



ORANGE WATER AND SEWER AUTHORITY

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

October 19, 2012

Chair Bernadette Pelissier
Orange County
Post Office Box 8181
Hillsborough, NC 27278

Mayor Mark Chilton
Town of Carrboro
301 West Main Street
Carrboro, NC 27510

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

Dear Chair Pelissier, Mayor Chilton, and Mayor Kleinschmidt:

Enclosed is an update on OWASA activities for the most recent quarter.

Please feel free to contact me or our staff if you would like an in-person presentation or further details about any of the items in the enclosed report.

Best Regards,

Alan Rimer, P.E., Chair
OWASA Board of Directors

Enclosure

c: Mr. David Andrews, Carrboro Town Manager (w/encs.)
Mr. Frank Clifton, Orange County Manager (w/encs.)
Mr. Roger L. Stancil, Chapel Hill Town Manager (w/encs.)
OWASA Board of Directors (w/encs.)
Ed Kerwin, OWASA Executive Director (w/encs.)



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Quarterly Report to Local Governments October 19, 2012

OWASA's August 24, 2012 Annual Report to Local Governments summarized major accomplishments and activities for FY 2012 (July 2011 – June 2012). This quarterly report is a more abbreviated summary of new or updated information through October 2012. Additional materials are available on request. OWASA Board members and staff will be glad to provide presentations if desired.

Water Supply and Demand – As of October 18, 2012, OWASA's University Lake/Cane Creek/Stone Quarry reservoir system was 92 percent full with 3.3 billion gallons, or about 15 months of supply, in storage. The reservoirs were 62 percent full on this date a year ago (2011). The statistical risk of critical reservoir drawdown based on historical data remains minimal for the next 12 months.

Jordan Lake Water Supply – The OWASA Board will consider a recommendation at its December 13th meeting to request the NC Environmental Management Commission to convert our Level II Jordan Lake water supply allocation to Level I. Jordan Lake represents a water supply insurance policy to be used only in the event of an extended drought or operational emergency, and only after mandatory water use restrictions have been implemented for OWASA customers. Discussions continue with Carrboro and Chapel Hill elected boards regarding OWASA's proposed Drought Response Operating Protocol, which includes specific guidance for how and when Jordan Lake will be used to supplement our primary Cane Creek/University Lake/Quarry Reservoir supply during severe droughts in the future.

New Rates and Fees – Went into effect on October 1st, and included no increases in monthly water or sewer rates for the first time in 25 years.

Rate Study – We are continuing to analyze OWASA's rate structure to ensure that it supports our strategic priorities for cost-of-service, conservation, and affordability. Any rate structure changes that the Board may make would not go into effect until October, 2013.

Rogers Road Community – OWASA has continued to provide informational support to Carrboro, Chapel Hill, and Orange County regarding water and sewer infrastructure in the Rogers Road vicinity.

Strategic Plan Update – The Board has begun updating OWASA's Strategic Plan adopted in 2010. The Plan's four primary goals are: (a) effective resource management and infrastructure sustainability, (b) enhanced customer service, (c) effective knowledge management and workforce sustainability, and (d) secure financial stability and sustainability.

Asset Management – OWASA is developing a comprehensive asset management system to optimize the service life and minimize costs of our hundreds of millions of dollars worth of infrastructure. The new system will guide the acquisition, use, and disposal of these assets.

Water Line Projects – Water main replacement work is underway in Barclay Road and Iris Lane. Upcoming projects are scheduled within the next several months at Arboretum Drive, Buttons Lane, Clark Court, Scarlett Drive, and Tilghman Circle. Design is nearly complete for the water main/chilled

water line replacement in East Cameron Avenue on the UNC campus, with construction planned for Summer 2013. Additional water main replacement projects in the design phase are planned for Henderson Street, East Rosemary Street, and Hillsborough Street in downtown Chapel Hill; East Estes Drive and Willow Drive at University Mall; and Legion Road near Europa Drive.

Sewer Line Projects – Approximately 1,000 feet of deteriorating sewer main adjacent to Finley Golf Course will be replaced, and the capacity of 5,000 feet of sewer main from the Friday Center to the Mason Farm Wastewater Treatment Plant will be increased beginning in 2013. Smaller sewer and manhole rehabilitation projects are nearly complete or will soon begin in other parts of Carrboro and Chapel Hill.

