



ORANGE WATER AND SEWER AUTHORITY

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

Agenda

Work Session of the OWASA Board of Directors

Thursday, January 10, 2019, 6:00 P.M.

OWASA Community Room

The Board of Directors appreciates and invites the public to attend and observe its meetings. For the Board's Work Session, public comments are invited on only items appearing on this 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).

For items on the agenda, 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.

The Board may take action on any item on the agenda.

Announcements

- a. Announcements by the Chair
 - 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.
 - Update on January 9, 2019 Board Session with VISIONS, Inc.
- b. Announcements by Board Members
 - Members of the Orange County Board of Commissioners and Orange County Appointees to the OWASA Board will meet on Wednesday, January 30, 2019 at 8:30 AM in the OWASA Boardroom to discuss items of mutual interest (Ray DuBose)
 - OWASA's Annual Update to the Orange County Board of County Commissioners on Tuesday, February 19, 2019, at 7:00 PM at Southern Human Services Center (Ray DuBose)
- c. Announcements by Staff
- d. Additional Comments, Suggestions, and Information Items by Board Members (Yinka Ayankoya)

Consent Agenda

Information and Reports

1. Quarterly Report on Attendance at Board and Committee Meetings (Andrea Orbich)
2. Purchase of Solids Thickening Equipment for the Mason Farm Wastewater Treatment Plant (Simon Lobdell)

Action

3. Appoint Audit Firm (Kelly Satterfield)

Regular Agenda

Discussion

4. Update on Employee Health and Dental Insurance for Next Fiscal Year (Stephanie Glasgow/Ellen Tucker, Hill Chesson & Woody)

Discussion and Action

5. Budget Amendment for Fiscal Year 2019 (Stephen Winters)

Discussion

6. Discuss Consultant Analysis of November 5, 2018 Water Main Break and OWASA Response (Todd Taylor)
7. Approach for Developing a Forestry Management Program (Ruth Rouse/John Young)
8. Review Board Work Schedule (Yinka Ayankoya/Ed Kerwin)
 - a. Request(s) by Board Committees, Board Members and Staff
 - b. January 24, 2019 Board Meeting
 - c. February 14, 2019 Work Session
 - d. 12 Month Board Meeting Schedule
 - e. Pending Key Staff Action Items

Summary of Work Session Items

9. Executive Director will summarize the key staff action items from the Work Session

Closed Session

10. The Board of Directors will continue in a Closed Session to Discuss Confidential Information Regarding Security Measures in Place to Protect OWASA Customers, Personnel and Assets (Dan Przybyl)

Agenda Item 1

ORANGE WATER AND SEWER AUTHORITY - QUARTERLY REPORT

ATTENDANCE AT BOARD AND COMMITTEE MEETINGS

BOARD OF DIRECTORS	OCTOBER 2018	NOVEMBER 2018	DECEMBER 2018
YINKA AYANKOYA, CHAIR	October 8 FC (Meeting) October 11 WS (Canceled) October 25 Board (Meeting) October 30 NRTS (Meeting)	November 8 WS (Meeting) November 13 D&I (Meeting) November 15 WS (Meeting)	December 5 FC (Meeting) December 12 NRTS (Absent) December 13 WS (Meeting) December 19 SMB (Meeting)
JEFF DANNER, VICE CHAIR	October 8 FC (Absent) October 11 WS (Canceled) October 25 Board (Absent)	November 8 WS (Absent) November 15 WS (Meeting)	December 5 FC (Absent) December 13 WS (Absent) December 19 SMB (Meeting)
RAY DUBOSE, SECRETARY	October 8 FC (Meeting) October 11 WS (Canceled) October 25 Board (Meeting) October 30 NRTS (Meeting)	November 8 WS (Meeting) November 13 D&I (Meeting) November 15 WS (Meeting)	December 5 FC (Meeting) December 12 NRTS (Meeting) December 13 WS (Meeting) December 19 SMB (Meeting)
BRUCE BOEHM	October 8 FC (Meeting) October 11 WS (Canceled) October 25 Board (Meeting) October 30 NRTS (Meeting)	November 8 WS (Meeting) November 13 D&I (Meeting) November 15 WS (Meeting)	December 5 FC (Meeting) December 12 NRTS (Meeting) December 13 WS (Meeting) December 19 SMB (Meeting)
JODY EIMERS	October 8 FC (Meeting) October 11 WS (Canceled) October 25 Board (Meeting) October 30 NRTS (Meeting)	November 8 WS (Meeting) November 13 D&I (Meeting) November 15 WS (Meeting)	December 5 FC (Meeting) December 12 NRTS (Meeting) December 13 WS (Meeting) December 19 SMB (Meeting)
ROBERT MORGAN	October 8 FC (Meeting) October 11 WS (Canceled) October 25 Board (Meeting)	November 8 WS (Meeting) November 13 D&I (Meeting) November 15 WS (Meeting)	December 5 FC (Meeting) December 12 NRTS (Meeting) December 13 WS (Meeting) December 19 SMB (Meeting)
JOHN N. MORRIS	October 11 WS (Canceled) October 25 Board (Meeting) October 30 NRTS (Meeting)	November 8 WS (Meeting) November 15 WS (Meeting)	December 5 FC (Meeting) December 12 NRTS (Meeting) December 13 WS (Meeting) December 19 SMB (Meeting)
RUCHIR VORA	October 11 WS (Canceled) October 25 Board (Meeting)	November 8 WS (Meeting) November 13 D&I (Meeting) November 15 WS (Meeting)	December 13 WS (Meeting) December 19 SMB (Absent)

JANUARY 10, 2019

BOARD OF DIRECTORS	OCTOBER 2018	NOVEMBER 2018	DECEMBER 2018
JOHN A. YOUNG	October 8 FC (Meeting) October 11 WS (Canceled) October 25 Board (Meeting) October 30 NRTS (Meeting)	November 8 WS (Meeting) November 15 WS (Absent)	December 5 FC (Meeting) December 12 NRTS (Meeting) December 13 WS (Meeting) December 19 SMB (Meeting)
TOTAL MEETINGS HELD:	3	3	4

Board – Board of Directors
 D&I – Diversity and Inclusion
 FC – Finance Committee
 NRTS – Natural Resources and Technical Services Committee
 SMG – Special Meeting of the Board
 WS – Work Session

JANUARY 10, 2019

Agenda Item 2:

Purchase of Solids Thickening Equipment for the Mason Farm Wastewater Treatment Plant (WWTP)

Purpose:

In accordance with OWASA policy pertaining to certain large purchases, this memorandum provides summary information about the procurement of rotary drum thickeners (RDT's) for the WWTP. No Board action is required at this time.

Background:

Prior to the anaerobic digestion process, the Mason Farm WWTP uses equipment that thickens or concentrates the solids that are produced in various parts of the treatment process. This step helps to reduce the volume of solids treated in the anaerobic digestion process. As part of the Mason Farm WWTP Solids Handling Improvements Project ([CIP #278-51](#)), the current thickening equipment will be replaced with two RDTs.

Equipment selection was done early in the design phase in order to facilitate the final design of the project and also to guarantee pricing and delivery schedule. At the March 22, 2018 Board Meeting, staff provided detailed information (see Attachment 1) about the selection and price negotiation for two RDT units from Parkson Corporation, Inc. (Parkson). However, the purchase was not actually completed at that time.

In December, a purchase order for the RDTs was issued to Parkson in anticipation of the bid of the construction contract and also to lock in the negotiated price of \$414,725.00 before a price escalation clause would take effect. In accordance with OWASA purchasing policy, this memo provides the Board with information about this procurement now that the purchase is formally under contract.

Action Needed:

Information item, no action is needed.

Information:

- March 14, 2018 Memorandum: Information on the Selection and Procurement of Solids Thickening Equipment for the Mason Farm WWTP

January 10, 2019



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: Simon Lobdell

DATE: March 14, 2018

SUBJECT: Information on the Selection and Procurement of Solids Thickening Equipment for the Mason Farm Wastewater Treatment Plant (WWTP)

This memorandum provides information about the selection and procurement of new rotary drum thickeners (RDT's) for the Mason Farm WWTP Solids Handling Improvements Project (CIP #278-51). The memo reviews our process for choosing RDTs as the preferred thickening technology, as well as our procurement process for the selected RDT. No Board action is required at this time.

Background

The Mason Farm WWTP uses thickeners to concentrate solids generated in the WWTP for anaerobic digestion which produce biosolids for recycling. The current units are gravity belt thickeners (GBTs) which have reached the end of their useful life. The Capital Improvements Program (CIP) initially anticipated replacing the units with new units using similar technology. However, during preliminary design, staff and our engineering consultant (CDM Smith) evaluated alternative technologies and found that RDTs would be preferred. Primarily, the RDT's are anticipated to be more reliable, generate less odors and be more cost effective to operate and maintain. The RDT's will have a notable reduction in washwater, generate more concentrated solids, and may result in between 25,000 and 70,000 kWh of electrical energy savings (largely depending on final commissioning).

The project scope also includes the improvement of a number of auxiliary systems including the waste activated solids (WAS) pumping, primary solids pumping, and odor control systems. The design of these systems cannot be finalized until a vendor is selected for the RDT because the foundation design, piping, and secondary components are largely dependent on equipment details specific to the selected vendor and model. The team chose to select a vendor and RDT system before design was complete to reduce bid uncertainty with the general construction contract.

Discussion

Staff and CDM Smith developed equipment and vendor requirements and a set of weighted evaluation criteria, and in January 2018 issued a public Request for Proposal to meet these specifications. Three vendors (FKC, Parkson and JWC) submitted proposals by the bid deadline. Purchasing statute requires the award be made to the lowest responsible, responsive bidder. Two out of three bidders showed insufficient experience for the design parameters listed. Because of this, we consider Parkson to be the only responsive bidder. (Responsiveness in this case refers to a bid's conformance with specifications.)

