



CITY OF FRANKLIN COUNCIL AGENDA REPORT

Fiscal Year 2017 Water / Sewer Budget Overview

From: Brian J. Sullivan, Municipal Services Director

Subject: Current information relative to the City Water and Sanitary Sewer Enterprise Funds including current and future trends, needs and projections relating to Rates; Challenges; Revenues and Expenditures for Fiscal Year 2017.

Date: May 9, 2016

Purpose of this Document:

The purpose of this agenda report is to update the City Manager, Mayor and City Council to assist with the FY17 Budget Process as it relates to the status of the City of Franklin Water and Sanitary Sewer Department Enterprise Funds.

Discussion:

This update is being provided to the Mayor, City Council and City Manager in preparation for the FY 2017 budget process. A strategy is needed relative to prioritizing and funding upcoming essential projects for FY17. We also must begin to talk about the development of a policy to deal with future budgets and setting utility rates for the Franklin Water and Sanitary Sewer Departments. The upkeep and maintenance of both systems becomes more challenging with age. Although these are difficult times and I acknowledge some of the information contained in this report is not popular however it is my obligation to keep the Ratepayers; City Manager; Mayor and City Council informed relative to current conditions and future challenges these funds will be dealing with in the years ahead. In my opinion without a properly operated and funded water and wastewater system there will be a negative impact on the quality of life Franklins Residents, Business Owners, Future Industry and overall Public Health.

Much of what will impact the two budgets and customer rates in future Water and Sanitary Sewer Funds will result from the continuing need to undertake critical infrastructure improvements. Additionally, ongoing regulatory requirements in order to comply with the "Safe Drinking Water Act" as directed by the State of New Hampshire, Department of Environmental Services (NHDES) and the United States Environmental Protection Agency (USEPA), will have an effect on both departments. Expect the U.S.E.P.A. changing regulations relative to increased sampling.

Each Department operates as City Enterprise Funds relying on water consumption and quarterly availability charges to derive their operating revenue. As a result, both are similar in many ways and share the same short and long-term challenges. The most important factor to consider when evaluating the long-term financial, operational and capital needs of both departments is the small customer base supporting extensive water and wastewater systems. Water connections number

2,315 and sewer connections 1,845. This limited customer base, coupled with the age; condition of existing infrastructure and vast amount of above and subsurface assets that the ratepayer must support is highly disproportionate. The customer base and water consumption have also declined since the late 1980's while critical capital projects were deferred and while operating costs continued to increase.

With the assistance of Director Milner we have divided this report into two sections dealing with the Water and Sewer Funds. After your review and I am available to meet as many times necessary to provide direction, review various scenarios and answer questions. A workshop may be helpful at some point in F. Y. 17.

Concurrences:

Operation of the Water and Sewer Enterprise Funds are consistent with GASB accounting standards. Each operates under the requirements of U.S.E.P.A. Federal Permits as well as, State R.S.A. for public water and wastewater systems.

Additionally, the Sewer Department is one of ten member communities participating in the Winnepesaukee River Basin Program (WRBP), which operates in compliance with its own set of guidelines created by State R.S.A., established through special legislation adopted in the late 1970's. The legislation established the framework which ultimately formed a regional wastewater collection system and treatment plant serving the Lakes Region. It also identifies how the system should be structured and managed.

The WRBP has its own set of challenges that are currently being addressed both short and long term. I could do a workshop solely on the WRBP as decisions are going to need to be made by each participating community relative to ownership, assets and the potential of the member communities operating the WRBP as a public Waste Water Utility Authority thus taking the ownership and operation away from the State of New Hampshire. The WRBP Advisory Board is in the process of performing a feasibility study which will evaluate this option/concept. Given the time and everyone's busy schedules it might be better for the City Council to conduct our own meeting in Franklin, at which time I can give the same presentation using the information contained in the report. I believe by doing this we may also get more public participation.

