



ORANGE WATER AND SEWER AUTHORITY

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

April 25, 2013

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

Barry Jacobs, Chair of the
Board of Commissioners
County of Orange
PO Box 8181
Hillsborough, NC 27278

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

Dear Mayor Chilton, Chair Jacobs and Mayor Kleinschmidt:

Mark

We are pleased to submit our quarterly report on OWASA's initiatives and services from January through March, 2012 plus some recent items.

The key points in the attached information include:

- The OWASA Board has begun an intensive process to develop a new Strategic Plan. We have identified five areas of focus, and the completed plan will include action items in each area.
- Based on preliminary revenue and cost projections, it appears that an increase in monthly water, sewer and reclaimed water rates will not be needed in the coming budget year. As previously reported, the Board is considering potential changes to OWASA's rate structure that would rebalance rates across customer classes, but not as a mechanism to increase overall revenue. We are continuing our discussions in preparation for public hearings on May 23, 2013, 7:00 PM at Chapel Hill Town Hall.

We welcome the opportunity to provide additional information and/or to plan a presentation or discussion on any matter of interest to you.

Sincerely,

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

Copies: Mr. David Andrews, Carrboro Town Manager
Mr. Frank Clifton, Orange County Manager
Mr. Roger Stancil, Chapel Hill Town Manager
OWASA Board of Directors
Ed Kerwin, Executive Director



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Quarterly Report to the Carrboro Board of Aldermen, Chapel Hill Town Council and Orange County Board of Commissioners on OWASA Initiatives and Services

(January through March, 2013 with additional recent items)

Strategic Planning: The Board is developing a new multi-year Strategic Plan with a focus on five topics:

- Affordability and Cost Management,
- Environmental Stewardship and Conservation,
- OWASA's Role in the Community,
- Resource Management and Infrastructure Sustainability, and
- Technology.

We have had two work sessions to date. Our process will include identifying, prioritizing and evaluating possible actions for each strategic topic, and developing action plans.

Budget and rate outlook: Based on preliminary revenue and cost projections, it appears that an increase in monthly water, sewer and reclaimed water rates will not be needed in the coming budget year.

As previously reported, the Board is considering potential changes to OWASA's rate structure that would rebalance rates across customer classes, but not as a mechanism to increase overall revenue.

We have scheduled public hearings for May 23rd at 7:00 PM at Chapel Hill Town Hall on the proposed Fiscal Year 2014 budget, rates that would be effective in October, 2013 and the proposed 5-year capital program.

Water supply planning: On March 14th, the NC Environmental Management Commission (EMC) approved OWASA's request to change its Jordan Lake allocation from Level II (future use) to Level I so that we can use the allocation when and if needed due to a severe drought or operational emergency.

The Town of Cary and City of Durham staffs have said that during extended droughts, they will transfer water from Jordan Lake to OWASA only if OWASA has a Level I allocation so that water provided to OWASA would not be counted against their Jordan allocations.

Jordan Lake access is an "insurance policy" for severe droughts or operational emergencies. Because OWASA has no direct access to Jordan Lake, the only feasible way to use our Jordan Lake allocation is through the Town of Cary and City of Durham water systems. Existing mutual aid agreements allow the exchange of drinking water in short periods but those agreements must be modified, or new ones negotiated, to secure water in an extended drought.

On January 10th, the OWASA Board adopted a Drought Response Operating Protocol affirming that during extended droughts, OWASA may purchase water from other communities or use its Jordan

Lake allocation only after our lakes have fallen to the level that requires declaration of a Stage 1 shortage under OWASA's State-approved Water Shortage Response Plan.

Water supply and demand: Our lakes have remained full since January 17th. Current supply would last about 19 months assuming continuation of current demand and no rainfall. The risk of critical reservoir drawdown based on the last 87 years of streamflow records is minimal, but we recognize that the climate is changing and past experience does not predict the future.