The attached engineer's recommendation (Attachment 1) reviews the three vendors who submitted bids. This recommendation is weighted towards performance and reliability with cost as an important but secondary factor. Based on the engineer's review and Parkson's broad experience with similar applications, they recommended Parkson for award. Staff concurs with this recommendation because of Parkson's experience with 'blended solids' (i.e., a combination of WAS and primary solids), the physical limitations of our existing building, and the team's confidence in the operations and maintenance costs anticipated. This reasoning is described further below.

Firstly, Parkson is the only vendor with multiple facilities that operate with a blended primary and secondary solid stream similar to the Mason Farm WWTP. Primary solids and secondary solids are distinctly different in their corrosivity and material handling properties. Without a body of experience to back up the claim by other manufacturers of their suitability for the blended application, we would anticipate that significant modifications to their proposed design (and price) would be needed to achieve performance equivalent to Parkson. Secondly, the Parkson unit fits well within the footprint of the existing building, whereas the FKC unit would be substantially larger and provide less space for maintenance or future process improvements. Finally, the energy performance of the units is differentiated mainly by the washwater use, and the FKC unit requires twice the volume of water to achieve the required performance.

The Parkson unit recommended by the engineer was pilot tested at the plant and found to be reliable and easy to operate. As a specific example of the advantages of the Parkson unit, the use of chains and sprockets for rotation of the equipment is anticipated to be more reliable and fail-safe than the proposed direct-coupled drives of the FKC unit. The Parkson proposal is more expensive than the other vendors but not to a degree to warrant the extra effort and risks associated with alternative vendors. Additionally, the Parkson proposal is within OWASA's budget and comparable in cost to our overall estimate for the project. The table below shows the engineer's overall assessment of cost and the other criteria considered for the recommendation.

<i>Criteria Description</i>	<i>Criteria Weighting</i>	<i>Parkson Submittal</i>	<i>FKC Submittal</i>	<i>JWC-IPEC Submittal</i>
<i>Company Information and Experience</i>	35%	5	3	1
<i>Technical Support</i>	20%	5	3	1
<i>Warranty</i>	10%	5	5	3
<i>Pricing and Cost</i>	35%	4	5	4.8
		(\$414,725)	(\$369,000)	(\$378,700)
<i>Weighted Total</i>		4.65	3.90	2.53

Table 1 - Summary of Bid Results

Parkson’s proposed price is within our original budget and will present no significant design issues. The final bid-ready design is expected to be complete by the summer of 2018.

Procurement

As allowed by statute, the Board has delegated the authority to award contracts to purchase equipment over \$90,000 to the Executive Director and update the Board at the next meeting after the purchase is awarded. Therefore, no Board action is required; however, this current selection decision essentially commits OWASA for a future purchase of specific equipment (roughly \$415,000) as part of a future construction contract to be bid this fall. The future general contractor construction contract will list the selected vendor as the sole supplier because the listed equipment was publicly and competitively bid. In this case, we are not actually awarding a purchase contract, but instead securing the price now and awarding the equipment scope via the general contractor contract later. Alerting the Board now is in keeping with the spirit of the statute and OWASA purchasing policy.

Sometimes in these situations, staff may choose to pre-purchase equipment rather than include it in the general contractor’s scope. However, since the construction activity on this project centers around the thickening equipment, it is better to keep this responsibility with the general contractor that has to manage the whole project.

Conclusion

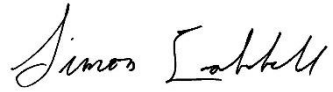
Based on the selection criteria included with the RFP for these units, the Parkson unit is recommended by both the engineer and staff and is the unit most likely to satisfy OWASA’s expectations. Staff recommends proceeding with negotiation of a final scope of supply with Parkson which will then be included with the construction contract to be bid this fall. Please let me know if you have any questions or comments.

Information on the Selection and Procurement of Solids Thickening Equipment for the
Mason Farm WWTP

March 14, 2018

Page 4

Respectfully submitted,

A handwritten signature in black ink that reads "Simon Lobdell". The signature is written in a cursive style with a large initial 'S' and a distinct 'L'.

Simon Lobdell
Utilities Engineer

Attachment 1 – Engineer’s recommendation

Agenda Item 3:

Appoint Audit Firm

Background:

General Statutes of the State of North Carolina and OWASA's Bond Order require that Orange Water and Sewer Authority have its financial records audited annually by an independent Certified Public Accountant.

In November of 2017, OWASA solicited audit proposals based upon the established criteria recommended by the North Carolina Local Government Commission.

A panel consisting of two board members and three staff members reviewed and evaluated the proposals received based on qualifications and cost. After interviewing the eligible respondents, Martin Starnes & Associates, CPAs, P.A. was identified as presenting the best proposal.

Martin Starnes & Associates, CPAs, P.A. has proposed to conduct the audit for Fiscal Year (FY) 2019 for a fee of \$31,150 for the basic audit and an additional \$1,500 for single audits of state and federal grant monies received and expended.

Recommendation:

Approve the FY 2019 audit contract with Martin Starnes & Associates, CPAs, P.A. for total base fees not to exceed \$33,000.

Action Needed:

Adopt the Resolution Awarding Audit Contract to Martin Starnes & Associates, CPAs, P.A. and Authorizing Chair of the Board of Directors and the Finance Officer to execute the contract.

January 10, 2019

**Resolution Approving and Awarding Audit Contract to
Martin Starnes & Associates, CPAs, P.A. and Authorizing Chair of
the Board of Directors and the Finance Officer
to Execute Said Contract**

Whereas, Orange Water and Sewer Authority is required by the General Statutes of the State of North Carolina and the Series 2001 Bond Order to have its financial records audited at the termination of each fiscal year; and

Whereas, in November of 2017, the Authority solicited audit proposals based upon the established criteria recommended by the North Carolina Local Government Commission; and

Whereas, Martin Starnes & Associates, CPAs, P.A. provided satisfactory service related to the Fiscal Years 2011 through 2018 financial audits;

Now, Therefore, Be It Resolved:

1. That the contract between Orange Water and Sewer Authority and Martin Starnes & Associates, CPAs, P.A. for financial audit of the Fiscal Year Ending June 30, 2019, for charges not to exceed \$33,000 is hereby approved subject to approval by the North Carolina Local Government Commission.

2. That the Chair of the OWASA Board of Directors and the Finance Officer are hereby authorized to execute such contract.

Adopted this 10th day of January 2019.

Yinka Ayankoya, Chair

ATTEST:

Raymond E. DuBose, Secretary

Agenda Item 4:

Update on Employee Health and Dental Insurance for next Fiscal Year

Purpose:

Information and presentation by Ellen Tucker, Principal Health and Wellness Consultant with Hill, Chesson and Woody to generate Board discussion and guidance to staff regarding renewal of Employee Health and Dental Insurance policies effective July 1, 2019.

Background:

The Orange Water and Sewer Authority began using the firm of Hill, Chesson and Woody in April 2014 to manage benefit plans and negotiate premiums for Employee Health, Dental, Life, Dependent Life, Accidental Death and Dismemberment (AD&D) and Long Term Disability (LTD) Insurance.

The current Employee Health and Dental Insurance plan contracts expire on June 30, 2019.

Information:

Ellen Tucker will be presenting the following information on January 10, 2019:

- Financial Performance of Health Insurance Plan
- Overview of Claims Data
- Renewal Considerations

A timeline of events is attached and will be available for discussion on January 10, 2019.

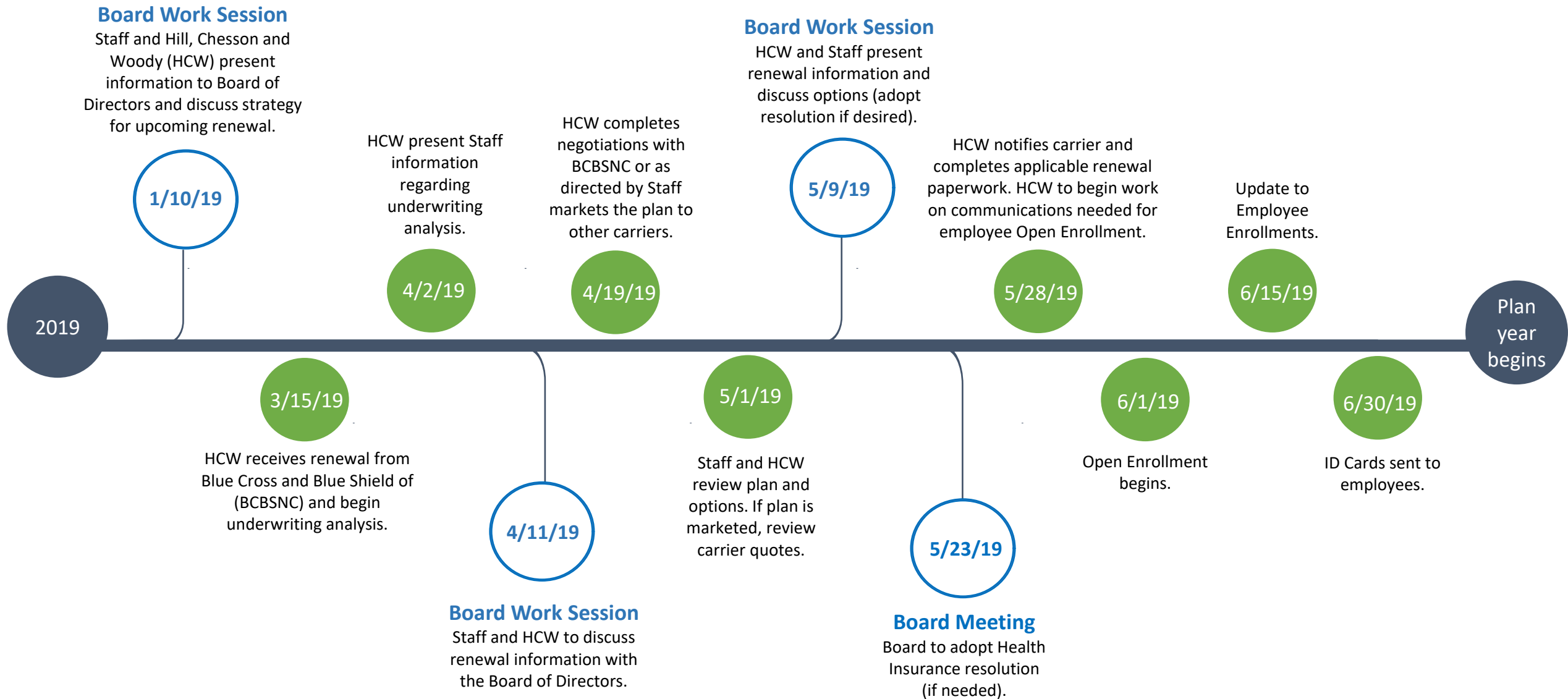
Action Requested:

Staff requests guidance from the Board regarding health and dental insurance renewal effective July 1, 2019. Based on this guidance, staff will work with Hill, Chesson and Woody to provide more information as it becomes available.

