



**TOWN OF BOWLING GREEN
TOWN COUNCIL WORK SESSION**

A G E N D A

**Thursday, September 07, 2023
6:00 PM**

CALL TO ORDER AND QUORUM ESTABLISHED:

BUSINESS:

1. Finance Report
2. Wastewater/Utility Report

INFORMATIONAL ITEMS:

3. Discussion with Interim Manager About - Town Manager, Council Training, Committees and IT Contract

ADJOURNMENT



The Historic Town of **BOWLING GREEN** V I R G I N I A

MEMORANDUM

To: The Honorable Mark Gaines, Mayor and Members of the Bowling Green Town Council

From: John A. Anzivino, Interim Town Manager

Subject: Town Finances

Date: August 31, 2023

As Council members are aware the Town has a variety of important issues to address including staffing of existing vacancies, financial reporting /accounting and utilities operations/capital expenses. Each is interdependent and has, or could have, a significant impact on the Town's vitality. Being dealt with via cooperative efforts with the County (utilities) and staffing (internally) each topic will be covered separately in additional communications. The topic of this memorandum is focused on the Town's financial situation, which drives the Town's ability to respond to almost all other issues and particularly those noted above. The following is what I've found to date and some actions which I would recommend need to be taken to stabilize and improve the situation.

Current Situation

The Town, at of close of business on August 30, had, what appears to be, a healthy cash balance \$ 3,246, 661 at Atlantic Union. Unfortunately, beyond that good news the news is not so good. As Council members know the Town's last audit was completed in 2019 (indicating an unassigned fund balance of \$427,680). Since then, no audits have been conducted, the Town has experienced a major health emergency (Covid), a financial system conversion has not gone well (based upon initial conversations with staff) and financial reporting has become suspect due to a difficult conversion of financial systems from the Bright system to the Town's new software, Keystone. Having up to date audits and a locality's financial house in order is a prerequisite to maintaining citizen confidence in their government and granting and lending agencies such as the USDA and Virginia Resources Authority (VRA) for grants and loans.

While the Town has 'cash in the bank' as noted above it was suggested that the Town might be able to better determine its current position by visiting each budget (Fiscal Years 20-23) since the last audit and examine the difference between final revenues and expenditures to better gain confidence in that number. So, I could a stab at a concept suggested by others and gathered information from the Town's FY 2024 budget and the table below indicates what I found in conjunction with annual budget year end trends for the Town.

Town of Bowling Green Budgets FY 2019 -2024 Estimated (unaudited year end balances)			
Fiscal Year	Final Expenditures	Final Revenues	Difference (+/-)
2019			+\$427,680 (audited unassigned fund balance including \$64,602 of capital project funds)
2020	\$6,495,271	None Reported in FY 2024 Budget from Financial System Conversion – requires additional research	Unknown
2021	\$4,398,350	\$7,380,585	+ \$2,982,235
2022	\$3,922,511	\$2,998,432	- \$924,079
2023	\$2,337,709	\$2,704, 668	+\$366,959
2024	\$1,926,660	\$2,069,245	+\$142,585
Estimated Balance (unaudited)			+ \$2,995,380

As you can see the data above indicates that by using the method above the ending balance is not too far off the bank balance of August 30, which is good news. Unfortunately, as of today without additional professional assistance, I cannot tell you how much of the Town's August 30 cash balance has been designated for projects and how much remains unassigned. All it confirms is that we have money in the bank and, possibly, yearend information for unaudited budgets may not be too far off the actual numbers provided.

In speaking with our one permanent staff member and reviewing documents concerning internal Town operations here are some of the challenges which I have discovered the Town is currently facing which will affect our ability to bring financial reporting to an acceptable and consistent level for a small community:

- Data still needs to be entered into the Keystone system for utility billing and revenue generation purposes and checked for accuracy. Town staff, working with County staff, when available are working on checking the accuracy of current tax billing since the County has not activated the Keystone tax module and remains on the Bright system. The lack of information and its accuracy in Keystone has resulted in inaccurate utility and tax bills being prepared, some utility accounts not being billed, and revenue not being collected. Finalization of checks of the Bright system data needs to be completed to ensure accuracy and all real estate taxes are billed, particularly in the US 301 corridor.
- No written internal financial procedures exist resulting in new hires receiving various and inconsistent levels of training of staff when turnover in staffing occurs.
- Internal processes for posting revenues and expenses have not been consistent among prior staff members resulting in inconsistent and inaccurate postings within the financial reports and confusion for current staff.

