

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, January 25, 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. Human Resources Committee will meet on Monday, February 5, 2018, at 5:30 p.m. in the OWASA Boardroom to discuss Retiree Health Benefits for New Hires and 457 Deferred Compensation (Barbara Foushee)
 - B. Chatham/Orange Joint Planning Task Force will meet on Thursday, February 8, 2018, at 12:00 noon at Clarion Associates, Chapel Hill (John Young)
 - C. OWASA 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 (Ray DuBose)
 - D. 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. Update on the January 18, 2018 Winter Weather Event (Todd Taylor)
 - B. Partnership for Safe Water Presidents Award for Distribution System Operation (Todd Taylor)

Petitions and Requests

- 1. Public
- 2. Board
- Staff

AGENDA January 25, 2018 Page 2

Consent Agenda

Information and Reports

12 Month Board Meeting Schedule (Robert Morgan/Ed Kerwin)

Action

- 2. Approve Proposed New Calculation Method for System Development Fees (Stephen Winters)
- 3. Key Focus Areas for OWASA's Executive Director (Ed Kerwin)

Regular Agenda

Information and Reports

- 4. 2017 Annual Lakes Recreation Report (Kenneth Loflin/Johnny Riley)
- 5. Capital Improvements Program Semiannual Status Report (Vishnu Gangadharan)
- 6. Financial Report for the Six-Month Period Ended December 31, 2017 (Stephen Winters)

Discussion

7. Fiscal Year 2019 Budget Calendar and Assumptions (Stephen Winters)

Summary of Board Meeting Action Items

8. Executive Director will summarize the key action items from the Board meeting and note significant items for discussion and/or action expected at the next meeting

OWASA Board of Directors – 12 Month Board Meeting Schedule (January 19, 2018)

	Воа	Committee & Other			
Month	Work Session	Business Meeting	Meetings and Reports		
January 2018	CY 17 Biosolids Report Employee Health and Dental Insurance Update Appoint Audit Firm Overview of WTP & WWTP Reliability and Risk Assessment Project Discuss KPI Indicators Executive Director Compensation Discuss/Approve ED Key Focus Areas	0	Annual Lakes Recreation Report CIP Semiannual Report Approve Proposed New Calculation Method for System Development Fees Q2 Financial Report Approve ED Key Focus Areas FY 19 Budget Calendar and Assumptions	0 0	Board D&I Training with VISIONS, Inc. (1/29/2018)
February	1/11/2018 Diversity and Inclusion Progress Report		1/25/2018 Update on Perfluorinated Compounds		Human Resources
2018	Affordability Outreach Program Update Discuss and determine topic of next KPI discussion (Tentative) Status of Action Items on Communications During Emergencies CS - General Counsel Interim Review	0	Energy Management Plan Update Discuss AWWA Partnership Awards Selection and Procurement of WWTP Solids Thickening Equipment CS - General Counsel Interim Review	O	Committee Meeting (2/5/2018) NRTS Committee Meeting (2/26/2018)
March 2018	2/8/2018 (Tentative) Discuss LRWSP – Demands &	()	2/22/2018 FY 19 Draft Budget & Rates	()	
Water 2010	Yield (Tentative) Discuss Revisions to Retiree Health Insurance for New Hires and 457 Deferred Compensation Award the Rogerson Drive Pump Station	•	Set date for Public Hearings – FY 19 Budget & Rates Authorize staff to publish proposed rates Award the WWTP Intermediate Pump Station Rehabilitation Contract	0	
	Phase 2 Contract	//	CS – ED Interim Review	()	
	FY 19 Draft Budget & Rates CS - ED Interim Review 3/8/2018	0	3/22/2018		
April 2018	Review Employee Health and Dental Insurance Renewal Award the Galvanized Water Main Replacement Contract FY 19 Draft Budget and Rates Review Action Plan for Improvements Identified by Organizational Assessment Appointment of the Nominating Committee	0	Q3 Financial Report	O	
	4/12/2018	**	4/26/2018		
May 2018	Approve Employee Health and Dental Insurance Renewal Discuss Employee Merit Pay for FY 19 Discuss Community Engagement Plan for Forestry Management 5/10/2018	0	Public Hearings – FY 19 Budget and Rates 5/24/2018	O	
June 2018	Approve FY 19 Budget and Rates Election of Officers (Tentative) Review Draft WTP & WWTP Reliability and Risk Assessment Report 6/14/2018	0	TBD 6/28/2018		
July 2018	Discuss KPI Trends 7/12/2018		TBD 7/26/2018		
August 2018	(Tentative) Discuss AMI Policies (other than manual read) CS – General Counsel Review 8/9/2018	0	Preliminary 12 Month Financial Report CIP Semiannual Report CS – General Counsel Review 8/23/2018	0 0	
September 2018	EEO/Affirmative Action Report Annual Report on Disposal of Surplus Personal Property	0	Annual Report and Financial Audit Approve General Counsel Engagement CS – ED Review	0	

OWASA Board of Directors – 12 Month Board Meeting Schedule (January 19, 2018)

	Review Updated Implementation Plan for D&I Program Discuss Action Plan from WTP/WWTP Reliability and Risk Assessment Project				
	CS – ED Review	()			
	9/13/2018		9/27/2018		
October	TBD		Q1 Financial Report	()	
2018			Strategic Trends Report and Strategic Plan	()	
			Update		
	10/11/2018		10/25/2018		
November	TBD	•	Holiday - no meeting	•	
2018	11/8/2018				
December	TBD	•	Holiday - no meeting	•	
2018	12/13/2018				

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 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 (January 19, 2018)

Abbreviations Used in Draft Schedule:

()	Recurring agenda item (generally these are "required"		
	items)	JLP	Jordan Lake Partnership
AMI	Advanced Metering Infrastructure	LRWSP	Long-Range Water Supply Plan
CE	Community Engagement	MST	Mountains-to-Sea Trail
CEP	Community Engagement Plan	MFMM	Multi-Family Master Meter
CIP	Capital Improvements Program	NRTS	Natural Resources and Technical Services
COLA	Cost of Labor Adjustment	Q	Quarter
CS	Closed Session of the Board	SOW	Scope of Work
CY	Calendar Year	TBD	To Be Determined
D&I	Diversity and Inclusion	WTP	Water Treatment Plant
ED	Executive Director	WWTP	Wastewater Treatment Plant
FY	Fiscal Year		

Current and Pending Key Projects and Stages

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

Stages	Committee Discussion	Feasibility Study	Board Review	Community Engagement	Action	Procurement	Implementation

Agenda Item

• Approve Proposed New Calculation Method for System Development Fees

Purpose

- In July 2017, the North Carolina General Assembly passed a law that requires a change to the method water and sewer utilities use to calculate system development fees.
- The statute also specifies a process for public notification and input, as well as Board approval.
- The purpose of this agenda item is for the Board to approve a new proposed calculation method for OWASA's System Development Fees.
- On December 14, 2017, the Board reviewed information about the new law, its impact on OWASA's fees, and a timeline for adopting the necessary changes.
- Staff recommends using the Buy-In Method, one of three calculation methods allowed by the new statute.
- At the December 14, 2017 meeting, the Board scheduled approving a proposed calculation method for its meeting on January 25, 2018.

Action Requested

 Approve a motion selecting the Buy-In Method as the proposed method for calculating OWASA's System Development Fees.



ORANGE WATER AND SEWER AUTHORITY

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MEMORANDUM

TO: **Board of Directors**

THROUGH: Ed Kerwin Col

FROM: Stephen Winters, CPA

DATE: January 19, 2018

SUBJECT: Approve Proposed New Calculation Method for System Development Fees

Purpose and Background

In July 2017, the North Carolina General Assembly passed a law (NC House Bill 436/Session Law 2017-138) that requires a change to the way water and sewer utilities calculate system development fees (what we currently call service availability fees). The statute also specifies a process for public notification and input, as well as Board approval. The purpose of this agenda item is for the Board to approve a new proposed calculation method for OWASA's System Development Fees.

On December 14, 2017, the Board reviewed information about the new law, a timeline for adopting the necessary changes, and the impact on OWASA's fees of the methods sanctioned by the new law. The Board generally supported use of the "buy-in method" which would result in the most notable decrease in OWASA's fees. The Board agreed to make a final decision on the proposed methodology on January 25, 2018, after informing local government leaders of the proposed approach (letter attached).

The following information was discussed on December 14, 2017.

Service Availability Fee vs. System Development Fee

To reduce confusion, staff suggests we officially change the name we use for this fee from service availability fee to system development fee. For the rest of this document, we will refer to these charges as system development fees.

Calculation Methods

The new statute provides three alternative methods for calculating system development fees.

Methodology	Description	Allowable Use of Proceeds
Buy-In Method	New development pays for a portion of <u>capital</u> <u>costs previously incurred</u> which provided capacity for demand.	Expansion and/or rehabilitation projects. Since the Buy-In Method reimburses the system for certain past investments, proceeds can be treated as unrestricted.
Incremental/Marginal Cost Method		Professional services costs for system development fee calculation.

Methodology	Description	Allowable Use of Proceeds	
	New development pays for a portion of capital costs to be incurred in the future which will provide capacity for demand.	Expansion costs (debt service, capital, land, etc.) related to new development only.	
Combined Method	Combination of Buy-In and	Professional services costs for system development fee calculation.	
(Plant-In-Service)	Incremental/Marginal Cost methods	Expansion costs (debt service, capital, land, etc.) related to new development only.	

Analysis of Calculation Methods

OWASA's current system development fees were calculated using the Combined or Plant-In-Service Method. In complying with the new statute, staff and our consultants recommend against using the Incremental/Marginal Cost Method; it is most appropriate for organizations that expect to experience significant future growth. We do not expect significant growth in our service area.

