



ORANGE WATER AND SEWER AUTHORITY

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

October 23, 2015

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

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

Mayor Mark Kleinschmidt
Town of Chapel Hill
405 Martin Luther King Jr.
Boulevard
Chapel Hill, NC 27514

Dear Mayor Lavelle, Mayor Kleinschmidt and Chair McKee:

We are pleased to submit this report on our services, projects and initiatives. The information below focuses primarily on items from July through September 2015, with some items updated to indicate current status.

Consideration of possible changes in rate structures; rate study

On October 8, we authorized staff to proceed with a cost allocation study as the next step in a process to consider changes to water and sewer rate structures.

Detailed design of sewers to serve the Historic Rogers Road Area

Our engineering consultant is progressing with land surveying, soil borings to check for underground rock, marking wetlands boundaries and other field work needed for the detailed design, which we expect will be complete in 2016.

As previously reported, we co-sponsored a community meeting on July 28, 2015 with the Rogers-Eubanks Neighborhood Association, Marian Cheek Jackson Center, Orange County and the Towns of Carrboro and Chapel Hill to give residents information and receive comments and questions about the design process. More than 50 citizens participated in the meeting and we responded to numerous questions.

We look forward to further communication and interaction with the Rogers Road area residents and property owners as the design moves forward for this very important project.

Affordability outreach

On October 22, we approved a plan to make affordability outreach an ongoing program at OWASA. The plan incorporates the lessons learned and feedback received from the 2014-15 Affordability Outreach Pilot Project. The strategies proposed in the plan incorporate many of the comments and suggestions provided by over a dozen local social service agencies and affordable

housing agencies engaged with us in this effort, including representatives from Orange County and the Towns of Chapel Hill and Carrboro.

On-line account service improvements

In August 2015, OWASA implemented a new customer portal to improve the on-line customer experience. The new customer portal offers expanded payment options and account information, and an enhanced user experience. Additionally, e-bill notifications now include balance and date due information, the enhancements most often requested by OWASA customers.

2015 Customer Survey

On October 15, we began publicizing our 2015 survey, which has nine questions. We are asking customers for feedback on our core services and on how customers prefer to receive information and communicate with us.

We are distributing information in a newsletter to all accountholders and are asking property managers at several dozen multi-family neighborhoods to share the survey with residents who receive our service but pay for it through their rent or receive private bills. A Spanish version of the survey is also available. We will report on the results of the survey this winter.

Meter infrastructure feasibility study

OWASA is conducting a feasibility study to evaluate the economic and non-economic benefits of an Automated Meter Reading (AMR), Advanced Meter Infrastructure (AMI), or hybrid AMR/AMI system to replace our manually-read water meters. After the AMI feasibility study by our consultant is complete early next year, OWASA will develop and implement a community engagement plan.

Biosolids management

On October 8, we agreed to move toward recycling about 75% of our biosolids in “liquid” form on approved farmland (when practical), and recycling about 25% in dewatered form at a private composting facility in Chatham County. This modification will help reduce costs, continue partnership with our local agricultural community, and maintain flexibility for future decision-making. We now apply about 50% of our biosolids in liquid form on farmland and dewater 50% for transport to the composting facility.

We will review this matter in January 2017 after experience with the 75%-25% approach. We will continue to inform and engage with farmers and other stakeholders regarding biosolids management.

Care to Share customer assistance program

In July 2015, the Executive Director sent a personal appeal to the firms and vendors with whom we conduct business to contribute to Care to Share. To date, this has resulted in \$1,470 of

additional one-time funding support to the program. The additional contribution represents approximately 30% of the amount donated in Fiscal Year 2015.

These contributions are managed by the Inter-Faith Council (IFC). To ensure that donations do not affect or appear to affect OWASA, the Executive Director has asked the IFC to not disclose the names of the businesses and individuals who contributed. OWASA staff continues to encourage new and existing customers to sign up for automatic monthly contributions to Care to Share through on-bill contributions and explore additional opportunities to increase community support of the fund.

Energy management

To help advance our energy management efforts, we began regular discussions with staff and advisory board members from Carrboro, Chapel Hill, Orange County, the Chapel Hill-Carrboro City Schools System and UNC-Chapel Hill to explore opportunities for collaboration on energy efficiency, energy management and renewable energy strategies. This informal working group may identify specific proposals for joint consideration by the respective governing boards.

Recreation at the Cane Creek Reservoir

After receiving comments from 28 citizens, we decided on September 10 to allow birdwatching on Wednesday mornings at the Cane Creek Reservoir in months when our lakes are closed to boating (mid-November to mid-March).

Capital Improvements

Projects under construction include:

- renovating two of our four solids treatment tanks (called “digesters”) at the Mason Farm Wastewater Treatment Plant for structural rehabilitation and to contain odor. The digesters are where we treat solids to make recyclable biosolids.
- replacing a sewer near Brigham Road and Emory Drive in Chapel Hill.
- renovating sewers and manholes at locations near Ephesus Church Road, Pinehurst Drive and Long Leaf Drive.