Wastewater Plant Odor Project – Design work is complete for the final phase of OWASA's odor control improvements program to cover and treat the air from 10 aeration basins. This project will also substantially improve energy efficiency at the wastewater plant. Construction is expected to begin in Spring 2013 with completion by the end of calendar year 2014, which will enable OWASA to meet its commitment to the Town of Chapel Hill.

Awards – Dusty Martin, Operations Supervisor at OWASA's Jones Ferry Road Water Treatment Plant, received the NC Waterworks Operators Association's A-Surface Operator of The Year award.

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

January-2002 to September 2012

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012 Reports	2012 Events
January	11	3	9	0	8	3	8	1	3	3	7	4
February	7	5	2	0	8	0	4	1	0	3	7	4
March	9	0	7	1	10	4	1	1	0	2	8	8
April	9	2	4	0	9	3	1	1	2	1	1	1
May	6	0	2	5	8	3	2	5	4	0	1	1
June	4	1	1	1	5	1	8	8	1	2	2	2
July	1	0	2	0	0	2	6	3	2	4	0	0
August	1	0	4	3	11	2	9	0	1	1	2	2
September	2	5	2	2	9	3	1	1	5	1	1	1
October	2	6	1	1	8	8	2	0	3	3		
November	0	0	1	7	2	6	7	1	1	4		
December	3	3	2	5	8	10	2	1	1	6		
TOTALS	55	25	37	25	86	45	51	23	23	30	22	16

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

July 2012 – September 2012

Date call received	Time call received	Location
8/4/2012	11:45 PM	Highland Woods Rd.
8/16/2012	9:00 PM	Highland Woods Rd.
9/9/2012	7:00 PM	Highland Woods Rd.

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

July -September, 2012

Date	Topic
Sept. 4, 2012	Annual Report for Fiscal Year 2012 with information on current OWASA initiatives including work at the Mason Farm Wastewater Treatment Plant

DISTRIBUTION LIST FOR OWASA E-MAILS ABOUT WWTP ODOR-RELATED ITEMS
(October 8, 2012)

Area	Resident
Highland Woods	Alice W. Neebe
	Paul Neebe
	Paul Neebe
	Malcolm Forbes
	Natalia Lebedeva
	Gary Richman, Gail Wood
	Gail Wood
	Robert and Melissa Porter
	Jeffrey Tate
	Ann Schwab
	Seth Kingsbury
	Amanda Kingsbury
	Freeman and Angela Kirby
	Reed Johnson
	Reed Johnson
	Kay Johnson
	Rex Bartles
	Lisa Bartles
	Mary Ellen Bierck
	Barnes Bierck
	Ann Alexander
	Lex Alexander
	Lex Alexander
	Nortin Hadler
	Carol Hadler
	Carol Hadler
	Frank P. Rexford

Area	Resident
	Scott Brees
	Kendall Brees
	Ed and Helen Ludwig
	Rainer Blaesius
	Elisabeth Schweins
	Gunilla Luboff
	Fred Hall
	Lawanda Rainey-Hall
	Katie Jamieson
	Richard Harrill
	Richard and Jane Caswell
	Ed Tostanoski
	Angel Smith
	Smiths
Finley Forest	Adam Kimplead
	Cindy Underwood
	Dan Puckett
	Donna Kaye
	John Neal
	David J. Polewka
	Kathryn Conard
	Michael Sharpe
	Rima Wehbe
	Dan Choi
	Julie Maness
Laurel Hill	Mike Ramsey
	Bob Wendell
	Carol David
	Pat Evans

Area	Resident
	Ewan Rodewald and Sharon Hodge
	Marcella Grendler
	Carolyn Goldfinch
	Carol Hazard and Winston Liao
	Dick and Marie Clark
	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 Langley
	John Pendergrass
	AW Carr
	Gary Glish
	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, President, Hunt's Reserve Homeowners
	James F. Howard
	Steven and Susan Frye