OWASA's System Development Fees Will be Lower

The following is a summary comparison of our current system development fees to the fees as calculated using the Buy-In and Combined Methods per guidance specified in the new statute (additional details are shown in Appendix A). Both the Buy-In and Combined Methods result in lower system development fees. The fees are lower because in applying any of the allowed methods, the new statute requires that the calculation include deducting the amount of outstanding debt from the aggregate cost of capital improvements and that this deduction be no less than 25%.

	Decrease in Amount of System Development Fees				
Property Type	Buy-In Method	Combined Method			
Single-family, individually-metered	25% - 36% *	14% - 33% *			
Multi-family, individually-metered	33% - 36%	21% - 33%			
All others	14% - 18%	0 – 14%			
Single-family, individually-metered, < 800 square feet	47% *	50% *			

^{*} The system development fees for single-family, individually-metered properties are based on the heated square-footage of the residence. Currently, < 1,300 square feet is the smallest tier and lowest fee for this property type. Staff proposes adding another tier for residences with less than 800 square-feet of heated space to account for smaller homes. The percentage reductions for < 800 square feet single-family, individually-metered properties is shown separate from other size single-family, individually-metered properties in the chart above. There are currently about 240 residences under 800 square feet in our service area.

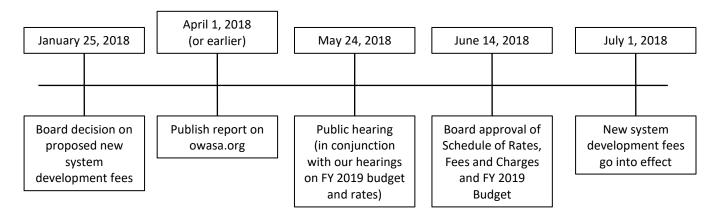
Proposed Schedule for Public Comment and Board Approval

The new statute imposes the following requirements regarding public notice and approval by the Board.

- System development fees conform to the requirements of the new statute no later than July 1, 2018.
- A report documenting the analysis and calculation of the new system development fees must be published on OWASA's website for not less than 45 days prior to considering adoption.
- After the 45-day website posting requirement and prior to Board adoption, a public hearing must be held.

Approve Proposed New Calculation Method for System Development Fees January 19, 2018 Page 3 of 4

Based on these requirements, staff proposes the following timeline.



Staff Recommendation

Staff recommends that the Board consider using the Buy-In Method for calculating system development fees.

- For sewer system development fees, there is no difference in the amount of the decrease in fees resulting from the Buy-In or Combined Methods.
- For water system development fees, the Buy-In Method results in lower fees than the Combined Method.
- While we are not permitted to reduce fees for any reason other than cost of service, reducing fees overall will benefit low-income and public housing property developments.
- Based on recent years' system development fee revenue, staff estimates the budget impact of the decrease
 in fees from using the Buy-In Method versus the current method to be approximately \$200,000 per year.
 At this time, we do not expect this potential reduction in revenue to, by itself, change our projection that a
 rate increase will not be needed for FY 2019.
- The budget impact of using the Combined Method would not be significantly different than the budget impact of the Buy-In Method.

Action Requested

Approve the following motion selecting the Buy-In Method as the proposed method for calculating OWASA's System Development Fees.

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 proposing the Buy-In Method for calculating OWASA's System Development Fees.

Stephen Winters, CPA

Director of Finance and Customer Service

Attachment: Letter to local government leaders

Appendix A

Water System Development Fees						
	Method					
Customer Class	Current	Buy-In	Combined			
Single-family, individually-metered < 800 sq ft	\$1,033	\$547	\$633			
Single-family, individually-metered 800-1300 sq ft	\$1,033	\$696	\$806			
Single-family, individually-metered 1301-1700 sq ft	\$1,207	\$798	\$923			
Single-family, individually-metered 1701-2400 sq ft	\$1,552	\$1,063	\$1,230			
Single-family, individually-metered 2401-3100 sq ft	\$2,470	\$1,644	\$1,903			
Single-family, individually-metered 3101-3800 sq ft	\$3,429	\$2,259	\$2,613			
Single-family, individually-metered >3800 sq ft	\$5,406	\$4,020	\$4,652			
Multi-family, individually-metered	\$1,112	\$750	\$868			
Other properties 5/8" meter	\$3,255	\$2,799	\$3,239			
Other properties 1" meter	\$8,143	\$7,002	\$8,102			
Other properties 1.5" meter	\$16,275	\$13,996	\$16,195			
Other properties 2" meter	\$26,040	\$22,394	\$25,912			
Other properties 3" meter	\$52,081	\$44,788	\$51,823			
Other properties 4" meter	\$81,376	\$69,981	\$80,974			
Other properties 6" meter	\$162,752	\$139,961	\$161,948			
Other properties 8" meter	\$260,403	\$223,938	\$259,116			

Sewer System Development Fees							
	Method						
Customer Class	Current	Buy-In	Combined				
Single-family, individually-metered < 800 sq ft	\$2,829	\$1,395	\$1,395				
Single-family, individually-metered 800-1300 sq ft	\$2,829	\$1,776	\$1,776				
Single-family, individually-metered 1301-1700 sq ft	\$3,270	\$2,013	\$2,013				
Single-family, individually-metered 1701-2400 sq ft	\$3,384	\$2,158	\$2,158				
Single-family, individually-metered 2401-3100 sq ft	\$3,859	\$2,392	\$2,392				
Single-family, individually-metered 3101-3800 sq ft	\$4,256	\$2,611	\$2,611				
Single-family, individually-metered >3800 sq ft	\$4,541	\$3,145	\$3,145				
Multi-family, individually-metered	\$3,064	\$1,924	\$1,924				
Other properties 5/8" meter	\$6,553	\$5,248	\$5,248				
Other properties 1" meter	\$16,392	\$13,128	\$13,128				
Other properties 1.5" meter	\$32,763	\$26,239	\$26,239				
Other properties 2" meter	\$52,421	\$41,982	\$41,982				
Other properties 3" meter	\$104,842	\$83,965	\$83,965				
Other properties 4" meter	\$163,816	\$131,195	\$131,195				
Other properties 6" meter	\$327,632	\$262,389	\$262,389				
Other properties 8" meter	\$524,211	\$419,823	\$419,823				



ORANGE WATER AND SEWER AUTHORITY

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December 18, 2017

Mayor Pam Hemminger Town of Chapel Hill 405 Martin Luther King Jr. Boulevard Chapel Hill, NC 27514 Mayor Lydia Lavelle Town of Carrboro 301 West Main Street Carrboro, NC 27510 Chair Mark Dorosin
Orange County Board of
Commissioners
Post Office Box 8181
Hillsborough, NC 27278

Subject: OWASA System Development Fees

Dear Mayor Hemminger, Mayor Lavelle, and Chair Dorosin,

In our continuing effort to provide affordable and high-value services to our current and future customers and in response to a new law passed by the North Carolina General Assembly (NC House Bill 436/Session Law 2017-138), OWASA is recalculating the upfront costs for new connections to our water and sewer system. In general, the purpose of these fees is to recover the cost of capacity needed to serve new customers. Although in the past we have referred to them as service availability fees, the new law refers to them as system development fees.

The legislation provides us with a choice on which cost-of-service methodology we use to recalculate our system development fees. The choice lies in whether or not to incorporate projected costs of system expansion into the fee. In a system with few expansion-related expenses on the horizon, such as ours, we propose to not include these projected costs and to set the fee to only reimburse OWASA for past expenditures made to provide capacity for demand. Due to discounts required by the legislation, either method would reduce connection fees; the method we are proposing will reduce them more.

The extent of the reduction will depend on the property type and size of either home or meter, as briefly summarized below.

Residential Customers, Individually-Metered: System development fees for new connections for residential properties are based on anticipated water use using heated square-footage of the home as a proxy for water use. Depending on the house size, system development fees will be reduced by 25-36% under the proposed fees. For example, under current rates, a new 1,300 square foot home would be charged \$3,862 to connect to the water and sewer system. Under the revised rates, the same new connection would be charged \$2,472.

In addition to what is required by law, it is proposed that we add a new "low-tier" for system development fees to further reduce connection costs for very small homes. Currently, <1,300 square feet is the smallest tier and lowest fee for this property type.

OWASA System Development Fees December 18, 2017 Page 2

The new "low-tier" is proposed to be <800 square feet. The combination of the new methodology and new tier will result in a 47% reduction of system development fees for these very small homes.

Multi-family Residential and Nonresidential: System development fees for new master-metered multi-family and non-residential properties are also based on anticipated water use using meter size as a proxy for water use. Depending on the meter size, system development fees will be reduced by 14-18% under the proposed fees for these property types.

The OWASA Board of Directors discussed the issue at our <u>December 14, 2017 Work Session</u> and will decide on the methodology used to calculate the revised system development fees at our January 25, 2018 meeting. We do not anticipate community opposition to the proposed methodology.

Once the methodology is determined on January 25th, we will publicize our analysis and calculations and incorporate the consideration of the revised fees into our annual budget and rates schedule, including a public hearing. The law requires that the new system development fees be in-place by July 1, 2018.

We recognize that this letter provides a level of detail that we generally do not proactively share with you, but we believe it is important to provide you with an explanation of our process and advanced notification of changes that will impact water and sewer service affordability in our community.

On behalf of the entire OWASA Board of Directors, we welcome your feedback, thoughts and questions.

Sincerely,

Robert Morgan, Chair

Cobert W Massan

Board of Directors

c: Mr. Roger Stancil, Chapel Hill Town Manager

Mr. David Andrews, Carrboro Town Manager

Ms. Bonnie Hammersley, Orange County Manager

OWASA Board of Directors

Ed Kerwin, OWASA Executive Director

Agenda Item

• Key Focus Areas for OWASA's Executive Director

Purpose

• Review and approval of Key Focus Areas for OWASA's Executive Director for the period October 2017 to September 2018.