January 10, 2019

Health Insurance Renewal for FY 2020

January 1, 2019 – June 30, 2019



Agenda Item 5:

Budget Amendment for Fiscal Year 2019

Background:

At the December 13, 2018 Board Work Session, staff discussed potential actions we can take to make improvements to OWASA’s water distribution system. These actions include adding and retaining staff in the Engineering and Planning and Water Distribution departments and purchasing valve maintenance equipment. These expenditures are not in the original budget for FY 2019. Additionally, we have identified several other expenditures for FY 2019 that are not in the budget. An estimate of the financial impact of these additional expenditures on FY 2019 is shown below.

Expenditure	FY 2019
Capital Equipment Budget	
Valve maintenance vehicle and equipment	\$130,000
Operating Expenses	
Staffing changes (additional information is shown in Agenda Item 6 from the December 13, 2018 Work Session) ^{1 2}	\$146,700
Evaluation of the cause and OWASA’s response to the November 2018 water main break	\$60,000
Communications plan expenses	\$70,000
Diversity and Inclusion program consulting expenses	\$100,000
Higher than budgeted biosolids recycling expenses (dewatering)	\$100,000
Expenses related to Hurricane Florence (some or all may be reimbursed by FEMA)	\$133,000
Total estimated impact on Operating Expense Budget	\$609,700

¹ Includes payroll taxes and benefits

² FY 2019 Budget included anticipated AMI savings of 50% of the cost of these positions; therefore, the FY 2019 Budget impact of retaining these positions is 50% of annual salaries, taxes and benefits.

As mentioned during the discussion on December 13, 2018, the estimated impact on our projections of future rate adjustments is:

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Original projection	2.0%	2.0%	3.0%	4.0%	4.0%
Revised projection	2.0%	2.0%	4.0%	4.0%	4.0%

Budget Amendment:

Capital Equipment Budget

Staff recommends amending the FY 2019 Capital Equipment Budget to increase it by the amount of the valve maintenance equipment, \$130,000.

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Operating Expense Budget

Although the proposed additional operating expenses total approximately \$609,700, staff does not recommend amending the Operating Expense Budget at this time. We anticipate that a number of planned expenses will be less than the amounts budgeted for FY 2019. It is possible that the reductions in these budgeted expenses will offset some or all of the amounts of the unbudgeted items. Rather than amending the Operating Expense Budget now, staff suggests we reevaluate the need for an amendment to the Operating Expense Budget as we progress through the rest of the fiscal year. However, staff requests the Board’s approval to incur the additional expenses. (The Board gave its approval for the additional personnel costs at its December 13, 2018 Work Session.)

The following is a forecast of the Operating Budget results for FY 2019; it includes the unbudgeted Operating Expenses shown in the table on page 1 and estimates of what we believe we will spend for the year in all expense categories. The estimate for Operating Revenue is based on actual revenue realized through November 2018 plus our original estimate for December 2018 through June 2019. Water sales through the first five months of the fiscal year have been less than projected, likely due to rainfall in the service area.

Operating Budget	FY 2019 Forecast	FY 2019 Budget	Variance – Favorable (Unfavorable) Budget
	(thousands)		
Operating revenue	\$36,284	\$36,874	(\$590)
Operating expense	(22,995)	(22,524)	(471)
Non-operating income	1,230	1,218	12
Net income	14,519	15,568	(1,049)

Capital Equipment Budget Amendment:

The original Capital Equipment Budget for FY 2019 was \$871,135. Staff proposes to amend the FY 2019 budget to reallocate \$130,000 from Reserves to the Capital Equipment Budget. Any amount reallocated by this budget amendment that is not spent in FY 2019 will flow back into Reserves.

Except as otherwise restricted by law, the Board of Directors may amend the budget at any time after adoption in any manner as long as the budget, as amended, remains in balance (G.S. 159-15.).

Action Requested:

- Approve the attached resolution to amend the FY 2019 budget for Capital Equipment.
- Approve the additional Operating Expenses estimated to be \$609,700 with the understanding that staff will request a budget amendment if we determine that expense reductions in other budgeted items are not sufficient to offset the amount of the additional expenses.

Resolution Amending the Fiscal Year (FY) 2019 Annual Budget for Capital Equipment

Whereas, the Board of Directors adopted the FY 2019 Annual Budget of Orange Water and Sewer Authority; and

Whereas, North Carolina General Statute 159-15 provides the authority for the Board of Directors to amend the adopted budget; and

Whereas, staff has identified a need for capital equipment that was not included in the FY 2019 Annual Budget; and

Whereas, funds exist in reserves sufficient to cover the additional expenditures.

Now, Therefore, Be It Resolved:

1. That pursuant to the provisions of North Carolina G.S. 159-15, the Official Budget of Orange Water and Sewer Authority for the FY 2019 is amended as set forth in Attachment A.
2. That \$130,000 in reserves be transferred to capital equipment expenditures as set forth in Attachment A.
3. That the Executive Director is authorized and instructed to implement the revised budget as herein set forth.

Adopted this 10th day of January 2019.

Yinka Ayankoya, Chair

ATTEST:

Raymond E. DuBose, Secretary

**ORANGE WATER AND SEWER AUTHORITY
FISCAL YEAR 2019 ANNUAL BUDGET
STATEMENT OF INCOME, EXPENSE AND DEBT SERVICE**

	FY 2019 Annual Budget	Amendment	FY 2019 Amended Budget
Operating Revenue			
Water	\$ 18,224,334		\$ 18,224,334
Sewer	17,265,060		17,265,060
Reclaimed Water	454,440		454,440
Service Initiation Fee	154,345		154,345
Other	1,006,078		1,006,078
Refunds and Adjustments	(230,007)		(230,007)
Total Operating Revenue	<u>36,874,250</u>		<u>36,874,250</u>
Operating Expense			
General and Administrative	7,527,991		7,527,991
Operations	14,995,990		14,995,990
Total Operating Expense	<u>22,523,981</u>		<u>22,523,981</u>
Net Operating Income	14,350,269		14,350,269
Non-operating Revenue			
Customer Fees	1,194,353		1,194,353
Interest	23,678		23,678
Total Net Income	<u>15,568,300</u>		<u>15,568,300</u>
Debt Service			
Existing	7,155,554		7,155,554
New	0		0
Total Debt Service	<u>7,155,554</u>		<u>7,155,554</u>
Net Income Less Debt Service	<u>8,412,746</u>		<u>8,412,746</u>
General Fund			
Resources			
Transfer From Revenue	8,412,746		8,412,746
Transfer from Construction Fund (loan proceeds)	14,900,000		14,900,000
Grants and Contributions	0		0
Annual Income Available for Capital	<u>23,312,746</u>		<u>23,312,746</u>
Capital Expenditures			
Project Ordinances			
General Fund Contribution	6,052,000		6,052,000
Funded by Bond Proceeds	14,900,000		14,900,000
Total Project Resolutions	<u>20,952,000</u>		<u>20,952,000</u>
Capital Equipment	871,135	130,000	1,001,135
Total Capital Outlay	<u>21,823,135</u>		<u>21,953,135</u>
Annual General Fund Balance	1,489,611		1,359,611
General Fund Beginning Balance	<u>26,661,000</u>		<u>26,661,000</u>
General Fund Ending Balance	28,150,611		28,020,611
Project Funding	4,566,276		4,566,276
Reserves	16,955,000	(130,000)	<u>16,825,000</u>
Unallocated General Fund Balance	<u>6,629,335</u>		<u>6,629,335</u>

Agenda Item 6:

Discuss Consultant Analysis of November 5, 2018 Water Main Break and OWASA Response

Purpose:

To receive the OWASA Board of Directors' feedback and guidance on the findings and recommendations of the consultant's report.

Background:

Immediately following the November 5, 2018 water main break, OWASA engaged the consulting engineering firm of Hazen and Sawyer (Hazen) to determine the root cause of the break and to review OWASA's response. We received their report on December 19, 2018; see links below:

- [Executive Summary](#)
- [Full Report](#) (please note that sensitive information regarding the location of critical assets has been redacted)
- [Questions and Answers](#) about the report and actions OWASA is taking

In short, Hazen found the root cause of the main break to be a manufacturing defect in the pipe, combined with its age and original installation over 70 years ago.

Hazen also found that the delay in stopping the leak was due to three main factors: limited access to the valves, the presence of broken valves, and complicated piping infrastructure.

This information was shared with key stakeholders and posted on our website on December 20, 2018.

Staff Comments:

Staff has reviewed Hazen's report and determined it to be responsive to our request for an independent review of the November 5, 2018 water main break. We support both their findings and recommendations for improvement.