- The Town is working with one staff person dedicated to finance, clerk and other activities. This staff member has good prior bookkeeping experience in a medical setting and is relatively new to the Town. She is dedicated to the tasks she has assumed and works long hours trying to keep up. She currently is performing accounts payable/receivable accounting functions for both General Fund and Utility functions, as well as payroll, purchasing and BPOL financial functions and also serves as Clerk to the Council and Planning Commission, assisting in preparation of agenda packages, attending Council and Planning Commission meetings, preparing minutes for each body. She also has taken on a variety of other duties and is the key operator of the financial systems (Bright/Keystone). The Town is fortunate to have her on staff. While an Administrative Assistant will bring some relief the Town needs additional support that provides a deeper knowledge of and time for public finance.
- Past hires brought on to mitigate the problems above have not been well trained and adequately supervised, which resulted in accounts being posted in an inconsistent fashion which has led to additional problems in accuracy of recordkeeping.
- Utility (water/sewer) and general Fund revenues and expenditures are seemingly accounted for in the budget, but unassigned fund balances are not readily available.

What I understand is Being Done to Address the Situation

To correct the identified challenges above takes both time and money. Currently, the Town has been working with County staff familiar with the Bright system to assist in correcting the errors made during the conversion process and ensure a higher level of accuracy in tax billing. I have also enlisted Steve Manster on a volunteer basis to perform data entry functions for utilities.

I have also been briefed that discussions have been held with a major accounting firm (Brown-Edwards) that I am told has the ability to untangle the Bright/Keystone conversion difficulties, assist in better defining internal financial practices and perform needed and past due audits. The Mayor and I have had discussions concerning their capabilities but have not yet had a chance to meet with their Principal in Charge due to her being out of the country but I am hoping to at least have a phone conversation with her this week. I am also aware that with the Town's record-keeping as it exists and the Town's software systems and staff's level of training and familiarity in them is resulting in delays in preparing some of the reports Brown-Edwards has requested. As I understand it these reports are important in providing information Brown-Edwards needs to provide the Town with a reasonable work plan so that they may best address the Town's challenges. Town staff indicate that the reports require time to prepare due to the nature of the requests and the Town's software but require time to do it and a deeper dive into the use of the Keystone software. There has been a strong desire to provide the information, but not the time to do it.

I also understand that the Council has received a proposal for hourly temporary employee services that could be utilized to begin to reduce the backlog of data needing to be entered. With adequate direction this approach, supplemented by Steve Manster's part-time effort, could save the Town money by allowing less complex data entry tasks to be performed in advance of the arrival of hire paid accounting professionals and provide current staff with the time to work on current Brown-Edwards requests. Coupled with Town requested County cleanup in regard to Bright all of these actions will be important in

laying the groundwork for Brown-Edwards or another firm to begin their work of auditing the Town's prior fiscal years efficiently.

Recommended Steps

To continue the Town's efforts to restore and build on its financial systems I would offer the following recommendations to the Town Council:

- Authorize hiring part-time, contracted assistance to reduce the backlog of data entry
- Continue to work with the County on cleaning up the Bright financials for use by Town retained accountants
- Begin to more aggressively seek to fill the position of Town Treasurer
- Upon review of their work plan enter into an agreement with an accounting firm (Brown-Edwards) to untangle the data for Fiscal Year's 2019-23 and produce certified audits for each fiscal year
- Retain outside assistance (could be a former Finance Director, accounting firm or related financial services firm specializing in public sector accounting) to coordinate preparation of documented internal accounting processes for internal staff use.
- Train staff in processes

In closing, it took time for the Town to get into the position it is in and will take some time to reestablish sound financial accounting/financial practices. As noted, it will take some time to correct.