Background

- On January 11, 2018, the Board reviewed and requested changes to Executive Director's Draft Key Focus Areas.
- Updated Key Focus Areas are included for the Board's review and approval.

Action Requested

 Approval of the Key Focus Areas for OWASA's Executive Director for the period of October 2017 to September 2018.

January 25, 2018

Under the Executive Director's leadership, the OWASA staff works together to ensure the organization's Mission is reliably and sustainably met. The Board of Directors acknowledges that the Executive Director will continue to use his judgement on the best use of his time to benefit the organization. While there are many goals and objectives for which the Executive Director is ultimately responsible, to include working with the OWASA Team to deliver high-quality and reliable services, the Board of Directors and Ed Kerwin agree to these key focus areas.

Operational/Business Objectives

High Quality and Reliable Service

- 1. Effective leadership and management of OWASA's daily core mission responsibility of providing high quality and reliable drinking water, wastewater management, and reclaimed water services for the Carrboro-Chapel Hill community. Measures of success include:
 - a) Zero violations of primary drinking water standards
 - b) Maintain certification by the Partnership for Safe Water for Phase IV Excellence in Water Treatment
 - c) Receive the Partnership for Safe Water's President's Award for Distribution System Operation
 - d) Zero violations of treated wastewater standards
 - e) Zero violations of reclaimed water standards
 - f) Zero violations of biosolids recycling standards
 - f)g)Meet all Financial Management Objectives
- 2. Complete Water Treatment Plant (WTP) and Wastewater Treatment Plant (WWTP) Reliability and Risk Assessment project and discuss results with the Board of Directors by June 2018. Following this discussion, staff will prepare an action plan for improvements by September 2018.

Expected Results: full compliance with Objectives 1.a-f.

Advanced Metering Infrastructure (AMI)

3. A Field Readiness Test (FRT) will be performed in February 2018 to evaluate the installation contractor's processes and procedures. Full-scale system deployment is anticipated to begin in March 2018 and will be managed by staff with the assistance of our consultant. The customer portal will be accessible once approximately 75% of the meters in our service area are upgraded. The Board will continue to receive regular communications from staff regarding project status to include performance on key metrics and progress towards

milestones. Staff will make recommendations to the Board regarding any new policies and/or policy revisions related to the new system.

Working with Stephen Winters and Dan Przybyl, Todd Taylor has the lead role for this project. Ed Kerwin's focus will be on processes, performance and resources for a highly successful project.

Expected Results:

- a) Successful completion of FRT by end of February 2018.
- b) Commence full-scale deployment by end of March 2018.
- c) Board review of recommended policy changes by end of August 2018.
- d) Provide portal access to eligible customers at 75% saturation point.
- e) Project status reports provided on a monthly basis.

Energy Management Plan

4. Continue implementation of Energy Management Program and provide support for achieving energy management goals and objectives. An updated plan will be brought to the Board in the first quarter of 2018, to include a suite of strategies for reducing the use of purchased electricity and natural gas, as well as opportunities for further evaluation identified by the OWASA Energy Team. The Key Performance Indicator Report tracks our progress against these goals.

Mary Tiger has the lead role for this project. Ed Kerwin's focus will be working with staff to improve the organization's culture to be more energy aware and achieve outcomes set forth in the plan.

Expected Results:

- a) Reduce use of purchased electricity, making progress to meet goal of a 35% reduction from 2010 levels by 2020.
- b) Reduce use of purchased natural gas, making progress to meet goal of a 5% reduction from 2010 levels by 2020.
- c) Propose a strategy to the Board for third-party development of renewable energy on OWASA property.
- d) Provide the Board information required to determine the most appropriate strategy for making beneficial use of biogas generated at the Mason Farm Wastewater Treatment Plant.

Human Resource Objectives

Diversity and Inclusion

5. Continue implementation of the Diversity and Inclusion (D&I) program to include completing Focus Group Assessments (organizational assessment), evaluation of the job

application and recruitment processes, mandatory supervisor/manager training and voluntary employee training.

Expected Results:

- a) Increased diversity throughout the organization (will ask consultant about D&I metrics).
- b) Develop action plan for improvements identified by the organizational assessment for the Board's review by April 2018.
- c) Update Implementation Plan for D&I program for the Board's review by September 2018.

Employee Safety

6. Support Stephanie Glasgow in the recruitment, hiring and training of the new Safety and Risk Manager. Initial tasks for the position include crisis management, OSHA inspections, analyzing data and determining the need for more detailed safety reports and safety performance metrics for Board of Directors and staff.

Expected Results:

- a) #Reduction in Safety Incident Rate.
- a)b) Propose additional safety metrics for the Board's consideration.

Implement New Employee Performance Evaluation System

7. Train supervisors and employees on the revised Employee Performance Evaluation System.

Expected Results: training provides supervisors and employees the knowledge and skills to effectively implement the revised Employee Performance Evaluation System.

Community Engagement Objectives

Affordability Outreach Program

8. Develop and implement Year Three of the Affordability Outreach Program designed to increase community awareness of options to manage and reduce water and sewer bills and to empower low-income customers, and the local agencies that serve them, with information and tools to manage and reduce water and sewer bills. Provide the Board an implementation plan with milestones by January 31, 2018.

Mary Tiger has the lead for this program. Ed Kerwin's focus will be on program accountability and to ensure sufficient resources are committed to the program.

Expected Results:

- a) Increase in contributions to Care to Share Program.
- b) Implementation of Affordability Outreach Program, as approved by the Board.

- c) Reduction in the average water use of customers with whom our program engages.
- d) Stabilization or reduction in the number of customers cut-off due to non-payment.

Communications and Community Engagement

9. Recruit, hire and train new Communications and Community Relations Officer. Working with the Board and staff, begin development of Communications and Community Engagement Plan.

Expected Results: quality addition to the OWASA Team to lead improvements for OWASA's communications and community engagement work.

Forestry Management

10. Prepare Community Engagement Plan (CEP) for Forestry Management for Board review on May 10, 2018. Ruth Rouse has the lead for this; Ed Kerwin's focus will be to provide the resources needed to ensure a successful community engagement program for Forestry Management.

Expected Results: Forestry management stakeholders will be informed of OWASA's planned forestry management work and their opportunities to provide input prior to Board approval.

Long-Range Water Supply Plan

11. Develop demand projections through 2065 for the update of the Long-Range Water Supply Plan (LRWSP). Staff will base projections on growth information provided by the Towns of Carrboro and Chapel Hill and UNC. The Towns and UNC will also have opportunities to review and provide feedback on the assumptions used to develop the demand projections. The demand projections will reflect uncertainty and a range of potential projections is expected to be provided to the Board for review in spring 2018.

Staff will also develop a list of supply and demand management alternatives that will be evaluated against the goals and objectives accepted by the Board of Directors in November 2016. Staff expects to present this list to the Board and public in the middle of calendar year 2018.

Ruth Rouse has the lead on the LRWSP update; Ed Kerwin's focus will be on process, performance, and resources for a successful update of the Plan.

Expected Results:

- a) Demand projections which reflect uncertainty that incorporate information from the Towns of Carrboro and Chapel Hill and UNC.
- b) Draft list of supply and demand management alternatives to evaluate in the LRWSP update.

Note: Ultimately, these two items inform the LRWSP that will provide a clear path forward to ensure a reliable and high-quality supply of water for the next fifty years.

Communication and Coordination with the Board

12. Keep the Board informed about all matters related to fulfilment of their fiduciary responsibilities. Keep the Board timely informed about matters important to customers, the environment, local governments and other stakeholders.

Expected Results: while difficult to quantitatively measure, the majority of the Board should believe the Executive Director and staff has met expectations.



Agenda Item

• 2017 Annual Lakes Recreation Report

Purpose

• To provide information about the 2017 lake recreation season including patronage, cost, and revenues.

Background

• This report and other agenda information has been distributed by e-mail to more than 80 lake recreation stakeholders.

Action Needed

• Receive and discuss the 2017 Annual Lakes Recreation Report

January 25, 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

FROM: Johnny Riley

DATE: January 16, 2018

SUBJECT: 2017 Lake Recreation Report

Purpose

To provide information about lake recreation in 2017 including patronage, costs, and revenues.

In accordance with the Board's direction, this report is provided in the Board's regular meeting agenda each year and public comments are welcome. This report and other agenda information will also be distributed by e-mail to more than 80 lake recreation stakeholders.

Summary

- Overall attendance and revenues increased in 2017 by 12% and 17.5% respectively.
- As in past years, revenue covered somewhat less than half of costs.
- We recommend continuing the birdwatching program at Cane Creek Reservoir on Wednesday mornings in the off-season, due to the limited cost of this program.

Operating Schedule

During the 2017 lake season (March 25th through 12th) November University Lake was open Friday, Saturday and Sunday from 6:30 a.m. to 6:00 p.m. Cane Creek Reservoir was open on Friday and Saturday from 6:30 a.m. to 6:00 p.m.

User Fees

Attachment 1 shows the rates and fees for the 2017 season. Fees have remained unchanged since 2011.



Cane Creek Reservoir

Annual Report on Recreation at University Lake and Cane Creek Reservoir January 16, 2018 Page 2 of 4

Revenue & Attendance

University Lake generated \$44,127 in total revenue during 2017 (15% increase from the 2016 season). In total, 4,740 people visited University Lake during the 2017 season (12% increase from the 2016 season).

Average revenue per University Lake visitor in 2017 was \$9.31 (3% increase from the 2016

season). The continued increases in kayak rentals contributed to the overall increase in revenue this season at University Lake.

In 2017, Cane Creek generated \$36,359 in total revenue (21% increase from the 2016 season).

Cane Creek received 3,667 visitors (12% increase from the 2016 season). Average revenue per Cane Creek visitor in 2017 was \$9.92 (8% increase from the 2016 season).

A total of \$80,486 was received at the two facilities. (17.5% more than in 2016 season).



