



ORANGE WATER AND SEWER AUTHORITY

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

Agenda

Meeting of the OWASA Board of Directors

Thursday, February 22, 2018, 7:00 P.M.

Chapel Hill Town Hall

In compliance with the "Americans with Disabilities Act," interpreter services are available with five days prior notice. If you need this assistance, please contact the Clerk to the Board at 919-537-4217 or aorbich@owasa.org.

The Board of Directors appreciates and invites the public to attend and observe its meetings. Public comment is invited either by petition upon topics not on the Board's agenda, or by comments upon items appearing on the Board's agenda. Speakers are invited to submit more detailed comments via written materials, ideally submitted at least three days in advance of the meeting to the Clerk to the Board via email or US Postal Service (aorbich@owasa.org/400 Jones Ferry Road, Carrboro, NC 27510).

Public speakers are encouraged to organize their remarks for delivery within a four-minute time frame allowed each speaker, unless otherwise determined by the Board of Directors.

Announcements

1. Announcements by the Chair
 - A. Any Board Member who knows of a conflict of interest or potential conflict of interest with respect to any item on the agenda tonight is asked to disclose the same at this time.
2. Announcements by Board Members
 - A. OWASA's Annual Update to the Orange County Board of County Commissioners on February 20, 2018 (Ray DuBose)
 - B. Natural Resources and Technical Services Committee will meet on Monday, February 26, 2018, at 5:00 p.m. in the OWASA Boardroom to discuss and evaluate OWASA's Drought Response Operating Protocol (John Young)
3. Announcements by Staff
 - A. Jones Ferry Road Water Treatment Plant maintains Excellence in Water Treatment Award status from the Partnership for Safe Water for 2017 (Todd Taylor)
 - B. Change to Disinfection of Drinking Water with Free Chlorine instead of Chloramines in the month of March (Ken Loflin)

Petitions and Requests

1. Public
2. Board
3. Staff

Consent Agenda

Information and Reports

1. 12 Month Board Meeting Schedule (Robert Morgan/Todd Taylor)

Action

2. Minutes of the January 25, 2018 Meeting of the Board of Directors (Andrea Orbich)
3. Minutes of the February 8, 2018 Closed Session of the Board of Directors for the Purpose of Discussing a Personnel Matter (Barbara Foushee)

Regular Agenda

Information and Reports

4. Update on Unregulated Compounds in Water Resources, Including Recent Regional Analysis of Per- and Polyfluoroalkyl Substances (Katie Harrold)
5. Presentation on the Partnership for Safe Water and Partnership for Clean Water Programs (Todd Taylor)

Discussion and Action

6. Response to a Request Regarding the Birdwatching Program at Cane Creek Reservoir (Johnny Riley)
7. Resolution Accepting Six Low-Interest Loan Offers from the State of North Carolina, and Authorizing Executive Director to Execute and Administer all Related Loan Offer and Acceptance Documents (Stephen Winters)
8. Resolutions in Preparation of the Issuance of Series 2018 Water and Sewer Revenue Refunding Bonds (Stephen Winters)

Summary of Board Meeting Action Items

9. General Manager of Operations will summarize the key action items from the Board meeting and note significant items for discussion and/or action expected at the next meeting

Closed Session

10. The Board of Directors will convene in a Closed Session for the Purpose of Discussing a Personnel Matter (Barbara Foushee)

OWASA Board of Directors – 12 Month Board Meeting Schedule (February 16, 2018)

Month	Board Meetings		Committee & Other Meetings and Reports
	Work Session	Business Meeting	
February 2018	Response to Petition from OWASA Customer Michael Potter regarding the Water Meter at his Residence Affordability Outreach Program Update Discuss and Determine Topic of Next KPI Discussion Diversity and Inclusion Progress Report CS - General Counsel Interim Review (C)	Update on Perfluorinated Compounds Participation in Partnership for Safe Water Optimization Programs Response to Request Regarding Options and Recommendations to Enhance Birdwatching Opportunities at Cane Creek Reservoir Authorize Staff to Accept Loan Offers from the State Consider Refunding Variable Rate Bonds CS - General Counsel Interim Review (C)	<i>Human Resources Committee (2/5/2018)</i> <i>OWASA Orientation for Newly Elected Chapel Hill Town Council Members (2/12/2018)</i> <i>OWASA's Annual Update to the Orange County BOCC (2/20/2018)</i> <i>NRTS Committee (2/26/2018)</i>
	2/8/2018	2/22/2018	
March 2018	Status of Action Items on Communications During Emergencies Approve Energy Management Plan Update FY 19 Draft Budget & Rates (C) CS - ED Interim Review (C)	FY 19 Draft Budget & Rates (C) Set date for Public Hearings – FY 19 Budget & Rates (C) Authorize staff to publish proposed rates (C) Selection and Procurement of WWTP Solids Thickening Equipment (Tentative) Adopt Series Resolution for bond refunding CS – ED Interim Review (C)	<i>Human Resources Committee (TBD)</i>
	3/8/2018	3/22/2018	
April 2018	(Tentative) Discuss Revisions to Retiree Health Insurance for New Hires and 457 Deferred Compensation Award the Rogerson Drive Pump Station Phase 2 Contract Review Employee Health and Dental Insurance Renewal (C) Award the Galvanized Water Main Replacement Contract FY 19 Draft Budget and Rates (C) Review Action Plan for Improvements Identified by Organizational Assessment Appointment of the Nominating Committee (C)	Q3 Financial Report (C) Award the WWTP Intermediate Pump Station Rehabilitation Contract Agua Vista Update	
	4/12/2018	4/26/2018	
May 2018	<i>(Tentative) Discuss LRWSP – Demands & Yield</i> Approve Employee Health and Dental Insurance Renewal (C) Discuss Employee Merit Pay for FY 19 <i>Discuss Community Engagement Plan for Forestry Management</i>	Public Hearings – FY 19 Budget and Rates (C) Budget Amendment for FY 2018 CIP	
	5/10/2018	5/24/2018	
June 2018	Approve FY 19 Budget and Rates (C) Election of Officers (C) (Tentative) Review Draft WTP & WWTP Reliability and Risk Assessment Report	TBD	
	6/14/2018	6/28/2018	
July 2018	Discuss KPI Trends	TBD	

OWASA Board of Directors – 12 Month Board Meeting Schedule (February 16, 2018)

	7/12/2018	7/26/2018	
August 2018	CS – General Counsel Review (C)	Award the WWTP Solids Thickening Construction Contract Preliminary 12 Month Financial Report (C) CIP Semiannual Report (C) (Tentative) Discuss AMI Policies (other than manual read) CS – General Counsel Review (C)	
	8/9/2018	8/23/2018	
September 2018	EEO/Affirmative Action Report (C) Annual Report on Disposal of Surplus Personal Property (C) Review Updated Implementation Plan for D&I Program Discuss Action Plan from WTP/WWTP Reliability and Risk Assessment Project Discuss KPI Deep Dive on Water Loss and Non-Revenue Water CS – ED Review (C)	Annual Report and Financial Audit (C) Approve General Counsel Engagement (C) CS – ED Review (C)	
	9/13/2018	9/27/2018	
October 2018	TBD	Q1 Financial Report (C) Strategic Trends Report and Strategic Plan Update (C)	
	10/11/2018	10/25/2018	
November 2018	TBD	<i>Holiday - no meeting</i>	
	11/8/2018		
December 2018	TBD	<i>Holiday - no meeting</i>	
	12/13/2018		
January 2019	Employee Health and Dental Insurance Update (C) Appoint Audit Firm (C) Affordability Outreach Program Plan Update	Annual Lakes Recreation Report (C) CIP Semiannual Report (C) Q2 Financial Report (C) FY 19 Budget Calendar and Assumptions (C)	
	1/10/2019	1/24/2019	

The 12 Month Board Meeting Schedule shows Strategic Plan initiatives and other priority efforts that the Board and staff plan to give greatest consideration to during the next twelve months. The schedule also shows major recurring agenda items that require Board action, or items that have been scheduled in response to the Board's prior standing request. This schedule does not show all the items the Board may consider in a work session or business meeting. It also does not reflect meetings at which the Board will discuss and act on the update of the Strategic Plan.

The 12 Month Board Meeting Schedule will be reviewed and updated at each monthly work session and may also be discussed and updated at the Board's business meetings.

In addition to the initiatives shown in this schedule, staff will be working on other Strategic Plan and organizational priorities that are not expected to require major additional discussion with the Board except as part of budget deliberations.

The schedule implies that the following Strategic Plan initiatives would be addressed beyond the 12-month period. The Board may conclude that one or more of the following initiatives are higher priority. The schedule will be revised as needed to reflect the Board's priorities, and any additional initiatives that the Board may decide to address.

- Development of a plan and policy framework for OWASA lands is considered a longer-term priority. The NRTS Committee discussed this issue in September 2017 and determined it was lower

OWASA Board of Directors – 12 Month Board Meeting Schedule (February 16, 2018)

priority than Forestry Management. Staff will develop a Community Engagement Plan for Forestry Management by June 2018, and currently plan to present a draft in May 2018.

- Improve effectiveness as a learning organization is considered a longer-term priority.
- Water Conservation Plan will be prepared concurrent with update of the Long-Range Water Supply Plan.

The OWASA Board determines which topics it wants to explore as a full Board (potentially in a work session format) and which topics it wants to assign to Board committees or committee chairs for further analysis and development of recommendations. Board also determines priorities and desired timeframes for addressing topics. Committee meetings will be updated on the schedule routinely.

OWASA Board of Directors – 12 Month Board Meeting Schedule (February 16, 2018)

Abbreviations Used in Draft Schedule:

- | | |
|---|--|
| <ul style="list-style-type: none"> ☐ Recurring agenda item (generally these are “required” items) AMI Advanced Metering Infrastructure CE Community Engagement CEP Community Engagement Plan CIP Capital Improvements Program COLA Cost of Labor Adjustment CS Closed Session of the Board CY Calendar Year D&I Diversity and Inclusion ED Executive Director FY Fiscal Year | <ul style="list-style-type: none"> JLP Jordan Lake Partnership LRWSP Long-Range Water Supply Plan MST Mountains-to-Sea Trail MFMM Multi-Family Master Meter NRTS Natural Resources and Technical Services Q Quarter SOW Scope of Work TBD To Be Determined WTP Water Treatment Plant WWTP Wastewater Treatment Plant |
|---|--|

Current and Pending Key Projects and Stages

Project	Strategic Initiative	Project Lead	Feb-18	Mar-18	Apr-18	May-18	June-18	July-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19
AMI	6	Taylor												
LRWSP	1	Rouse				Demand & Yield								
Energy Plan	5	Tiger												

Stages	Committee Discussion	Feasibility Study	Board Review	Community Engagement	Action	Procurement	Implementation
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Orange Water and Sewer Authority
Meeting of the Board of Directors
January 25, 2018

The Board of Directors of the Orange Water and Sewer Authority (OWASA) held a regular meeting on Thursday, January 25, 2018, at 7:00 p.m. in Chapel Hill Town Hall Council Chamber.

Board Members present: Robert Morgan (Chair), Heather Payne (Vice Chair), Yinka Ayankoya (Secretary), Jeff Danner, Ray DuBose, Barbara Foushee, John N. Morris, Ruchir Vora and John A. Young.

OWASA staff present: Mary Darr, Robert Epting, Esq., (Epting and Hackney), Vishnu Gangadharan, Ed Kerwin, Ken Loflin, Andrea Orbich, Johnny Riley, Kelly Satterfield, Todd Taylor, Mary Tiger and Stephen Winters.

Others present: Elijah Ayankoya, Joel Bulkley (Community Sports News), Margaret Holton (University of North Carolina (UNC) Water, Sewer and Reclaimed Water Coordinator), A. McArthur, Michael Potter and Ben Poulson (UNC at Chapel Hill Associate Director of Energy Services).

Motions

1. John Young made a motion that the Board receive Michael Potter's petition regarding his water meter, and that staff provide a response and recommendation at a future meeting; second by Barbara Foushee and unanimously approved.
2. Ruchir Vora made a motion that in advance of publishing a report on OWASA's website no later than April 1, 2018, in compliance with NC House Bill 436/Session Law 2017-138, the Board of Directors hereby approves and directs staff to use the Buy-In Method for calculating OWASA's System Development Fees going forward; second by Yinka Ayankoya and unanimously approved.
3. Barbara Foushee made a motion to adjourn the meeting; second by Heather Payne and unanimously approved.

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Announcements

Robert Morgan asked if any Board Member knows of a conflict of interest or potential conflict of interest with respect to any item on the agenda tonight to disclose the same at this time; none were disclosed.

Mr. Morgan said that an OWASA orientation has been scheduled for newly elected Chapel Hill Town Council Members on Monday, February 12, 2018, at 4:00 p.m. in the OWASA Boardroom.

Barbara Foushee said the Human Resources Committee will meet to discuss retiree health benefits for new hires, and 457 deferred compensation, on Monday, February 5, 2018, at 5:30 p.m. in the OWASA Boardroom.