The Historic Town of **BOWLING GREEN** V I R G I N I A

MEMORANDUM

To: The Honorable Mark Gaines, Mayor and Members of the Bowling Green Town Council

From: John A. Anzivino, Interim Town Manager

Subject: Utilities Update

Date: September 4, 2023

As the Town Council knows the Town has a lot of catching up to do and decisions to make in conjunction with operations and viability of its water and wastewater operations. I will briefly try to bring you up to date on current issues. Many of these will require additional thought, study and longer term, funding.

Town County Emergency Operations Agreement

Wastewater Treatment Plant and Lab

As noted in my weekly Council update briefing significant progress has been made in stabilizing the Town's wastewater treatment plant and its operations by the County with all 'Immediate Action' items identified near completion or underway. Most significant of these with replacement of sand in the sand drying beds the most significant item. This effort is well underway, and work is expected to begin as early as this week. All identified deficiencies/problems at the Lab are also complete or underway (5 of 5 issues resolved or near completion). In addition, the County in concert with Town staff has worked on correcting problems at two of the Town's wastewater pumping stations (Maury Heights and US 301) replacing pumps that needed to be replaced and dealing with issues created by improper disposal of materials by users (disposable diapers clogging pumps at one pump station).

Beyond that the County has identified several 'Actions Highly Recommended' for completion over the next 90 days. Expense for these items at the top end as estimated by the County require expenditure of an additional \$275,000, (high end County estimate) but is necessary to place the plant into an acceptable level of operation and in conformity to DEQ permit requirements. All of these are complete or awaiting quotes or inspections by a contractor and are being addressed by Town and County staff. In addition, there are numerous minor repairs, as identified in the County work plan being carried out with no assigned cost at this time.

More problematic for wastewater treatment processes at the plant is the infiltration of rainwater during periods of heavy rain. Twice in the past couple of weeks heavy downpours have created a situation that

has placed the wastewater plant in 'bypass' operational mode which means simply that there is such a high level of influent that the plant is not sized to handle it. When this occurs solids are retained, but minimal treatment (disinfection) of the remainder of the waste is carried out. This is not in conformance with the Town's permit issued by DEQ.

To reduce the infiltration of water and reduce flow into the plant the Town needs to seriously consider a more aggressive infiltration/inflow program – a need which was demonstrated by emergency repairs to the sewage line at the Manin Street/Broadus Avenue intersection. The extent of the problem was outlined in a preliminary engineering report by Dewberry Engineers carried out in 2021 at the request of the Town which identified \$ 2,378,000 of construction costs for replacing several lines and rehabilitating/replacing several manholes (40 +/-) along Main Street, the surrounding downtown area and in other areas of Town.

Water System Improvements/Issues

Well 4 was operating at 25% capacity. The pump has been pulled (August 24), several leaks in the well pump line identified. A new pump and piping have been ordered and should be received within the next week and the well put back on line until replacement.

A secondary issue with groundwater quality was identified when regular test results unexpectedly determined a higher of Gross Alpha (Gross Alpha is a permit regulated naturally occurring background element in groundwater created when certain radioactive elements decay or breakdown) than allowed by the Town's permit in Wells 4 and 5. Well 5 provides the Town's highest yield of 220 gallons per minute and is key to the Town's ability to supply customers. This was a surprise and could have occurred for a number of reasons including current pumping issues and a 'bad test'. To resolve it additional testing is underway with results expected soon. If recent tests confirm a higher than acceptable level there are both short and long term treatment options available which I have authorized the County to pursue, if necessary since we are charged with providing of safe drinking water, within permit parameters, to the Town's customers.

