



ORANGE WATER AND SEWER AUTHORITY

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

April 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. 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 April 27, 2012

OWASA's August 22, 2011 Annual Report to Local Governments summarized major accomplishments and activities for FY 2011 (July 2010 – June 2011). Quarterly reports dated October 28, 2011 and January 27, 2012 provided updates, and this current report provides additional information through April 2012. Supplementary materials are available on request. OWASA Board members and staff will be glad to provide presentations if desired.

Drought Response Operating Protocol – Since January 2012, the Board of Directors 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) discussed the draft protocol with the Chapel Hill Town Council's OWASA Committee (Jim Ward, Gene Pease, and Penny Rich) on January 30th. It was agreed to schedule another discussion with the full Council, which occurred on March 26, 2012. The draft protocol received generally positive feedback from Council members at that time. The Council's OWASA Committee met again with the OWASA Board's Chapel Hill appointees on April 2nd.

A similar presentation was given to the Carrboro Board of Aldermen on March 13, 2012. The Carrboro Board adopted a resolution to receive OWASA's report and offered the following comments: "Water should not be purchased prior to Stage 2 Water Shortage being declared. Stage 2 Water Shortage is understood only as specified in the graph that is pictured in the Draft Drought Response Operating Protocol (Average Annual Withdrawals of 8.0 MGD) and for equivalent graphs of different MGD's."

The OWASA Board considered this recent feedback from Carrboro and Chapel Hill during its April 12, 2012 meeting and agreed that the preferred next steps be:

- Direct discussion between representatives of the OWASA Board and Carrboro Board of Aldermen
- Direct discussion between representatives of the Chapel Hill Town Council and Carrboro Board of Aldermen
- Formal action by the OWASA Board regarding the proposed Drought Response Operating Protocol

At its April 24, 2012 meeting, the Carrboro Board appointed Aldermen Haven-O'Donnell, Lavelle, and Slade to a subcommittee "to work through technical information related to the DROP program with the Town's OWASA representatives, to work with the Chapel Hill subcommittee, and to communicate more effectively with OWASA."

Jordan Lake/Water and Sewer Management, Planning and Boundary Agreement – No action taken.

Financial Forecast for Fiscal Year (FY) 2012 – FY 2012 Net Revenue less Debt Service is expected to exceed OWASA’s adopted budget by about \$1.5 million. Operating and Maintenance (O&M) costs are expected to be about \$300,000 under budget. Revenue from new system connections is projected to be over budget by approximately \$800,000.

FY 2013 Budget and Rates – OWASA’s proposed budget for FY 2013 is consistent with projections in the financial plan developed one year ago, but with slightly lower Debt Service and O&M costs. As a result, the current draft of the FY 2013 budget includes no increase in monthly water and sewer rates. Other fees will be adjusted as necessary to comply with the cost-of-service principles OWASA is contractually obligated to follow.

Shale Gas/Hydraulic Fracturing – OWASA’s Board Chair transmitted a letter to the NC Department of Environment and Natural Resources on March 26, 2012 with comments on the Department’s draft report titled *North Carolina Oil and Gas Study under Session Law 2011-276*. Copies of the letter were provided to the Carrboro, Chapel Hill, and Orange County Managers.

Water and Sewer Rehabilitation and Replacement Projects – Water main replacement projects are ongoing or upcoming within the next several months along Dobbins Drive from Eastowne to Sage Road, at Ram’s Plaza Shopping Center, several streets in the Booker Creek and Lake Forest neighborhoods, Plant Road and East Franklin Street, and Boyd and East Main Street; and several service reconnections will be done within Martin Luther King Jr. Boulevard. Sewer rehabilitation projects are typically completed within a few days at each location and without the need for excavation. Upcoming locations for sewer work include Burris Place and Wesley Drive, Buxton Court, Glosson Circle, Iris Lane, Lakeshore Drive, Landerwood Lane, Severin Street, Barclay Road, and Shannon Drive. OWASA closely coordinates its water and sewer rehabilitation and replacement work with Carrboro and Chapel Hill staffs.

Water Supply and Demand – As of April 27, 2012, OWASA’s University Lake/Cane Creek/Stone Quarry reservoir system was 99 percent full with 3.5 billion gallons, or nearly 18 months of supply, in storage. The reservoirs were 93 percent full on this date a year ago (2011). Based on historical data, the statistical risk of critical reservoir drawdown during the next 12 months remains low.