Ms. Foushee said that the Board of Directors will meet to receive diversity and inclusion training and feedback with VISIONS, Inc. (OWASA's consultant) on Monday, January 29, 2018, at 6:00 p.m., in the OWASA Boardroom.

John Young said that Ed Kerwin and he will attend the Chatham/Orange Joint Planning Task Force meeting on Thursday, February 8, 2018, at 12:00 noon at the offices of Clarion Associates in Chapel Hill. The Task Force was originally initiated in 2009 but has been inactive in recent years. It is being restored to discuss topics of mutual interest between the two counties, such as comprehensive planning and public water supply protection and enhancement.

Mr. Young said the Natural Resources and Technical Services Committee will meet to discuss and evaluate the Drought Response Operating Protocol on Monday, February 26, 2018, at 5:00 p.m. in the OWASA Boardroom.

Ray DuBose said that he will provide OWASA's annual update to the Orange County Board of County Commissioners on Tuesday, February 20, 2018, 7:00 p.m., at the Southern Human Services Center in Chapel Hill. Mr. DuBose said the update will include items from the January 2018 Annual Report to the local governments and that Robert Morgan and Todd Taylor will also attend.

Todd Taylor provided a brief report and expressed appreciation to OWASA employees who worked during the January 18th winter weather event to ensure water and sewer services were operational for the community.

Mr. Taylor said that staff received notice that OWASA will receive the Partnership for Safe Water Presidents Award for Distribution System Operation, which recognizes the Distribution Department for continuous self-assessment and facilities improvement planning. OWASA is the third utility in the United States to receive this award.

Heather Payne reported that Todd Taylor did a great job representing OWASA at the DistribuTech conference regarding OWASA's Advanced Metering Infrastructure installation.

Petitions and Requests

Michael Potter petitioned the Board to review staff's determination on his request for a refund of billing fees and charges. He said that due to a faulty water meter at his residence (over a 10-year period), he was overbilled. Mr. Potter complained that the rate at which OWASA owes him reimbursement should be the highest rate applicable to his use, rather than the lowest rate, and

that the reimbursement should be calculated over a 10-year period rather than the three-year period used by OWASA staff.

John Young made a motion that the Board receive Michael Potter's petition regarding his water meter, and that staff provide a response and recommendation at a future meeting; second by Barbara Foushee and unanimously approved. Please see Motion 1 above.

Jeff Danner ask about the planning and preparedness of this spring's possibility of algae outbreaks; staff will follow up.

Robert Morgan asked for petitions and requests from staff; there were none.

Item One: 12 Month Board Meeting Schedule

The Board received this as an information item.

Item Two: Approve Proposed New Calculation Method for System Development Fees

Ruchir Vora made a motion that in advance of publishing a report on OWASA's website no later than April 1, 2018, in compliance with NC House Bill 436/Session Law 2017-138, the Board of Directors hereby approves and directs staff to use the Buy-In Method for calculating OWASA's System Development Fees going forward; second by Yinka Ayankoya and unanimously approved. Please see Motion 2 above.

Item Three: Key Focus Areas for OWASA's Executive Director

The Board approved Key Focus Areas for OWASA's Executive Director.

Item Four: 2017 Annual Lakes Recreation Report

John Young commented that he would like to consider charging a higher rate for out of the county visitors to use Cane Creek as part of the annual rate recommendations, and that he would like staff to provide a break out of operational costs separately for the two lakes.

The Board received five public comments via e-mail requesting that the birdwatching day continue, and four requested that the day be changed from Wednesday to Saturday or Sunday.

After discussion, the Board agreed to treat the request as a petition and requested staff provide options and recommendations at a future meeting to enhance birdwatching opportunities at Cane Creek Reservoir.

Item Five: Capital Improvements Program (CIP) Semiannual Status Report

The Board requested that the CIP expenses graph be further detailed to include a simple depiction of the causes of the projected budget variance. The Board also requested that staff explore and implement feasible options to attract greater Minority and Women-Owned Business

Enterprise participation in bidding on construction projects, including a potential project for an “Open House” event, possibly in conjunction with other local municipalities or entities.

Item Six: Financial Report for the Six-Month Period Ended December 31, 2017

The Board received a presentation on the financial report for the six-month period ended December 31, 2017, reporting that OWASA is meeting all financial management policy performance objectives.

Item Seven: Fiscal Year 2019 Budget Calendar and Assumptions

The Board received this as an information item.

Item Eight: Summary of Board Meeting Action Items

Ed Kerwin noted the following items for staff follow-up:

- February 8, 2018 Work Session will include:
 - Progress Report on Diversity and Inclusion work;
 - Update on Affordability Outreach Program for Year 3; and
 - Discuss and determine the next Key Performance Indicator for an in-dept discussion.
- Provide a recommendation on Michael Potter’s petition regarding his water bill.
- Provide options and a recommendation to enhance birdwatching opportunities at Cane Creek Reservoir at a future meeting.
- Incorporate the Board’s suggestions for Capital Improvements Program expense reporting in the next report.
- Investigate and implement efforts to attract greater Minority and Women-Owned Business Enterprise participation on bidding construction projects.
- Provide a report via e-mail on work to manage taste and odor impacts algae outbreaks.

Barbara Foushee made a motion to adjourn the meeting; second by Heather Payne and unanimously approved. Please see Motion 3 above.

The Board meeting was adjourned at 8:15 p.m.

Respectfully submitted by:

Andrea Orbich
Executive Assistant/Clerk to the Board

Orange Water and Sewer Authority

Closed Session of The Board of Directors

February 8, 2018

The Board of Directors of Orange Water and Sewer Authority met in Closed Session on Thursday, February 8, 2018, following the Board meeting.

Board Members present: Robert Morgan (Chair), Heather Payne (Vice Chair), Yinka Ayankoya (Secretary), Ray DuBose, Barbara Foushee, John Morris, Ruchir Vora and John A. Young. Board Member absent: Jeff Danner.

ITEM ONE

The Board of Directors met in Closed Session to evaluate the General Counsel's semiannual performance review.

No official action was taken at the meeting.

The meeting was adjourned at 8:35 p.m.

Barbara Foushee, Chair
Human Resources Committee

Agenda Item

- Update on Unregulated Compounds in Water Resources, Including Recent Regional Analysis of Per- and Polyfluoroalkyl Substances (PFAS)

Purpose

- To provide an overview of unregulated compounds in water resources and a summary of OWASA's recent testing for PFASs and results.

Background

- OWASA's drinking water and treated wastewater are safe and meet all Federal and State regulations.
- The US Environmental Protection Agency (EPA) periodically requires water utilities to test drinking water for unregulated compounds which could become subject to new Federal standards. These testing requirements are part of the Safe Drinking Water Act and are called the Unregulated Contaminant Monitoring Rule (UCMR). OWASA has participated in all three rounds to date and will continue to participate in future iterations of the UCMR.
- OWASA participates in and contributes funds to regional, national, and international cooperative organizations that support research and monitoring on topics of common concern including the Urban Water Consortium, Triangle Area Water Supply Monitoring Project, and Water Research Foundation.
- The OWASA website includes the following information related to unregulated compounds:
 - The [Annual Water Quality Report Cards](#), which have OWASA's UCMR results from each previous round of UCMR testing in the year the testing occurred.
 - [Testing for unregulated compounds](#), which has all OWASA UCMR results and links to additional information for select compounds.
 - [Testing for perfluorinated compounds](#) and [Chromium 6 and drinking water](#), which provide more detailed information on these topics.

Action Needed

- Receive staff's presentation and invite customers' comments and feedback.
- Review staff's recommended future steps and provide feedback.

February 22, 2018



ORANGE WATER AND SEWER AUTHORITY

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

MEMORANDUM

TO: Board of Directors

THROUGH: Todd Taylor, P.E. *T.T.*

FROM: Katie Harrold

DATE: February 15, 2018

SUBJECT: Update on Unregulated Compounds in Water Resources, including Recent Regional Analysis of Per- and Polyfluoroalkyl Substances

Background

OWASA maintains full compliance with and often surpasses all current Federal and State regulations. According to all current and available science, OWASA's drinking water is safe for drinking and OWASA's treated wastewater is safe for the environment. OWASA supports and participates in science-based research to inform these regulations and protect water quality and human health.

Unregulated Compounds

The Federal law that regulates public drinking water utilities like OWASA is called the Safe Drinking Water Act (SDWA). The US Environmental Protection Agency (EPA) sets these health-based regulations, which are then enforced by state agencies such as the NC Department of Environmental Quality in partnership with the EPA.

To ensure high-quality, safe drinking water the EPA reviews unregulated compounds which may warrant regulation under the SDWA and has added regulated compounds to the SDWA, as a result. Periodically, specific unregulated compounds will gain local or national attention. For example, recently hexavalent chromium (or chromium 6) and 1,4-dioxane were topics of concern in the public. Often, such compounds are already under review by the EPA.

Two factors are important to the EPA when considering regulation of unregulated compounds: occurrence and health risks. Is this compound prevalent in drinking water systems across the country? And at what levels are chronic and acute exposures hazardous to human health? The fact that a compound is detectable does not necessarily mean that it is harmful to human health; this remains true even as technology improves and compounds can be measured at increasingly lower levels.

The EPA collects information on the occurrence of compounds that are suspected to be present in drinking water, but are not currently regulated, through the [Unregulated Contaminant Monitoring Rule](#) (UCMR). OWASA has participated in the previous monitoring under the UCMR and will continue to participate in the future.

Risk-based health levels are based on the most current research regarding the health effects of compounds and established at concentrations under which no health impact should be realized by even the most vulnerable populations.

If and when a compound is regulated, the EPA sets the Maximum Contaminant Level (MCL) which takes into account health effects, detection limits, treatment effectiveness, and cost. The MCL is set as close as feasible to the Maximum Contaminant Level Goal (MCLG), for which the EPA only considers health effects in its establishment. The MCLG is not regulatory. These are set to protect even the most sensitive populations (including infants, children, the elderly, and people with compromised immune systems and chronic diseases).

If a compound is not regulated, the EPA may set a non-regulatory Health Advisory Level (HAL) based on health effects information to provide technical guidance to assist Federal, State, and local officials.

Per- and Polyfluoroalkyl Substances

Recently, the occurrence and levels of GenX, a compound that belongs to a class of man-made chemicals, known as per- and polyfluoroalkyl substances (together, PFASs) has impacted drinking water in nearby communities¹.

PFASs are used in a variety of everyday products to increase resistance to water, grease, or stains such as carpet, clothing, fabric for furniture, paper packaging for food, and other materials (e.g., cookware). Thus, they are commonly found in household dust as well as household discharges to wastewater. They are also used in aqueous firefighting foams (AFFF) that are used at airfields and in industrial processes.

Detectable concentrations of PFASs can enter lakes, rivers, or groundwater through industrial releases, discharges from wastewater treatment plants, and the use of AFFF. Often, PFASs in water are localized and associated with a specific facility, such as fire training facilities, military bases, domestic airports, and manufacturing sites. Treated effluent from wastewater treatment plants and biosolids land application sites have also been identified as PFASs contributors as they are conveyors of PFASs that enter the wastewater stream from concentrated sources and household products.

In 2016, the EPA established a lifetime Health Advisory Level (HAL) of 70 parts per trillion (ppt) for the combined amount of two PFASs - PFOA and PFOS - in drinking water.

¹ These compounds have been sometimes referred to as perfluorinated compounds or PFCs, but the EPA and other organizations are switching to PFASs rather than PFCs to consistently collectively describe this class of compounds.

Perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) are the two PFASs which have been the most extensively produced and studied.

Recent PFASs Monitoring Results

In October 2017, Duke University professors analyzed a sample of OWASA drinking water. When analyzed, the sample was found to have a sum total of 14 ppt of PFOA and PFOS. This is well below the aforementioned EPA Health Advisory Level of 70 ppt combined of the two compounds. The Duke professors also analyzed the sample for seven other perfluorinated compounds, they detected a sum total of about 50 ppt for all nine compounds (PFOA, PFOS, and 7 additional compounds). While we saw no reason for alarm in these results, we followed-up with additional analysis.

In January 2018, OWASA collected samples for PFASs analysis. These analyses measured the level of 39 PFASs in OWASA’s raw source waters, treated drinking water, and treated wastewater effluent as well as the raw well water source for the Cane Creek Reservoir Recreation Facilities water system, process water within the water treatment plant, and Morgan Creek upstream of the wastewater effluent discharge. Full results are attached. Below are some key findings:

	Treated Drinking Water	Raw Source Water			Morgan Creek Upstream	Wastewater
		University Lake	Cane Creek Reservoir	Quarry Reservoir		Treated Wastewater Effluent
Count of PFASs Detected from 39 analyzed	7	2	11	2	8	9
Sum of all PFASs (ppt) [No HAL]	37.8 – 45.9	4.7	206.1	4.9	49.6	101.9
Sum of PFOS & PFOA (ppt) [HAL* is 70 ppt]	13.7 – 18.0	4.7	120.0	4.9	13.4	23.1

*Drinking water Health advisories are specifically for PFOA and PFOS and do not apply to other perfluoroalkyl substances (PFASs). The EPA is continuing to gather information about other PFASs.