Longer Term Issues

The world of utilities is no longer a simple one for localities, particularly smaller ones, due to customer expectations and regulatory requirements which protect the customer and the environment. Challenges exist in adequately meeting operating costs (chemicals, electricity, staffing and other operating expenses) and in maintaining physical infrastructure (wells, distribution lines, treatment plants, pumping stations and collection lines) as regulatory requirements increase and general costs of materials grow. This is particularly true in wastewater services where the product treated, and chemicals used are hard on both the collection treatment processes. Ideally utility systems have well-planned maintenance programs to address these impacts, but many smaller entities lack the ability to adequately complete and carry out the plans. The challenges are increased further by the need to hire and retain well-trained and licensed staff which are in short supply.

The previously referenced preliminary engineering report provided by Dewberry in 2021 also provided a listing of needed system improvements (wastewater treatment plant, pump stations and collection system repairs) totaling \$16.9 million (2021 costs) of which \$13,292,600 was for improvements to the wastewater treatment plant; a plant with approximately 33 years of life on it.

A significant investment in capital cost as well as a significant cost in continuing operations (\$ 569,550 annually as outlined in the Town's FY 24 budget) indicates that other options might be worthy of consideration such as entering into an agreement with Caroline County to treat the Town's wastewater. Such an option would parallel systems in the Hampton Roads region of Virginia where smaller systems (Towns of Urbanna, West Point, Mathews, King William, Surry Counties to name a few) contract with the Hampton Roads Sanitation District for wastewater treatment services due to the economies of scale gained by a larger organization while maintaining their own municipal or County water systems.

I offer this only as a thought and, as noted, the issue requires further study and discussion due to both financial and political considerations. However, continued cost increases for both capital and operations undoubtedly will continue with direct impacts on the rate that the Town's customers pay.

Closing Thoughts

The Town is fortunate that Caroline County entered the utility business in 1986 and has grown in both sophistication and expertise and has stepped in to help the Town. Working together the system is being stabilized and short term water and sewer issues addressed. Longer term the Town needs to work towards developing a plan for future direction and improvements while diligently working within its financial abilities to correct infiltration issues for its sewage system and distribution problems for the water system (funding of the Main Street line replacement). While both of these projects may/will be eligible for some federal/state assistance additional work needs to be completed to prepare them for construction so that they are 'shovel ready'. Less for the waterline replacement where the Town will soon begin obtaining construction easements and more in the sewer line area for final engineering. These will be topics for discussion with your new Town Manager, but, given my experience in utility systems, I would be remiss in not raising them with the elected body so that you may begin to give them some thought and begin developing appropriate plans.

I look forward to any comments you may have and future discussion on the topics

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County of Caroline

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August 10, 2023

**Town of Bowling Green
Emergency Utility Operations**

This memo prioritizes issues that have been identified concerning the Town of Bowling Green's water and wastewater facilities.

Overview

- An introductory meeting was held on July 27th between Caroline County and the Town of Bowling Green's management and staff members to introduce the County's initial possibility of assistance in emergency operations and oversight during the Town of Bowling Green's compliance transition during its loss of licensed employees. Caroline County would assist the remaining town staff with licensed water and wastewater operational oversight, with direction concerning water and wastewater operations. This service was requested to begin Tuesday, August 1, 2023. The town council and board will determine future procedures and staffing options during this emergency service and process.
- A walk around of town facilities was completed by county staff, along with a staff-to-staff discussion concerning issues currently being experienced by the Town. The walk-around was conducted over three days (July 27th, 28th, and 31st), with pictures of all facilities taken on the last day.
- A meeting between county staff, one board member and two council representatives from Bowling Green was held on July 31st as requested by the Caroline County Board representative for the Bowling Green district. The meeting was held to discuss the walk-around items concerning emergency operations and to provide this information to the town officials.

- On August 1st, Caroline County Utilities began emergency oversight and management of the Town of Bowling Green Utilities Operations as requested in writing by the Bowling Green's Town Manager, Mrs. Finchum, to County Administrator, Mr. Culley, on July 27th.
- On August 3rd, the Bowling Green Town Council meeting was held, where county staff was asked to attend and discuss the emergency operations of the Bowling Green Utilities. Town Council requested that a list of these concerns be presented in order of priority and be presented to Town Council for review.