University Lake

The table below compares historical daily attendance averages (2004-2016) to the 2017 daily attendance averages for each lake:

Comparison of Attendance by Day of the Week

Cane Creek	Friday ¹	Saturday
Average 2004-2016	26	63
2017	34	70

¹Cane Creek closed on Fridays following the 2007 season and reopened in the 2013 season.

University Lake	Friday	Saturday	Sunday
Average 2004-2016	20	50	60
2017	14	54	67

Annual Report on Recreation at University Lake and Cane Creek Reservoir January 16, 2018 Page 3 of 4

Kayak Rental

On April 4, 2014 both lakes began offering kayaks for rent. During the 2017 season, revenue from kayak rentals totaled \$8,200 which is a 26% increase over the previous year. To date, Kayak rentals have accounted for \$26,260 in revenue. To meet demand, two more tandem kayaks have been purchased for the 2018 season.

The table below compares the total revenue from kayak rentals over the past four seasons:

	2014	2015	2016	2017
Cane Creek	\$780	\$985	\$945	\$1,315
University Lake	\$3,475	\$6,290	\$5,585	\$6,885
Total	\$4,255	\$7,275	\$6,530	\$8,200

Open House at Cane Creek

An Open House was held on Saturday, October 21st at Cane Creek Reservoir. Representatives from Audubon North Carolina, North Carolina Wildlife Resources Commission and the U.S. Coast Guard Auxiliary were on hand to set up interactive displays and answer questions. OWASA staff also set up an informational display. A fishing rodeo was held for children. The event was well attended by our neighbors, OWASA staff and their families.



Bird watching

On September 10, 2015, the Board of Directors approved free birdwatching at the Cane Creek Reservoir on Wednesdays between 7:00 and 11:00 AM. During the 2016-17 season (November 16, 2016 to March 22, 2017) the lake received a total of 71 visitors (4 per day average). This is a 30% decrease in attendance from the year before. Poor weather during this time may have been a factor in the decrease. However, we recommend continuing this program because the staffing time needed continues to be minimal.

Year	2015-16	2016-17	2017-18
Total	101	71	48*
Average	5	4	6*

*as of 1/10/18

Demographics

As shown in Attachment 3 Exhibit A, the largest segment of visitors at University Lake continues to be Orange County residents (82%), followed by Durham County residents (5%), Chatham Country residents (3%), Alamance County residents (3%), and others (6%).

Annual Report on Recreation at University Lake and Cane Creek Reservoir January 16, 2018 Page 4 of 4

As shown in Attachment 3 Exhibit B, the largest segment of visitors at Cane Creek Reservoir continues to be Orange County residents (37%), followed by Alamance County residents (15%), Robeson Country residents (10%), Guilford County residents (6%), and others (28%).

Expenses versus Revenues

As shown in Attachment 4 Exhibit B, expenses exceeded revenues by \$82,090 in 2017. Revenues covered about 49% of costs. Labor remains the largest expense in the operation of the lakes. The lakes staff time is allocated to one of five categories: maintenance, recreation activities, security, grounds, and administration. A portion of each of these five categories is considered in the expense of operating the two lakes as public recreation facilities.

Please feel free to contact me with any questions concerning this report or the lake operation.

Johnny Riley

Senior Lake Warden

Attachments

Attachment 1 - Lake Use Fees and Pass Information

2016 and 2017 Lake Use Fees

LAKE USE FEES:		2016 Season	2017 Season
Doot Doutel For	Orange County Resident	\$4.501	\$4.501
Boat Rental Fee	Non-county Resident	\$8.001	\$8.001
	Orange County Resident	\$15.00	\$15.00
Kayak Rental Fee	Non-county Resident	\$20.00	\$20.00
Driveta Deat Lavada Fac	Orange County Resident	\$3.50	\$3.50
Private Boat Launch Fee	Non-county Resident	\$7.00	\$7.00
Matan Dantal	Orange County Resident	\$15.00	\$15.00
Motor Rental	Non-county Resident	\$22.00	\$22.00
	Orange County Resident	\$4.50	\$4.50
	Non-county Resident	\$5.50	\$5.50
	Child (Orange County Resident)	\$2.00	\$2.00
Lake Use Fee	Senior (OWASA Customer or Orange County Resident)	\$0.00	\$0.00
	Senior or Child (Non-County Resident)	\$2.50	\$2.50

¹ Rental Fee does not include Lake Use Fee

Season Passes

For the 2017 season, five types of passes were available to Orange County residents. A single boat pass is issued to only one person and includes the boat rental and lake use fee. The group pass is honored for up to four people including the person who is the holder of the pass. The lake use pass is for a single individual and includes the associated lake use fee. The table below shows the fees for the different types of passes.

Season Passes

Type of Pass	2017 Cost
Single boat only	\$82.00
Single boat and motor	\$163.00
Group boat only	\$163.00
Group boat and motor	\$245.00
Lake use	\$45.00

Attachment 2 – Lake Use Fees and Pass Information

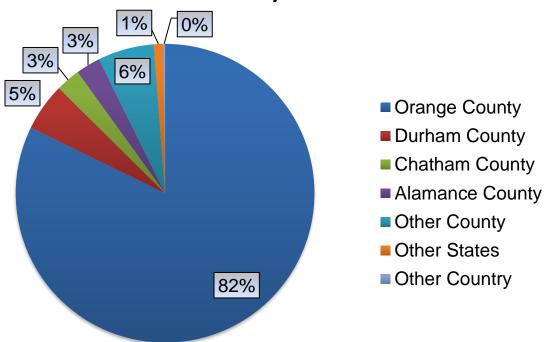
Number of Passes Sold by Type

	2012	2013	2014	2015	2016	2017
Single boat only	9	16	10	30	21	26
Single boat and motor	2	0	1	3	3	9
Group boat only	2	3	3	3	5	2
Group boat and motor	2	0	2	1	0	0
Lake Use	1	0	3	0	1	3
TOTAL	16	19	19	37	30	40

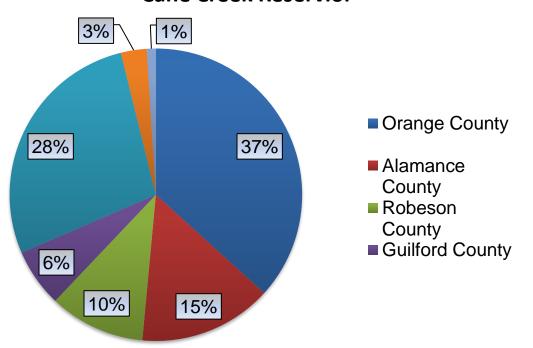
Overall a total of 40 passes were sold in 2017. Passes generated \$4,063 in total revenue. This is a 36% increase over the previous year. The 40 passes sold were used an average of 12 times.

Attachment 3 – Origin of Visitors 2017

University Lake



Cane Creek Reservior



Attachment 4: Annual Revenues and Expenses from Lakes Operations

Exhibit A

Total Revenues from Lakes Operations

_	2009	2010	2011	2012	2013	2014	2015	2016	2017
Boat Rentals ¹	\$ 24,885	\$12,712	\$11,952.50	\$12,736	\$15,127	\$14,004	\$12,448	\$12,702	\$14,425
Lake Use & Boat Launch Fees	\$ 18,524	\$28,093	\$25,327.50	\$26,276	\$29,650	\$30,544	\$29,957	\$30,935	\$34,664
Electric Motor Rentals	\$ 11,029	\$10,431	\$9,180	\$9,444	\$13,475	\$13,290	\$11,760	\$15,335	\$19,134
Lakes Use Passes	\$ 1,690	\$1,540	\$2,160	\$1,926	\$1,801	\$2,100	\$3,683	\$2,991	\$4,063
Kayak Rentals ²	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,255	\$7,275	\$6,530	\$8,200
TOTALS:	\$56,128	\$52,776	\$48,620	\$50,382	\$60,053	\$64,193	\$65,123	\$68,493	\$80,486

NOTES:

¹ Lake Use Fee for individuals renting a boat is included in the Boat Rental revenues for 2009.

² Kayak rentals began in April of the 2014 recreational season.

Exhibit B 2017 Lake Operating Expenses

	Expenses						
Description	Total	Non- Recreational	Recreational				
Full Time Employee Salaries	\$181,033	\$90,517	\$90,516				
Fringe Benefits	\$57,931	\$28,965	\$28,966				
Part Time Employee Salaries	\$25,114	\$3,472	\$21,642				
Utilities	\$11,608	\$7,429	\$4,179				
Materials and Supplies	\$15,296	\$2,607	\$12,689				
Maintenance of Facilities	\$2,340	\$2,143	\$197				
Annual Amortization of equipment	\$8,000	\$4,000	\$4,000				
Miscellaneous Expenses	\$2,310	\$1,923	\$387				
Totals	\$303,632	\$141,056	\$162,576				

2016 Revenue (from Exhibit A) \$80,486

Deficit (Total Revenue - Total Recreational Expense) -\$82,090

Operating Ratio (Total Recreational Expense/Total Revenue) 2.02

Agenda Item

• Capital Improvements Program (CIP) Semiannual Status Report

Purpose

 To summarize project and program performance for OWASA's Capital Improvements Program (CIP) for the first two quarters of Fiscal Year (FY) 2018 and to provide an updated projection of capital improvement expenses for FY 2018.

Background

- The report details CIP performance during the first two quarters of FY 2018, a projection of FY 2018 CIP expenses, status updates for projects active during the reporting period, and Minority and Women Business Enterprise (MWBE) participation information.
- Highlights of the report include:
 - Through the first two quarters, approximately \$7.3 million (or 48% of the budgeted CIP funds) was invested in about 50 capital projects which were active during the reporting period. Most of these expenses are attributable to six large projects in the construction phase.
 - Staff currently projects FY 2018 CIP expenses of \$18.9 million (125% of budget), which falls above the targeted range for CIP expenses (between 90% and 105% of budget).
 - Aside from budget variances related to the timing of expenses across Fiscal Years, the overall budget variance is due in large part to construction cost increases due to scope changes (particularly on the Little Creek Sewer Interceptor project) and to a lesser extent, rising costs of construction and design.
 - Over the past five fiscal years, the CIP program has achieved 34% MWBE participation on formal and informal contracts, and has met the 10% MWBE participation goal on 57% of awarded contracts.