GenX was not detected in any sample.

Finished Drinking Water: Two treated drinking water samples were collected, one as water left the Jones Ferry Water Treatment Plant and one from the distribution system. The same seven PFASs were detected in each sample at very similar levels. The sum of PFOS and PFOA in these samples was well below the 70 ppt health advisory level (13.7 in one sample and 18.0 ppt in the other). Studies indicate that the use powder activated carbon (PAC) is successful in the removal of some PFASs but not all. Our test results showed that OWASA’s treatment process was also successful in removing some PFASs but not all.

Raw Reservoir Water: In the University Lake and Quarry Reservoir samples only two PFASs were detected. In the sample from Cane Creek Reservoir, 11 PFASs were detected. The sum of

PFOS and PFOA in University Lake, Quarry Reservoir, and Cane Creek Reservoir were 4.7, 4.9, and 120 ppt, respectively.

The definite sources of PFOS and PFOA in the Cane Creek Reservoir are unknown. There are no facilities typically associated with elevated levels of PFAS in the watershed, although we do not have specifics on past land use. We do know that other utilities apply biosolids in the watershed; OWASA does not.

Wastewater: In the Mason Farm Wastewater Treatment Plant effluent sample, nine PFASs were detected. The list of nine compounds detected in the effluent includes all seven PFASs detected in the drinking water samples and two additional compounds. Five of these compounds were present at similar levels to that in the drinking water samples.

Upstream Morgan Creek: Eight PFASs were detected in the sample collected from Morgan Creek upstream of where the Mason Farm Wastewater Treatment Plant effluent is discharged. These were the same eight compounds detected in the effluent sample; one additional compound was detected in the effluent and not in the creek sample. Four of the compounds were present at similar levels in the creek and effluent samples.

Future Steps

Recent test results help to assure that OWASA's water is safe to drink, with levels of PFOS and PFOA well-below Health Advisory Levels. They do, however, raise questions about the potential that biosolids are a contributor to levels in the Cane Creek Reservoir that exceed the drinking water HAL for PFOA and PFOS, as well as the potential that our own biosolids and wastewater effluent are contributing to elevated levels in other watersheds. Our analysis suggests that the use of powder activated carbon at the Jones Ferry Water Treatment Plant is effective at removing some, but not all PFAS from drinking water.

As it is for the entire water and wastewater industry of many unregulated compounds, this issue is of continued interest and importance to OWASA. As an individual utility, OWASA continues to proactively address it through regional cooperation and communication, the support of local and national research, and open and honest communication with our customers.

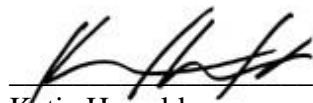
We support research into the occurrence, primary sources, health impacts, and effective treatment options for PFASs and other unregulated compounds on the forefront of the industry's research agenda. As we do for all other compounds, we look to the federal and state government to turn this research into science-based laws that protect our community.

We will continue to coordinate with nearby communities on analysis and treatment options, recognizing the connectivity of our actions. We have and will continue to reach out to other utilities known to land apply biosolids in the Cane Creek watershed to try and gain a better understanding of the potential sources of PFASs.

And we continue to communicate openly and transparently about our water quality and serve as a resource for our community on state of the science. Within the week, the results of this test will be posted on OWASA's website with information about how to interpret the results.

At this time, OWASA staff does not see justification to pursue aggressive mitigation and treatment of PFAS. As a product of our current source water protection efforts and water treatment processes, OWASA's water is safe to drink. And while biosolids are potentially associated with elevated levels of some PFASs, they are not causing OWASA's drinking water quality to exceed HALs for PFOA and PFOS, nor are they the ultimate source of PFASs. The ultimate sources are potentially indiscrete, individually minor, and beyond the regulatory authority of OWASA.

We remain vigilant in our support of scientific research regarding the occurrence and health effects of PFASs and other unregulated compounds to help us continue in our commitment to providing high-quality and reliable water, wastewater, and reclaimed water services.



Katie Harrold
Laboratory Supervisor

Attachment: Full results from January 11, 2018 sample taken by OWASA staff and analyzed by Eurofins Eaton Analytical.

Results from January 11, 2018 sample taken by OWASA staff and analyzed by Eurofins Eaton Analytical

Analyte	Acronym	Cane Creek Reservoir and Recreation	University Lake	Cane Creek Reservoir	Quarry Reservoir	WTP Process Recycle	Treated Drinking Water Leaving Jones Ferry Water Treatment Plant	Distribution System Treated Drinking Water	Morgan Creek Upstream of Wastewater Discharge	Mason Farm Treated Wastewater Effluent
10:2 Fluorotelomer sulfonic acid	10:2 FTS	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
4:2 Fluorotelomer sulfonic acid	4:2 FTS	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
6:2 Fluorotelomer sulfonic acid	6:2 FTS	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	2.2
8:2 Fluorotelomer sulfonic acid	8:2 FTS	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
ADONA		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
F-53B Major		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
F-53B Minor		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
GenX		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
N-ethylperfluorooctane sulfonamide	NEtFOSA	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
N-ethylperfluorooctane sulfonamidoethanol		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
N-methylperfluorooctane sulfonamide	NMeFOSA	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
N-methylperfluorooctane sulfonamidoethanol		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorobutanesulfonic acid	PFBS	<2.0	<2.0	7.8	<2.0	5.1	4.2	3.6	5.6	5.1
Perfluorobutanoic acid	PFBA	<5.0	<5.0	6.1	<5.0	<5.0	<5.0	<5.0	6.2	11
Perfluorodecanoic acid	PFDA	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluoroheptanoic acid	PFHpA	<2.0	<2.0	16	<2.0	7.5	7.4	6.1	4.2	7.4
Perfluorohexanesulfonic acid	PFHxS	<2.0	<2.0	20	<2.0	2.6	3.5	2.7	4.9	4.1
Perfluorohexanoic acid	PFHxA	<2.0	<2.0	12	<2.0	11	7.7	7.0	7.5	26
Perfluorolauric acid	PFDoA	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorononanoic acid	PFNA	<2.0	<2.0	2.6	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorooctane sulfonate	PFOS	<2.0	2.3	63	2.6	2.5	3.0	2.7	5.4	5.1
N-ethyl Perfluorooctanesulfonamidoacetic acid	NEtFOSAA	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
N-methyl Perfluorooctanesulfonamidoacetic acid	NMeFOSAA	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorooctanoic acid	PFOA	2.2	2.4	57	2.3	12	15	11	8.0	18
Perfluorotridecanoic acid	PFTTrDA	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0

Analyte	Acronym	Cane Creek Reservoir and Recreation	University Lake	Cane Creek Reservoir	Quarry Reservoir	WTP Process Recycle	Treated Drinking Water Leaving Jones Ferry Water Treatment Plant	Distribution System Treated Drinking Water	Morgan Creek Upstream of Wastewater Discharge	Mason Farm Treated Wastewater Effluent
<i>Perfluoroundecanoic acid</i>	PFUNA	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
<i>Perfluorododecanesulfonic acid</i>	PFDoS	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
<i>Perfluorodecanesulfonic acid</i>	PFDS	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
<i>Perfluoroheptanesulfonic acid</i>	PFHpS	<2.0	<2.0	3.9	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
<i>Perfluorohexadecanoic acid</i>	PFHxDA	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
<i>Perfluoro-2-(2-methyl)ethoxyacetic acid</i>		<5.0	<5.0	<5.0	<2.0	<2.0	<2.0	<2.0	<5.0	<5.0
<i>Perfluoro-4-(1-methyl)ethoxybutanoic acid</i>		<5.0	<5.0	<5.0	<2.0	<2.0	<2.0	<2.0	<5.0	<5.0
<i>Perfluoro-4-methoxybutanoic acid</i>	PFMObA	<5.0	<5.0	<5.0	<2.0	<2.0	<2.0	<2.0	<5.0	<5.0
<i>Perfluoro-3-methoxypropanoic acid</i>	PFMOPrA	<5.0	<5.0	<5.0	<2.0	<2.0	<2.0	<2.0	<5.0	<5.0
<i>Perfluorononanesulfonic acid</i>	PFNS	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
<i>Perfluorooctane sulfonamide</i>	PFOSA	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
<i>Perfluoropentanoic acid</i>	PFPeA	<2.0	<2.0	8.7	<2.0	6.8	5.1	4.7	7.8	23
<i>Perfluoropentanesulfonic acid</i>	PFPeS	<2.0	<2.0	9	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
<i>Perfluorotetradecanoic acid</i>	PFTeDA	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0

Agenda Item

- Presentation on the Partnership for Safe Water and Partnership for Clean Water Programs

Purpose

- To provide an update on the Orange Water and Sewer Authority's work on the Partnership programs.

Background

- The Partnership programs are voluntary optimization programs. OWASA is currently participating in three programs. The Partnership for Safe Water which consist of two separate programs, the Treatment Plant Optimization and Distribution System Optimization programs. OWASA's Wastewater Treatment Plant participates in the Partnership for Clean Water Program.
- Participation in the Partnership programs is a commitment by OWASA to provide the highest quality service for our customers and the environment.
- The attached memorandum provides information on the Partnership programs and OWASA's status on completing the various phases of each program.

Action Needed

- No action is needed.



ORANGE WATER AND SEWER AUTHORITY

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

MEMORANDUM

TO: Board of Directors

THROUGH: Ed Kerwin *EKL*

FROM: Todd Taylor

DATE: February 15, 2018

SUBJECT: OWASA's Participation in Partnership Programs

Background

The Partnership programs are voluntary programs designed to assist utilities with treatment plant and distribution system optimization. The Partnership programs are supported by the United States Environmental Protection Agency (US EPA), the American Water Works Association (AWWA), Water Research Foundation, and several other drinking water organizations. AWWA administers the programs.

The goal of the Partnership is to provide a new measure of safety to millions of Americans by implementing prevention programs where legislation or regulation does not exist. The preventative measures are based around optimizing treatment plant performance and distribution system operation. The result is the production and delivery of superior quality water to all users.

Partnership Programs

OWASA participates in three Partnership programs. The Jones Ferry Road Water Treatment Plant and Distribution System participate in the Partnership for Safe Water. OWASA's Mason Farm Wastewater Treatment Plant participates in the Partnership for Clean Water.

There are four phases of each Partnership program. The first three phases are required for participating utilities. The fourth phase, which is Optimized Performance Review, is voluntary and not required.

- **PHASE I: Commitment** – OWASA commitments to change the focus to continuous improvement.

- **PHASE II: Base Line & Annual Data Collection and Submission** – Performance data is collected and submitted annually.
- **PHASE III: Self-Assessment** - A team of OWASA staff is assigned from throughout the organization to perform a comprehensive self-assessment evaluation. The findings from the self -assessment are assembled into a report. Performance limiting factors identified by the team are prioritized and action plans for optimization are created. This report defines the activities to be undertaken to move toward optimum performance. It can take several years to fully implement all of the action plans. The Phase III Self-Assessment Completion Report is the basis for the Directors Award and reviewed by a panel of optimization experts.
- **PHASE IV: Fully Optimized System** - Recognizes the highest level of optimization with the exclusive Excellence in Water Treatment Award and the Presidents Award (recognizing progress towards full optimization).

The Partnership for Safe Water

The Jones Ferry Road Water Treatment Plant (WTP) joined the Partnership for Safe Water, Treatment Plant Optimization Program in 2002. The WTP team completed Phase II in 2004. The Phase III Directors Award was received in 2005. In 2011, OWASA became the first utility in North Carolina and the ninth utility in the nation to achieve Excellence in Water Treatment. The WTP continues to maintain Phase IV goals and objectives and identify opportunities for continuous improvement. The WTP has received the Phase IV award for the past seven years.

OWASA's Distribution System joined the Partnership for Safe Water, Distribution System Optimization Program in 2010. The Phase III Directors Award was first received in 2013. In 2017, OWASA become one of only three utilities in the country to receive Presidents Award.

The Partnership program provides operators, managers and administrators with the tools to assess treatment plants and distribution systems and improve performance beyond regulatory levels. The Treatment Plant Optimization Program focuses on enhancing particle removal (clarity of the water). Optimized particle removal increases protection against microbial contamination. The Distribution System Optimization Program focuses on efforts to maintain water quality in the distribution pipes and tanks. The primary performance indicator are disinfectant residual, pressure and main break frequency.

The Partnership for Clean Water

The Partnership for Clean Water is a global optimization and recognition program for wastewater utilities.

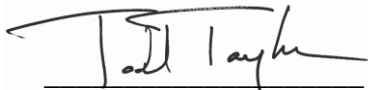
The wastewater treatment plant optimization program focuses on optimizing plant operations to improve effluent water quality, providing a margin of safety beyond current regulatory requirements – and to achieve this in as an energy-efficient manner as possible, limiting consumption of the earth's natural resources. This leads to improvements in operational efficiencies and operating costs. The program's unique self-assessment process can help to create a focus on results and a culture of excellence.

OWASA's Wastewater Treatment Plant joined the Partnership for Clean Water program in 2016 and completed Phase II in 2017. Our goal is to become one of the first utilities in the nation to achieve Phase III in the Partnership's developing wastewater optimization program.

