



ORANGE WATER AND SEWER AUTHORITY

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

January 27, 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,

Gordon Merklein, 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. Matt Efird, Interim 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 27, 2012

OWASA's August 22, 2011 Annual Report to Local Governments summarized major accomplishments and activities for FY 2011 (July 2010 – June 2011). This quarterly report is a summary of new or updated information for the period November 2011 through January 2012. Additional materials are available on request. OWASA Board members and staff will be glad to provide presentations if desired.

Jordan Lake/WSMPBA (Water and Sewer Management, Planning and Boundary Agreement) – In October the OWASA Board modified its previous position regarding water purchases during drought conditions and adopted a resolution stating that:

“OWASA shall only purchase water from other communities or obtain water from its Jordan Lake storage allocation during periods of increased drought risk after it has declared a Stage 1 Water Supply Shortage per OWASA's State-approved Water Shortage Response Plan and OWASA's Water Conservation Standards as incorporated therein.”

Most recently, the Board has been developing a Drought Response Operating Protocol intended to clarify when and under what conditions OWASA would purchase water from neighboring utilities and/or use its Jordan Lake allocation. The Board's Chapel Hill appointees (Gordon Merklein, Will Raymond, Alan Rimer, Amy Witsil, and John Young) will discuss this draft protocol with the Chapel Hill Town Council's OWASA Committee (Jim Ward, Gene Pease, and Penny Rich) on January 30th. OWASA's Carrboro appointees (William Stott and Dana Stidham) will contact Carrboro Aldermen to determine their interest in similar discussions.

Mr. Tom Fransen, Deputy Director of the NC Division of Water Resources, presented information about Jordan Lake water allocations to the OWASA Board on December 8, 2011. A transcript of his presentation and the Board's discussion can be viewed at:

http://www.owasa.org/client_resources/about/minutes/2011/fransen%20transcript%2012-08-2011.pdf.

Year-to-date Financial Performance for Fiscal Year 2012 – Operating revenues were close to expectations, exceeding OWASA's adopted budget by 1.4 percent, or approximately \$250,000. Net Revenue less Debt Service for the first half of FY 2012 exceeded the budget by about \$1.6 million, due primarily to slightly higher than expected revenue and lower than budgeted energy, chemical, and personnel costs

Shale Gas/Hydraulic Fracturing – On January 26, 2012, Ms. Robin Smith, Assistant Secretary of the North Carolina Department of Environment and Natural Resources, presented the status of the State's ongoing study of potential development and regulation of shale gas extraction to the OWASA Board. Ms. Smith reviewed the purpose and scope of the study, which the General Assembly directed to be completed by May 1, 2012; key resource agencies and subject matter experts participating in the study; and the timetable and process for releasing the draft report and opportunity for public review and comment. A video clip of the presentation at the January 26, 2012 OWASA Board Meeting is available on OWASA's website: <http://www.owasa.org/about/board-meetings.aspx>.

Water and Sewer Main Rehabilitation and Replacement Projects – Several water main replacement projects were completed during the past quarter, including work at Nunn Lane, Sunset Drive, Cole Street, and Milton Avenue. Ongoing or upcoming water main replacements include projects at the Chapel Hill Rehabilitation Center from Franklin Street to Elliott Road, along Dobbins Drive from Eastowne Drive to Sage Road, and several streets within the Booker Creek and Lake Forest neighborhoods. Upcoming sewer main rehabilitation work will take place along Morgan Creek at the James Taylor Bridge, at the southeast corner of Merritt's Pasture, and near Ashe Place.

Bolin Creek Sewer Replacement – This major project in the Umstead Road vicinity between Martin Luther King, Jr. Boulevard and Estes Drive Extension was completed ahead of schedule and under budget. OWASA staff worked closely with property owners and the Town of Chapel Hill to minimize disruptions caused by the project.

Wastewater Plant Odor Improvements – Design work for the final of phase of OWASA's odor control improvements capital program (covering and treating air from 10 aeration basins) began in September 2011. Construction work will be completed by the end of calendar year 2014 per OWASA's commitment to the Town of Chapel Hill.

Chapel Hill 2020 – OWASA staff will give an informational presentation to interested participants in Chapel Hill's 2020 Comprehensive Plan on Monday, February 6, at 5:00 pm in the Chapel Hill Town Council Chamber.

Awards - OWASA recently received the Platinum Award for Utility Excellence from the Association of Metropolitan Water Agencies (AMWA). The award recognized OWASA's work during the past five years to achieve excellence in water quality, customer service, management processes and related items. (AMWA is an organization of more than 180 public water supply agencies which serve more than 133 million people.)

Water Supply and Demand – As of January 27, 2012, OWASA's University Lake/Cane Creek/Stone Quarry reservoir system was 71 percent full with 2.5 billion gallons, or about 13 months of supply, in storage. The reservoirs were 66 percent full on this date a year ago (2011). The statistical risk of critical reservoir drawdown based on historical data remains low for the next 12 months.

