



ORANGE WATER AND SEWER AUTHORITY

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

October 30, 2009

Chair Valerie Foushee
Orange County
Post Office Box 8181
Hillsborough, NC 27278

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

Mayor Kevin Foy
Town of Chapel Hill
405 Martin Luther King Jr. Blvd.
Chapel Hill, NC 27514

Dear Chair Foushee, Mayor Chilton, and Mayor Foy:

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,

Randy Kabrick, P.E., Chair
OWASA Board of Directors

Enclosure

c: Mr. Frank Clifton, Orange County Manager (w/encs.)
Mr. Roger L. Stancil, Chapel Hill Town Manager (w/encs.)
Mr. Steven Stewart, Carrboro 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 30, 2009

OWASA's August 28, 2009 Annual Report to Local Governments summarized major accomplishments and activities for Fiscal Year (FY) 2009 (July 2008 – June 2009). This present summary is a more abbreviated report of new or updated information through October 2009. 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 30, 2009, OWASA's University Lake/Cane Creek/Stone Quarry reservoir system was 69 percent full, with 2.5 billion gallons, or about 10 months of supply in storage. The reservoirs were 89 percent full on this date a year ago (2008). The statistical risk of critical reservoir drawdown based on historical data remains minimal for the next 12 months.

New Water and Sewer Rates in Effect – Monthly water and sewer rates increased about 9.75 percent on October 1, 2009 in order to offset expected reductions in water sales; a \$1.2 million (58 percent) increase in the cost of chemicals used in water and wastewater treatment; and lower levels of connection fees expected from new development due to the slow economy. The average bill for a typical individually-metered residential customer using 5,000 gallons per month increased by \$6.68, from \$68.24 to \$74.92, but the effect of the new rates on individual bills will depend on actual water use, meter size, and so forth.

During the past year, OWASA staff identified nearly \$1.7 million in operating and maintenance cost cutting measures that will remain in place during FY 2010. These include a combination of frozen and permanently eliminated full-time staff positions representing 12 percent of the workforce and the deferral of numerous initiatives, such as employee pay increases, a sewer maintenance program, some water meter testing and replacement, and fewer days of recreation at University Lake and the Cane Creek Reservoir. Several capital improvement projects have also been deferred, which allowed us to reduce FY 2010 capital spending by 41 percent.

Despite these significant reductions, we currently project annual rate increases of 9.75 percent through FY 2013, followed by 6 percent increases each year thereafter. These projections will be reviewed in each annual budget process.

Odor Elimination at the Mason Farm Wastewater Treatment Plant (WWTP) – “Phase II” improvements to cover and treat foul air from the plant's three primary settling tanks were completed and put into operation in September. The OWASA Board of Directors adopted a resolution on September 10, 2009 committing OWASA to complete the Phase III Odor Control Project, which will cover and treat foul air from half of the plant's biological treatment basins, “as soon as practical, but no later than calendar year 2014.” OWASA's Executive Director presented this information to the Chapel Hill Town Council on September 28, 2009.

Community Meeting on Long-Range Water Supply Plan Update – OWASA will host a public meeting on Wednesday, November 11th, at 7:00 p.m. in the Chapel Hill Town Hall to receive comments

on our recently completed draft Long-Range Water Supply Plan Update report. Highlights were presented to the Chapel Hill Town Council on September 14th, and similar presentations are scheduled for the Orange County Board of Commissioners and Carrboro Board of Aldermen on November 5th and 10th. The OWASA Board will consider all comments received before taking action on a Final Report. Information about the draft Long-Range Water Supply Plan Update is available on our website, www.owasa.org.

Additional Infrastructure Studies – Three major technical studies to evaluate other principal elements of OWASA’s infrastructure are underway and will be completed during the coming year. These include: (1) a study of the wastewater plant’s hydraulic (flow) and treatment capacity; (2) an assessment of the sewer system’s physical condition and flow capacity; and (3) an updated hydraulic model of the water distribution system. These projects will provide a strategic overview of OWASA’s infrastructure needs for the next 15 to 20 years.

Capital Improvement Projects – Capital projects to improve the reliability of our water and sewer lines are proceeding as described in the August 28, 2009 *Annual Report to Local Governments*.

Commitments to Excellence in Customer Service – On October 22nd, the OWASA Board formally adopted a statement of our customer service commitments including honesty, fairness, and responsiveness to questions and requests.

We welcome questions and comments regarding this report and any of our services, projects, plans, etc. at any time.

**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-2009

	2002	2003	2004	2005	2006	2007 Reports	2007 Events	2008 Reports	2008 Events	2009 Reports	2009 Events
January	11	3	9	0	8	3	3	11	8	1	1
February	7	5	2	0	8	0	0	6	4	1	1
March	9	0	7	1	10	6	4	1	1	1	1
April	9	2	4	0	9	3	3	1	1	1	1
May	6	0	2	5	8	4	3	2	2	8	5
June	4	1	1	1	5	1	1	13	8	9	8
July	1	0	2	0	0	4	2	6	6	4	3
August	1	0	4	3	11	2	2	12	9	0	0
September	2	5	2	2	9	3	3	1	1	1	1
October	2	6	1	1	8	9	8	2	2		
November	0	0	1	7	2	11	6	7	7		
December	3	3	2	5	8	16	10	2	2		
TOTALS	55	25	37	25	86	62	45	64	51	26	21

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 2009 - September 2009

Date call received	Time call received	Location
7/01/2009	9:06 PM	Highland Woods
7/06/2009	10:10 PM	Highland Woods
7/11/2009	12:06 AM	Highland Woods
7/11/2009	12:49 AM	Highland Woods
9/9/2009	12:40 AM	Highland Woods