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

January-2002 to March 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		
May	6	0	2	5	8	3	2	5	4	0		
June	4	1	1	1	5	1	8	8	1	2		
July	1	0	2	0	0	2	6	3	2	4		
August	1	0	4	3	11	2	9	0	1	1		
September	2	5	2	2	9	3	1	1	5	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**

January 2012 – March 2012

Date call received	Time call received	Location
1/5/2012	7:50 AM	Highland Woods Rd
1/6/2012	9:22 PM	Highland Woods Rd
1/6/2012	10:23 PM	Highland Woods Rd
1/6/2012	10:55 PM	Highland Woods Rd
1/10/2012	5:30 PM	Highland Woods Rd
1/10/2012	6:00 PM	Highland Woods Rd
1/31/2012	8:15 AM	Highland Woods Rd
2/13/2012	7:23 PM	Highland Woods Rd
2/23/2012	10:58 AM	Highland Woods Rd
2/23/2012	5:55 PM	Highland Woods Rd
2/23/2012	6:22 PM	Highland Woods Rd
2/23/2012	7:07 PM	Highland Woods Rd
2/23/2012	9:21 PM	Old Mason Farm Rd
2/26/2012	7:00 PM	Highland Woods Rd
3/7/2012	9:00 PM	Old Mason Farm Rd.
3/12/2012	8:40 PM	Highland Woods Rd.
3/14/2012	9:33 PM	Highland Woods Rd.
3/16/2012	2:10 PM	Highland Woods Rd.
3/18/2012	9:00 PM	Highland Woods Rd.
3/20/2012	12:35 PM	Flagstone Ct.
3/22/2012	8:20 PM	Highland Woods Rd.
3/23/2012	6:46 PM	Highland Woods Rd.

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

January - March, 2012

Date	Topic/Comments:
January 12, 2012	Update on odor control program
January 30, 2012	Quarterly report to the Town of Chapel Hill
February 13, 2012	Announcement that Damon Forney, WWTP Plant Manager was leaving OWASA for position with Town of Cary.

DISTRIBUTION LIST FOR OWASA E-MAILS ABOUT WWTP ODOR-RELATED ITEMS
(April 18, 2012)

AREA ORGANIZATION	NAME
Highland Woods	Alice W. Neebe
	Paul Neebe
	Malcolm Forbes
	Natalia Lebedeva
	Gary Richman, Gail Wood
	Gail Wood
	Robert and Melissa Porter
	Peg Parker
	Jeffrey Tate
	Ann Schwab
	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
	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
Finley Forest	Adam Kimplead
	Cindy Underwood
	Dan Puckett

AREA ORGANIZATION	NAME
	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
	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
	James F. Howard
	Steven and Susan Frye
	Doug Longman
	Barbara and Edward Paradise
	Jeanne & David Jarrett
	Nadine O'Malley
	Mark Witcher
	Ralph Abrahams

AREA ORGANIZATION	NAME
	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
	Jan Mann, Women's Golf Coach
	UNC Tennis Center
	UNC Parking
	Mike McFarland, Corporate Relations
	Scott Ragland, Corporate Relations
	Linda Convissor, University 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
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

AREA ORGANIZATION	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 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)
January 2012	0.0005	0.0001	0.1477 ¹	0.0000	0.0000	0.0000 ²	0.0001	0.0000	0.0176 ³	0.0000	0.0000	0.0211 ⁴
February 2012	0.0003	0.0000	0.1319 ⁵	0.0000	0.0000	0.0000 ⁶	0.0001	0.0000	0.0166 ⁷	0.0000	0.0000	0.0000 ⁸
March 2012	0.0003	0.0000	0.0311 ⁹	0.0000	0.0000	0.0000 ¹⁰	0.0001	0.0000	0.0425 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 January 7, 2012 at 11:29 AM.

² Maximum reading occurred on January 1, 2012 at 12:00 AM.

³ Maximum reading occurred on January 23, 2012 at 10:53 PM.

⁴ Maximum reading occurred on January 7, 2012 at 11:29 AM.

⁵ Maximum reading occurred on February 15, 2012 at 1:48 PM.

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

⁷ Maximum reading occurred on February 1, 2012 at 12:15 AM.

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

⁹ Maximum reading occurred on March 7, 2012 at 9:43 AM.

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

¹¹ Maximum reading occurred on March 22, 2012 at 12:49 PM.

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