Continuing Commitment

The Partnership programs are an ongoing commitment by OWASA and we will continuously search for ways to improve our operation. Progress reports and process data are submitted annually for as long as OWASA participates in the programs.

Please let us know if you have any questions or need additional information regarding OWASA's participation in the Partnership programs.

A handwritten signature in black ink that reads "Todd Taylor". The signature is written in a cursive style with a horizontal line underneath the name.

Todd Taylor, P.E.
General Manager of Operations

Agenda Item

- Response to a Request Regarding the Birdwatching Program at Cane Creek Reservoir

Background

- On January 25, 2018, the OWASA Board accepted a request from birders regarding OWASA's Birdwatching Program at Cane Creek Reservoir and requested that staff provide options for the Board's consideration.
- When the Board approved free winter birdwatching in 2015, it was understood that there would be minimal cost and impact to our operation.
- To date, there has been minimal cost and impact to our operation for birdwatching on Wednesday mornings. Our staff's experiences with birdwatchers has been positive.

Action

- Discuss options to enhance birdwatching opportunities at Cane Creek Reservoir and provide direction to staff.

February 22, 2018




ORANGE WATER AND SEWER AUTHORITY

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

MEMORANDUM

TO: OWASA Board of Directors

THROUGH: Ed Kerwin 

FROM: Johnny Riley

DATE: February 16, 2018

SUBJECT: Response to a Request Regarding the Birdwatching Program at Cane Creek Reservoir

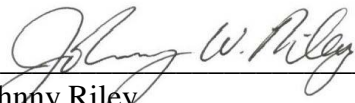
On January 25, 2018, the OWASA Board accepted a request from birders (attached) regarding OWASA’s birdwatching program at Cane Creek Reservoir and requested that staff provide options for the Board’s consideration.

For Board discussion, the following three birdwatching options during the non-recreation season are provided:

Options	Impact on OWASA	Impact on Birdwatching Non-recreation Season
1. Wednesdays 7 – 11 a.m. <i>(current practice)</i>	Minimal. Multiple staff work on Wednesdays on maintenance activities. Experience has shown minimal impact on staff’s work.	Provides a weekly four-hour opportunity for birding.
2. Change from Wednesday to Friday 7 – 11 a.m.	Minimal. Maintenance activities for staff on Fridays essentially the same as Wednesday.	Provides a weekly four-hour opportunity for birding.
3. Change from Wednesday to Saturday 7 – 11 a.m.	Significant. If staffed with overtime pay, estimated impact is about \$125 per week and \$2,250 per season. If staffed with regular pay, an employee who worked Monday through Friday during non-recreation season would be reassigned to work Tuesday through Saturday. This would result in less essential maintenance activities being performed and safety implications.	Provides a weekly four-hour opportunity for birding. Increase usage would be expected on Saturday.

In 2015, when the Board approved free winter birdwatching, it was understood that there would be minimal cost and impact to our operation. To date, there has been minimal cost and impact to

our operation for birdwatching on Wednesday mornings. Our staff's experiences with birdwatchers has been positive. However, changing the day from Wednesdays to Saturdays or adding additional dates would come at a cost to our ratepayers and is not recommended by staff. Staff's recommends the Board consider option 2, move the day from Wednesday to Friday from 7:00 a.m. until 11:00 a.m.



Johnny Riley
Senior Lake Warden

Attachment

Request Regarding Birdwatching at Cane Creek Reservoir

Accepted on January 25, 2018

January 22

Tommy Richey

Dear members of the OWASA board and leadership,

Hello, my name is Tommy Richey. I am a resident of Orange County (Chapel Hill) and actively involved in New Hope Audubon Society's leadership and programs.

Foremost, I would like to thank you for opening Cane Creek Reservoir to birders during the winter. The reservoir is a prime spot for winter birding, particularly for seeing migratory waterfowl. Moreover, it is a peaceful, accessible place that serves as an ideal setting for individual and group bird walks. New Hope Audubon Society's trip leaders are encouraged to make use of access to Cane Creek Reservoir as much as possible, and I recently reminded them to do so.

Unfortunately, I am not able to make use of Cane Creek Reservoir as much as I would like because of the day of week it is open. I would need to take time off work to visit the reservoir on Wednesday mornings. If changing the day is possible, I recommend shifting birding hours to Saturday morning. I think overall attendance would then increase, as several other people have noted that the current hours are a hindrance to visiting the reservoir.

Thank you for the courtesy of and investment in allowing winter birding at Cane Creek Reservoir. It is much appreciated by me and my fellow birders.

Kindly,
Tommy Richey

Loren Hintz

Dear Board, I have enjoyed visiting Cane Creek in the winter time for observing birds. It is a great resource and I record the data in the citizen science website of ebird.org. I hope you will continue to keep it open at least one morning a week.

Sincerely,
Mr. Loren Hintz

January 21

Ralph Perrine

First let me say thank you for making arrangements to have Cane Creek Reservoir open to birders. It is a great spot, and we do appreciate OWASA allowing access. We hope you continue to do so.

I understand you are reviewing the access rules for Cane Creek.

For many birdwatchers like myself it is difficult to take time off work during the week to go birdwatching.

Cane Creek is a key birding hotspot because of its location and lake features. I would definitely be able to visit more often if the open day was on a weekend. I suggest that the open day to move from Wednesday to Saturday or Sunday.

Thank you again,
Ralph Perrine

Maria de Bruyn

Dear OWASA Board,

Many birders appreciate the policy instituted by OWASA to allow birders to visit Cane Creek Reservoir in the winter one morning a week during the winter months. It is a place that water fowl visit in this season and allows good views of them. However, having four hours available on a weekday/work day morning means that many birders are unable to take advantage of this opportunity. And when it rains or snows on a Wednesday morning, that prevents many people from enjoying the chance to bird there as well.

It would be great if OWASA could change the policy to have the reservoir open to birders on Saturday instead of Wednesday mornings. Not only would it enable people who work weekdays or have other commitments then to enjoy this birding venue but it would also make it easier for people from outside Orange County to participate.

Thank you.
Maria de Bruyn

Terri Buckner

Dear Board members,

As you review the past year's recreational data, I request that you consider changing the day of the week for bird watching. I've spoken with members of the New Hope Audubon Society and usage numbers are down this year due to weather. However, the usage data for previous years would have been higher if more individuals were able to enjoy what they all agree is the best sight for observing water fowl in Orange County. Wednesday mornings mean that no working individuals are able to take advantage of this wonderful recreational opportunity.

I encourage you to shift the day from Wednesday to Saturday.

Terri Buckner

OWASA Response:

Thank you for your email to the OWASA Board about birdwatching at our Cane Creek Reservoir. As you may know from the [Annual Report on Recreation at University Lake and Cane Creek Reservoir](#), our staff recommends that we continue our current practice for free birdwatching on Wednesday mornings during the winter when the lake is closed for recreation.

A key understanding by the OWASA Board when free winter birdwatching was approved in 2015, was that there would be minimal cost and impact to our operation. To date, there has been minimal cost and impact to our operation by holding birdwatching on Wednesday mornings and our staff's experiences with bird watchers has been positive. However, changing the day from Wednesdays to Saturdays or adding additional dates would come at a cost to our ratepayers and is not recommended by our staff.

The OWASA Board invites additional public comment about birdwatching at our meeting on Thursday, January 25th at 7:00 p.m. at Chapel Hill Town Hall when staff's report will be received.

Thank you again for your feedback.

Regards,

Robert Morgan, Chair
OWASA Board of Directors

AGENDA ITEM

- Resolution Accepting Six Low-Interest Loan Offers from the State of North Carolina, and Authorizing Executive Director to Execute and Administer all Related Loan Offer and Acceptance Documents

BACKGROUND

- The Federal Clean Water Act Amendments of 1987 and the North Carolina Clean Water Revolving Loan and Grant Act of 1987 have authorized making loans and grants to aid eligible units of government in financing the cost of construction of water and wastewater treatment works, and/or water distribution and wastewater collection systems.
- On September 22, 2016 the Board of Directors authorized the submittal of applications for low-interest loans from the state of North Carolina to fund six water and sewer projects included in OWASA's Capital Improvements Program. The loan applications were approved by the NC Department of Environmental Quality, our engineering and environmental documents for the projects have been approved, and the NC Local Government Commission has approved the issuance of low-interest loans for the projects.
- We have received the official Loan Offer and Acceptance documents for the six projects. These documents must be approved by resolution of the Board of Directors and executed by an authorized representative of OWASA.
- The total amount of the proposed loans is \$14,832,000. These would be 20-year loans with a fixed interest rate of 1.53%. The low-interest loan funding will enable OWASA to defer and/or reduce the size of its next revenue bond issue. Additionally, OWASA customers will benefit from borrowing at the below-market interest rate offered by the state. We estimate savings over the life of the loan to be approximately \$6 million.

RECOMMENDATION

- Accept the state's offer for low-interest loan financing for six water and sewer projects, and authorize the Executive Director to execute the Offer and Acceptance Document from the state of North Carolina.

ACTION NEEDED

- Adopt the resolution accepting the loan offers from the state of North Carolina and authorizing the Executive Director to execute the Offer and Acceptance Documents on behalf of OWASA.

February 22, 2018



ORANGE WATER AND SEWER AUTHORITY

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

MEMORANDUM

TO: Board of Directors

THROUGH Ed Kerwin *EK*

FROM: Stephen Winters, CPA

DATE: February 16, 2018

SUBJECT: Resolution Accepting North Carolina Division of Water Infrastructure's Low-Interest Loan Offers for Six Projects, and Authorizing Executive Director to Execute and Administer Loan Offer and Acceptance Documents

Background

On September 22, 2016 the Board of Directors authorized staff to apply for low-interest loans from the state of North Carolina for six different water and sewer system projects. Our loan applications have been approved by the state Water Infrastructure Authority and our preliminary engineering reports and environmental information documentation for each project have been approved by the Department of Environmental Quality's Division of Water Infrastructure (NCDWI).

Recently, the North Carolina Local Government Commission authorized the NCDWI to offer OWASA low-interest loans in the amounts shown for the following projects:

Project Name	Loan Amount
Brandywine Road Water Main Rehabilitation	\$1,056,000
Wastewater Treatment Plant Intermediate Pump Stations Rehabilitation	\$1,071,000
Advanced Meter Infrastructure System	\$6,132,000
Dobbins Drive Sewer Interceptor Rehabilitation	\$1,658,000
Dobbins Drive Water Main Rehabilitation	\$1,525,000
Water Treatment Plant Sedimentation Basin Rehabilitation	\$3,390,000
Total	\$14,832,000

The 20-year loans would have a fixed interest rate of 1.53%, which is about one-half of the current market rate for revenue bonds. The state charges a loan closing, processing, and administration fee equal to 2% of the loan amount. Based on the above loan amounts, the total loan administration fees for these projects would be about \$297,000. As shown below, we estimate savings over the life of the loan to be approximately \$6 million.

Loan offers must be officially accepted by the governing board of the loan recipient, and loan recipients must comply with all applicable state and federal requirements, including bidding requirements for involving minority and women-owned businesses in contracts, and Davis-Bacon Act provisions governing wages that must be paid by contractors.

Debt Service Comparison

	State Loan	Public Bond Market
Term	20 years	25 years
Average annual debt service	\$866,455	\$887,844 *
Total interest cost	\$2,497,098	\$8,491,088 *
Estimated interest cost savings compared to public bond market	\$5,993,990	Not Applicable

* Based on current market conditions

Staff Recommendation – Board Action Requested

This alternative financing strategy will help in our efforts to keep costs low and improve affordability. It will enable us to defer and/or reduce the size of our next revenue bond issue, which is currently planned for Fiscal Year 2019. Borrowing now at a low fixed interest rate will also help reduce our potential risks of having to pay higher interest rates when we go to the revenue bond market in the next few years.

Staff recommends accepting the state’s loan offers. Attached is a draft of a resolution accepting the six Loan Offer and Acceptance Documents and authorizing the Executive Director to execute the loan documents and do all things necessary for administering the loans.

Staff recommends approval of the resolution.



