



ORANGE WATER AND SEWER AUTHORITY

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

February 1, 2010

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

Dear Chair Foushee, 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,

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 January 29, 2010

OWASA's August 28, 2009 Annual Report to Local Governments summarized major accomplishments and activities for Fiscal Year (FY) 2009 (July 2008 – June 2009). An October 30, 2009 report provided an update through October, and this current report provides new or updated information for November 2009 – January 2010. 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 January 29, 2010 OWASA's University Lake/Cane Creek/Stone Quarry reservoir system was full, with 3.6 billion gallons, or about 15 months of supply in storage. The reservoirs were also full on this date one year ago. The statistical risk of critical reservoir drawdown remains minimal for the next 12 months.

Long-Range Water Supply Plan Update – OWASA hosted a public meeting on November 11, 2009 to receive comments on our July 17, 2009 draft Long-Range Water Supply Plan Update report. Previous presentations had been made to Chapel Hill's Sustainable Community Visioning Task Force, the Chapel Hill Town Council, Orange County Board of Commissioners, and Carrboro Board of Aldermen. The Carrboro Board of Aldermen adopted a resolution accepting the draft report, but opposing a recommendation that OWASA purchase water before declaring future Water Supply Shortages. Similar comments were received from members of the Chapel Hill Town Council. The OWASA Board took no action on a proposed Final Report at its January 28, 2010 meeting, pending further communication with the elected boards.

New Finance Director – Stephen Winters, CPA, joined OWASA on December 7, 2009 as Director of Finance and Customer Service. He has more than 25 years of experience as a finance and accounting professional, including executive, marketing, and consulting roles in the private sector. As part of the orientation to his new position, Stephen has met, or will soon meet, with his professional counterparts in the Carrboro, Chapel Hill, and Orange County.

New Credit Rating – Fitch Ratings recently downgraded OWASA from a AA+ to AA credit rating. Moody's and Standard and Poor's ratings for OWASA remain unchanged at Aa2 and AA+, respectively. The ratings agencies last reviewed our credit status in October, 2006 in conjunction with our most recent bond issue. At that time, Fitch rated OWASA as AA+, but had given us a Rating Outlook of Negative. Rating Outlooks indicate the direction a rating is likely to move over a one to two-year period and reflect financial or other trends that have not yet reached a level that would trigger a rating action, but which may do so if such trends continue. With the downgrade, Fitch changed OWASA's Rating Outlook to Stable.

Fitch cited two closely related factors as the primary drivers for their action. They want to see higher debt coverage ratios and larger cash reserves for AA+ rated companies. Quoting from Fitch's press release, "Maintenance of the current rating and Stable Outlook will depend primarily upon OWASA's ability to produce operating margins going forward sufficient enough to provide healthy debt service

coverage levels and necessary cash balances needed for an operating cushion and for pay-as-you-go capital financing, as is currently planned.” OWASA’s rating remains very good for a water utility.

Mountains-to-Sea Trail – At its December 10, 2009 meeting, the OWASA Board expressed support for the Mountains-to-Sea Trail initiative and provided a letter to the Orange County Board of Commissioners indicating that OWASA-owned property in the vicinity of the Cane Creek Reservoir could be used for a portion of the trail. Pending approval by the Commissioners, the Board directed OWASA staff to work with County Staff and the Friends of the Mountains-to-Sea Trail to develop the necessary agreements and arrangements for using OWASA property, provided that water quality not be compromised in any way, that no OWASA funds be expended, and that OWASA be allowed to make necessary arrangements to minimize any security risks associated with hikers on the property. Although not a condition of support for the trail, the OWASA Board also requested that Orange County provide an appropriate level of public involvement before finalizing plans for the trail.

Odor Elimination at the Mason Farm Wastewater Treatment Plant – “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.”

Additional Infrastructure Studies – Three major technical studies to evaluate other principal elements of OWASA’s infrastructure are underway and will be completed later this 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 include a number of projects that involve local permits and/or affect local neighborhoods. Current highlights:

- As part of OWASA’s ongoing efforts to maintain a high level of service reliability, we completed the replacement of water mains in three streets in the **Colony Woods** neighborhood in December 2009. Additional water line replacement projects are ongoing in the **Ridgefield** and **Briarcliff** neighborhoods.
- Design and permitting for a major project to replace portions of the large sewer main along **Bolin Creek** between **Estes Drive Extension** and **Martin Luther King, Jr. Boulevard** will be completed in FY 2010. OWASA’s application for a Town of Chapel Hill Zoning Compliance Permit was approved in January 2010. Construction is planned to begin during the Fall of 2010 and will likely last 12 months.

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 January 2010

	2002	2003	2004	2005	2006	2007 Reports	2007 Events	2008 Reports	2008 Events	2009 Reports	2009 Events	2010 Reports	2010 Events
January	11	3	9	0	8	3	3	11	8	1	1	3	3
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	0	0		
November	0	0	1	7	2	11	6	7	7	1	1		
December	3	3	2	5	8	16	10	2	2	1	1		
TOTALS	55	25	37	25	86	62	45	64	51	28	23	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.

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

November 1, 2009 – January 31, 2010

Date	Topic/Comments:
January 14	Information regarding an odor release on January 14 th including OWASA's follow-up repair of a valve where the release occurred.
January 20	Electronic version of OWASA's annual report to the Town of Chapel Hill regarding the WWTP odor elimination program in the 2009 calendar year
	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 (January 29, 2010)**

Neighborhood	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	

Neighborhood	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

Neighborhood	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 Convissor, 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
	Time Warner Cable

Neighborhood	Name
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)
Nov. 2009	11	0	0	0	0	0	3	3	7	0
Dec. 2009	3	0	0	0	0	0	1	1	1	1
Jan. 2010	13	0	0	0	0	0	7	12	12	8
Totals	27	0	0	0	0	0	11	16	20	9
%		0	0	0	0	0	20%	28%	36%	16%

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)
November 2009	0.0008	0.0002	0.4671 ¹	0.0001	0.0000	0.0042 ²	0.0002	0.0000	0.0264 ³	0.0003	0.0000	0.0005 ⁴
December 2009	0.0006	0.0000	0.3079 ⁵	0.0001	0.0000	0.0013 ⁶	0.0003	0.0000	0.0542 ⁷	0.0003	0.0000	0.0064 ⁸
January 2010	0.0007	0.0003	0.1229 ⁹	0.0002	0.0000	0.0103 ¹⁰	0.0004	0.0000	0.3223 ¹¹	0.0001	0.0000	0.0078 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.

¹Maximum reading occurred on November 18, 2009 at 9:31 AM.

² Maximum reading occurred on November 4, 2009 at 7:51 AM and November 9, 2009 at 8:45 AM.

³Maximum reading occurred on November 11, 2009 at 8:58 PM.

⁴ Maximum reading occurred on November 3, 2009 at 11:00 AM and November 10, 2009 at 11:06 AM.

⁵ Maximum reading occurred on December 26, 2009 at 1:11 PM.

⁶ Maximum reading occurred on December 1, 2009 at 12:33 AM.

⁷ Maximum reading occurred on December 9, 2009 at 5:15 AM.

⁸ Maximum reading occurred on December 1, 2009 at 1:30 AM.

⁹ Maximum reading occurred on January 6, 2010 at 11:00 AM.

¹⁰ Maximum reading occurred on January 26, 2010 at 6:25 AM.

¹¹ Maximum reading occurred on January 7, 2010 at 8:09 AM.

¹² Maximum reading occurred on January 18, 2010 at 7:42 AM.