential route of and conditions for the Mountains-to-Sea Trail on OWASA land. Since February, we have received comments from more than 50 residents, including 22 who spoke in our June 23rd meeting. We are inviting additional public input in our August 25th meeting, and may make a decision then. ([Link to news release on August 11.](#))

Review of water rates for multi-family master-metered locations

We will resume discussions regarding possible changes in the water rate structure for multi-family, master-metered customers at our September 8, 2016 meeting. If the Board decides to make changes to the rates charged multi-family, master-metered customers, the changes would likely go into effect prior to May 2017, when peak-season rates go into effect. Under the seasonal rate structure currently charged to multi-family, master-metered customers, higher water rates are paid during the peak demand period from May to September and lower off-peak rates apply from October to April. This causes bills to rise unexpectedly in May for some of the residents of these properties, even if their water use doesn't change.

Budgeting and financial management

On June 9th, we adopted a budget for the fiscal year (FY) July 2016 through June 2017 with no increase in monthly rates for the fifth year in a row. Highlights of the budget include:

	FY 2017 Budget (millions)	Percent Change from FY 2016 Results
Revenue	\$36.9	(2.4)
Operating expenses	\$21.0	6.0
Capital outlays	\$14.9	79.7
Debt service	\$6.9	(16.0)

We continue to meet our financial performance objectives, including affordability of our services relative to average household income.

Advanced Metering Infrastructure

We will receive proposals for an AMI system this fall, and construction of the system could take 18 months to two years.

AMI is a meter reading system with fixed antennae for remotely reading water meters. Without the need to drive or walk to read meters, we will reduce personnel, vehicle and energy costs and greenhouse gas emissions. AMI will enable faster detection of leaks from monitoring daily water use on line, and will not require a rate increase. [Link for more information](#). As you may already know, the [Town of Hillsborough has begun installing equipment for an AMI system](#).

Draft Diversity and Inclusion Plan

On July 14th, we began discussion of the draft Diversity and Inclusion Plan submitted by staff. We expect to hold a special meeting later this year to continue discussing and improving the draft plan.

Capital projects

Capital investments, including payment of bond debt for capital projects, account for about half of the costs in our monthly bills.

Current

- Replacing water lines on part of East Rosemary, Henderson and Hillsborough Streets
- Sewer replacement near Emory Drive and Brigham Road
- Renovating two of the four solids treatment tanks (“digesters”) at our Mason Farm Wastewater Treatment Plant
- Pump station rehabilitation in the Piney Mountain neighborhood
- Construction of new chemical addition facility at our Cane Creek Reservoir Pump Station
- Water line replacement on Chase Avenue

Upcoming

- Water line replacement on Emory Drive between Long Leaf Drive and Willow Drive

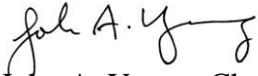
Completed since March 2016

- Water line replacement on Purefoy Road (east of South Columbia Street)
- Water line replacement on Evergreen Lane and Ridge Lane (Gimghoul neighborhood)
- Sewer replacement at Finley Golf Course near Glenwood Elementary
- Water line replacement on Weiner Street
- Water line replacement on Chase Park Road

We would be happy to give you more detail on any of our initiatives or to arrange a tour of facilities. Please let Ed Kerwin, Executive Director (ekerwin@owasa.org or 919-537-2411) or me know.

Quarterly report
August 19, 2016
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Sincerely,

A handwritten signature in black ink, appearing to read "John A. Young". The signature is fluid and cursive, with a long horizontal stroke at the end.

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**

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		
September	2	5	2	2	9	3	1	1	5	1	1	0	3	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		N/A
September 2016		N/A
October 2016		N/A
November 2016		N/A
December 2016		N/A

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

August 17, 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
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
Adam Kimplead
Cindy Underwood
Dan Puckett
David J. Polewka
Kathryn Conard
Michael Sharpe
Rima Wehbe

Finley Forest

Laurel Hill	Julie Maness Rima Wehbe 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 Carlos Lima
Morgan Creek area	Ellen Johnson Betsy Malpass Hanson Malpass Jeannie Cox Laura King Moore Jeanne Langlely 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 & 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 Coord. 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
Jim Gregory, Media Relations
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
Mel Hurston
Karen McCall
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
Bill Mullin

UNC Healthcare

Town of Chapel Hill

City Schools

	Todd LoFrese, Asst Supt. For Support Services
	Jeff Nash, Community Relations
	Crystal Jones
	Chris Liles
	Darlene Ryan
	Kiel Harms
	Ran Northam
	Ross Tompkins
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
	Bill Ferrell, Meadowmont Community Association
Other	Chamber of Commerce
	Michael Hughes

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

April 21-August 12, 2016

Date	Topic
April 21, 2016	Quarterly report to the Town of Chapel Hill
August 10, 2016	Update on renovation of solids treatment tanks including potential for odor releases in upcoming work

**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 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
May 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	0.0127 ⁸
June 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	0.0147 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 April 2016

² Maximum reading zero all of April 2016

³ Maximum reading zero all of April 2016

⁴ Maximum reading occurred on April 22nd 2016

⁵ Maximum reading zero all of May 2016

⁶ Maximum reading zero all of May 2016

⁷ Maximum reading zero all of May 2016

⁸ Maximum reading occurred on May 28th 2016

⁹ Maximum reading zero all of June 2016

¹⁰ Maximum reading zero all of June 2016

¹¹ Maximum reading zero all of June 2016

¹² Maximum reading occurred on June 7th 2016