Stephen Winters, CPA
 Director of Finance and Customer Service

Attachments

Resolution Accepting North Carolina Division of Water Infrastructure’s Loan Offer and Acceptance Documents for Six Projects and Authorizing Executive Director to Execute and Administer Loan Offer and Acceptance Documents

Whereas, the Federal Clean Water Act Amendments of 1987, the 1996 Amendments to the Federal Safe Drinking Water Act, and the North Carolina Clean Water Revolving Loan and Grant Act of 1987, have authorized the state to make loans and grants to aid eligible units of government for financing water and/or wastewater utility improvements and studies; and

Whereas, the North Carolina Department of Environmental Quality has offered State Revolving Loans in the following amounts for the following water and wastewater utility system improvements:

- (a) \$6,132,000 Drinking Water State Revolving Fund loan for the Advanced Metering Infrastructure System project (Project #WIF-1930);
- (b) \$1,525,000 Drinking Water State Reserve Program loan for the Dobbins Drive Water Main Replacement project (Project #H-SRP-D-17-0021);
- (c) \$1,056,000 Drinking Water State Reserve loan for the Brandywine Road Water Main Rehabilitation project (Project #H-SRP-D-17-0012);
- (d) \$3,390,000 Drinking Water State Revolving Fund loan for the Jones Ferry Road Water Treatment Plant Sedimentation Basin Rehabilitation project (Project #WIF-1928);
- (e) \$1,658,000 Wastewater State Reserve Program loan for the Dobbins Drive Sewer Main Rehabilitation project (Project #E-SRP-W-17-0047);
- (f) \$1,071,000 Wastewater State Reserve Program loan for the Mason Farm Wastewater Treatment Plant Intermediate Pump Stations Rehabilitation project (Project #E-SRP-W-17-0049); and

Whereas, the Orange Water and Sewer Authority intends to construct said projects in accordance with the approved plans and specifications;

Now, Therefore, Be It Resolved:

1. That the Orange Water and Sewer Authority Board of Directors hereby accepts the following loan offer and acceptance documents, copies of which are attached to this resolution:

- (a) Loan Offer and Acceptance document for a \$6,132,000 Drinking Water State Revolving Fund loan for the Advanced Metering Infrastructure System project (Project #WIF-1930);
- (b) Loan Offer and Acceptance document for a \$1,525,000 Drinking Water State Reserve Program loan for the Dobbins Drive Water Main Replacement project (Project #H-SRP-D-17-0021);
- (c) Loan Offer and Acceptance document for a \$1,056,000 Drinking Water State Reserve loan for the Brandywine Road Water Main Rehabilitation project (Project #H-SRP-D-17-0012);

- (d) Loan Offer and Acceptance document for a \$3,390,000 Drinking Water State Revolving Fund loan for the Jones Ferry Road Water Treatment Plant Sedimentation Basin Rehabilitation project (Project #WIF-1928);
- (e) Loan Offer and Acceptance document for a \$1,658,000 Wastewater State Reserve Program loan for the Dobbins Drive Sewer Main Rehabilitation project (Project #E-SRP-W-17-0047); and
- (g) Loan Offer and Acceptance document for a \$1,071,000 Wastewater State Reserve Program loan for the Mason Farm Wastewater Treatment Plant Intermediate Pump Stations Rehabilitation project (Project #E-SRP-W-17-0049).

2. That the Orange Water and Sewer Authority hereby gives its assurance to the North Carolina Department of Environmental Quality that all items specified in the loan offers will be adhered to.

3. That the Board of Directors hereby designates the Executive Director as Orange Water and Sewer Authority's authorized representative for the above projects, and authorizes and directs the Executive Director to execute said Loan Offer and Acceptance Documents and to do all things necessary for the management and execution of the terms and conditions of said documents.

4. That the Orange Water and Sewer Authority has substantially complied or will substantially comply with all federal, state, and local laws, rules, regulations, and ordinances applicable to the above-specified projects and to federal and state loans pertaining thereto.

Adopted this 22nd day of February 2018.

Robert Morgan, Chair

ATTEST:

Yinka Ayankoya, Secretary

**STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF WATER INFRASTRUCTURE**

Funding Offer and Acceptance

Legal Name and Address of Award Recipient (Applicant)
Orange Water and Sewer Authority
400 Jones Ferry Road
Carrboro, North Carolina 27510

Project Number: H-LRX-F-17-1930
Project Number: N/A
CFDA Number: 66.468

Drinking Water	<input checked="" type="checkbox"/>	Additional Amount for	Previous Total	Total Offered
Wastewater	<input type="checkbox"/>	Funding Increases		
State Revolving Fund (SRF)	<input checked="" type="checkbox"/>			
State Reserve Loan (SRP)	<input type="checkbox"/>			
State Reserve Grant (SRP)	<input type="checkbox"/>			
State Emergency Loan (SEL)	<input type="checkbox"/>			
Asset Inventory & Assessment Grant (AIA)	<input type="checkbox"/>			
Merger/Regionalization Feasibility Grant (MRF)	<input type="checkbox"/>			

Project Description:

Replace/retrofit approx. 21,000 ex. water meters with proposed AMR-type water meters and appurtenances, to include radio-read registers and transmitters, the installation of a fixed-read network, necessary computer software, and so forth.

Total Financial Assistance Offer: \$6,132,000
Total Project Cost: \$6,252,000
Estimated Closing Fee*: \$122,640
For Loans
Principal Forgiveness: \$ - 0 -
Interest Rate: 1.53% Per Annum
Maximum Loan Term: 20 Years

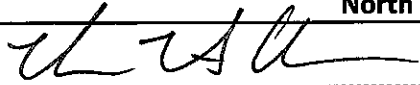
**Estimate closing fee calculated based on grant and loan amount.*

Pursuant to North Carolina General Statute 159G:

- The applicant is eligible under Federal and State law,
- The project is eligible under Federal and State law, and
- The project has been approved by the Department of Environmental Quality as having sufficient priority to receive financial assistance,

The Department of Environmental Quality, acting on behalf of the State of North Carolina, hereby offers the financial assistance described in this document.

For the State of North Carolina: **Kim H. Colson, P.E., Director, Division of Water Infrastructure
North Carolina Department of Environmental Quality**

 Signature	7/28/17 Date
--	-----------------

On Behalf of: **Orange Water and Sewer Authority**
Name of Representative in Resolution: **Mr. Ed Kerwin**
Title (Type or Print): **Executive Director**

I, the undersigned, being duly authorized to take such action, as evidenced by the attached CERTIFIED COPY OF AUTHORIZATION BY THE APPLICANT'S GOVERNING BODY, do hereby accept this Financial Award Offer and will comply with the Assurances and the Standard Conditions.

Signature	Date
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STANDARD CONDITIONS FOR FEDERAL SRF LOANS

1. The following "super cross-cutters" apply to SRF projects and may be found in the Public Policy Requirements section of the EPA General Terms and Conditions for each year's appropriation. This document can be found at www.epa.gov/ogd/tc.htm. Please note that nothing is submitted to the State's SRF program offices regarding compliance with these items.
 - (a) Title VI of the Civil Rights Act of 1964
 - (b) Section 504 of the Rehabilitation Act of 1973
 - (c) The Age Discrimination Act of 1975
 - (d) Section 13 of the Federal Water Pollution Control Act Amendments of 1972
2. Acquisition of Real Property must comply with all applicable provisions of the Uniform Relocation and Real Property Acquisition Policies Act of 1970 (PL 92-646), as amended. The Applicant shall certify it has or will have a fee simple, or such other estate or interest in the site of the project, including necessary easements and rights-of-way, to assure undisturbed use and possession for purposes of construction and operation for the estimated life of the project using a certification form provided by the Department of Environmental Quality (DEQ).
3. Specific MBE/WBE "disadvantaged businesses enterprise" (DBE) forms and instructions are provided, which are to be included in the contract specifications. These forms will assist with documenting positive efforts made by the Applicant, their consultant(s) and contractor(s) to utilize DBEs. Such efforts should allow DBEs the maximum feasible opportunity to compete for subagreements and subcontracts to be performed. Documentation of efforts made to utilize DBE firms must be maintained by the Applicant and their construction contractor(s), and made available upon request.
4. The Applicant shall comply fully with Subpart C of the Code of Federal Regulations (CFR), Chapter 2, Part 180, entitled, "Responsibilities of Participants Regarding Transactions Doing Business with Other Persons," as implemented and supplemented by 2 CFR Part 1532. The Applicant is responsible for ensuring that any lower-tier covered transaction, as described in Subpart B of 2 CFR Part 180, entitled "Covered Transactions," includes a term or condition requiring compliance with Subpart C. The Applicant is responsible for further requiring the inclusion of a similar term or condition in any subsequent lower-tier covered transactions. The Applicant may access suspension and debarment information at: <http://www.sam.gov>. This system allows applicants to perform searches determining whether an entity or individual is excluded from receiving Federal assistance.
5. The construction contract(s) require(s) the contractor to adhere to the Davis-Bacon and Related Acts Provisions and Procedures, as listed in the Code of Federal Regulations, Chapter 29, Part 5, Section 5 (29 CFR 5.5). Public Law pertaining to this is also enacted in Title 40, United States Code, Subtitle II Section 3141 through Section 3148.
6. As required by H.R. 3547, "Consolidated Appropriations Act, 2014" Section 436, Division G, Title IV, this project is subject to the federal "American Iron-and-Steel" provisions. The State provides detailed requirements, to be included in the construction contract specifications.

ASSURANCES

1. The Applicant intends to construct the project, or cause it to be constructed to final completion, in accordance with the Application approved for financial assistance by the Division of Water Infrastructure. The Applicant acknowledges that in the event a milestone contained within the most recent Drinking Water State Revolving Fund Intended Use Plan and/or the Letter of Intent to Fund is missed, the Department of Environmental Quality will rescind this Funding Award Offer.
2. The Applicant is responsible for paying for those costs that are ineligible for SRF funding.
3. The construction of the project, including the letting of contracts in connection therewith, conforms to the applicable requirements of State and local laws and ordinances.
4. As of the acceptance of this Funding Award Offer, Steps "A-D" in the "North Carolina SRF Program Overview and Guidance" (SRF Guidance Document enclosed with the Funding Award Offer) will be complete. These Assurances, likewise, incorporate the most recent version of the SRF Guidance Document, and the Applicant hereby certifies by accepting this Funding Award Offer that it will adhere to the subsequent steps in the SRF Guidance Document. The remaining steps generally govern project design, bidding, contracting, inspection, reimbursements, close-out and repayment.
5. The Applicant will provide and maintain adequate engineering supervision and inspection.
6. The Applicant agrees to establish and maintain a financial management system that adequately accounts for revenues and expenditures. Adequate accounting and fiscal records will be maintained during the construction of the project, and these records will be retained and made available for a period of at least three (3) years following completion of the project.
7. All SRF funds loaned shall be expended solely for carrying out the approved project, and an audit shall be performed in accordance with G.S. 159-34. Partial disbursements on this loan will be made promptly upon request, subject to adequate documentation of incurred eligible costs, and subject to the Applicant's compliance with the "Standard Conditions" of this Funding Award Offer. The Applicant agrees to make prompt payment to its contractor, and to retain only such amount as allowed by North Carolina General Statute.
8. The Applicant will expend all the requisitioned funds for the purpose of paying the costs of the project within three (3) banking days following the receipt of the funds from the State. Please note the State is not a party to the construction contract(s) and the Applicant is expected to uphold its contract obligations regarding timely payment.

Acknowledgement of Standard Conditions and Assurances

The Applicant hereby gives assurance to the Department of Environmental Quality that the declarations, assurances, representations, and statements made by the Applicant in the Application; and all documents, amendments, and communications filed with the Department of Environmental Quality by the Applicant in support of its request for financial assistance, will be fulfilled.

..... Signature Date
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**STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF WATER INFRASTRUCTURE**

Funding Offer and Acceptance

Legal Name and Address of Award Recipient

Project Number: H-SRP-D-17-0021

Orange Water and Sewer Authority
400 Jones Ferry Road
Carrboro, NC 27510

Drinking Water	<input checked="" type="checkbox"/>	Additional Amount for Funding Increases	Previous Total	Total Offered
Wastewater	<input type="checkbox"/>			
State Revolving Fund (SRF)	<input type="checkbox"/>			
State Reserve Loan (SRP)	<input checked="" type="checkbox"/>			\$ 1,525,000
State Reserve Grant (SRP)	<input type="checkbox"/>			
State Emergency Loan (SEL)	<input type="checkbox"/>			
Asset Inventory & Assessment Grant (AIA)	<input type="checkbox"/>			
Merger/Regionalization Feasibility Grant (MRF)	<input type="checkbox"/>			

Project Description:

Dobbins Drive Water Main Replacement

Total Financial Assistance Offer: \$ 1,525,000
Total Project Cost: \$ 1,525,000
Estimated Closing Fee*: \$ 30,500
For Loans
Principal Forgiveness: \$ _____
Interest Rate: 1.53% Per Annum
Maximum Loan Term: 20 Years


**Estimate closing fee calculated based on grant and loan amount.*

Pursuant to North Carolina General Statute 159G:

- The applicant is eligible under Federal and State law,
- The project is eligible under Federal and State law, and
- The project has been approved by the Department of Environmental Quality as having sufficient priority to receive financial assistance,

The Department of Environmental Quality, acting on behalf of the State of North Carolina, hereby offers the financial assistance described in this document.

For The State of North Carolina: **Kim H. Colson, P.E., Director, Division of Water Infrastructure**
North Carolina Department of Environmental Quality

 Signature	<u>8/3/17</u> Date
--	-----------------------

On Behalf of: Orange Water and Sewer Authority
 Name of Representative in Resolution: _____
 Title (Type or Print): _____

I, the undersigned, being duly authorized to take such action, as evidenced by the attached CERTIFIED COPY OF AUTHORIZATION BY THE APPLICANT'S GOVERNING BODY, do hereby accept this Financial Award Offer and will comply with the Assurances and the Standard Conditions.