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

September 1- October 29, 2009

Date	Topic/Comments:
Sept. 4	Status of Phase II odor elimination work on primary settling tanks, OWASA Board's consideration of resolution on September 10 th regarding Phase III improvements (covering 8 of 16 biological treatment tanks).
Sept. 11	Adoption of resolution by the OWASA Board on September 10th regarding for completion of Phase III odor control project (resolution attached to e-mail)
Sept. 15	Electronic version of OWASA's annual report to the Town of Chapel Hill, including information on the WWTP odor elimination program, provided to WWTP neighbors.
Sept. 18	Status of work to cover and treat foul air from the primary settling tanks at the WWTP (the "Phase II" odor control project) including a potential odor release on Sept. 21 and 22; status of design work and plans for Phase III.

**DISTRIBUTION LIST FOR OWASA E-MAILS ABOUT ODOR RELEASES FROM
THE MASON FARM WWTP AND RELATED ITEMS (October 29, 2009)**

Area	Name	
Highland Woods	Alice W. Neebe	
	Paul Neebe	
	Malcolm Forbes	
	Gary Richman	
	Robert and Melissa Porter	
	Peg Parker	
	Jeffrey Tate and Anna Schwab	
	Seth Kingsbury	
	Amanda Kingsbury	
	Reed Johnson	
	Rex Bartles	
	Dan Pollitt	
	Mary Ellen Bierck	
	Barnes Bierck	
	Nortin Hadler	
	Carol Hadler	
	Frank P. Rexford, President, Highland Woods Association	
	Christina and Rex Page	
	Ed Ludwig	
	Joy Javits	
	Gunilla Luboff	
	Fred Hall	
	John and Anna K Schwab	
	Mary Helen and Donald Hayman	
	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	
	Phyllis Barrett	
	Bob Wendell, Pres. Laurel Hill Association	
	Carol David	
	Pat Evans	
	Ewan Rodewald and Sharon Hodge	
Joe Ferrell		

Area	Name
	Dr. Sian Kwa
	Marcella Grendler
	Paul 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
	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	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

Area	Name
	Willie Scroggs, Athletic Department
	Michael Wilkinson, golf pro
	John Inman, 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 Convisor, Corporate Relations
	Jon Howes, Corporate Relations
	Married Student Housing Manager
	UNC Farm (Faculty Staff Recreation Association)
	Steve Reznick, UNC Farm Assoc President
	Jim McAdams, Energy Services
	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
	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
	Sandy Kline, Deputy Town Clerk
	Larry Tucker, Engineering
	Bobby Pettiford, Inspections
	Brian Curran, Police Chief
	Kevin Gunter, Captain/ Police Information Officer
City Schools	Neil Pedersen, 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

Area	Name
	Time Warner Cable
Orange County	Clint Osburn, Emergency Management
	Orange 911 Center Supervisor on duty
	Mike Tapp, Fire Marshall
	Frank Montes de Oca, Emergency Services Director
	Tom Konsler, Environmental Health
Other	Meadowmont Apts.
	Bill Ferrell, Meadowmont Community Association
	Chamber of Commerce

**SUMMARY OF ON-SITE ODOR INSPECTIONS AND NUMBER OF TIMES
ODOR WAS DETECTED AT THE VARIOUS MONITORING SITES**

Month and Year	Total Inspections	Entrance Gate (1)	Generator Bldg. (2)	Old Outfall (3)	UV Complex (4)	Solids Tanks (5)	Odor Scrubber (6)	Head- works (7)	Digesters (8)	UNC Bldg. (9)
July 2009	40	1	0	0	0	5	10	15	14	2
August 2009	24	0	0	0	0	1	1	7	7	0
September 2009	21	0	0	0	0	0	1	4	4	2
Totals	85	1	0	0	0	6	12	26	25	4
Percent		1%	0%	0%	0%	8%	16%	35%	34%	5%

Notes:

- 1) All on-site odor events were characterized by the WWTP Operators as “Mild” with odors that would not be expected to create an off-site problem.

**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 2009	0.0000	0.0000	0.0000	0.0019	0.0000	0.1805 ¹	0.0002	0.0000	0.0322 ²	0.0001	0.0000	0.0214 ³
August 2009	0.0000	0.0000	0.0000	0.0002	0.0000	0.0508 ⁴	0.0002	0.0000	0.0013 ⁵	0.0003	0.0000	0.0086 ⁶
September 2009	0.0000	0.0000	0.0000	0.0027	0.0000	0.0606 ⁷	0.0004	0.0000	0.0825 ⁸	0.0002	0.0000	0.0305 ⁹

Notes:

¹ Maximum reading occurred on July 10, 2009 at 9:32 PM.

² Maximum reading occurred on July 9, 2009 at 7:53 PM.

³ Maximum reading occurred on July 12, 2009 at 6:23 AM.

⁴ Maximum reading occurred on August 1, 2009 at 8:34 AM.

⁵ Maximum reading occurred on August 5, 2009 at 12:29 AM.

⁶ Maximum reading occurred on August 4, 2009 at 11:43 AM.

⁷ Maximum reading occurred on September 30, 2009 at 12:30 AM.

⁸ Maximum reading occurred on September 30, 2009 at 10:30 AM.

⁹ Maximum reading occurred on September 29, 2009 at 10:29 PM.

Monitor Locations:

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

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

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

Switchgear Monitor– Monitor located across from Switchgear building on north side of plant property.