Staff continues to develop, in collaboration with our key stakeholders, an action plan for improving water system resiliency (below) and will incorporate Hazen's recommendations.

Action Plan for Improving Water System Resiliency:

Below is a brief summary of the actions currently underway to further improve resiliency of our drinking water system. We will provide routine updates to the Board, key stakeholders, and the public.

- Plan to invest \$33 million to replace 16 miles of water pipe over the next five years.

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- Created a new capital project to improve piping leaving the Jones Ferry Road Water Treatment Plant into the water distribution system. Design, bidding and construction is expected to take 24-30 months.
- On December 13, 2018, the OWASA Board approved the addition of a fourth Utilities Engineer position to support effective execution of the Capital Improvements Program, which includes important investments in water main replacement and system resiliency.
- Earlier this year, OWASA selected a consulting engineer to develop a new water main assessment and replacement prioritization model, to include recommendations to further improve system resiliency. This work is expected to be completed with the next 12-18 months. We plan to review the draft scope of work at the Board's February 14, 2019 work session.
- On December 13, 2018, the OWASA Board approved establishment of a dedicated valve maintenance crew with additional equipment. This crew is currently being formed, and its primary focus will be on ensuring the reliability of the over 12,000 valves in the water distribution system which are essential for planned and unplanned system maintenance.
- OWASA staff will continue to meet with UNC, UNC Hospitals and other key stakeholders and community partners to apprise, plan and collaborate on resiliency solutions.

Action Needed:

No action is needed; discussion as desired by the Board.

January 10, 2019

Agenda Item 7:

Approach for Developing a Forestry Management Program

Purpose:

To receive the OWASA Board of Directors' questions, comments, and feedback on a draft approach for developing a forestry management program for OWASA's forested lands.

Introduction:

OWASA owns approximately 2,400 acres of forested lands near Cane Creek Reservoir. The reservoir is a primary water source for OWASA's customers, and much of the 2,400 acres of land acts as the reservoir's protective watershed. Providing responsible and sustainable management of these lands supports OWASA's mission of providing safe and reliable water, wastewater, and reclaimed water services for the Chapel Hill-Carrboro community. Some of the forests OWASA owns are poor quality and are diseased, include storm damaged areas, or are stands of planted pines which require active management. Some of the poorer quality areas also pose a wildfire risk.

Since 2010, OWASA has been implementing a forest management plan on its 491-acre Cane Creek Mitigation Tract to comply with state and federal permit requirements. To address OWASA's remaining 1,900 acres of forested land, OWASA hired a forestry consultant to develop plans to manage them. These Plans were presented to the public in late 2010 and subsequently put on hold following extensive public comments and OWASA's need to focus on higher priority strategic plan initiatives.

OWASA plans to begin moving forward to manage its forests to protect water quality, improve the forest quality, enhance wildlife habitat, and reduce the risk of wildfire. The OWASA Board of Directors' Natural Resources and Technical Services (NRTS) Committee met on December 12, 2018 to discuss an approach to develop a forestry management program for OWASA's forested lands.

NRTS Committee's Proposed Approach for Developing a Forestry Management Program

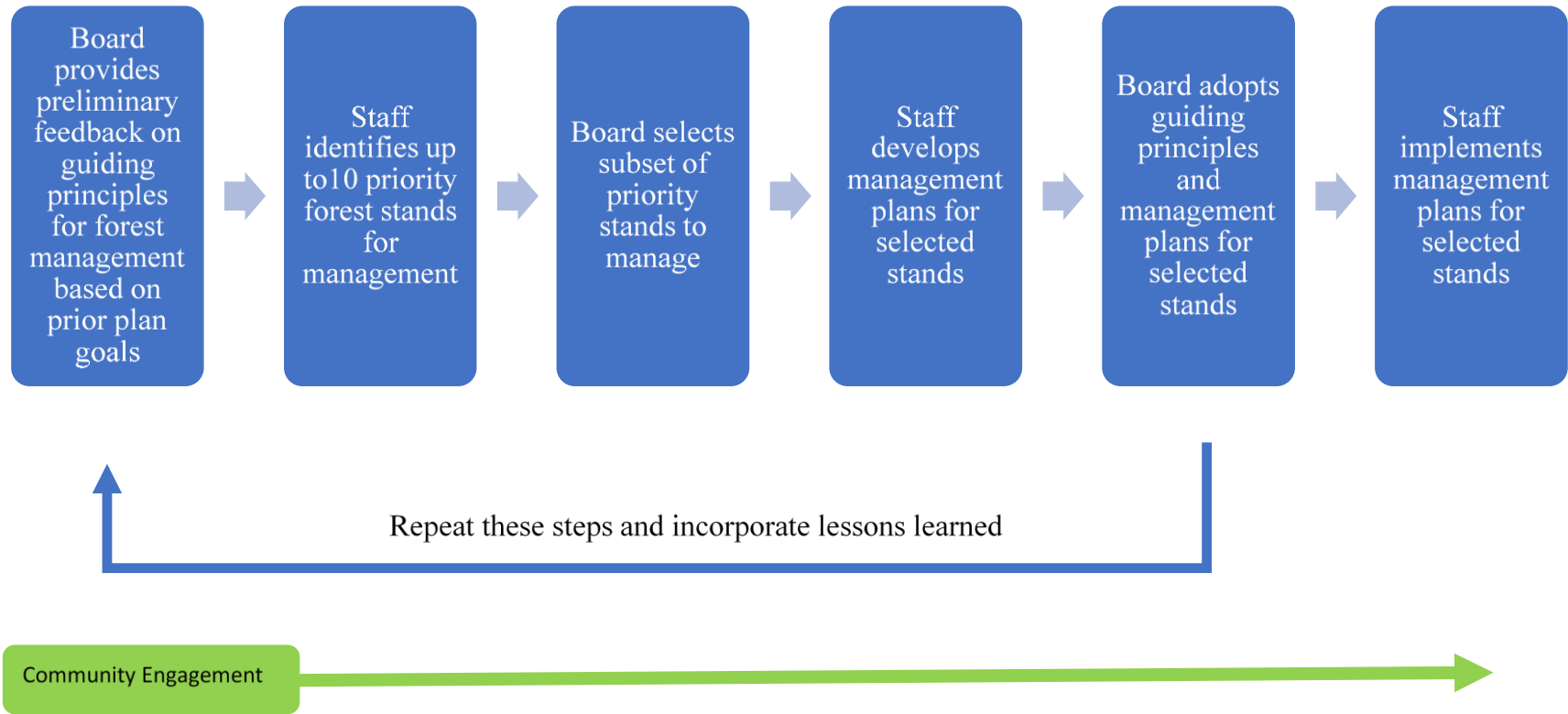
The NRTS Committee recommends an iterative approach in which the Board selects a few forested stands to manage that would result in immediate environmental benefits. We would develop management plans and implement the plans on these few selected stands. Based on what is learned, we would modify the program and select a few new stands to develop and implement stand management plans on. Based on this feedback, staff has drafted the approach illustrated in Figure 1 and described below:

1. **Board provides preliminary feedback on guiding principles for forest management** – these guiding principles should be based on the goals from the 2010 draft forest stewardship plans. The goals should be simplified which will allow flexibility in developing site specific plans. As we work through the initial site specific stand management plans (step 4 described below), the Board could further develop the guiding principles as we apply them to actual stands and adopt guiding principles with the stand management plans.
2. **Staff identifies up to 10 priority stands for management** – staff will work with its forestry consultant to identify up to 10 stands that will result in immediate environmental benefit after management activities occur. These stands should include a range of potential issues and illustrate different guiding principles and benefits.
3. **Board selects subset of stands identified in step 2 for management**
4. **Staff develops management plans for selected stands** – these plans should be developed for individual forest stands and identify the near-term management actions as well as a range of long-term forest management options. This will acknowledge that the state of the science may be different in the future, but be transparent to the public on what our current ideas are for the site. There would be opportunity for stakeholder feedback prior to the Board adopting the plans.
5. **Board adopts guiding principles and forest management plan(s) for selected stands**
6. **Staff implements the forest management plan(s) for selected stands**

These steps would be repeated and may be modified as we apply lessons learned.

A community engagement program would be built around this draft approach and would include a community engagement plan for each stand selected.

Figure 1: Draft Approach for Developing a Forestry Management Program



Note: A community engagement program, which will include a community engagement plan for each individual stand, will be built around this draft approach for developing a forestry management program.

Discussion by NRTS Committee:

The NRTS Committee [agenda](#) (Attachment 1) included a draft approach for managing OWASA's forested lands, which included the following basic steps:

1. **Develop Purpose and Guiding Principles** for sustainable management of OWASA's forested watershed lands – The purpose and guiding principles would serve as the foundation for prioritizing our forested land for management and for developing the Forest Stewardship Plans.
2. **Prioritize Forested Stands** for Management – Based on the guiding principles, OWASA would prioritize its forested stands for management.
3. **Evaluate 2010 Forest Stewardship Plan** for highest priority forested stands against the guiding principles. This evaluation would be done in the priority order established in the second step.
4. **Update the Forest Stewardship Plans** for the prioritized forested stands as needed to align with the guiding principles in priority order.
5. **Adopt Forest Stewardship Plans** for the prioritized forested stands.
6. **Implement Final Plans** – Each Plan would be implemented based on information included in the final Plan.

The Committee discussion centered around the guiding principles as outlined in the NRTS Committee meeting summary (Attachment 2) and described below along with other discussion highlights from the meeting.

Guiding Principles

The Committee reflected on the forest management goals that had been stated in the previous plan from 2010 as potential starting points for guiding principles.