**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-2011

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011 Reports	2011 Events
January	11	3	9	0	8	3	8	1	3	3	3
February	7	5	2	0	8	0	4	1	0	3	3
March	9	0	7	1	10	4	1	1	0	2	2
April	9	2	4	0	9	3	1	1	2	1	1
May	6	0	2	5	8	3	2	5	4	0	0
June	4	1	1	1	5	1	8	8	1	2	2
July	1	0	2	0	0	2	6	3	2	4	4
August	1	0	4	3	11	2	9	0	1	1	1
September	2	5	2	2	9	3	1	1	5	1	1
October	2	6	1	1	8	8	2	0	3	3	3
November	0	0	1	7	2	6	7	1	1	4	4
December	3	3	2	5	8	10	2	1	1	7	6
TOTALS	55	25	37	25	86	45	51	23	23	31	30

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**

October 2011 – December 2011

Date call received	Time call received	Location
10-6-2011	8:00 PM	Highland Woods Rd
10-7-2011	7:15 PM	Highland Woods Rd
10-26-2011	8:20 AM	Highland Woods Rd
11-3-2011	10:18 PM	Highland Woods Rd
11-8-2011	2:18 PM	Highland Woods Rd
11-12-2011	7:40 AM	Highland Woods Rd
11-18-2011	7:38 AM	Highland Woods Rd
12-13-2011	5:29 PM	Highland Woods Rd
12-14-2011	5:15 PM	Highland Woods Rd
12-16-2011	8:29 AM	Highland Woods Rd
12-19-2011	11:00 AM	Highland Woods Rd
12-26-2011	10:00 PM	Highland Woods Rd
12-29-2011	5:00 PM	Highland Woods Rd
12-29-2011	5:42 PM	Highland Woods Rd

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

October-December, 2011

Date	Topic/Comments:
November 7, 2011	Quarterly report to the Town of Chapel Hill

DISTRIBUTION LIST FOR OWASA E-MAILS ABOUT WWTP ODOR-RELATED ITEMS
(January 9, 2012)

Area	Name
Highland Woods	Alice W. Neebe
	Paul Neebe
	Malcolm Forbes
	Gary Richman
	Robert and Melissa Porter
	Peg Parker
	Jeffrey Tate
	Ann Schwab
	Seth Kingsbury
	Amanda Kingsbury
	Reed Johnson
	Kay Johnson
	Rex Bartles
	Mary Ellen Bierck
	Barnes Bierck
	Ann Alexander
	Lex Alexander
	Nortin Hadler
	Carol Hadler
	Frank P. Rexford, President, Highland Woods Association
	Christina and Rex Page
	Ed and Helen Ludwig
	Rainer Blaesius
	Elisabeth Schweins
	Gunilla Luboff
	Fred Hall
	Lawanda Rainey-Hall
Richard Caswell	
Ed Tostanoski	
Angel Smith	
Finley Forest	Adam Kimplead
	Cindy Underwood
	Dan Puckett
	Donna Kaye
	John Neal
	David J. Polewka
	Kathryn Conard
	Michael Sharpe
	Rima Wehbe
	Dan Choi

Area	Name
	Julie Maness
Laurel Hill	Mike Ramsey
	Bob Wendell, Pres. Laurel Hill Association
	Carol David
	Pat Evans
	Ewan Rodewald and Sharon Hodge
	Joe Ferrell
	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
	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

Area	Name
	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)
	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
	Larry Tucker, Engineering
	Bobby Pettiford, Inspections

Area	Name
	Chris Blue, Police Chief
	Jeff Clark, Patrol Captain
	Kevin Gunter, Captain/ Police Information Officer
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
	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)
October 2011	60	2	2	3	9	11	11	11	15	20
November 2011	56	1	1	4	5	6	3	5	28	23
December 2011	56	0	0	0	0	7	10	11	19	15
Totals	172	3	3	7	14	24	24	27	62	58
%		1	1	3	6	11	11	12	28	26

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)

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)
October 2011	0.0007	0.0004	0.0846 ¹	0.0002	0.0000	0.0235 ²	0.0002	0.0000	0.0147 ³	0.0001	0.0000	0.0040 ⁴
November 2011	0.0007	0.0002	0.2201 ⁵	0.0003	0.0000	0.0225 ⁶	0.0002	0.0000	0.0147 ⁷	0.0001	0.0000	0.0034 ⁸
December 2011	0.0007	0.0001	0.4373 ⁹	0.0001	0.0000	0.0176 ¹⁰	0.0001	0.0000	0.0161 ¹¹	0.0001	0.0000	0.0221 ¹²

ODOR MONITORING

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 October 12, 2011 at 8:32 AM

² Maximum reading occurred on October 15, 2011 at 4:05 PM.

³ Maximum reading occurred on October 25, 2011 at 9:34 AM.

⁴ Maximum reading occurred on October 25, 2011 at 1:29 AM.

⁵ Maximum reading occurred on November 16, 2011 at 1:11 PM.

⁶ Maximum reading occurred on November 8, 2011 at 2:53 PM.

⁷ Maximum reading occurred on November 15, 2011 at 10:54 AM.

⁸ Maximum reading occurred on November 15, 2011 at 9:47 PM.

⁹ Maximum reading occurred on December 21, 2011 at 8:59 AM.

¹⁰ Maximum reading occurred on December 4, 2011 at 5:03 PM.

¹¹ Maximum reading occurred on December 3, 2011 at 5:16 AM.

¹² Maximum reading occurred on December 13, 2011 at 11:15 AM.