To date in Fiscal Year 2013, drinking water use has averaged slightly below our budget estimate of 6.3 million gallons per day. We continue to commend our customers for their excellent conservation accomplishments—demand is about 30% less than in 2002 despite continuing growth in the community.

Asset Management Program: OWASA staff has begun a detailed analysis to plan for future replacement, renovation and other work to sustain the value and reliability of our aboveground buildings including treatment plants, pump stations, operations facility, offices, etc. This “asset management” program includes condition assessments and identifying criticality of facilities.

The asset management program for aboveground assets will complement our existing models which set priorities for replacing and renovating sewer and water lines.

Capital Investments

Mason Farm Wastewater Treatment Plant: In March, Haren Construction began \$10 million of improvements at our Mason Farm Wastewater Treatment Plant (WWTP) to increase energy efficiency, reduce greenhouse gas emissions, improve our wastewater treatment process and further control odor. The odor control improvements will be completed by December 31, 2014 per our previous commitment.

Later this spring, we will begin work to fortify the wall and berm that provide flood protection at the WWTP.

Water projects: We have completed water line replacements at Scarlett Drive, Brookview Drive and Barclay Road. Work is underway at Clark Court and pending over the next several months at Buttons Lane, Arboretum Drive and East Cameron Avenue.

Improvements to the Calvander (Water) Pump Station west of Carrboro began in March. This work will allow us to take the Nunn Mountain Water Tank out of service in October, 2013 for maintenance.

Sewer projects: In March, we began work to replace pressurized sewer mains in the Heritage Hills neighborhood and along part of Smith Level Road to the north. We are working with the NC Department of Transportation to coordinate with their project to widen portions of Smith Level Road. Our work along Smith Level Road will be on the road shoulder, but minor traffic restrictions will be needed at times. Later this spring, we will begin work to replace a sewer south of the University's Friday Center and east of Finley Golf Course.

DISTRIBUTION LIST FOR OWASA E-MAILS ABOUT WWTP ODOR-RELATED ITEMS
(April 22, 2013)

Area/Organization	Name
Highland Woods	Alice W. Neebe
	Paul Neebe
	Mary Turner
	Malcolm Forbes
	Natalia Lebedeva
	Gary Richman, Gail Wood
	Gail Wood
	Robert and Melissa Porter
	Robin Casey
	Joseph Clancy
	Ann Schwab
	Seth Kingsbury
	Amanda Kingsbury
	Freeman and Angela Kirby
	Reed Johnson
	Kay Johnson
	Rex Bartles
	Lisa Bartles
	Mary Ellen Bierck
	Barnes Bierck
	Ann Alexander
	Lex Alexander
	Nortin 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
	Frank Phoenix
	Angel Smith
Finley Forest	Adam Kimplead
	Cindy Underwood
	Dan Puckett
	Donna Kaye

Area/Organization	Name
	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

Area/Organization	Name
	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
	Phil Barner, Interim 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
	Karen Moon, News Services
	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
	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
	Robert Bosworth, Deputy Fire Chief

Area/Organization	Name
	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
	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	Indira Everett, Duke Energy
	Brenda Duke, 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)
January 2013	0.0000	0.0000	0.0000	0.0003	0.0000	0.0121 ¹	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
February 2013	0.0003	0.0000	0.0598 ²	0.0010	0.0002	0.0299 ³	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
March 2013	0.0006	0.0000	0.0449 ⁴	0.0019	0.0000	0.0190 ⁵	0.0000	0.0000	0.0000	0.0000	0.0000	0.0070 ⁶

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 30, 2013 at 11:02 AM.

² Maximum reading occurred on February 13, 2013 at 2:02 PM.

³ Maximum reading occurred on February 26, 2013 at 5:05 PM.

⁴ Maximum reading occurred on March 6, 2013 at 8:58 AM.

⁵ Maximum reading occurred on March 5, 2013 at 4:51 PM.

⁶ Maximum reading occurred on March 19, 2013 at 2:20 AM.