Area	Resident
	Doug Longman
	Barbara and Edward Paradise
	Jeanne & David Jarrett
	Nadine O'Malley
	Mark Witcher
	Ralph Abrahams
	Kathy Abrahams
Bayberry Drive area	William Ware
UNC	Jim Ward, Curator, NC Botanical Garden
	Jim Ward--home
	Peter White, Director, NC Botanical Garden
	Johnny Randall, Assistant Director, NC Botanical garden
	Carolyn Elfland, Assoc. Vice Chancellor
	Ray DuBose, 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
	Mike McFarland, Corporate Relations
	Scott Ragland, Corporate Relations
	Linda Convissor, Corporate Relations
	Married Student Housing Manager
	UNC Farm (Faculty Staff Recreation Association)

Area	Resident
	Steve Reznick, UNC Farm Assoc President
	Frank Maynard, Athletics/ Finley Golf Course
	Robert Costa, Athletics/ Finley Golf Course
	Jeremy Whitehurst, Athletics/ Finley Golf Course
	Mark Steffer, Athletics/ Finley Golf Course
	Jeff McCracken, Public Safety
UNC Hospitals	Mel Hurston
	Karen McCall
Town of Chapel Hill	Roger Stancil, Town Manager
	Florentine A. Miller, Deputy Town Manager
	Bruce Heflin, Asst. Town Manager
	Ralph Karpinos, Town Attorney
	Lance Norris, Public Works Director
	Jay Gibson, Town Engineer
	Richard Terrell, Public Works Operations Supt.
	Dan Jones, Fire Chief
	Caprice Mellon, Deputy Fire Chief
	Robert Bosworth, Deputy Fire Chief
	Catherine Lazorko, Public Information Officer
	Jennie Bob Culpepper, Planning Director
	David Bonk, Planner
	Phil Mason, Planner
	Sabrina Oliver, Town Clerk
	Amy Harvey, Public Affairs and Communications
	Larry Tucker, Engineering
	Bobby Pettiford, Inspections
	Chris Blue, Police Chief
	Jeff Clark, Patrol Captain
	Kevin Gunter, Captain/ Police Information Officer

Area	Resident
City Schools	Tom Forcella, Superintendent
	Bill Mullin
	Todd LoFrese, Asst Supt. For Support Services
Other Utilities	Ken Kernodle, Duke Energy
	Steve Small, Duke Energy
	Rob Masterson, BellSouth/ATT
	Billy Miller, PSNC
	Time Warner Cable
Orange County	Orange 911 Center Supervisor on duty
	Tom Konsler, Environmental Health
Other	Meadowmont Apts.
	Bill Ferrell, Meadowmont Community Association
	Chamber of Commerce

**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 2012	0.0010	0.0000	0.8304 ¹	0.0010	0.0000	0.0135 ²	0.0002	0.0000	0.8908 ³	0.0000	0.0000	0.0011 ⁴
August 2012	0.0007	0.0000	0.0086 ⁵	0.0000	0.0000	0.0000 ⁶	0.0000	0.0000	0.0000 ⁷	0.0000	0.0000	0.0000 ⁸
September 2012	0.0002	0.0000	0.0105 ⁹	0.0000	0.0000	0.0000 ¹⁰	0.0000	0.0000	0.0000 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 occurred on July 2, 2012 at 1:32 PM.

² Maximum reading occurred on July 7, 2012 at 9:28 PM.

³ Maximum reading occurred on July 2, 2012 at 1:08 PM.

⁴ Maximum reading occurred on July 5, 2012 at 8:48 AM.

⁵ Maximum reading occurred on August 22, 2012 at 2:33 PM.

⁶ Maximum reading occurred on August 1, 2012 at 12:00 AM.

⁷ Maximum reading occurred on August 1, 2012 at 12:00 AM.

⁸ Maximum reading occurred on August 1, 2012 at 12:00 AM.

⁹ Maximum reading occurred on September 2, 2012 at 2:22 PM.

¹⁰ Maximum reading occurred on September 1, 2012 at 12:00 AM.

¹¹ Maximum reading occurred on September 1, 2012 at 12:00 AM.

¹² Maximum reading occurred on September 1, 2012 at 12:00 AM.