Projects which will begin in the next several months include:

- replacing a water line in Plum Lane in the Briarcliff neighborhood.
- replacing a water line on part of Purefoy Road east of South Columbia Street.
- replacing water lines in Evergreen and Ridge Lanes in the Gimghoul Road area.

Study of total compensation of employees

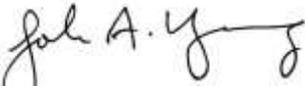
We have engaged Springsted Incorporated, based in Richmond, to review our pay and benefits. Our next step will be discussions to establish our compensation philosophy.

Fiscal Year 2015 Financial Results

For the year ended June 30, 2015, OWASA met all of its financial performance objectives which include targets for financial reserves, debt management, and service affordability. Operating revenue was about 3.5% more than projected and operating expenses were about 1.7% less than budget. Drinking water sales averaged 6.24 million gallons per day; 6.1 million gallons per day was projected.

We welcome the opportunity to make a presentation or otherwise provide information on these or other topics.

Sincerely,

A handwritten signature in black ink that reads "John A. Young". The signature is written in a cursive style 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 regarding 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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 Reports	2015 Events
January	11	3	9	0	8	3	8	1	3	3	4	0	3	0	0
February	7	5	2	0	8	0	4	1	0	3	3	0	4	0	0
March	9	0	7	1	10	4	1	1	0	2	8	0	0	1	1
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	2
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	3

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 2015 – September 2015

Date call received	Time call received	Location
January 2015	No Reported Odors	N/A
February 2015	No Reported Odors	N/A
March 11, 2015	8:16am	1016 Highland Woods Road
April 2015	No Reported Odors	N/A
May 2015	No Reported Odors	N/A
June 2015	No Reported Odors	N/A
July 2015	No Reported Odors	N/A
August 2, 2015	11:30pm	1002 Highland Woods Road
August 4, 2015	10:12pm	1002 Highland Woods Road
September 2015	No Reported Odors	N/A

**E-MAIL DISTRIBUTION LIST FOR NOTICES ABOUT ODOR-RELATED ITEMS AT
THE MASON FARM WASTEWATER TREATMENT PLANT**

October 19, 2015

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
Ed and Helen Ludwig
Rainer Blaesius
Elisabeth Schweins
Susannah Shearer
Fred Hall
Lawanda Rainey-Hall
Katie Jamieson
Richard Harrill
Frank Phoenix
Angel Smith
Jordon Sharome
Adam Kimplead
Cindy Underwood
Dan Puckett
David J. Polewka
Kathryn Conard
Michael Sharpe
Julie Maness

Finley Forest

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****Morgan Creek area**

St. Thomas More Church staff
 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
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
 Jim Ward, NC Botanical Garden
 Jim Ward--home
 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
Karen Moon, News Services
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
Jim Gregory, Media Relations
UNC Healthcare
Mel Hurston
Karen McCall
Jennifer James, Communications Director
Town of Chapel Hill
Roger Stancil, Town Manager
Florentine A. Miller, Deputy Town Manager
Bruce Heflin
Ralph Karpinos, Town Attorney
Lance Norris, Public Works Director
Richard Terrell, Public Works Operations Supt.
Catherine Lazorko, Public Information Officer
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
City Schools
Tom Forcella, Superintendent
Bill Mullin
Todd LoFrese, Asst. Supt. for Support Services
Jeff Nash, Community Relations
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
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 2015	0.0000	0.0000	0.0000 ¹	0.0000	0.0000	0.0000 ²	0.0000	0.0000	0.0000 ³	0.0000	0.0000	0.0000 ⁴
August 2015	0.0000	0.0000	0.0000 ⁵	0.0000	0.0000	0.0000 ⁶	0.0000	0.0000	0.0000 ⁷	0.0000	0.0000	0.0000 ⁸
September 2015	0.0000	0.0000	0.0000 ⁹	0.0000	0.0000	0.0000 ¹⁰	0.0000	0.0000	0.000 ¹¹	0.0000	0.0000	0.0000 ¹²

Monitor Locations:

Headworks Monitor (#1) – Monitor located between Headworks Facility and Septage Receiving Station on south side of plant property.

Digester Monitor (#2) – Monitor located between Digester #1 and Digester #4 on west side of plant property.

UNC Monitor (#3) – Monitor located between UNC Research Building and Trickling Filter on north side of plant property.

Switchgear Monitor (#4) – Monitor located across from Switchgear building on north side of plant property.

¹ Maximum reading zero all of July

² Maximum reading zero all of July

³ Maximum reading zero all of July

⁴ Maximum reading zero all of July

⁵ Maximum reading zero all of August

⁶ Maximum reading zero all of August

⁷ Maximum reading zero all of August

⁸ Maximum reading zero all of August

⁹ Maximum reading zero all of September

¹⁰ Maximum reading zero all of September

¹¹ Maximum reading zero all of September

¹² Maximum reading zero all of September