_____ Signature	_____ Date
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STANDARD CONDITIONS & ASSURANCES FOR STATE RESERVE PROJECTS

1. Specific MBE/WBE (DBE) forms and instructions are provided that are to be included in the contract specifications. These forms will assist with documenting positive efforts made by recipients, their consultants and contractors to utilize disadvantaged businesses enterprises. Such efforts should allow DBEs the maximum feasible opportunity to compete for sub agreements and subcontracts to be performed. Documentation of efforts made to utilize DBE firms must be maintained by all recipients, and construction contractors, and made available upon request.
2. The Applicant intends to construct the project or cause it to be constructed to final completion in accordance with the Application approved for financial assistance by the Division. The recipient acknowledges that in the event a milestone contained in the Letter of Intent to Fund is missed, the Department of Environmental Quality will rescind this Funding Offer.
3. The Applicant is responsible for paying for the costs ineligible for State funding.
4. The construction of the project, including the letting of contracts in connection therewith, conforms to the applicable requirements of State and local laws and ordinances.
5. As of the acceptance of this Funding Award Offer, steps A-D in the Funding Guidance will be complete. These Assurances, likewise, incorporate the most recent version of the Funding Guidance, and the Applicant hereby certifies by accepting this Funding Award Offer that it will adhere to the subsequent steps in the Funding Guidance document. The remaining steps generally govern project design, bidding, contracting, inspection, reimbursements, closeout and repayment.
6. The Applicant will provide and maintain adequate engineering supervision and inspection.
7. The recipient agrees to establish and maintain a financial management system that adequately accounts for revenues and expenditures. Adequate accounting and fiscal records will be maintained during the construction of the project and these records will be retained and made available for a period of at least three years following completion of the project.
8. All State funds loaned shall be expended solely for carrying out the approved project, and an audit shall be performed in accordance with G.S. 159-34. Partial disbursements on this loan will be made promptly upon request, subject to adequate documentation of incurred eligible costs, and subject to the recipient's compliance with the Standard Conditions of this Award. The Applicant agrees to make prompt payment to its contractor, and to retain only such amount as allowed by North Carolina General Statute.
9. The applicant will expend all of the requisitioned funds for the purpose of paying the costs of the project within three (3) banking days following the receipt of the funds from the State. Please note that the State is not a party to the construction contract(s) and the Applicant is expected to uphold its contract obligations regarding timely payment.

Acknowledgement of Standard Conditions and Assurances

The Applicant hereby gives assurance to the Department of Environmental Quality that the declarations, assurances, representations, and statements made by the Applicant in the Application; and all documents, amendments, and communications filed with the Department of Environmental Quality by the Applicant in support of its request for financial assistance will be fulfilled.

.....
Signature

.....
Date

**STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF WATER INFRASTRUCTURE**

Funding Offer and Acceptance

Legal Name and Address of Award Recipient

Project Number:

H-SRP-D-17-0012

Orange Water and Sewer Authority
400 Jones Ferry Road
Carrboro, NC 27510

Drinking Water	<input checked="" type="checkbox"/>	Additional Amount for Funding Increases	Previous Total	Total Offered
Wastewater	<input type="checkbox"/>			
State Revolving Fund (SRF)	<input type="checkbox"/>			
State Reserve Loan (SRP)	<input checked="" type="checkbox"/>			\$ 1,056,000
State Reserve Grant (SRP)	<input type="checkbox"/>			
State Emergency Loan (SEL)	<input type="checkbox"/>			
Asset Inventory & Assessment Grant (AIA)	<input type="checkbox"/>			
Merger/Regionalization Feasibility Grant (MRF)	<input type="checkbox"/>			

Project Description:

Brandywine Road Water Main Rehabilitation

Total Financial Assistance Offer:

\$ 1,056,000

Total Project Cost:

\$ 1,056,000

Estimated Closing Fee*:

\$ 21,120

For Loans

Principal Forgiveness:

\$ _____

Interest Rate:

1.53% Per Annum

Maximum Loan Term:

20 Years

**Estimate closing fee calculated based on grant and loan amount.*

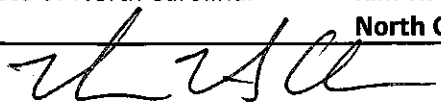
Pursuant to North Carolina General Statute 159G:

- The applicant is eligible under Federal and State law,
- The project is eligible under Federal and State law, and
- The project has been approved by the Department of Environmental Quality as having sufficient priority to receive financial assistance,

The Department of Environmental Quality, acting on behalf of the State of North Carolina, hereby offers the financial assistance described in this document.

For The State of North Carolina:

**Kim H. Colson, P.E., Director, Division of Water Infrastructure
North Carolina Department of Environmental Quality**

 _____ Signature	8/3/17 _____ Date
---	-------------------------

On Behalf of:

Orange Water and Sewer Authority

Name of Representative in Resolution: _____

Title (Type or Print): _____

I, the undersigned, being duly authorized to take such action, as evidenced by the attached CERTIFIED COPY OF AUTHORIZATION BY THE APPLICANT'S GOVERNING BODY, do hereby accept this Financial Award Offer and will comply with the Assurances and the Standard Conditions.

_____ Signature	_____ Date
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STANDARD CONDITIONS & ASSURANCES FOR STATE RESERVE PROJECTS

1. Specific MBE/WBE (DBE) forms and instructions are provided that are to be included in the contract specifications. These forms will assist with documenting positive efforts made by recipients, their consultants and contractors to utilize disadvantaged businesses enterprises. Such efforts should allow DBEs the maximum feasible opportunity to compete for sub agreements and subcontracts to be performed. Documentation of efforts made to utilize DBE firms must be maintained by all recipients, and construction contractors, and made available upon request.
2. The Applicant intends to construct the project or cause it to be constructed to final completion in accordance with the Application approved for financial assistance by the Division.
The recipient acknowledges that in the event a milestone contained in the Letter of Intent to Fund is missed, the Department of Environmental Quality will rescind this Funding Offer.
3. The Applicant is responsible for paying for the costs ineligible for State funding.
4. The construction of the project, including the letting of contracts in connection therewith, conforms to the applicable requirements of State and local laws and ordinances.
5. As of the acceptance of this Funding Award Offer, steps A-D in the Funding Guidance will be complete. These Assurances, likewise, incorporate the most recent version of the Funding Guidance, and the Applicant hereby certifies by accepting this Funding Award Offer that it will adhere to the subsequent steps in the Funding Guidance document. The remaining steps generally govern project design, bidding, contracting, inspection, reimbursements, closeout and repayment.
6. The Applicant will provide and maintain adequate engineering supervision and inspection.
7. The recipient agrees to establish and maintain a financial management system that adequately accounts for revenues and expenditures. Adequate accounting and fiscal records will be maintained during the construction of the project and these records will be retained and made available for a period of at least three years following completion of the project.
8. All State funds loaned shall be expended solely for carrying out the approved project, and an audit shall be performed in accordance with G.S. 159-34. Partial disbursements on this loan will be made promptly upon request, subject to adequate documentation of incurred eligible costs, and subject to the recipient's compliance with the Standard Conditions of this Award. The Applicant agrees to make prompt payment to its contractor, and to retain only such amount as allowed by North Carolina General Statute.
9. The applicant will expend all of the requisitioned funds for the purpose of paying the costs of the project within three (3) banking days following the receipt of the funds from the State. Please note that the State is not a party to the construction contract(s) and the Applicant is expected to uphold its contract obligations regarding timely payment.

Acknowledgement of Standard Conditions and Assurances

The Applicant hereby gives assurance to the Department of Environmental Quality that the declarations, assurances, representations, and statements made by the Applicant in the Application; and all documents, amendments, and communications filed with the Department of Environmental Quality by the Applicant in support of its request for financial assistance will be fulfilled.

..... Signature Date
--------------------	---------------

**STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF WATER INFRASTRUCTURE**

Funding Offer and Acceptance

Legal Name and Address of Award Recipient (Applicant)

Orange Water and Sewer Authority
400 Jones Ferry Road
Carrboro NC 27510

Project Number:

H-LRX-F-17-1928

Project Number:

N/A

CFDA Number:

66.468

Funding Program

Drinking Water	<input checked="" type="checkbox"/>	Additional Amount for Funding Increases	Previous Total	Total Offered
Wastewater	<input type="checkbox"/>			
State Revolving Fund (SRF)	<input checked="" type="checkbox"/>			
State Reserve Loan (SRP)	<input type="checkbox"/>			
State Reserve Grant (SRP)	<input type="checkbox"/>			
State Emergency Loan (SEL)	<input type="checkbox"/>			
Asset Inventory & Assessment Grant (AIA)	<input type="checkbox"/>			
Merger/Regionalization Feasibility Grant (MRF)	<input type="checkbox"/>			

Project Description:

Rehabilitate sedimentation basins at the Jones Ferry Road WTP by: 1) Replacing the influent channel top slab; 2) Remove the softened concrete from the walls and resurface with mortar; 3) Install a concrete coating on all interior wall surfaces; and 4) Replace the basins' influent and effluent channel mud valves and associated piping.

Total Financial Assistance Offer:

\$3,390,000

Total Project Cost:

\$3,456,000

Estimated Closing Fee*:

\$67,800

For Loans

Principal Forgiveness:

\$ - 0 -

Interest Rate:

1.53%PerAnnum

Maximum Loan Term:

20 Years

**Estimate closing fee calculated based on grant and loan amount.*

Pursuant to North Carolina General Statute 159G:

- The applicant is eligible under Federal and State law,
- The project is eligible under Federal and State law, and
- The project has been approved by the Department of Environmental Quality as having sufficient priority to receive financial assistance,

The Department of Environmental Quality, acting on behalf of the State of North Carolina, hereby offers the financial assistance described in this document.

For The State of North Carolina:

**Kim H. Colson, P.E., Director, Division of Water Infrastructure
North Carolina Department of Environmental Quality**

Signature: [Handwritten Signature] Date: 9/21/17

On Behalf of:

Orange Water and Sewer Authority

Name of Representative in Resolution:

Mr. Ed Kerwin

Title (Type or Print):

Executive Director

I, the undersigned, being duly authorized to take such action, as evidenced by the attached CERTIFIED COPY OF AUTHORIZATION BY THE APPLICANT'S GOVERNING BODY, do hereby accept this Financial Award Offer and will comply with the Assurances and the Standard Conditions.

Signature: _____ Date: _____

STANDARD CONDITIONS FOR FEDERAL SRF LOANS

1. The following "super cross-cutters" apply to SRF projects and may be found in the Public Policy Requirements section of the EPA General Terms and Conditions for each year's appropriation. This document can be found at www.epa.gov/ogd/tc.htm. Please note that nothing is submitted to the State's SRF program offices regarding compliance with these items.
 - (a) Title VI of the Civil Rights Act of 1964
 - (b) Section 504 of the Rehabilitation Act of 1973
 - (c) The Age Discrimination Act of 1975
 - (d) Section 13 of the Federal Water Pollution Control Act Amendments of 1972
2. Acquisition of Real Property must comply with all applicable provisions of the Uniform Relocation and Real Property Acquisition Policies Act of 1970 (PL 92-646), as amended. The Applicant shall certify it has or will have a fee simple, or such other estate or interest in the site of the project, including necessary easements and rights-of-way, to assure undisturbed use and possession for purposes of construction and operation for the estimated life of the project using a certification form provided by the Department of Environmental Quality (DEQ).
3. Specific MBE/WBE "disadvantaged businesses enterprise" (DBE) forms and instructions are provided, which are to be included in the contract specifications. These forms will assist with documenting positive efforts made by the Applicant, their consultant(s) and contractor(s) to utilize DBEs. Such efforts should allow DBEs the maximum feasible opportunity to compete for subagreements and subcontracts to be performed. Documentation of efforts made to utilize DBE firms must be maintained by the Applicant and their construction contractor(s), and made available upon request.
4. The Applicant shall comply fully with Subpart C of the Code of Federal Regulations (CFR), Chapter 2, Part 180, entitled, "Responsibilities of Participants Regarding Transactions Doing Business with Other Persons," as implemented and supplemented by 2 CFR Part 1532. The Applicant is responsible for ensuring that any lower-tier covered transaction, as described in Subpart B of 2 CFR Part 180, entitled "Covered Transactions," includes a term or condition requiring compliance with Subpart C. The Applicant is responsible for further requiring the inclusion of a similar term or condition in any subsequent lower-tier covered transactions. The Applicant may access suspension and debarment information at: <http://www.sam.gov>. This system allows applicants to perform searches determining whether an entity or individual is excluded from receiving Federal assistance.
5. The construction contract(s) require(s) the contractor to adhere to the Davis-Bacon and Related Acts Provisions and Procedures, as listed in the Code of Federal Regulations, Chapter 29, Part 5, Section 5 (29 CFR 5.5). Public Law pertaining to this is also enacted in Title 40, United States Code, Subtitle II Section 3141 through Section 3148.
6. As required by H.R. 3547, "Consolidated Appropriations Act, 2014" Section 436, Division G, Title IV, this project is subject to the federal "American Iron-and-Steel" provisions. The State provides detailed requirements, to be included in the construction contract specifications.