LAB

Immediate Action Required

- **The Emergency Auto-Dialer**
 - Auto-dialer is now active but needs a dedicated phone line for operation. The Auto-dialer connection was moved to a VOIP (Voice Over Internet Protocol) connection, which was unsuccessful as they are two different technologies. A dedicated POTs (Plain Old Telephone) line is required for the successful operations of this device. We were told that Town staff is working on ordering a dedicated POTs line.
 - Cost – Monthly phone plan (In progress)
Phone Line Has Been Installed 8/25/23
Auto Dialer has been programed and tested
Now in RUN mode
- **Initial Demonstration**
 - Initial Demonstration of Capabilities for all Town employees must be completed for all field-testing calibration and laboratory compliance. County staff is working with Town Staff to complete this task.
 - Cost – Staff Time (In progress)
Complete
- **Required Documentation**
 - Town staff has ordered a bound and page-numbered logbook to track daily activities.
 - Cost ~\$80.00 (In progress)
Complete
- **DMR Access & Update**
 - County Staff has been working with DEQ along with the Town Manager, Mrs. Finchum, to gain access control and to update the required License Operator and Signatory Authority. (Completed August 9th)
 - Cost – Staff Time (In progress)
Complete
- **Update Lab Equipment**

- The D.O. (Dissolved oxygen) meter cap had expired. County staff provided a new D.O. cap from our stock with the understanding the Town would replace our D.O. cap.
 - Cost ~\$185.00 – (In progress)
Complete

WASTEWATER TREATMENT PLANT

Immediate Action Required

- **Effluent/U.V. Area**
 - U.V. lights, controls and Trojan 3000 system are scheduled to be replaced by funds set aside by the town council. The Town issued a P.O. to Heyward on April 25th. Heyward gave a set of submittals to Mr. Irby on May 11th and was awaiting approval of the submittal to order the equipment. County staff has received the submittals, and with permission from Town Manager, Mrs. Finchum, County staff has reviewed and approved the submittals with comments.
 - Cost - P.O. was previously issued – (In progress – approximately three (3) months out)
Submittals Approved 8/23/23
Two-month lead time
White Oak Electric will be performing the install (not part of the PO)
- **Drying Beds**
 - Town staff is seeking quotes for removing the improper sand that had been installed in the sand beds in 2018 and installing new class A sand as required. Coordination with Waste Management on sand disposal has also begun. Quotes are forthcoming.
 - Cost ~\$25,000 -\$45,000 (In progress, Town staff is gathering quotes and need approval to move forward once we have the required three quotes)
Working on Specification - Complete
Paint Filter Test - Complete
Sand Classification - In Progress
- **Oxidation Sump Pits**
 - Oxidation ditch sump pit areas housing chain drives and roller block bearings were full of water and oil as the two chain drive motors are leaking oil on both sides of the ditch and into the sump pit. The oil in the sump pits must be removed to prevent hydrocarbons from entering the waterways. Staff recommends temporarily installing oil drip pans and hydrocarbon absorption pads to relieve oil issues.
 - Cost ~\$500 -\$2,000 (Need approval to move forward)
Pans and hydrocarbon pads installed
Working on scheduling a Pump Truck

Action Highly Recommended (90-days)

- **Solids Issue/ Infiltration**

- Town staff has been asked to increase waste rates, and once the drying beds are repaired, the solids issue should, at that time, resolve itself.

- Cost – Staff Time (In progress)

Replacing Sand -specification in progress

Emergency hauling of Waste Activate Sludge – Local Services

- **Oxidation Ditch**

- The two ditch drive gearboxes need to be looked at for replacement as they are worn out, causing the oil leaks.