Action Needed

• Receive and discuss the report.



ORANGE WATER AND SEWER AUTHORITY

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

TO: Board of Directors

THROUGH: Ed Kerwin

FROM: Vishnu Gangadharan, P.E., PMP

DATE: January 19, 2018

SUBJECT: Capital Improvements Program (CIP) Semiannual Report

PURPOSE

This semiannual report summarizes project and program performance for OWASA's Capital Improvements Program (CIP) for the first two quarters of Fiscal Year (FY) 2018 and provides an updated projection of capital improvement expenses for FY 2018.

DISCUSSION

Program Summary

Approximately \$7.3 million (or 48% of the budgeted CIP funds) was invested in about 50 capital projects which were active during the first two quarters of FY 2018. Over \$5 million of these expenses can be attributed to ongoing construction on six capital projects: Hillsborough Street Water Main, Little Creek Sewer Interceptor, Sanitary Sewer Rehabilitation, Rogerson Drive Pump Station, Rogerson Drive Force Main Rehabilitation, and the Eastowne, Eubanks, and Meadowmont 1 Pump Station Rehabilitation. Due largely to the progress on these projects, the program maintained momentum through the hiring and integration of two new Utilities Engineer (in August and October 2017).

Figure 1 shows the actual and projected FY 2018 CIP expenses against the monthly baseline projection. Actual FY 2018 expenditures through December (shown in red) of \$7.3 million represent approximately 110% of the original baseline projection (in blue) for this time period. The black dashed line reflects a current projection of \$18.9 million (125% of budget) for FY 2018, which falls above the targeted range for CIP expenses (between 90% and 105% of budget).

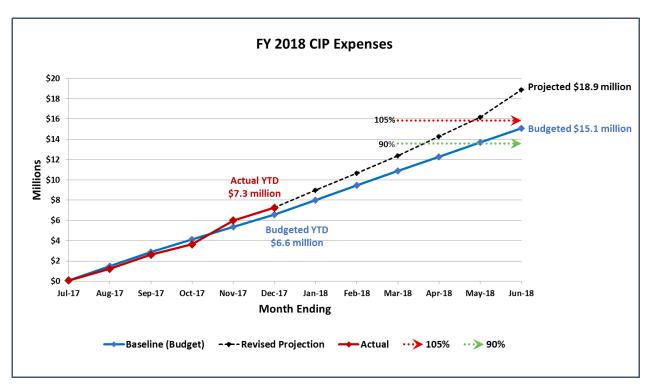


Figure 1 – FY 2018 CIP Expenses

The projected \$3.8 million budget variance for FY 2018 is a result of several factors which are summarized in Table 1 below.

Table 1 – Summary of Projected FY 2018 CIP Budget Variance

Reason for Change in Expenditure	Variance (\$1000's)	Comments
Prior (FY 17) work completed in FY 18	1,020	Typically comprised of work completed
Planned FY 18 work completed in FY 17	(52)	within first few months or last few months of
Future FY work completed in FY 18	562	fiscal year in amounts differing from assumptions used during budget preparation.
Planned FY 18 work deferred to future FY	(522)	Deferrals due to schedule slippage, project "shelving", or other programmatic considerations
FY 18 cost of work more than expected	756	Changes due to under- or over-estimation of
FY 18 cost of work less than expected	(40)	costs, with no significant scope change
FY 18 cost changes due to scope increases	2,119	Significant scope changes are detailed in Table 2
FY 18 cost changes due to scope decreases	(40)	

TOTAL PROJECTED VARIANCE 3,803

In general, the variances in expenditure shown in the first three rows in Table 1 tend to be minor variances from the planned budget that are annually developed in the spring and approved in

Capital Improvements Program Semiannual Report January 19, 2018 Page 3 of 4

early June; i.e., these are minor project schedule changes which occur at the very beginning or end of the fiscal year which are not able to be captured at time of budget approval (early June).

Significant project scope increases affecting the current Fiscal Year typically result from changes in construction scope due to unforeseen site features. The line items primarily contributing to this subtotal are listed in Table 2 below.

Table 2- Breakdown of significant project scope increases

	Tuble 2 Dicandown of		<u> </u>
CIP No.	Project	FY 2018 variance due to scope change (\$1000's)	Description
276-47	Little Creek Interceptor	933	Additional construction costs due to unforeseen conditions (soil conditions); further information provided in separate report to Board
272-40	WTP Filter Media and Backwash Improvements	273	Additional construction costs due to unforeseen conditions (filter basin concrete and underdrain system)
278-61	WWTP Pavement Improvements	166	Projected additional costs due to expanded scope of roadway reconstruction and construction constraints
276-57	Sanitary Sewer Hydraulic Model	166	Additional flow monitoring required to meet project objectives
275-87	Hillsborough St Water Main Replacement	129	Additional construction costs due to unforeseen conditions (buried utilities)
n/a	WWTP Headworks Concrete Repair/Replacement	125	New urgent project identified through condition assessment program

Project Performance Summary

Table 3 contains summaries of project performance for all active projects during this reporting period. Schedule performance is assessed for projects which are far enough along to have a final completion date established for the project. Conversely, budget performance is assessed against the budgeted funds for FY 2018. Explanations are provided for any schedule or budget variances indicated by red stoplights, and line items with total project budget variances over 5% are also highlighted with yellow cells.

The following project narratives provide descriptions for certain projects which cross several fiscal years and which may warrant additional information to help describe the budgetary impact from scheduling delays or other factors:

• CIP # 276-43 Sanitary Sewer Hydraulic Model: Budgeted funds for this flow monitoring and modeling effort was based on costs incurred during the prior master plan in FY 2010/2011. However, project planning revealed that significant additional monitoring would be required to meet project objectives, which included a detailed assessment of areas within the collection system subject to infiltration and inflow. FY 2018 costs of \$317,000 will allow for completion of additional flow monitoring, and the proposed CIP for FY 2019 - 2023 will include a request for additional related analysis.

Capital Improvements Program Semiannual Report January 19, 2018 Page 4 of 4

- CIP #272-40 WTP Filter Media and Backwash Improvements: Construction began in the fall of 2017 and encountered significant and previously unknown deteriorated components within the older filter basins. Replacement of filter troughs and rehabilitation of deteriorating concrete were added to the construction scope.
- CIP #276-47 Little Creek Interceptor Replacement: Construction began in FY 2016 and
 has been significantly delayed twice due to issues related to unusual soil conditions
 encountered in the area. FY 2018 funding included \$552,000 for the completion of
 construction; however, the contractor's claim for additional costs was found to be
 legitimate resulting in total additional FY 2018 costs of \$933,000. Additional
 information about this project will be provided to the Board concurrent with this agenda
 item.

Minority and Women Business Enterprise (MWBE) Participation

Formal and informal construction contracts awarded during this reporting period included \$1.0 million participation by MWBE businesses (or 32% of the total awarded contract value), with 25% of awarded contracts meeting the 10% participation goal. The contracts which fell below the goal either provided evidence of Good Faith Efforts to secure MWBE participation or else did not utilize subcontracts on the project.

The five-year averages for the CIP program include 34% MWBE participation on formal and informal contracts, and 57% of awarded contracts meeting the 10% participation goal. A review of contract information available since FY 2014 shows the following MWBE breakdown during that time period (out of total MWBE participation of \$10.5 million): Woman-Owned (90.1%), Hispanic-owned (6.2%), Black/African American-owned (3.6%), Other (0.2%).

Recent MWBE outreach efforts (beyond our standard MWBE advertising practices) have included online postings to MWBE contractors and subcontractors of upcoming capital project contracting opportunities as well as the development of an enhanced database of over 200 MWBE subcontractors for use in direct solicitation of contracting opportunities.

Additional Information

Customers may visit our website (<u>www.owasa.org</u>) for information about our current major CIP projects and our <u>FY 2018 - 2022 CIP book</u> which provides additional information about the CIP. Please feel free to contact me at (919) 537-4248 or <u>vgangadharan@owasa.org</u> if you have any questions regarding the CIP program or projects.