The goals that had been stated in 2010 are listed below as a point of reference:

- To protect water quality (including, at a minimum, compliance with the riparian buffer protection requirements in the Jordan Lake Rules).
- To establish and maintain adequate riparian forest buffers to serve as an effective filter for runoff and prevent sedimentation of streams and other surface waters.
- To enhance forest conditions for wildlife health and species diversity and abundance by creating a forest of diverse habitat types and conditions.
- To minimize impacts of forestry management activities on adjacent properties.
- To improve, restore and enhance the overall quality of OWASA-owned woodlands through a long-range program of managing the forests in accordance with sound, science-based silvicultural practices.
- To generate revenue through the sustainable harvesting of timber to meet the above objectives, with the goal of having long-term forestry program revenues equal or exceed the costs to develop, implement and maintain OWASA's Forest Stewardship Plan.

Following their discussion, the Committee reached agreement on the following regarding guiding principles:

- The 2010 goals are a good first step, but should be simplified. Simpler guiding principles allow the ability to refine them as we develop plans for specific tracts of land.
- Staff should consider including additional guiding principles concerning wildfire risk reduction, ecological health of the forest, and carbon capture.
- Guiding principles should not be prioritized, with the exception that protecting water quality should be the top priority with any forest management plan.

Several Committee members did not agree with the 2010 goal that forest management should be revenue neutral. We need to manage our forest land as we do our other assets and that may cost money. They acknowledged that we need to consider costs and also include funding for forest management in the annual budget.

Proposed Sites for Management

The Committee thought that staff's initial list of sites for management should include a range of potential issues and illustrate different guiding principles and benefits.

Near-term versus Long-term Plans

There was some discussion about developing short-term versus long-term plans. The Committee felt that stakeholders would likely be interested in hearing about long-term plans, but also understood that deferring long-term planning kept options open to provide flexibility to address future needs. The Committee thought that a range of potential long-term management options should be included in the plans.

Community Engagement

The Committee did not discuss any specific community engagement; the community engagement process will be developed once there is agreement on the approach to develop a forestry management program. The Committee acknowledged that stakeholders included both OWASA customers and neighboring landowners.

Draft Guiding Principles

Staff has drafted the following guiding principles, to guide the new forest management approach, for consideration by the Board of Directors:

- Protect water quality, OWASA's highest priority.
- Improve ecological health of forested land through science-based practices.
- Reduce the risk of wildfire.
- Improve wildlife habitat and species diversity.
- Promote beneficial impacts of forestry management on the environment.
- Sustainably manage OWASA's resources.

These draft guiding principles are not prioritized with the exception of protecting water quality; that is OWASA's main goal in its forest management program.

Proposed Next Steps:

Staff and the NRTS Committee propose the following next steps:

- Incorporate the Board's comments and feedback into a revised draft approach to develop a forest management program.
- Staff will develop an approach to community engagement. This is tentatively scheduled for the Board to discuss at its February 14, 2019 work session.
- Based on discussion at the February 14 work session, staff will develop a draft community engagement plan.
- Staff and its forestry consultant, True North Forest Management Services, will identify up to 10 priority forest stands on which to develop management plans and present these to the NRTS Committee.
- The NRTS Committee will select a subset of forest stands for management to bring to the Board of Directors for approval. Staff will work with True North Forest Management Services to develop forest management plans for these property tracts.

Action Needed:

No formal action is needed. However, staff and the Committee recommend that the Board provide feedback on the draft approach to develop a forest management program, the draft guiding principles, and next steps.

Information:

Attachment 1: Agenda for the December 12, 2018 NRTS Committee Meeting

Attachment 2: Meeting Summary from the December 12, 2018 NRTS Committee Meeting




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: Natural Resources and Technical Services (NRTS) Committee
John Young (Chair)
Bruce Boehm
Jody Eimers
John Morris
Yinka Ayankoya (*ex officio*)

THROUGH: Ed Kerwin 

FROM: Ruth Rouse

DATE: December 7, 2018

SUBJECT: December 12, 2018 NRTS Committee Meeting

The NRTS Committee will meet on Wednesday December 12, 2018 at 4:00 pm in the OWASA Boardroom. The purpose of the meeting will be to discuss a draft framework to manage OWASA's forested watershed lands.

The enclosed document provides additional background information.

We look forward to seeing you on December 12 and to receiving your questions, comments, and feedback regarding this important topic.



Ruth Rouse, AICP
Planning and Development Manager

c: OWASA Board of Directors
Robert Epting, OWASA General Counsel

Attachments

Attachment 1: Draft Approach for Managing Forested Watershed Lands

Draft Approach for Managing Forested Watershed Lands

Background

OWASA owns approximately 2,400 acres of forested lands to support our core mission of providing water, wastewater, and reclaimed water services for the Chapel Hill-Carrboro community. These land holdings are mapped in Figure 1 and summarized in Table 1. These lands include watershed protection lands to protect Cane Creek Reservoir; the Cane Creek Mitigation Tract, which was purchased to mitigate the impacts to wildlife as part of the permit process to construct Cane Creek Reservoir; lands for our biosolids program; and land for a potential water treatment plant near Jordan Lake in Chatham County. In addition, OWASA has protected approximately 770 acres of land through conservation easements on private property in the Cane Creek Reservoir and University Lake watersheds.

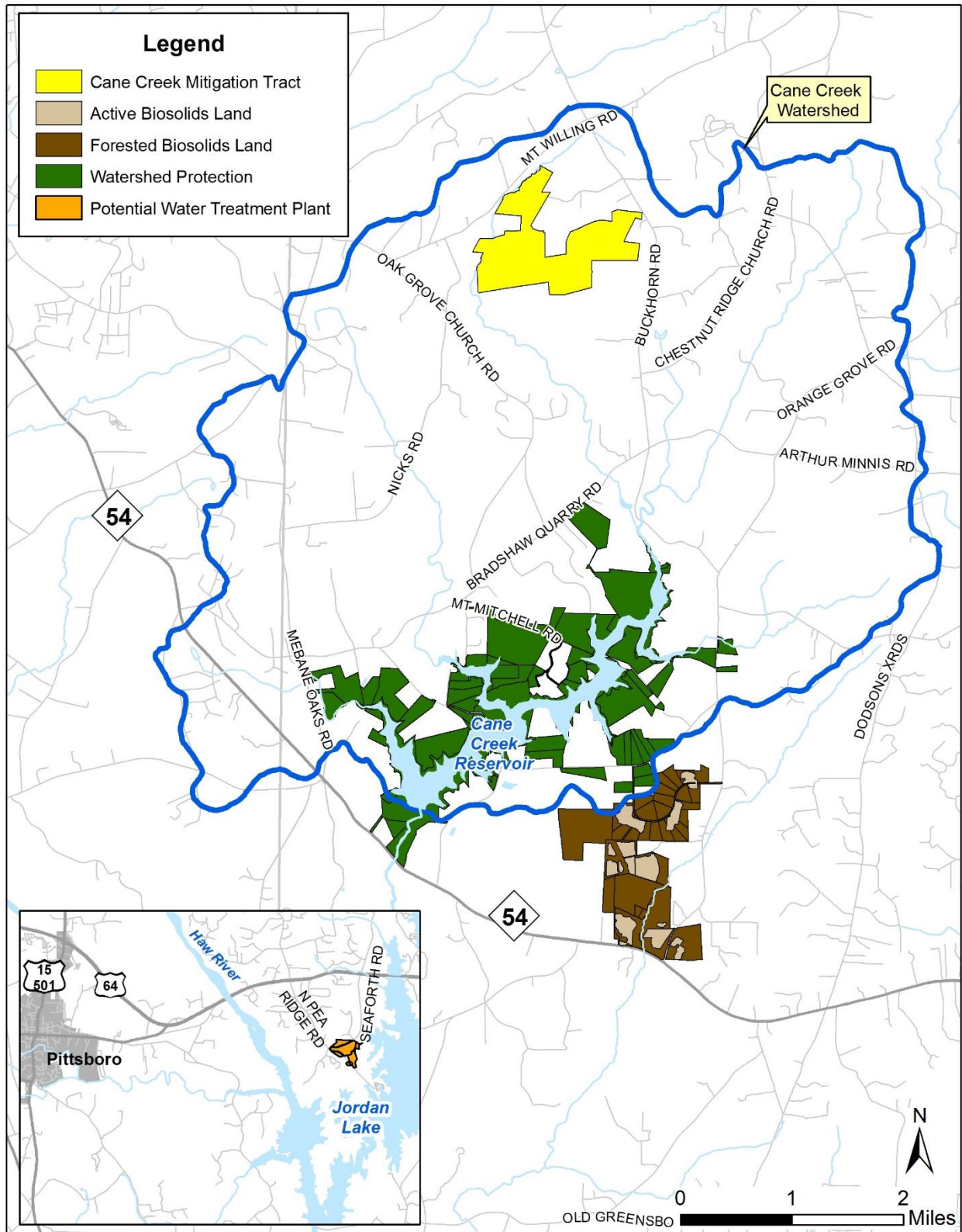
Table 1: Summary of OWASA-Owned Forested Land *(Acres rounded to nearest tens)*

Purpose	Acres
Watershed protection	1,260
Wildlife mitigation (and watershed protection)	490
Biosolids program	530
Potential water treatment plant	110
Total	2,390

OWASA recognizes the benefit of forested land to protect its water supply reservoirs. However, some of the forests it owns are poor quality and are diseased, include storm damage areas, or were planted with pines that are too close together which provides little wildlife benefit. Some of these poor quality areas also pose a fire risk. OWASA would like to manage its forests to protect water quality, improve the forest quality, and reduce fire risk.

OWASA implemented a forest management plan developed by the North Carolina Wildlife Resources Commission on the 491-acre Cane Creek Mitigation Tract to comply with state and federal permit requirements. To address the remaining 1,900 acres of forested land, OWASA hired True North Forest Management Services to develop plans to manage them. These Forest Stewardship Plans were presented to the public in late 2010 and subsequently put on hold following extensive public comments and concerns, and OWASA's need to focus on higher priority strategic plan initiatives. OWASA made a promise to the public that it would conduct a public meeting before implementing any forest management on these 1,900 acres. In addition, the local government Boards (Town of Chapel Hill Council, Town of Carrboro Board of Aldermen, and Orange County Board of County Commissioners) requested a presentation on the draft Forest Management Plan before it is finalized.