- Cost ~\$25,000 - \$50,000 (Need approval to gather quotes)

Atlantic Pump and Equipment (Inspection pending)

White Oak Electrical (Inspection 8/30 quote pending)

- **Sand filters**

- Sand filters are in need of rotation. The three filters are supposed to be rotated in operation every 30 days at a minimum. We began the process and found that the middle sand filter was not in proper working order. It was brought to our attention that the other two sand filters were rehabbed in 2017; however, the middle sand filter was not. This middle sand filter needs further evaluation and priced for repair. The O&M (Operations and Maintenance Manual) for the sand filter requires the sand to be four (4) feet from the water surface. All three filters are approximately eight (8) feet from the surface.

- Cost ~\$25,000 - \$50,000 (Need approval to spend more time evaluating this issue)

The two filters that were rehabbed in 2017 only have half the required sand. They need additional sand to function properly

The middle filter needs to be rehabbed Parkinson provided a quote in Feb 2023

- **Influent**

- Auger/ Debris removal was installed in 2017, and the headworks seem to be in good operational condition; however, the control screen is not functional and requires replacement.

- Cost ~\$1,500 - \$2,500 (Need approval to gather quotes)

White Oak Electrical (Inspection 8/30/23)

SEI (inspection pending)

- **NON Potable Water Pumps**

- These pumps recirculate water to the water WWTP hoses and plant lines to assist with washing down and cleaning the plant. Both of these pumps have been removed and were not replaced. The wastewater plant now uses the Town's potable water to wash down and clean the facility.

- Cost ~\$5,000 - \$30,000 (Need approval to gather quotes)

Atlantic Pump and Equipment (inspection Pending)

White Oak Electrical (Inspection 8/30/23)

- **Digesters**

- Town staff recently replaced a digester blower and now has an issue with one side of the digester not draining correctly. Town staff recently repaired this; however, the digester blower vibrates significantly. Town staff has contacted a contractor to have it examined.

- Cost ~\$5,000 - \$12,000 (In progress)

Contractor pulled and installed a metal plate it's in working order

- **Wet well**

- Missing one telescopic valve from the future side that is used in case a spare is needed.

- Cost ~\$2,000 - \$3,000 (Need approval to gather quotes)

Still gathering quote

- **Scum Pumping Station**

- This station is in operating order; however, the control box is very weathered and dated, along with corroding on the inside.

- Cost ~\$4,000 - \$5,000 (Need approval to gather quotes)

White Oak Electrical (Inspection pending 8/30/23)

- **O&M Manual**

- The O&M Manual is still the original version and has not been updated, and it still lists hours of operation as 16 hrs per day. The hours were changed and approved in 1994, and staffing went to 12 hours. Apparently, it was changed in 2016 or 2017 from 12 hrs to 10 hrs; however, neither the Town nor DEQ has any record of this change. The O&M manual needs to be updated to reflect the proper hours of operation and updated for current operational use. The change of hours approval letter from DEQ would also be required to insert the appropriate date of the change.

- Cost Staff Time ~\$2,500 - \$3,500 (Need approval to start the update)

Digitizing InProgress

- **Chemical Feed/ Addition**

- All chemical addition plumbing and chemical addition pumps have been removed from the chemical room. The WWTP DEQ permit was approved with four (4) LMI pumps, and two (2) stainless steel polymer mixers that have been removed and discarded.

- Cost ~\$75,000 - \$100,000 (Need approval to proceed with quotes)

Oh Hold – This equipment is part of the permitted equipment required by the Sewer Collection and Treatment regulation (SCAT

Regs) However, chemical have not been used in recent years and that money can be spent on more urgent matter at this time.

- **Influent grit**
 - Excess buildup of grit needs to be removed from the influent chamber.
 - Cost ~\$500-\$1000 (Need approval)
Completed
- **Spare Parts**
 - There are not any spare parts that are required to be on hand as per the WWTP O&M manual. Attached is the list of required Critical Spare Parts Inventory per the Towns O&M as approved by DEQ.
 - Cost ~\$16,835-18,000 (Need approval to purchase spare parts)
UV spare parts ordered
Ditch bearings order
- **Water Leak**
 - There is a potable water leak at the WWTP old office. This is a simple repair as the line needs to be capped off.
 - Cost ~\$50-\$150 (Need approval to repair)
Repaired 8/11/23