Vishnu Gangadharan, P.E., PMP

Engineering Manager - Capital Improvements

Attachment – Table 3 Project Performance Summary Table

Table 3 Project Performance Summary

				e Summary	
CIP No.	Project	Status	BUDGET ¹	SCHEDULE ²	COMMENTS - BUDGET VARIANCE Actual FY 2018 cost (planned cost) and description/narrative
FY 2018 I	Projects				
270-04	Jordan Lake Raw Water Supply Allocation	Closeout	•	•	
270-09	Quarry Reservoir Development	Closeout	•	•	
270-11	University Lake Pump Station Improvements	Design		•	\$143k (\$65k): scope addition for raw water meter installation
27011	University Lake i unip Station improvements	Design	_	_	\$140K (\$000A): Scope addition for raw water meter installation
272-14	Water Facility Security Upgrades	Construction	•	•	
272-21	WTP Switchgear Upgrade	Complete	•	•	
272-32	Water Treatment Plant Spill Containment	Complete	•	•	
272-34	WTP Generator Building Louver Replacement	Complete	•	•	
272-38	WTP Sedimentation Basin Rehabilitation	Design	•	•	\$110k (\$102k): engineering costs greater than planned
272-40	WTP Filter Media and Backwash Improvements	Construction	•	•	\$1153k (\$880k): see additional description in report
272-45	WTP Fluoride System Improvements	Closeout	•	•	
272-47	WTP Risk Assessment	Planning	•	•	\$119k (\$75k): engineering costs greater than planned
275-15	Water Main Road Improvement Projects (Greensboro / Estes, Mt. Carmel Church Rd)	Planning	•	•	
275-20	Water Main Rehabilitation/Replacement Projects	Planning	•	•	
275-20-	Lake Ellen Water Main Replacement	Construction	•	•	\$196k (\$160k): construction costs as bid were greater than estimated
275-20-	Brandywine Road WM	Construction	•	•	
275-21	High Priority Water Main Replacement Program	Planning	•	•	
275-46	Dobbins Drive Water and Sewer	Planning	•	•	
275-53	Water Distribution System Hydraulic Model	Planning	•	•	
275-76	Advanced Meter Infrastructure (AMI) System	Construction	•	•	
275-77	Galvanized Water Main Replacements	Design	•	•	
275-87	Hillsborough St Water Main Replacement	Construction	•	•	\$2029k (\$1700k): unforeseen utilty conflict
276-18	Sanitary Sewer Rehabilitation Program	Construction	•	•	\$1553k (\$1249k): price increase expected on planned/pending additional scope
276-47	Little Creek Interceptor	Construction	•	•	\$1485k (\$552k): see additional description in report
276-54	Rogers Road Gravity Sanitary Sewer Extension	Construction	-	•	
276-57	Sanitary Sewer Hydraulic Model	Planning	•	•	\$317k (\$151k): see additional description in report
276-60	Kenan Stadium Interceptor Replacement	Complete	•	•	
277-31	Rogerson Drive Pump Station Rehabilitation	Construction	•	•	
277-38	Rogerson Drive Force Main Rehabilitation	Construction	•	•	
277-39	WWPS Rehabilitation and Replacement FY18-20: fall prot., hot boxes	Pending	•	•	
278-46	Comprehensive Coatings Program	Construction	•	•	
278-54	WWTP IPS Rehabilitation	Design	•	•	
278-61	WWTP Pavement Improvements	Design	•	•	\$190k (\$20k): Additional construction scope due to site conditions and construction constraints
278-68	Building Envelope Rehabilitation	Construction	•	•	\$410k (\$236k): Construction costs as bid were greater than estimated
278-72	WWTP Secondary Clarifier 2 and 3 Rehab	Planning	•	•	
278-81	WWTP Risk Assessment	Planning	•	•	\$119k (\$75k): engineering costs greater than planned
280-12	Admin Building LED Lighting Retrofit	Construction	•	•	
Budget o	overage primarily due to planned FY 2	017 work b	eing delay	ed into FY 20	118
277-24	Eastowne, Eubanks, Meadowmont 1 Pump Station Rehab	Closeout	•	•	
277-29	Rogerson Drive Force Main Redundancy Evaluation	Planning		•	

Table 3 Project Performance Summary

			Citoiiiaiic		
CIP No.	Project	Status	BUDGET ¹	SCHEDULE ²	COMMENTS - BUDGET VARIANCE Actual FY 2018 cost (planned cost) and description/narrative
270-26	Cane Creek Permanganate Facility	Closeout	•	•	
272-31	Water Treatment Plant and Adjacent Facilities Paving	Construction	•	•	
272-44	WTP Energy Monitors	Complete	•	•	
275-71	Rosemary, Henderson, and Hillsborough Streets Water Mains	Complete	•	•	
276-17	Sanitary Sewer Condition Evaluation Program	Planning	•	•	
278-52	WWTP Digesters #1 & #2 Rehabilitation	Complete	•	•	
278-58	WWTP Non Potable Water Pump Replacements	Construction	•	•	
278-59	WWTP LED Lighting Retrofit	Complete		•	
278-71	WWTP Main Potable Water Line – Backflow Prevention	Closeout		•	
278-74	WWTP Critical Spare Pumps	Complete	•	•	
Unbudge	eted project for FY 2018	1			
n/a	WWTP Headworks Concrete Repair/Replacement	Planning	-	-	\$125k (\$0k): new urgent project identified through condition assessment program
Budget o	verage primarily due to planned FY 2	019 work b	eing accele	erated into F	Y 2018
280-06	Administration Building HVAC System Upgrade	Construction	•	•	
278-51	WWTP Solids Thickening Improvements	Design	•	•	
278-73	WWTP SCADA System Upgrade	Construction		•	
270-28	University Lake Permanganate Facility	Design		•	
278-78a	WWTP Fermenter Tank and Pumps Rehabilitation	Planning		•	
Projects	in planning phase and not yet baselii	ned			
278-50	WWTP Warehouse	Planning	-	-	
276-45	Bolinwood Dr Interceptor	Planning	-	-	
276-53	Creek Crossing Access Improvements	Planning	-	-	
277-37	Knolls PS Rehab	Planning	-	-	
278-72	WWTP Secondary Clarifier / Pumping Improvements	Planning	-	-	
272-35	WTP Flash Mix Basins Isolation Valve Replacement	Planning	-	-	
272-37	WTP Belt Filter Press Rehab	Planning	-	-	
272-39	Concrete Condition Assessment	Planning	-	-	
275-52	Cameron Avenue Water Main	Planning	-	-	
278-78a	Digester Gas Mixing Improvements	Planning	-	-	
278-79	Primary Sludge PS Rehab and Old Lab Building Demo	Planning	-	-	
					

NOTES

1. Budget:



2. Schedule:

	Expected completion is within 2 months of planned final completion date
•	Project is delayed by more than 2 months beyond the planned final completion date

Agenda Item

• Financial Report for The Six-Month Period Ended December 31, 2017

Purpose

• To inform the Board of Directors of OWASA's financial performance and fiscal position.

Background

- The financial report consists of a Statement of Net Position, an Income Statement that includes a budget to actual comparison, graphical presentations of financial performance indicators and a Financial Management Policy Report Card.
- Highlights of the report include:
 - o All financial performance targets were met.
 - Operating Revenues for the period were about \$217,000 or 1.1% over budget.
 - O System Development Fees were about \$204,000 or 28.8% over budget.
 - o Operating Expenses were under budget by 6.2% or about \$680,000.
 - o Net Income less Debt Service was 20.0% or roughly \$1.1 million over budget.
 - o Capital Improvement Program expenditures were over budget for the six-month period by approximately \$664,000.

Action Needed

• Receive and discuss the Financial Report for the six-month period ended December 31, 2017.

January 25, 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

Board of Directors To:

Through: Ed Kerwin

From: Stephen Winters, CPA

Date: January 19, 2018

Financial Report for the six-month period ended December 31, 2017 **Subject:**

Purpose

The financial report for the six-month period ended December 31, 2017 is presented to inform the Board of Directors of OWASA's financial position and financial performance in relation to budget.

Contents

- Statement of Net Position
- **Income Statement**
- Graphs of Key Performance Indicators
- Financial Management Policy Report Card

Fiscal Performance

- As shown on page 10 of the financial report, all financial performance measurement targets were met for the period.
- Average drinking water sales for the period was 6.31 million gallons per day (MGD), 6.35 was projected. Combined drinking and reclaimed water sales for the period averaged 7.06 MGD versus a projection of 7.23.
- Total Operating Revenue was 1.1% or about \$217,000 over budget.
- Revenue from new system connections (System Development Fees) was over budget by about \$204,000. Several large meters were set for which revenue was greater than the "average per-meter equivalent price" used in developing the budget.
- Total Operating Expenses for the period were 6.2% or about \$680,000 under budget.
 - General and Administrative expenses were under budget by about \$298,000 due primarily to not incurring consulting and professional fees when expected and vacancies in the Administration and Finance departments.
 - The Water Supply and Treatment department was under budget by about \$34,000 primarily due to lower than expected maintenance costs.
 - Water Distribution expenses were under budget by about \$64,000 due primarily to position vacancies.
 - Wastewater Treatment expenses were under budget by about \$210,000. Maintenance costs were

about \$108,000 less than projected for the period. Waste Disposal costs were under budget by about \$70,000 due to less than projected use of biosolids hauling contractor. Position vacancies also contributed.

- Wastewater Collection expenses were under budget by about \$75,000. Personnel, energy and maintenance costs were lower than budgeted.
- Net Income less Debt Service for the period was approximately \$1.1 million or 20.0% more than budget.
- Capital Improvements Program Expenditures

Approximately \$7.3 million (or 48% of the CIP funds budgeted for the fiscal year) was invested in about 50 capital projects which were active during the first six months of FY 2018. About \$5 million of these expenditures were attributed to ongoing construction on six capital projects: Hillsborough Street Water Main, Little Creek Sewer Interceptor, Sanitary Sewer Rehabilitation, Rogerson Drive Pump Station, Rogerson Drive Force Main Rehabilitation, and the Eastowne, Eubanks, and Meadowmont 1 Pump Station Rehabilitation. Due largely to the progress on these projects, the program maintained momentum through the hiring and integration of two new Utilities Engineers (in August and October 2017).

Actual FY 2018 expenditures through December of \$7.3 million represent approximately 110% of the original baseline projection for this time-period. We currently project total FY 2018 expenditures to be approximately \$18.9 million or 125% of budget, which falls above the target range for CIP expenditures of between 90% and 105% of budget.

Staff is developing plans to address the projection that we will spend more on CIP projects than originally budgeted. Alternatives may include delaying projects where possible, using financial reserves or other approaches. Staff will present options for the Board's consideration.