ASSURANCES

1. The Applicant intends to construct the project, or cause it to be constructed to final completion, in accordance with the Application approved for financial assistance by the Division of Water Infrastructure. The Applicant acknowledges that in the event a milestone contained within the most recent Drinking Water State Revolving Fund Intended Use Plan and/or the Letter of Intent to Fund is missed, the Department of Environmental Quality will rescind this Funding Award Offer.
2. The Applicant is responsible for paying for those costs that are ineligible for SRF funding.
3. The construction of the project, including the letting of contracts in connection therewith, conforms to the applicable requirements of State and local laws and ordinances.
4. As of the acceptance of this Funding Award Offer, Steps "A-D" in the "North Carolina SRF Program Overview and Guidance" (SRF Guidance Document enclosed with the Funding Award Offer) will be complete. These Assurances, likewise, incorporate the most recent version of the SRF Guidance Document, and the Applicant hereby certifies by accepting this Funding Award Offer that it will adhere to the subsequent steps in the SRF Guidance Document. The remaining steps generally govern project design, bidding, contracting, inspection, reimbursements, close-out and repayment.
5. The Applicant will provide and maintain adequate engineering supervision and inspection.
6. The Applicant agrees to establish and maintain a financial management system that adequately accounts for revenues and expenditures. Adequate accounting and fiscal records will be maintained during the construction of the project, and these records will be retained and made available for a period of at least three (3) years following completion of the project.
7. All SRF funds loaned shall be expended solely for carrying out the approved project, and an audit shall be performed in accordance with G.S. 159-34. Partial disbursements on this loan will be made promptly upon request, subject to adequate documentation of incurred eligible costs, and subject to the Applicant's compliance with the "Standard Conditions" of this Funding Award Offer. The Applicant agrees to make prompt payment to its contractor, and to retain only such amount as allowed by North Carolina General Statute.
8. The Applicant will expend all the requisitioned funds for the purpose of paying the costs of the project within three (3) banking days following the receipt of the funds from the State. Please note the State is not a party to the construction contract(s) and the Applicant is expected to uphold its contract obligations regarding timely payment.

Acknowledgement of Standard Conditions and Assurances

The Applicant hereby gives assurance to the Department of Environmental Quality that the declarations, assurances, representations, and statements made by the Applicant in the Application; and all documents, amendments, and communications filed with the Department of Environmental Quality by the Applicant in support of its request for financial assistance, will be fulfilled.

..... Signature Date
--------------------	---------------

**STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF WATER INFRASTRUCTURE**

Funding Offer and Acceptance

Legal Name and Address of Award Recipient

Project Number:

E-SRP-W-17-0047

Orange Water and Sewer Authority
400 Jones Ferry Road
Carrboro, North Carolina 27510

Drinking Water	<input type="checkbox"/>	Additional Amount for Funding Increases	Previous Total	Total Offered
Wastewater	<input checked="" type="checkbox"/>			
State Revolving Fund (SRF)	<input type="checkbox"/>			
State Reserve Loan (SRP)	<input checked="" type="checkbox"/>			\$ 1,658,000
State Reserve Grant (SRP)	<input type="checkbox"/>			
State Emergency Loan (SEL)	<input type="checkbox"/>			
Asset Inventory & Assessment Grant (AIA)	<input type="checkbox"/>			
Merger/Regionalization Feasibility Grant (MRF)	<input type="checkbox"/>			

Project Description:

Dobbins Drive Sewer Main Rehabilitation

Total Financial Assistance Offer:

\$ 1,658,000

Total Project Cost:

\$ 1,691,000

Estimated Closing Fee*:

\$ 33,160

For Loans

Principal Forgiveness:

\$ 0

Interest Rate:

1.53 % Per Annum

Maximum Loan Term:

20 Years

**Estimate closing fee calculated based on grant and loan amount.*

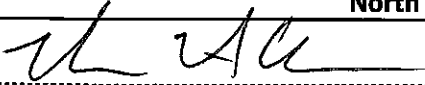
Pursuant to North Carolina General Statute 159G:

- The applicant is eligible under Federal and State law,
- The project is eligible under Federal and State law, and
- The project has been approved by the Department of Environmental Quality as having sufficient priority to receive financial assistance,

The Department of Environmental Quality, acting on behalf of the State of North Carolina, hereby offers the financial assistance described in this document.

For The State of North Carolina:

**Kim H. Colson, P.E., Director, Division of Water Infrastructure
North Carolina Department of Environmental Quality**

 Signature	9/14/17 Date
--	-----------------

On Behalf of:

Orange Water and Sewer Authority

Name of Representative in Resolution:

Title (Type or Print):

I, the undersigned, being duly authorized to take such action, as evidenced by the attached CERTIFIED COPY OF AUTHORIZATION BY THE APPLICANT'S GOVERNING BODY, do hereby accept this Financial Award Offer and will comply with the Assurances and the Standard Conditions.

Signature	Date
-----------	------

STANDARD CONDITIONS & ASSURANCES FOR STATE RESERVE PROJECTS

- 1. Specific MBE/WBE (DBE) forms and instructions are provided that are to be included in the contract specifications. These forms will assist with documenting positive efforts made by recipients, their consultants and contractors to utilize disadvantaged businesses enterprises. Such efforts should allow DBEs the maximum feasible opportunity to compete for sub agreements and subcontracts to be performed. Documentation of efforts made to utilize DBE firms must be maintained by all recipients, and construction contractors, and made available upon request.
- 2. The Applicant intends to construct the project or cause it to be constructed to final completion in accordance with the Application approved for financial assistance by the Division.
The recipient acknowledges that in the event a milestone contained in the Letter of Intent to Fund is missed, the Department of Environmental Quality will rescind this Funding Offer.
- 3. The Applicant is responsible for paying for the costs ineligible for State funding.
- 4. The construction of the project, including the letting of contracts in connection therewith, conforms to the applicable requirements of State and local laws and ordinances.
- 5. As of the acceptance of this Funding Award Offer, steps A-D in the Funding Guidance will be complete. These Assurances, likewise, incorporate the most recent version of the Funding Guidance, and the Applicant hereby certifies by accepting this Funding Award Offer that it will adhere to the subsequent steps in the Funding Guidance document. The remaining steps generally govern project design, bidding, contracting, inspection, reimbursements, closeout and repayment.
- 6. The Applicant will provide and maintain adequate engineering supervision and inspection.
- 7. The recipient agrees to establish and maintain a financial management system that adequately accounts for revenues and expenditures. Adequate accounting and fiscal records will be maintained during the construction of the project and these records will be retained and made available for a period of at least three years following completion of the project.
- 8. All State funds loaned shall be expended solely for carrying out the approved project, and an audit shall be performed in accordance with G.S. 159-34. Partial disbursements on this loan will be made promptly upon request, subject to adequate documentation of incurred eligible costs, and subject to the recipient's compliance with the Standard Conditions of this Award. The Applicant agrees to make prompt payment to its contractor, and to retain only such amount as allowed by North Carolina General Statute.
- 9. The applicant will expend all of the requisitioned funds for the purpose of paying the costs of the project within three (3) banking days following the receipt of the funds from the State. Please note that the State is not a party to the construction contract(s) and the Applicant is expected to uphold its contract obligations regarding timely payment.

Acknowledgement of Standard Conditions and Assurances

The Applicant hereby gives assurance to the Department of Environmental Quality that the declarations, assurances, representations, and statements made by the Applicant in the Application; and all documents, amendments, and communications filed with the Department of Environmental Quality by the Applicant in support of its request for financial assistance will be fulfilled.

<p>.....</p> <p>Signature</p>	<p>.....</p> <p>Date</p>
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**STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF WATER INFRASTRUCTURE**

Funding Offer and Acceptance

Legal Name and Address of Award Recipient

Project Number: E-SRP-W-17-0049

Orange Water and Sewer Authority
400 Jones Ferry Road
Carrboro, North Carolina 27510

Drinking Water	<input type="checkbox"/>	Additional Amount for Funding Increases	Previous Total	Total Offered
Wastewater	<input checked="" type="checkbox"/>			
State Revolving Fund (SRF)	<input type="checkbox"/>			
State Reserve Loan (SRP)	<input checked="" type="checkbox"/>			\$ 1,071,000
State Reserve Grant (SRP)	<input type="checkbox"/>			
State Emergency Loan (SEL)	<input type="checkbox"/>			
Asset Inventory & Assessment Grant (AIA)	<input type="checkbox"/>			
Merger/Regionalization Feasibility Grant (MRF)	<input type="checkbox"/>			

Project Description:

WWTP Intermediate Pump Stations
Rehabilitation

Total Financial Assistance Offer: **\$ 1,071,000**
Total Project Cost: **\$ 1,092,000**
Estimated Closing Fee*: **\$ 21,420**
For Loans
Principal Forgiveness: **\$ 0**
Interest Rate: **1.53% Per Annum**
Maximum Loan Term: **20 Years**

**Estimate closing fee calculated based on grant and loan amount.*

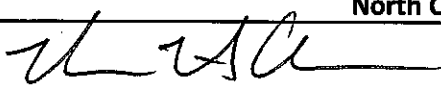
Pursuant to North Carolina General Statute 159G:

- The applicant is eligible under Federal and State law,
- The project is eligible under Federal and State law, and
- The project has been approved by the Department of Environmental Quality as having sufficient priority to receive financial assistance,

The Department of Environmental Quality, acting on behalf of the State of North Carolina, hereby offers the financial assistance described in this document.

For The State of North Carolina:

**Kim H. Colson, P.E., Director, Division of Water Infrastructure
North Carolina Department of Environmental Quality**

 Signature	9/14/17 Date
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On Behalf of:

Orange Water and Sewer Authority

Name of Representative in Resolution:

Title (Type or Print):

I, the undersigned, being duly authorized to take such action, as evidenced by the attached CERTIFIED COPY OF AUTHORIZATION BY THE APPLICANT'S GOVERNING BODY, do hereby accept this Financial Award Offer and will comply with the Assurances and the Standard Conditions.

Signature	Date
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STANDARD CONDITIONS & ASSURANCES FOR STATE RESERVE PROJECTS

1. Specific MBE/WBE (DBE) forms and instructions are provided that are to be included in the contract specifications. These forms will assist with documenting positive efforts made by recipients, their consultants and contractors to utilize disadvantaged businesses enterprises. Such efforts should allow DBEs the maximum feasible opportunity to compete for sub agreements and subcontracts to be performed. Documentation of efforts made to utilize DBE firms must be maintained by all recipients, and construction contractors, and made available upon request.
2. The Applicant intends to construct the project or cause it to be constructed to final completion in accordance with the Application approved for financial assistance by the Division. The recipient acknowledges that in the event a milestone contained in the Letter of Intent to Fund is missed, the Department of Environmental Quality will rescind this Funding Offer.
3. The Applicant is responsible for paying for the costs ineligible for State funding.
4. The construction of the project, including the letting of contracts in connection therewith, conforms to the applicable requirements of State and local laws and ordinances.
5. As of the acceptance of this Funding Award Offer, steps A-D in the Funding Guidance will be complete. These Assurances, likewise, incorporate the most recent version of the Funding Guidance, and the Applicant hereby certifies by accepting this Funding Award Offer that it will adhere to the subsequent steps in the Funding Guidance document. The remaining steps generally govern project design, bidding, contracting, inspection, reimbursements, closeout and repayment.
6. The Applicant will provide and maintain adequate engineering supervision and inspection.
7. The recipient agrees to establish and maintain a financial management system that adequately accounts for revenues and expenditures. Adequate accounting and fiscal records will be maintained during the construction of the project and these records will be retained and made available for a period of at least three years following completion of the project.
8. All State funds loaned shall be expended solely for carrying out the approved project, and an audit shall be performed in accordance with G.S. 159-34. Partial disbursements on this loan will be made promptly upon request, subject to adequate documentation of incurred eligible costs, and subject to the recipient's compliance with the Standard Conditions of this Award. The Applicant agrees to make prompt payment to its contractor, and to retain only such amount as allowed by North Carolina General Statute.
9. The applicant will expend all of the requisitioned funds for the purpose of paying the costs of the project within three (3) banking days following the receipt of the funds from the State. Please note that the State is not a party to the construction contract(s) and the Applicant is expected to uphold its contract obligations regarding timely payment.

Acknowledgement of Standard Conditions and Assurances

The Applicant hereby gives assurance to the Department of Environmental Quality that the declarations, assurances, representations, and statements made by the Applicant in the Application; and all documents, amendments, and communications filed with the Department of Environmental Quality by the Applicant in support of its request for financial assistance will be fulfilled.

.....
Signature

.....
Date

Agenda Item

- Resolutions in Preparation of the Issuance of Series 2018 Water and Sewer Revenue Refunding Bonds
 - A. Resolution directing the filing of an application with the North Carolina Local Government Commission for approval of the issuance and private sale of Orange Water and Sewer Authority Water and Sewer System Revenue Refunding Bonds, Series 2018
 - B. Resolution requesting the North Carolina Local Government Commission to approve the financing team to be used in connection with the issuance and sale of Orange Water and Sewer Authority Water and Sewer System Revenue Refunding Bonds, Series 2018

Purpose

- To seek Board approval of the resolutions required in connection with the issuance of refunding bonds.