Other items being worked on by County and Town staff

- **Generator Batteries**
 - Both batteries need to be replaced due to age and corrosion.
Batteries Clean and corrosion inhibitor applied
Batteries are 4- years old and should be replaced
- **Generator Exhaust**
 - The exhaust appears to have nesting debris packed around it, creating a fire hazard.
- **Generator Ventilation**
 - Confirm the operation of the automated louver's function (semi-open when not running)
- **Sand Filter Compressor**
 - Pressure vessel safety inspection on the air compressor.
Need Town Insurance Carrier to order the inspection

- **Sand Filters**

- Unclear what controls work (float controls don't work). Investigating this issue.

Six Control Valves need to be replaced \$1,200 total. Unit is currently running in test mode

- **Effluent gate**

- The U.V. effluent gate needs to have stripped bolt drilled out and re-tapped to be able to tighten/adjust counterweights to prevent water from escaping.

White Oak Electric (Repairing pending)

- **Oxidation Ditch Gate**

- Adjustment of the gate that has allowed sludge to back up into bearing pits.

- **Aeration Disk Replacement**

Oxidation ditch is unable to maintain proper Dissolved Oxygen (DO) levels. Need to replace missing disks. May need to remove a few from the outer ring.

- **Digester Controls**

- At some point, the controls have been rewired, causing a potential unsafe exposure to wiring. In addition, there is only local control, and the main panel may not function. Staff is looking into the cause.

White Oak Equipment (inspection pending 8/30)

WATER FACILITIES AND WELLS

Immediate Action Required

- **Well 4**

- It is operating at 25 percent of its normal capacity of 80 gallons per minute. Town staff does not know if it is a Pump issue or holes in the piping inside the well. Town staff has not pulled the well to review the issue since the reduction issue. According to staff, this well is scheduled to be re-drilled near the existing well by DEQ permit due to improper screening. Stated they did not want to put money into the well if a new well was to be drilled. We recommend pulling the well and seeing if we can identify the cause of the loss of production. (test the pump on the ground and look for holes in the well pump piping)

- Cost ~\$5,000 to pull the pump
- ~\$5,000 - \$10,000 If the well pump piping and pump are required to be replaced.
- Total Cost ~\$15,000 **(Need approval to proceed)**

- If the lift pipe and pump are required to be replaced.

- Cost ~\$5,000-\$10,000 additional dollars **(Need approval to proceed)**

The well pump was pulled on 8/24. The screen was stopped up and some of the stages on the pump were not operational. Also found two pipe joints were leaking along with a nick in the power core that had been taped. New piping and pump have been ordered. Two week lead time.

- **Well Analysis**

- On July 15th, Town staff asked for advice on a contaminant of Gross Alpha. The limit for Gross Alpha is 15 pc/l, the Town received a result in the range of 40 pc/l in Well 5, and the following week received a result in the range of 20 pc/l for Well 4. Both wells are over the acceptable limits for this analyte. The County reviewed prior results on July 15th, noting that the Town had not had an issue with these analytes recently.
- Town staff has taken split samples at both locations and sent them to two different laboratories for analysis to identify a laboratory issue if one exists.

The first sample came back at 16 pc/l still want on the second sample. The well was cut back to 220 gpm and a second split sample was taken.

- The County requests permission to examine emergency treatment options if these results return positive. This process would include looking for and receiving quotes on portable R.O. (Reverse Osmosis) treatment systems and how to handle the backwash from the temporary R.O. system and talking to the regulatory agencies about their requirements. This will speed up the system installation process if the test results are similar to the last report and the well must be turned off.
 - Cost Staff Time ~\$500 (Need approval to proceed)

Staff has consulted with our engenders about treatment option and it appears that Green Sand Filter would be the most cost-effective solution to remove gross alpha. There are few companies that provide trailer mounted Green Sand Filters that could be installed fairly quickly. A temporary pump station would also need to be installed to handle the daily backwash.