Stephen Winters, CPA

Director of Finance and Customer Service

Orange Water and Sewer Authority

Financial Report
For the Six-month Period Ended
December 31, 2017

Orange Water and Sewer Authority Statement of Net Position December 31, 2017

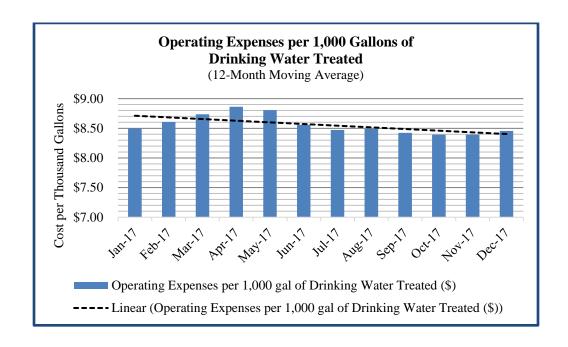
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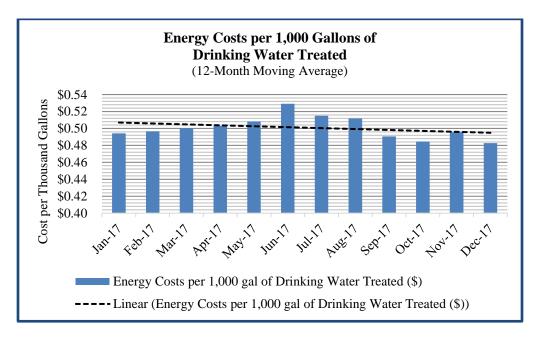
Assets	
Current Assets Cash	\$22,913,794
Receivables	5,124,813
Inventory	1,174,164
Prepaid expenses	487,664
Restricted cash	3,467,602
Total Current Assets	33,168,037
Noncurrent Assets	
Capital assets (net of depreciation)	274,509,599
Other noncurrent assets	34,324,117
Total Noncurrent Assets	308,833,716
Total Assets	\$342,001,753
Liabilities and Net Position	========
Current Liabilities	
Accounts payable and accrued expenses	\$1,358,925
Unearned income	267,244
Customer deposits	1,051,659
Total Current Liabilities	2,677,828
Noncurrent Liabilities	
Bonds payable	62,626,000
Other noncurrent liabilities	7,769,058
Total Noncurrent Liabilities	70,395,058
Net Position	
Contributed capital	115,023,604
Net position at the beginning of the year	149,425,983
Year-to-date accrual basis net income	4,479,280
Total Liabilities and Net Position	\$342,001,753
Net income reconciliation:	
Accrual basis net income	\$4,479,280
Depreciation, other post-employment benefits, and interest expense	5,308,850
Modified accrual basis net income	\$9,788,130 ======

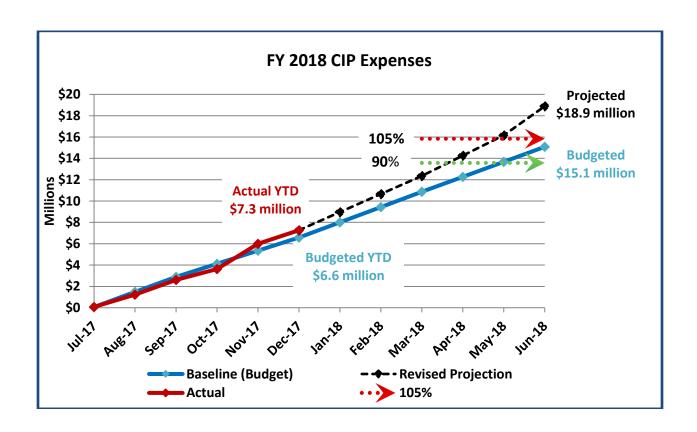
Orange Water and Sewer Authority Income Statement For the Six-month Period Ended December 31, 2017

(unaudited)

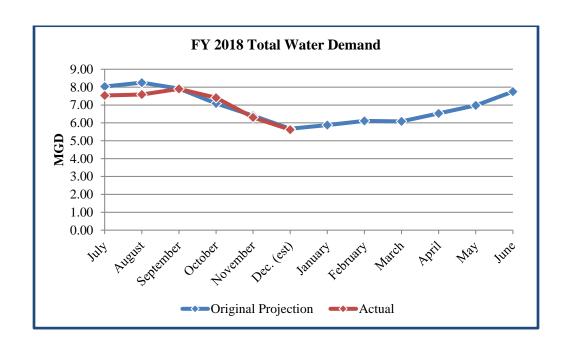
	Actual through December 31, 2017	Budget through December 31, 2017	Variance (effect on net change in Fund Balance)	Percent Variance
Operating Revenue:				
Water	\$9,645,077	\$9,678,524	(\$33,447)	(0.3%)
Sewer	8,724,283	8,501,010	223,273	2.6
Reclaimed Water	238,352	239,990	(1,638)	(0.7)
Service Initiation Fees	81,960	82,824	(864)	(1.0)
Other	494,430	489,904	4,526	0.9
Refunds and Allowances	(98,205)	(123,042)	24,837	20.2
Total Operating Revenue	19,085,897	18,869,210	216,687	1.1
Non-Operating Income:				
System Development Fees	912,404	708,330	204,074	28.8
Interest	19,708	19,218	490	2.5
Total Non-Operating Income	932,112	727,548	204,564	28.1
Total Income	20,018,009	19,596,758	421,251	2.1
Operating Expense:				
General and Administrative	3,311,205	3,609,245	298,040	8.3
Water Supply and Treatment	2,771,994	2,805,630	33,636	1.2
Water Distribution	1,519,091	1,583,437	64,346	4.1
Wastewater Treatment	2,109,660	2,319,226	209,566	9.0
Wastewater Collection	517,929	592,680	74,751	12.6
Total Operating Expense	10,229,879	10,910,218	680,339	6.2
Net Income (modified accrual)	9,788,130	8,686,540	1,101,590	12.7
Debt Service	3,335,974	3,310,769	(25,205)	(0.8)
Net Income less Debt Service	6,452,156	5,375,771	1,076,385	20.0
Less: CIP Expenditures	7,263,967	6,600,000	(663,967)	(10.1)
Capital Equipment Expenditures	548,472	1,231,100	682,628	55.4
Net Change in Fund Balance	(\$1,360,283) ======	(\$2,455,329) ======	\$1,095,046 =====	44.6

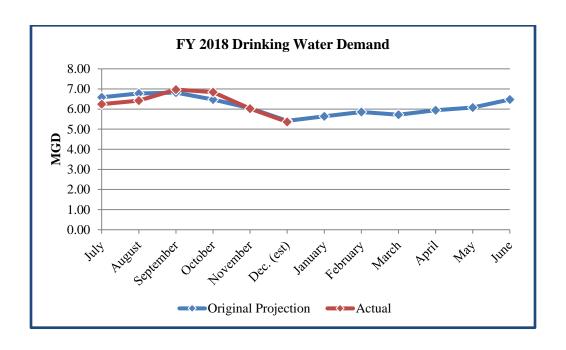


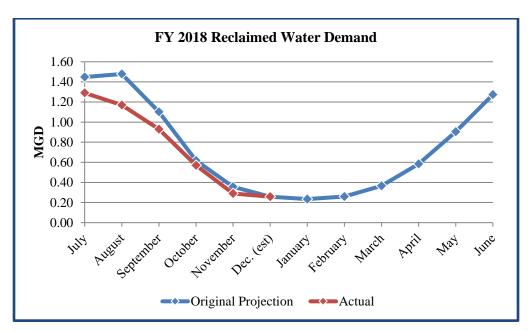


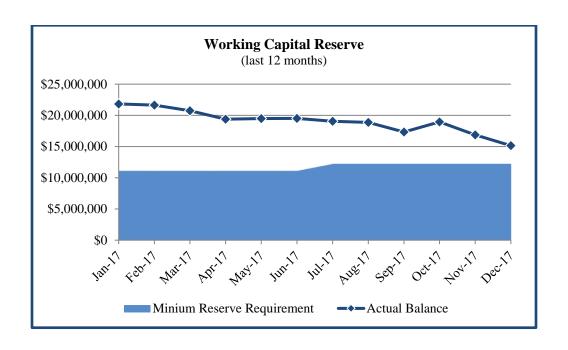


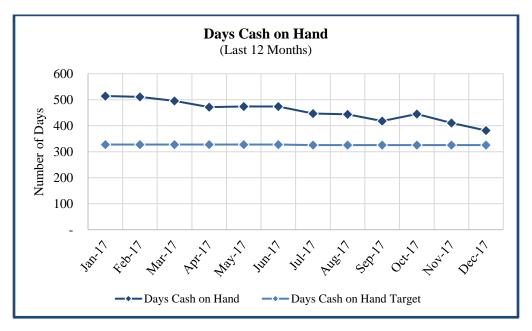
FY 2018 Water Sales Projection (Average Day)						
	_	d FY 2018 rojections		FY 2018 er Sales		I FY 2018 rojections
	DW	RCW	DW	RCW	DW	RCW
July	6.59	1.45	6.24	1.29	6.24	1.29
August	6.77	1.48	6.42	1.17	6.42	1.17
September	6.82	1.10	6.97	0.93	6.97	0.93
October	6.47	0.62	6.84	0.57	6.84	0.57
November	6.05	0.36	6.02	0.29	6.02	0.29
December	5.41	0.26	5.36	0.26	5.41	0.26
January	5.64	0.23			5.64	0.23
February	5.85	0.26			5.85	0.26
March	5.72	0.37			5.72	0.37
April	5.94	0.58			5.95	0.58
May	6.07	0.90			6.07	0.90
June	6.47	1.27			6.47	1.27
Average	6.15	0.74	6.31	0.75	6.13	0.68
Estimates shown in red						

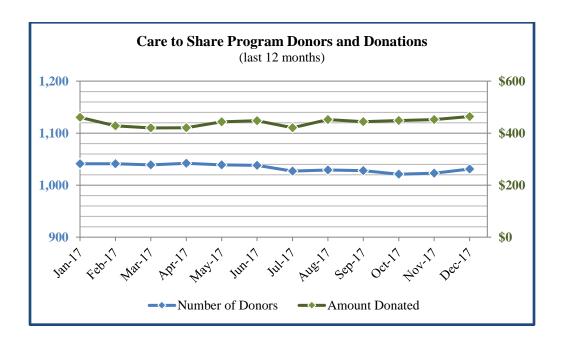












Orange Water and Sewer Authority Financial Management Policy Report Card For the Six-month Period Ended December 31, 2017

Measurement	Objective	FY17 Results	FY18 Goal	YTD FY18 Results
Working Capital Reserves	Greater of four months Operating expenses or 20% of succeeding three years CIP	\$19.5M	\$11.6M	\$16.0M
Capital Improvements Reserve	2% of Net Capital Assets (Funding \$400,000 per year until reach goal of approximately \$6M)	\$3.2M	\$3.6M	\$3.6M
Rate/Revenue Stabilization Reserve	5% of annual Water and Sewer Revenue	\$1.7M	\$1.7M	\$1.7M
Debt Burden to Asset Value	Total Debt not more than 50% of Total Assets	23%	≤ 50%	21%
Sufficiency of Revenues above Debt Requirements ¹	Annual Debt Service no more than 35% of Gross Revenue	18%	≤ 35%	19%
Cash Financing of Capital ²	Annual revenues and reserves provide at least 30% of CIP funding	50%	≥ 30%	49%
Debt Service Coverage Ratio ¹	Annual Net Income not less than two times Annual Debt Service	2.4	2.0	2.2
Service Affordability Ratio ³	Average annual OWASA bill not more than 1.5% of area median household income	1.35%	1.5%	1.35%

M = million

¹ Calculation based on the FY 2018 Annual Budget until full-year results are available.