Background

- OWASA's outstanding bond debt is approximately \$63 million.
- Due to market conditions, OWASA has an opportunity to potentially reduce interest costs and its annual debt service obligations and reduce risk by refunding our outstanding Series 2004B bonds.
- The Board of Directors must approve and direct the filing of an application with the North Carolina Local Government Commission (LGC) for the approval of the issuance of revenue bonds, and must request approval of the financing team.
- The anticipated date of LGC approval of OWASA's refunding bond issues is April 3, 2018.
- Staff plans to use a competitive underwriting. Rather than engage a specific underwriter throughout the process, financial institutions will bid for the underwriting services when the bonds are offered for sale.

Action Needed

- Approval of the above resolutions directing the filing of the application with the LGC and requesting LGC approval of the financing team.



ORANGE WATER AND SEWER AUTHORITY

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

MEMORANDUM

TO: Board of Directors

THROUGH: Ed Kerwin *EK*

FROM: Stephen Winters, CPA

DATE: February 16, 2018

SUBJECT: Resolutions in Preparation of the Issuance of Series 2018 Water and Sewer Revenue Refunding Bonds

Background

In our effort to address service affordability, we continually look for ways to reduce costs and/or risk. One of our practices is to regularly monitor the bond market and evaluate opportunities to reduce our interest costs. Based on estimated current market conditions, we have an opportunity to potentially reduce interest costs and annual debt service obligations, as well as eliminate certain risks, by refunding our outstanding Series 2004B variable rate bonds with fixed rate bonds.

In 2004, OWASA issued about \$45 million in revenue bonds. \$20 million of the bonds were issued as variable rate bonds given that variable rates were lower than long term fixed rates at the time of issuance. This turned out to be advantageous for the organization. Interest rates have been at historic lows for a significant part of the time these bonds have been outstanding; this has resulted in significant interest cost savings compared to what we would have paid on fixed interest rate bonds.

Interest rates on our variable rate bonds have recently begun to increase. While rates are still low, averaging approximately 1.25% during the month of January, they got as high as 1.75% for a week in December. In addition, with the passage of time, the 2004B bonds that were originally issued to mature towards the end of a 25-year financing term, now mature over the next 10 years where we can take advantage of shorter term fixed rates.

Bond Market Interest Rates

The most important factor in deciding whether we should refund our variable rate bonds is the outlook for interest rates. Since interest rates are low and the economy seems to be improving, some are predicting that both fixed and variable interest rates will rise over the next several years. The Federal Reserve last raised its benchmark interest rate in December 2017 and officials have indicated that additional increases should be expected in 2018; this will have a direct impact on the variable rates we pay on the 2004B Bonds. However, these are only predictions, not assurances of what will happen.

The following table illustrates the potential debt service savings (or costs) that we could realize by refunding our variable rate bonds with fixed rate bonds using different assumptions on what underlying variable rates may do in the future.

Scenario No.	Assumed Interest Rate Scenario	Assumed Max Rate – Reached in	Potential Savings from Refunding		
			Net Present Value Percent Savings	Total Savings	Net Present Value Savings
1	Rate increases of 50 basis points in each of the next four years	3% - FY 2021	3.1%	\$794,000	\$616,000
2	Rate increases of 25 basis points in each of the next seven years	3% - FY 2024	0.5%	\$202,000	\$91,000
3*	Four rate increases of 25 basis points over the next seven years	2.5% - FY 2024	(1.0%)	(\$206,000)	(\$148,000)

* Negative numbers indicate additional costs.

Most of the costs associated with the issuing the bonds are incurred only if the deal ultimately goes through. If the market moves against us to the point that it does not make sense to go through with the refunding, none of the service providers will be compensated other than the three ratings agencies, which charge fees of about \$22,500 each. To avoid incurring ratings agency fees, we would need to cancel the transaction by mid-March 2018.

As with any financing transaction such as this, we will work with the North Carolina Local Government Commission (LGC) to obtain its approval.

Risk Reduction

In addition to potentially providing debt service savings, a fixed rate refunding would also allow us to eliminate the risks associated with variable rate bonds. These include the risk that interest rates will rise in the future; once fixed rate bonds are issued, interest rates are locked-in for the future.

We would also eliminate risks unique to variable rate bonds. We have managed these risks effectively to-date, and we expect to be able to continue do so in the future. However, this refunding is an opportunity to eliminate these risks altogether while also potentially reducing our interest costs.

Resolutions

The Series 2004B bonds will be refunded by the issuance of the Series 2018 Bonds. Three resolutions must be adopted in order for the borrowing process to proceed. These resolutions accomplish the following:

- **Authorize staff to apply to the LGC for approval of the bond issue**

G.S. 159-51 states that “no bonds may be issued...unless the issue is approved by the Local Government Commission. The governing board of the issuing unit shall file an application for approval of the issue with the Secretary of the Commission.”

- **Request LGC approval of our selected financing team**

While not required by statute, it is the administrative policy of the LGC to approve the selection of the financing team. The financing team is typically comprised of bond counsel, bond trustee, financial advisor, and others depending on the issue.

Staff plans to use a competitive underwriting. Rather than engage a specific underwriter throughout the process, financial institutions will bid for the underwriting services when the bonds are offered for sale.

Based on our satisfaction with services rendered in connection with previous bond issues, staff recommends the firm of McGuireWoods LLP to serve as bond counsel. Kevin Dougherty of McGuireWoods has served OWASA in this capacity for our bond issues dating back to 2001. Mr. Dougherty also rewrote and streamlined our bond order in 2001 and has significant knowledge of our operations.

The Bank of New York Mellon Trust Company has provided competent trustee services for OWASA commencing with the Series 1993 issue. To preserve continuity in trustee services, staff recommends that the Bank of New York Mellon Trust Company continue to serve as our bond trustee.

Based on prior consultation services provided to OWASA regarding bonds and other financial instruments, staff recommends First Tryon Advisors to serve as financial advisor. In addition to serving in this capacity, David Cheatwood of First Tryon also assisted OWASA in issuing its Series 2010, 2014 and 2015 bond refundings.

- **Series Resolutions**

In accordance with Section 2.08 of OWASA's Bond Order dated September 13, 2001, the final formal action the Board of Directors must take to issue the bonds will be to adopt the Series 2018 Bonds Resolutions. This is scheduled for the Board Meeting on March 22, 2018.

Action Requested

Approve resolutions in preparation of the issuance of Series 2018 Water and Sewer Revenue Refunding Bonds.



Stephen Winters, CPA
Director of Finance and Customer Service

Attachments: Resolutions

RESOLUTION DIRECTING THE FILING OF AN APPLICATION WITH THE NORTH CAROLINA LOCAL GOVERNMENT COMMISSION FOR APPROVAL OF THE ISSUANCE AND PUBLIC SALE OF ORANGE WATER AND SEWER AUTHORITY WATER AND SEWER SYSTEM REVENUE REFUNDING BONDS, SERIES 2018

WHEREAS, the Orange Water and Sewer Authority (“OWASA”), acting by and through its Board of Directors (the “Board”), is authorized by The State and Local Government Revenue Bond Act of North Carolina, Article 5 of Chapter 159 of the North Carolina General Statutes, as amended (the “Act”), and particularly Sections 159-83(a)(5) and 159-81(3)a and b thereof, to issue revenue bonds for the purpose of financing the cost of acquisition, construction, reconstruction, enlargement, equipping, extension, betterment or improvement of facilities for obtaining, conserving, treating and distributing water for domestic or industrial use, irrigation, sanitation, fire protection, or any other public or private use and the collection, treatment, purification or disposal of sewage and to refund revenue bonds issued for such purposes; and

WHEREAS, OWASA owns and operates facilities for the production, collection, treatment, transmission and distribution of water and the collection, transmission, treatment and disposal of sewage; and

WHEREAS, OWASA proposes to issue its Water and Sewer System Revenue Refunding Bonds, Series 2018 (the “Series 2018 Bonds”) for the purpose of providing funds, together with other available funds, to (i) refund all of OWASA’s outstanding Water and Sewer System Revenue Bonds, Series 2004B (the “Series 2004B Bonds”) and (ii) pay certain costs and expenses incurred in connection with the issuance of the Series 2018 Bonds; and

WHEREAS, OWASA proposes to issue the Series 2018 Bonds in an aggregate principal amount not to exceed \$21,000,000, the determination of the aggregate principal amount of the Series 2018 Bonds to be made at the time of the public sale of the Series 2018 Bonds;

NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE ORANGE WATER AND SEWER AUTHORITY DOES HEREBY DETERMINE AND RESOLVE, as follows:

1. The Board hereby finds and determines, in connection with the issuance of the Series 2018 Bonds, that (i) the issuance of the Series 2018 Bonds is necessary or expedient for OWASA, (ii) the proposed aggregate principal amount of the Series 2018 Bonds is adequate and not excessive for the proposed purposes of such issue, (iii) the refunding of the Series 2004B Bonds to be effectuated by the issuance of the Series 2018 Bonds is feasible, (iv) OWASA's debt management procedures and policies are good and OWASA's finances are managed in strict compliance with law and (v) under current economic conditions, the Series 2018 Bonds can be marketed at a reasonable interest cost to OWASA.

2. The Board hereby authorizes the filing of an application with the Local Government Commission for approval of the issuance of the Series 2018 Bonds, in an aggregate principal amount not to exceed \$21,000,000, pursuant to Section 159-86 of the Act and directs the Executive Director of OWASA and the Director of Finance and Customer Service of OWASA, as representatives of OWASA, to file such application with the Local Government Commission.

3. The Local Government Commission is hereby requested to sell the Series 2018 Bonds at public sale after advertisement and upon sealed and electronic bids to the bidder offering to purchase the Series 2018 Bonds at the lowest interest cost to OWASA, such cost to be determined in accordance with the true interest cost method, subject to the right of OWASA to change, cancel or reschedule the date or time established for the receipt of bids.

4. This resolution shall take effect immediately upon its passage.

Adopted this 22nd day of February, 2018.

Robert Morgan, Chair

ATTEST:

Yinka Ayankoya, Secretary

RESOLUTION REQUESTING THE NORTH CAROLINA LOCAL GOVERNMENT COMMISSION TO APPROVE THE FINANCING TEAM TO BE USED IN CONNECTION WITH THE ISSUANCE AND SALE OF ORANGE WATER AND SEWER AUTHORITY WATER AND SEWER SYSTEM REVENUE REFUNDING BONDS, SERIES 2018

WHEREAS, the Orange Water and Sewer Authority (“OWASA”), acting by and through its Board of Directors (the “Board”), is authorized by The State and Local Government Revenue Bond Act of North Carolina, Article 5 of Chapter 159 of the North Carolina General Statutes, as amended (the “Act”), and particularly Sections 159-83(a)(5) and 159-81(3)a and b thereof, to issue revenue bonds for the purpose of financing the cost of acquisition, construction, reconstruction, enlargement, equipping, extension, betterment or improvement of facilities for obtaining, conserving, treating and distributing water for domestic or industrial use, irrigation, sanitation, fire protection, or any other public or private use and the collection, treatment, purification or disposal of sewage and to refund revenue bonds issued for such purposes; and

WHEREAS, OWASA owns and operates facilities for the production, collection, treatment, transmission and distribution of water and the collection, transmission, treatment and disposal of sewage; and

WHEREAS, OWASA proposes to issue its Water and Sewer System Revenue Refunding Bonds, Series 2018 (the “Series 2018 Bonds”) for the purpose of providing funds, together with other available funds, to (i) refund all of OWASA’s outstanding Water and Sewer System Revenue Bonds, Series 2004B and (ii) pay certain costs and expenses incurred in connection with the issuance of the Series 2018 Bonds; and

WHEREAS, OWASA proposes to issue the Series 2018 Bonds in an aggregate principal amount not to exceed \$21,000,000, the determination of the aggregate principal amount of the Series 2018 Bonds to be made at the time of the public sale of the Series 2018 Bonds; and

WHEREAS, OWASA has selected for recommendation to the Local Government Commission a financing team to be used in connection with the issuance and public sale of the Series 2018 Bonds; and

WHEREAS, the selection of said financing team was made by OWASA after a review of the record of service to OWASA of the members of said financing team; and

WHEREAS, OWASA wishes to obtain the approval of the Local Government Commission for said financing team;

NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE ORANGE WATER AND SEWER AUTHORITY DOES HEREBY DETERMINE AND RESOLVE, as follows:

1. The Board hereby recommends that the following financing team members be engaged in connection with the issuance and public sale of the Series 2018 Bonds and requests that the Local Government Commission approve said financing team members:

Bond Counsel: McGuireWoods LLP

Trustee and Bond Registrar: The Bank of New York Mellon Trust Company, N.A.

Financial Advisor to OWASA: First Tryon Advisors

2. This resolution shall take effect immediately upon its passage.

Adopted this 22nd day of February, 2018.

Robert Morgan, Chair

ATTEST:

Yinka Ayankoya, Secretary