Figure 1: OWASA-Owned Forested Land



Strategic Initiative 6 of the Board of Directors' [Strategic Plan](#) is to develop a plan and policy framework for long-term management of OWASA lands. One action identified is to develop a long-term plan for sustainable management of OWASA forest lands; management could range from no active management to comprehensive management that includes a variety of forest management activities. As a first step in addressing this initiative, staff presented the Board of Directors with an overview of OWASA's land holdings and past discussions on [May 25, 2017](#). At that meeting, the Board requested that staff draft a Community Engagement Plan (CEP) for forest management and present that draft plan by the end of fiscal year 2018.

Staff began drafting a CEP to present to the Board, but determined that it was important to discuss an overall approach for managing our forested land prior to developing a detailed CEP. The Board supported this suggestion; staff presented a draft approach to manage our forested land at the [May 10, 2018 work session](#). The Board requested that staff work with the Natural Resources and Technical Services Committee to develop a process for OWASA's forest management program. Staff heard the following comments during the Board meeting to consider when drafting a framework:

- OWASA should develop draft guiding principles and then provide the public an opportunity to comment on them. OWASA staff concurs with this.
- OWASA should prioritize its lands for management and provide opportunities for feedback on plans developed for smaller areas rather than the entire remaining 1,900 acres in need of management (Plans for the entire 1,900 acres were presented to the public in one meeting in 2010). OWASA staff agrees that presenting plans for smaller areas would provide opportunities for more meaningful input from the public. A disadvantage of this approach is that it does not provide a comprehensive picture of what is planned for all 1,900 acres.
- OWASA should evaluate the existing Forest Stewardship Plans against the final guiding principles to determine whether the existing Plans meet the guiding principles or are in need of change. Staff concurs with this suggestion.
- OWASA should use the expertise of other land management agencies and groups as well as forester expertise in developing our program. Staff concurs with this suggestion.

Proposed Framework to Develop a Sustainable Program to Manage OWASA's Forested Watershed Lands

Staff's proposed framework is illustrated in Figure 2. It is important to note that Figure 2 does not include details on how we would engage the community. Once the overall process is agreed upon, we anticipate working with the Board to develop a complementary CEP. In addition, each of these steps would likely include substeps to include draft and final versions of documents. As we develop the CEP and apply what we learn as we move through the process in an adaptive management approach, staff could modify or include additional details in Figure 2. The following basic steps are identified:

1. **Develop Purpose and Guiding Principles** for sustainable management of OWASA's forested watershed lands – The purpose and guiding principles would serve as the

foundation for prioritizing our forested land for management and for developing the Forest Stewardship Plans.

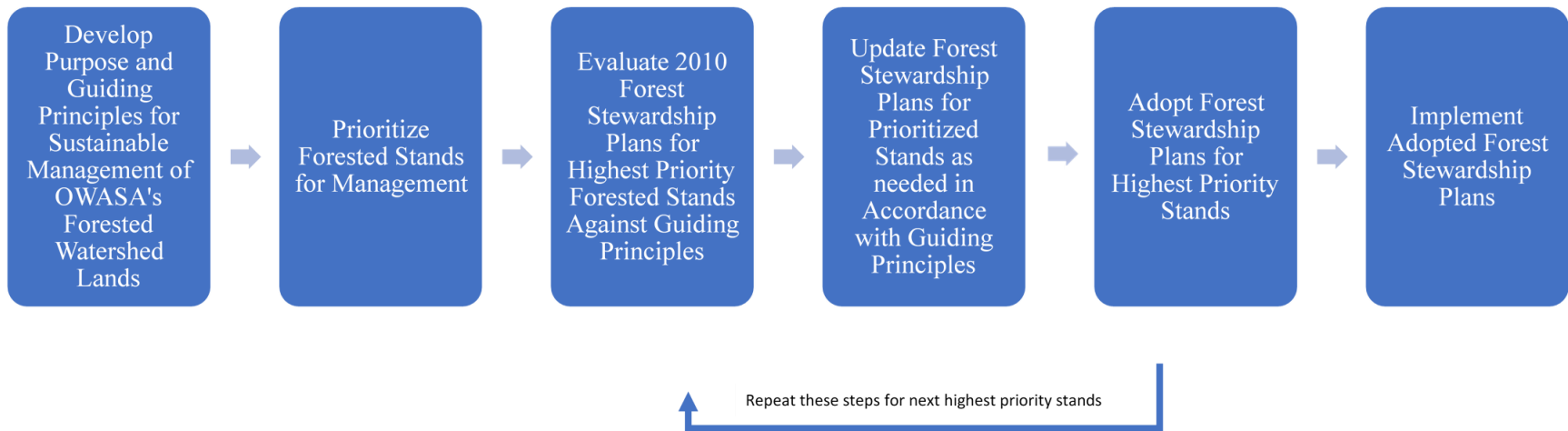
2. **Prioritize Forested Stands** for Management – Based on the guiding principles, OWASA would prioritize its forested stands for management.
3. **Evaluate 2010 Forest Stewardship Plan** for highest priority forested stands against the guiding principles. This evaluation would be done in the priority order established in the second step. Staff proposes beginning this evaluation with approximately the top 10 percent of forested stands.
4. **Update the Forest Stewardship Plans** for the prioritized forested stands as needed to align with the guiding principles in priority order.
5. **Adopt Forest Stewardship Plans** for the prioritized forested stands.
6. **Implement Final Plans** – Each Plan would be implemented based on information included in the final Plan.

Proposed Next Steps

Staff suggests the following next steps:

1. Staff modifies the framework based on NRTS Committee feedback.
2. Staff and the Committee present the framework to the Board of Directors for concurrence; at this meeting the Board should also provide guidance to staff on whether they would like the full Board or a Committee to review a draft CEP.
3. Staff draft a CEP and show opportunities for community engagement in the various components of the draft framework and bring this to the Board or a Committee for discussion as directed in Step 2.

Figure 2: Overall Process for a Sustainable Forest Management Program



Note: This figure does not include Community Engagement, which would be developed after the overall framework is agreed upon

**Meeting Summary
Natural Resources and Technical Services Committee
December 12, 2018, 4:00 p.m.**

Committee Members: John Young (Chair), Bruce Boehm, Jody Eimers, John Morris,

Other Board Members: Ray DuBose, Bob Morgan

Staff: Mary Darr, Ed Kerwin, Ken Loflin, Linda Low, Johnny Riley, Ruth Rouse, Todd Taylor, Mary Tiger, Stephen Winters

Public: Linda Cooper, Edward Mann III, Jim Warren

The Natural Resources and Technical Services (NRTS) Committee met to discuss a framework to manage OWASA's forested lands. John Young opened the meeting. Ruth Rouse briefly summarized the information in the [agenda package](#). General discussion points are summarized below.

Framework

John Morris sent an email to the Committee members prior to the meeting which outlined an alternative framework (Attachment 1). His proposal was:

1. Start with the goals included in the 2010 draft forest management plans and adapt them rather than developing guiding principles from scratch. The principles would be drafted in Committee, reviewed by the Board, and discussed with stakeholders.
2. Staff would recommend 6 to 10 sites where we would see immediate environmental benefits.
3. The Committee and Board would select 6-8 tracts to develop management plans.
4. Staff would develop 3-4 specific, near-term plans that would be presented to the Committee, Board, and neighboring landowners. These would not look beyond what was the initial management as that would keep long-term options open for future Boards.
5. Staff would implement the plans.
6. We would go back and repeat the above steps incorporating any lessons learned.

Guiding Principles

The Committee reached agreement on the following regarding guiding principles:

- The 2010 goals are a good first step, but should be simplified. Simpler guiding principles allow the ability to refine them as we develop plans for specific tracts of land.
- Staff should consider including additional guiding principles concerning fire risk reduction, ecological health of the forest, and carbon capture.
- Guiding principles should not be prioritized, with the exception that protecting water quality should be the top priority with any forest management plan.

Proposed Sites for Management

The Committee thought that staff's initial list of 6-10 sites for management should include a range of potential issues and illustrate different guiding principles and benefits.

Near-term versus Long-term Plans

There was some discussion about developing short-term versus long-term plans. The Committee felt that stakeholders would likely be interested in hearing about long-term plans, but also understood that deferring long-term planning kept options open as the state of forest management science changes. The Committee thought that multiple long-term management activities should be included in the plans to reflect that we may not presently know the best future management option.

Stakeholder Engagement

Several points were made regarding stakeholder engagement:

- Stakeholders include both OWASA's customers and neighboring land owners.
- The above process does not yet address community engagement; that process will be developed once there is agreement on the framework.
- Some Committee members felt there should be no engagement on the guiding principles as they will be vague. More specific goals for a given stand could be based on the broader guiding principles with neighboring landowners.
- Stakeholders present indicated that reducing fire risk was important to them and also suggested that stakeholder involvement begin early.
- The engagement process needs to be carefully thought out.
- One goal is to end up with plans that most stakeholders agree to.

Other Discussion

Several Committee members did not agree with the 2010 goal that forest management should be revenue neutral. We need to manage our forest land as we do our other assets and that may cost money. They acknowledged that we need to consider costs and also include funding for forest management in the annual budget.

Next Steps

The Committee identified the following next steps:

1. Obtain Board agreement on a revised framework that staff will develop based on the Committee discussion; staff will present this to the Board at its January 10, 2019 work session.
2. Staff will draft guiding principles based on the Committee discussion and provide those to the Board at its January 10, 2019 work session.

3. Upon Board agreement with the framework, staff and True North Forest Management Services (OWASA's consulting forester) will identify 6-10 tracts of land for management and present those in a future NRTS Committee meeting.
4. Upon Board agreement with the framework, staff will develop an approach for engaging the community on forestry management and present that at a future Board meeting.