² Cash Financing of Capital based on 5-Year CIP Budget and potential borrowing during the same period.

³ FY 2018 Calculation based on median household income of \$62,620 (per 2015 U.S. Census Bureau, American Community Survey, 5-Year Estimates) and average monthly household water use of 4,000 gallons.

Agenda Item

• Fiscal Year (FY) 2019 Budget Calendar and Assumptions

Purpose

- The following pages include:
 - FY 2019 Budget Calendar the proposed dates of Board meetings and work sessions at which budget matters are expected to be discussed. It also lists the dates by which major budget tasks are to be completed by staff.
 - o FY 2019 Budget Assumptions a high-level list of assumptions that are planned to be considered in preparing the budget.

Action Requested

• We ask the Board to review the budget calendar and list of assumptions and provide feedback to staff.

January 25, 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**

Ed Kerwin THROUGH:

FROM: Stephen Winters, CPA

DATE: January 19, 2018

SUBJECT: Fiscal Year 2019 Budget Calendar and Assumptions

Budget Calendar

The following is a schedule of the key dates related to developing the budget for Fiscal Year (FY) 2019.

December 2017	Distribute templates for the preparation of operating expense appropriations, capital equipment requests and departmental budget narratives.
January 25, 2018	Board of Directors Meeting – review FY 2019 Budget Calendar and Assumptions.
January 25, 2018	Board of Directors Meeting – review FY 2018 financial report for the sixmonth period ending December 31, 2017.
February 2, 2018	Staff submission of Capital Equipment Request Forms, Budget Narratives and Departmental Operating Budget Requests to Budget Officer.
March 8, 2018	Board of Directors Work Session – discussion of <i>Draft Annual Budget</i> and, if available, staff recommendation of rate adjustment.
March 22, 2018	Board of Directors Meeting - discussion of <i>Draft Annual Budget</i> and staff recommendation of rate adjustment, as necessary. Set date for public hearings on budget and rates and authorize staff to publicize draft budget and
	rate information.
April 12, 2018	Board of Directors Work Session – discussion of <i>Draft Annual Budget</i> and staff recommendation of rate adjustment.
April 12, 2018 April 26, 2018	Board of Directors Work Session – discussion of <i>Draft Annual Budget</i> and

June 14, 2018 Board of Directors Work Session – adoption of FY 2019 Annual Budget and adoption of Schedule of Rates, Fees and Other Charges.
 July 2018 Distribute FY 2019 Annual Budget.

Budget Assumptions

The following are key issues and assumptions that we expect to consider in developing the FY 2019 Budget.

Strategic Plan

OWASA will continue to focus on addressing our Strategic Plan initiatives. The following is a summary of our expectations for existing initiatives in FY 2019.

Initiative	Goals	FY 2019 Plans
Provide reliable and high-quality supply of water for the next 50 years	 Optimum mix of technically, environmentally, economically, and socially feasible water supply and demand management alternatives that meet projected demands and level-of-service objectives under a range of future conditions and uncertainties. Enhanced water supply reliability, reduced energy use, and reduced long-term life-cycle costs of water and sewer service through cost-effective water use efficiency, conservation, and reclaimed water strategies. 	 We have begun the process of updating our long-range water supply plan (LRWSP) and expect to have the draft completed in FY 2019. It is expected that our water supply will be sufficient to meet the community's needs for the next 50 years in most scenarios. The LRWSP update will evaluate different supply (including reclaimed water) and demand management strategies against goals adopted by the Board on November 10, 2016. The Water Conservation Plan will be prepared as part of the LRWSP.

Initiative	Goals	FY 2019 Plans
	 Maintain our Jordan Lake water supply allocation. New or amended water transfer agreements with Town of Cary and City of Durham for OWASA to access our Jordan Lake water supply allocation through those entities when needed. 	 OWASA's Round 4 Jordan Lake water supply allocation was granted by the Environmental Management Commission on March 9, 2017. As part of the update to the LRWSP, staff will evaluate the amount of water needed from Jordan Lake and the best way to cost-effectively access the allocation when needed. Staff continues to work with the City of Durham, Chatham County, and Town of Pittsboro to evaluate the feasibility and cost of constructing a new intake and water treatment plant on the west side of Jordan Lake. This information will be used as we evaluate different alternatives including new or amended agreements with other utilities to access our Jordan Lake allocation.
Engage the Community	 Engage stakeholders to understand their perceptions and expectations so that we make well-informed decisions about our services and maintain their trust. Empower stakeholders with information so they use water wisely and protect water quality through proper use of our wastewater system. Provide stakeholders with timely information about projects, programs, and policies that are important to them and offer them meaningful opportunities to give feedback so that we can continue to improve. 	 We have guidance from the Board and plan to complete a community engagement process for use in conjunction with our major initiatives. We will continue to implement a plan to engage stakeholders regarding the LRWSP; forestry management; and Agua Vista, the Advanced Metering Infrastructure project. The newly approved Communications and Community Relations Officer position will work with the Board to enhance OWASA's communication and community engagement program.

Initiative	Goals	FY 2019 Plans
Adopt financial management policies and budget decision processes to ensure affordable services and fiscal sustainability	 Financial reserve funds set at appropriate level. Efficient process which provides opportunities for stakeholder input and allows the Board of Directors to make well-informed budget and rate decisions. Affordability target set at appropriate level. The right investments at the right time to sustain the community's essential water, wastewater, and reclaimed water assets. Rates, fees and charges meet objectives. 	 We have completed tasks related to the budget process, affordability target, and capital improvements program investment levels. In FY 2018, the Board reviewed the financial reserves policy and recommended no changes. As is our practice, analyzing and projecting reserve balances will be part of the FY 2019 budget development process. Pursuant to a North Carolina statute adopted in July 2017, we will implement a change in the way OWASA's system development fees are calculated which will result in a reduction in revenue of approximately \$200,000, based on the amount budgeted for FY 2018.
Implement an Energy Management Plan	 Cost-effective measures to reduce our use of energy, related energy costs, and associated greenhouse gas (GHG) emissions. 	• We expect to update and continue to implement the Energy Management Program in FY 2019.
Implement Advanced Metering Infrastructure (AMI)	Cost-effective, accurate, reliable and timely water metering information for enhanced customer service.	• A contract for implementing AMI was executed in FY 2018. Installation of the system began in FY 2018 and the project is expected to be completed before the end of FY 2019.
Develop a plan and policy framework for long-term management and disposition of OWASA lands	• Land assets provide the expected value to fulfill OWASA's mission and the assets are effectively managed.	• On May 25, 2017, staff provided the Board with an overview of OWASA's land assets and the purpose of owning them. The Board directed staff to develop a Community Engagement Plan for forest management by late spring 2018. Staff will work on implementing forest management in alignment with an approved Community Engagement Plan.

Additional assumptions

- The FY 2019 Budget will be developed to meet the financial performance objectives stipulated in our Financial Management Policy.
- Based on input from the Board Finance Committee Chair, staff plans to include long-term trend analyses
 of major expense items to assist the Board in its deliberations on the budget.

Fiscal Year 2019 Budget Calendar and Assumptions January 19, 2018 Page 5 of 5

- Current service levels will be maintained.
- Proposed changes to system development fees will modestly reduce revenue.
- Drinking water and reclaimed water sales are not expected to increase or decrease significantly. However, we are monitoring drought conditions which may impact revenue.
- Wastewater treatment nutrient removal requirements in the Jordan Lake Rules have been delayed by the NC General Assembly until 2024.
- The new approach to measure and compensate employee performance will be factored into the FY 2019 Budget.
- Consulting support for our Diversity and Inclusion program will continue.
- Energy and chemical costs are expected to increase due to anticipated rate increases.
- Costs related to the planned OSHA Consultation Services Audit and Crisis Management projects to be managed by the new Safety and Risk Manager will be included in the FY 2019 Budget.
- Health insurance costs are expected to stabilize.
- Reductions in Distribution and Collection costs resulting from the AMI project will be factored into the FY 2019 Budget.
- Staff is evaluating the need for additional resources (staff and equipment) to:
 - Enhance sediment control from water main breaks.
 - O Assist in early detection and response to taste and odor-causing compounds in the drinking water.
- Results of the Risk Evaluation projects at the Water Treatment and Wastewater Treatment Plants may identify additional funding needs for Operating Expenses and CIP projects. The full impact of these results may not be known until later in FY 2019.
- Our goal is to develop a budget that does not call for a rate increase.

Stephen Winters, CPA

Director of Finance and Customer Service