- **Gutter on Sludge Drying Beds need to be cleaned**

- The recent heavy rains over flowed the gutters causing water to run on top of the sludge drying beds causing excessive flow and slowed down the sludge drying time.

SEWER COLLECTIONS

Other items being worked on by County and Town staff

- Maury Heights Pump Station has a pump issue. One pump has been replaced while awaiting the second for replacement. In addition, the Rt.301 pump station also has one pump inoperable at this time. Town staff is working on repair costs.

Two pumps have been installed
Bypass pump has been removed

MISCELLANEOUS ITEMS

- Inspection of the Main Street Sewer Line Work.
 - We did not have a clear expectation from the Town if they would like us to inspect this work.
 - **Do you want the County to continue the inspections?**
Work has been completed
- Septage
 - Due to the organic overloading of the wastewater treatment plant, the County recommends an immediate stop all septage trucks being allowed to dump into the Town Wastewater System.
 - **Authorize the immediate stoppage of septage truck dumping.**
All Septic dumping has been stopped
- Pump Station Reliability Review
 - DEQ has requested that the Town perform a Pump Station Reliability Review of all six (6) Town Sewage Pump Stations. During this review, the County will examine the spare pumps for each pump station and create a list of spare pumps/parts with a cost estimate to bring back to Council for approval.
 - **Authorize the County to proceed with this review by staff.**
DEQ gave us 90 days to complete this task
All pump station had to be cleaned (completed on 8/25)
- Habitat
 - Habitat has contacted the County asking for assistance as they prepare to connect and add two (2) new manholes in the Town when connecting the three new homes.
 - **Has the Town Approved these Plans?**
 - **Do you want the County to assist with reviewing and inspecting this project?**
 - **Are these three (3) lots approved to connect to the water system?**
Plans are being reviewed
Note there are no profile sheets
Water connections are not shown
- DEQ Inspection
 - Yesterday afternoon we were notified by DEQ that they would be coming to inspect the Towns WWTP today at 10:30 am. DEQ will return on Wednesday, August 16th, at 1:00 pm at Town Hall to review their findings with us.

I would like to thank my staff for their hard work and acknowledge Mr. William Stanley for assisting with the data included in this memo.

Town of Bowling Green WWTP Critical Inventory List

Item Description	Area of Use	Cost	Quantity
Shear Pins	Clarifier(s)		12
Limit Switch for Shear Pin Coupling	Clarifier(s)	\$300.00	1
Oil	Clarifier(s)		
Discs (Complete)	Oxidation Ditch		2
Plastic Slinger	Oxidation Ditch		3
Bearings	Oxidation Ditch	\$3,500.00	1 set each type
Shaft Chain Coupling	Oxidation Ditch		1
Woods Coupling	Oxidation Ditch		
Oil	Oxidation Ditch		
Seal Kit	RAS/WAS		1
Set of Gaskets	RAS/WAS		1
Impeller	RAS/WAS	\$6,000.00	1
Set of Belts	RAS/WAS		1
Shaft and Shaft Seal	RAS/WAS		1
Oil	RAS/WAS		
O-Ring - Air Lift Pump Chamber	Sand Filter		1
O-Ring - Air Lift Inlet Nut	Sand Filter		1
Screen - Air Lift Pump	Sand Filter	\$3,500.00	1
Regulator - Air Control Panel	Sand Filter		1
Air Flow Indicator - Air Control Panel	Sand Filter		1
Air Inlet Filter	SF Compressor		1
Valve Kit	SF Compressor		1
Oil	SF Compressor	\$200.00	
Set of Belts	SF Compressor		1
Coalescing Filter	SF Compressor		
UV Lamps	UV		8
Quartz Sleeves	UV	\$715.00	8
Lamp Holder Seals	UV		8
Electronic Ballast	UV	\$320.00	4
UV Module	UV		2
pH Probe	Laboratory	\$910.00	1
LDO Probe	Laboratory	\$1,200.00	1
LDO Probe Cap	Laboratory	\$190.00	1
Total		\$16,835.00	