The meeting was adjourned at approximately 5:30 PM.

Prepared by:



Ruth Rouse, AICP
Planning and Development Manager

Attachment 1: Email from John Morris to NRTS Committee Members and Staff on Forest Management at Cane Creek dated December 7, 2018

From: John N. Morris
Sent: Friday, December 7, 2018 11:56 PM
Subject: Forest Management at Cane Creek

To NRTS Committee members and OWASA Staff:

At our NRTS meeting on December 12 we will be discussing forest management at Cane Creek. I met with Ed and Ruth this week as suggested by John Young to propose a less complicated, incremental approach to forest management that I believe will get us started on long deferred management sooner, and at the same time give the public more effective participation by showing them exactly what we propose to do, rather than having a debate on abstract principles alone. We had a good meeting and appeared to be converging in our idea of how to proceed. I appreciated their time and engagement. Ed and Ruth encouraged me to send my proposals to the committee in advance, so here they are.

The materials Ruth sent out this afternoon are the same as she sent November 2 for our canceled meeting in November, and do not reflect our discussion this week. In any event, at our meeting next week we can look at both approaches and Ed and Ruth can explain their current thinking.

The agenda materials sent out for the May 25, 2017 Board meeting explain the need for forest management on OWASA land at Cane Creek clearly and convincingly:

Staff Recommendations for Forestry Stewardship

Staff recommends that we proceed with forestry stewardship on all our forested land. While there will likely be opposition to adopting and implementing Forest Stewardship Plans that involve active timber management on our lands – especially watershed land – staff believes we have an obligation to be good stewards and to follow best practices for managing our lands in perpetuity. Properly managing our land assets will promote healthy forests, prevent disease and infestation, and reduce fire risk, thereby assuring long-term water quality protection. OWASA is committed to providing the public meaningful opportunities for review and comment on future draft Forest Stewardship Plans prepared for any OWASA lands, and we will consider that feedback before final adoption and implementation of such plans.

I would only add to this statement that good management can also greatly improve wildlife habitat.

This same agenda item includes six goals for forest management that were developed in 2010:

OWASA developed the following goals which were presented to the Board of Directors in 2010 for its forest stewardship program:

- To protect water quality (including, at a minimum, compliance with the riparian buffer protection requirements in the Jordan Lake Rules (50 foot riparian buffer with the inner 20 feet being forested)).
- To establish and maintain adequate riparian forest buffers to serve as an effective filter for runoff and prevent sedimentation of streams and other surface waters.
- To enhance forest conditions for wildlife health and species diversity and abundance by creating a forest of diverse habitat types and conditions.
- To minimize impacts of forestry management activities on adjacent properties.
- To improve, restore and enhance the overall quality of OWASA-owned woodlands through a long-range program of managing the forests in accordance with sound, science-based silvicultural practices.
- To generate revenue through the sustainable harvesting of timber to meet the above objectives, with the goal of having long-term forestry program revenues equal or exceed the costs to develop, implement and maintain OWASA's Forest Stewardship Plan.

These goals were thoughtfully developed by the staff and our contract forester. They are still a sound basis for our forest management, and include the purpose of improving wildlife health and species diversity.

During our recent tour of the Cane Creek area, we saw two sites, both primarily stocked with pines, one planted in straight rows by OWASA and one naturally seeded on old fields with a few more hardwoods mixed in. Our forester explained that at both sites the pines are too crowded, which is slowing growth. A first thinning (neither site has been thinned) would take out appropriate rows of trees, giving the remaining trees more light and improving their health and growth. Thinning would also open up some of the forest floor to sunlight, allowing green plants to grow that would provide wildlife food and cover. In both cases there is good access from a paved road and impacts on neighboring land owners appear to be minimal. We should ask our staff to help us identify a small number of such priority sites for management for review by our committee. Ruth points out that we should also include sites where problems such as fire danger, storm blowdown, or beetle infestation make them priorities.

When we settle on a small number of priority sites for management, we should get public comment on these specific actions, along with the guiding goals listed above. This approach allows the concerned public to see exactly what we are planning to do, much more likely to give us useful comments than debating general principles, which individuals will interpret in different ways.

In planning public consultation, we need to think clearly about who our stakeholders are. The primary stakeholders are our water users and rate payers, who will want us to assure protection of the reservoir and will support recovering the cost of forest management. Individual adjacent landowners around Cane Creek are secondary stakeholders because of potential impacts of forest management on their property and amenities. We will communicate with them to let them know what is planned and to minimize our impacts on them, including making individual contacts.

As we plan for public comment, our announcement should stress that we are taking a very different approach than we did in 2010. Instead of presenting a whole complicated notebook of a hundred or so tract plans covering decades into the future, we are proposing a small number of management items which are described in detail so they can be understood. We will be inviting comment on these specific actions. We will also only be recommending near term actions. Decisions about management decades from now can be left to future leaders, who will need to take unpredictable changes in such important factors as climate, forest health, and community preferences into account as they make these future decisions.

Forest management is basically maintenance of a resource according to well understood scientific forestry principles. It lends itself to a series of incremental steps, where we start with the most urgent or beneficial projects, learn from our experience, and adjust our plans as we monitor our results. Trying to approach it through Board adoption of a long term master plan is not necessary and will take too long, as well as being much harder to communicate to the public.

I suggest these steps:

1. The NRTS Committee should go over the goals of forest management listed above with our staff and our consulting forester to make sure that we are happy with them or to amend them as needed. We do not need to start over on goals, but can rely on the product we already have to start with.
2. The NRTS Committee should work with our staff and consulting forester to pick a small number of initial priority management projects as outlined above. The Board should then review our goals (with any needed changes) and the proposed forest projects to assure that we all understand and support our recommendation.
3. The public should be invited to comment on our goals and on the selected management actions. Landowners living near the selected projects should be approached individually to minimize impacts on them to the greatest extent possible. At the beginning of any public meeting on forest management, we should have our forester or other appropriate expert explain the benefits of the actions we are recommending and the precautions we are taking to protect water quality. For example, 26 percent of the OWASA land around Cane Creek has been set aside for protective stream buffers where no forest management will occur. All forest management will be carried out according to proven best management practices to protect water quality.
4. After considering public input and modifying our direction as appropriate, the Board should authorize the selected management projects to begin.

We can anticipate that there will be some opposition to our plans. Some believe that cutting any tree is wrong. Others may fear that the reservoir will be harmed. We will need to explain carefully the technical basis for our recommendations. In the case of resuming fluoridation and of the radio emissions from new meters, we heard public objections respectfully, but decided to follow the most widely accepted scientific information that the benefits of these actions were great and that there were no significant negative effects. In the case of forest management, after hearing from the public and making any changes in our plans that are needed, we should be resolute in pursuing the good management and protection of the resources entrusted to us.

I am looking forward to working together with you on this important resource management responsibility.

Agenda Item 8:

Review Board Work Schedule

Purpose:

- a) Request(s) by Board Committees, Board Members and Staff
 - (Tentative) Relocate February 28, 2019 Board Meeting to OWASA Board Room for Special Work Session to discuss Communications and Community Engagement Plan (Linda Low)
 - Schedule a Community Engagement Committee meeting in February 2019 to discuss Agua Vista Web Portal (Ed Kerwin)
- b) January 24, 2019 Board Meeting
- c) February 14, 2019 Work Session
- d) Review and update the 12 Month Board Meeting Schedule
- e) Review Pending Key Staff Action Items

Information:

- Draft agenda for the January 24, 2019 meeting
- Draft agenda for the February 14, 2019 meeting
- 12 Month Board Meeting Schedule
- Pending Key Staff Action Items from Board Meetings

January 10, 2019

Agenda
Meeting of the OWASA Board of Directors
Thursday, January 24, 2019, 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. Members of the Orange County Board of Commissioners and Orange County Appointees to the OWASA Board will meet on Wednesday, January 30, 2019 at 8:30 AM in the OWASA Boardroom to discuss items of mutual interest (Ray DuBose)
 - B. OWASA's Annual Update to the Orange County Board of County Commissioners on Tuesday, February 19, 2019, at 7:00 PM at Southern Human Services Center (Ray DuBose)
3. Announcements by Staff
4. Additional Comments, Suggestions, and Information Items by Board Members (Yinka Ayankoya)

Petitions and Requests

1. Public
2. Board
3. Staff

Consent Agenda

Information and Reports

1. 2018 Annual Lakes Recreation Report (Kenneth Loflin/Johnny Riley)
2. Capital Improvements Program Semiannual Report (Vishnu Gangadharan)
3. 12 Month Board Meeting Schedule (Yinka Ayankoya/Ed Kerwin)

Action

4. (Tentative) Authorize Applying for State Revolving Fund Loans (Stephen Winters)
5. Minutes of the November 8, 2018 Meeting of the Board of Directors (Andrea Orbich)
6. Minutes of the November 15, 2018 Meeting of the Board of Directors (Andrea Orbich)

Regular Agenda

Information and Reports

7. Financial Report for the Six-Month Period Ended December 31, 2018 (Stephen Winters)

Discussion

8. Affordability Outreach Program Update (Mary Tiger)
9. Fiscal Year 2020 Budget Calendar and Assumptions (Stephen Winters)

Summary of Board Meeting Action Items

10. 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

DRAFT

Agenda
Work Session of the OWASA Board of Directors
Thursday, February 14, 2019, 6:00 P.M.
OWASA Community Room

The Board of Directors appreciates and invites the public to attend and observe its meetings. For the Board's Work Session, public comments are invited on only items appearing on this 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).

For items on the agenda, 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.

The Board may take action on any item on the agenda.

Announcements

- a. Announcements by the Chair
 - 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.
- b. Announcements by Board Members
 - Update on Meeting Between Members of the Orange County Board of Commissioners and Orange County Appointees to the OWASA Board on January 30, 2019 (Ray DuBose)
 - OWASA's Annual Update to the Orange County Board of County Commissioners on Tuesday, February 19, 2019, at 7:00 PM at Southern Human Services Center (Ray DuBose)
 - Chatham-Orange Joint Planning Task Force Meeting on Thursday, February 21, 2019 (John Young)
- c. Announcements by Staff
- d. Additional Comments, Suggestions, and Information Items by Board Members (Yinka Ayankoya)

Consent Agenda

Action

1. Executive Director Compensation (Robert Morgan)

Regular Agenda

Discussion and Action

2. Award the Wastewater Treatment Plant Solids Thickening Improvements and Headworks Rehabilitation Construction Contract (Simon Lobdell)
3. Award the University Lake Raw Water Pump Station Improvements Construction Contract (Simon Lobdell)

Discussion

4. Review Scope of Water Distribution System Prioritization Model (Vishnu Gangadharan)
5. (Tentative) Long-Range Water Supply Plan Final Demands and Yield (Ruth Rouse)

6. (Tentative) Community Engagement Approach for Forestry Management (Ruth Rouse/Linda Low)
7. Review Board Work Schedule (Yinka Ayankoya/Ed Kerwin)
 - a. Request(s) by Board Committees, Board Members and Staff
 - b. February 28, 2019 Board Meeting
 - c. March 14, 2019 Work Session
 - d. 12 Month Board Meeting Schedule
 - e. Pending Key Staff Action Items

Summary of Work Session Items

8. Executive Director will summarize the key staff action items from the Work Session

Closed Session

9. The Board of Directors will convene in a Closed Session for the Purpose of Discussing a Personnel Matter (Robert Morgan)

DRAFT

OWASA Board of Directors – 12 Month Board Meeting Schedule (January 4, 2019)

Month	Board Meetings		Committee & Other Meetings
	Work Session	Business Meeting	
January 2019	Purchase of Solids Thickening Equipment for the Mason Farm WWTP Appoint Audit Firm (C) Employee Health and Dental Insurance Update for FY20 (C) Approve Budget Amendment Discuss Consultant Analysis of November 5, 2018 Water Main Break and OWASA Response Approach for Developing a Forestry Management Program CS – Discuss Confidential Information Regarding Security Measures in Place to Protect OWASA Customers, Personnel and Assets 1/10/2019	Annual Lakes Recreation Report (C) CIP Semiannual Report (C) Q2 Financial Report (C) FY 20 Budget Calendar and Assumptions (C) Affordability Outreach Program Update (Tentative) Authorize Applying for SRF Loans 1/24/2019	Board Session with VISIONS, Inc. (1/9/2019) OC Appointees to the OWASA Board meet with Members of Orange County BOCC (1/30/2019) HR Committee Meeting to discuss retiree health and 457 deferred compensation (TBD) NRTS Committee Meeting to discuss forest management (TBD)
February 2019	(Tentative) LRWSP Final Demands and Yield (Tentative) Community Engagement Approach for Forestry Management Award the WWTP Solids Thickening Improvements and Headworks Rehabilitation Construction Contract Award the University Lake Raw Water Pump Station Improvements Construction Contract Review Scope of Water Distribution System Prioritization Model CS – Prepare for General Counsel Interim Review (C) 2/14/2019	CS – General Counsel Interim Review (C) 2/28/2019	OWASA's Annual Update to the Orange County BOCC (2/19/2019) Chatham-Orange Joint Planning Task Force Meeting (2/21/2019) (Tentative) Special Work Session to Discuss Communications and Community Engagement Plan (TBD) (Tentative) Community Engagement Committee Meeting to discuss Agua Vista Web Portal (TBD)
March 2019	FY 20 Draft Budget & Rates (C) Review AMI Manual Read (Tentative) LRWSP – Discuss Water Supply and Demand Management Alternatives CS – Prepare for ED Interim Review (C) 3/14/2019	Annual Update of the Energy Management Plan (C) Award the Manning and Country Club Water Main Replacement Construction Contract FY 20 Draft Budget & Rates and Proposed Staff Rate Adjustment Recommendation (C) Set date for Public Hearings – FY 20 Budget & Rates (C) CS – ED Interim Review (C) 3/28/2019	
April 2019	Review Employee Health and Dental Insurance Renewals (C) FY 20 Draft Budget and Rate Adjustment Information (C) Appointment of the Nominating Committee (C) 4/11/2019	Q3 Financial Report (C) FY 20 Budget and Rates Discussion and Authorize Staff to Publish Proposed Rates Demonstration of Agua Vista Web Portal 4/25/2019	

OWASA Board of Directors – 12 Month Board Meeting Schedule (January 4, 2019)

May 2019	Approve Employee Health and Dental Insurance Renewals Discuss Employee Merit Pay for FY 2020 5/9/2019	☞	Public Hearings – FY 20 Budget and Rates (Tentative) Approve New Banking Services Provider Approve Employee Health and Dental Insurance Renewals (if needed) 5/23/2019	☞
June 2019	Approve FY 20 Budget and Rates, including merit pay decision (Tentative) LRWSP – Final Water Supply and Demand Management Alternatives Election of Officers 6/13/2019	☞	Award Kensington Drive Water Main Replacement Construction Contract 6/27/2019	
July 2019	TBD 7/11/2019		TBD 7/25/2019	
August 2019	TBD 8/8/2019		Preliminary 12 Month Financial Report CIP Semiannual Report CS – Prepare for General Counsel Review 8/22/2019	☞ ☞ ☞
September 2019	EEO/Affirmative Action Report Annual Report on Disposal of Surplus Personal Property AMI Low-Flow Leak Alerts CS – General Counsel Review 9/12/2019	☞ ☞ ☞	Annual Report and Financial Audit Approve General Counsel Engagement CS – Prepare for ED Review 9/26/2019	☞ ☞ ☞
October 2019	CS – ED Review 10/10/2019	☞	Q1 Financial Report Strategic Trends Report and Strategic Plan Update 10/24/2019	☞ ☞
November 2019	TBD 11/14/2019		<i>Holiday – no meeting</i>	
December 2019	TBD 12/12/2019		<i>Holiday – no meeting</i>	

Note: Additional Board Meetings will include matters related to improving reliability and resiliency on OWASA’s services.

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.

OWASA Board of Directors – 12 Month Board Meeting Schedule (January 4, 2019)

- Water Conservation Plan will be prepared concurrent with update of the Long-Range Water Supply Plan.
- Update of Strategic Plan. On November 15, 2018, the Board and staff agreed to defer update of the Strategic Plan to a date to be determined.

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.

Abbreviations Used in Draft Schedule:

<p>(C) Recurring agenda item (generally these are “required” items)</p> <p>AMI Advanced Metering Infrastructure</p> <p>BOCC Board of County Commissioners</p> <p>CBOA Carrboro Board of Aldermen</p> <p>CE Community Engagement</p> <p>CEP Community Engagement Plan</p> <p>CHTC Chapel Hill Town Council</p> <p>CIP Capital Improvements Program</p> <p>COLA Cost of Labor Adjustment</p> <p>CS Closed Session of the Board</p> <p>CY Calendar Year</p> <p>D&I Diversity and Inclusion</p> <p>ED Executive Director</p> <p>EEO Equal Employment Opportunity</p> <p>FY Fiscal Year</p> <p>HR Human Resources</p>	<p>JLP Jordan Lake Partnership</p> <p>KPI Key Performance Indicator</p> <p>LRWSP Long-Range Water Supply Plan</p> <p>MOA Memorandum of Agreement</p> <p>MST Mountains-to-Sea Trail</p> <p>MFMM Multi-Family Master Meter</p> <p>NCDOT North Carolina Department of Transportation</p> <p>NRTS Natural Resources and Technical Services</p> <p>OC Orange County</p> <p>Q Quarter</p> <p>RFP Request for Proposals</p> <p>SRF State Revolving Fund</p> <p>SOW Scope of Work</p> <p>TBD To Be Determined</p> <p>WTP Water Treatment Plant</p> <p>WWTP Wastewater Treatment Plant</p>
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Pending Key Staff Action Items from Board Meetings

No.	Date	Action Item	Target Board Meeting Date	Person(s) Responsible	Status
1.	12-13-2018	Update Executive Director Key Focus areas to include the Board suggestion of establishing measurements for OWASA's diversity and inclusion work.	NA	Kerwin	Complete. Approved Key Focus Areas incorporating Board suggestion emailed 1-4-19.
2.	12-13-2018	Update Strategic Trends Report to reflect Board Member suggestions.	10-24-2019	Rouse	
3.	11-15-2018	Incorporate the Board's feedback on the projected demands and yield for the Long-Range Water Supply Plan and provide the additional information that was requested.	2-14-2019	Rouse	
4.	11-8-2018	Provide the Board via email the Scope of Work for the Distribution System Prioritization Model (when available).	NA	Gangadharan	Will be emailed out by February 1. Review of scope is on regular agenda for February 14 work session.
5.	11-8-2018	Considering Board feedback, refine/develop plans to address short and longer-term improvements for water distribution system resiliency for discussion and action at future Board meetings.	Ongoing	Taylor Darr	Regular Board meeting updates and discussion will be scheduled.
6.	11-8-2018	Schedule full Board discussion on PFAS sampling plan.	TBD	Kerwin	Will first follow up with Ruchir regarding this matter.
7.	10-25-2018	Incorporate Board feedback on WTP & WWTP Reliability and Risk Assessment Action Plan and provide the Board a yearly progress report via email in October 2019.	NA	Darr Taylor Loflin Dodson	
8.	7-12-2018	Address the Board's feedback on the action plan on communications during OWASA-related emergencies.	NA	Low	
9.	10-12-2017	Schedule future Board discussion about low-flow benchmarks to be used once AMI is implemented.	9-12-2019	Winters Taylor	Complete. Board discussion scheduled for 9-12-2019.