Based on the complexity and magnitude of the State and Federal regulatory requirements we work under, the City has performed extremely well remaining in compliance and meeting our obligations under our Water and Wastewater System Permits.

Fiscal Impact Sewer Fund:

The Fiscal Impact section of this report is divided into two sections, the first deals with the Sanitary Sewer Fund and the second is specific to the Water Fund.

(1) Sanitary Sewer Fund including Sewer Rates; Challenges; Revenues and Expenditures**Sewer Rates:**

- Support Operations, Maintenance and Administrative costs of the City Department.
- Fund the City portion of Sewer Budget which in FY 16 is 36% of the total.
- Support the WRBP portion of Sewer Budget which in FY 16 is 64 % of the total.
- Fund Capital Repairs and Debt Service for the City Sewer Collection System.
- Are needed to fund the City's current and future "Inflow & Infiltration (I&I) Reduction Program."
- Have steadily increased, primarily to fund desperately needed WRBP operations, maintenance and capital project at the WRBP Wastewater Treatment Plant (WWTP) located on River Street in Franklin. This will continue as the WWTP, Collection System and Pumping Stations are well over 30 years in age and upgrades are necessary as equipment is nearing the end of its useful life.
- Unfortunately it is inevitable that sewer rates will continue to escalate as a result of essential capital projects as well as, increasing operation and maintenance costs on both the City and State portions of the Sewer Budget.

Challenges:

- Extensive aging of both the City and WRBP infrastructure, which is in need of on-going capital investment. Both systems have miles of collection system pipelines spread over a large geographic area, with very limited customer bases.
- Controlling and funding WRBP "Capital Recovery Costs" will be a major challenge. WRBP operates 65 miles of its Sewer Collection System, 14 Pumping Stations and the 11.54 million gallon per day capacity Wastewater Treatment Plant. There are approximately 14,500 connections to the WRBP wastewater interceptors / collection system. The City owns and operates another 28 miles of its own collection system.
- Reducing excessive City wastewater flow due to Inflow and Infiltration is necessary if we are going to stabilize and maintain affordable sewer rates.
- Meeting future regulatory requirements as USEPA changes our NPDES permit.

Revenues:

- Metered water consumption is the basis for the sewer "Disposal Charge" and is also the primary source of revenue.
- Over the past three fiscal years, water consumption by Sewer Customers is down therefore billable wastewater disposal charges are down by 723,936 cubic feet.
- The reason for less water consumption is mainly due to the amount of vacant properties, loss of customer base and increased water conservation by the customer.
- The last sewer rate increase was in FY15. The current "Disposal Charge" is \$6.27 per 100 cubic feet which is equivalent to 748 gallons.
- For every 13 cent increase in the "Sewer Disposal Charge", the fund generates an additional \$25,000 in annual revenue.

- The quarterly "Sewer Availability Charge" has remained at \$20 per quarter for 27 years. Increasing the quarterly "Sewer Availability Charge" by \$1.00 will generate an additional \$7,380 in annual revenue.
- Unrestricted retained earnings in the Sewer Fund were \$739,079 at the end of F.Y. 15 (without the effects of GASB68 – pension liability).
- For the past four years, the City has invested about \$458,558 in capital improvements including: system maintenance; mapping; sewer line cleaning and flushing; condition assessment and inspection; smoke testing and implementing components to be utilized for an "Inflow and Infiltration Reduction Program".
- Leachate disposal from the recently capped ashfill owned by the Concord Regional Solid Waste Resource Recovery Cooperative (CRSWRRC) and discharged into the Franklin Sewer Collection system will be nearly eliminated due to the ash fill closure. This leachate disposed into the City's Sewer Collection System is a significant revenue source. The ashfill closure will equate to an estimated \$38,000 decrease in annual revenue to the Sewer Fund beginning in FY18.
- Without adequate revenue to fund Inflow and Infiltration (I and I) reduction and other capital projects, City Sanitary Sewer Customers could be adversely affected. WRBP is developing a new assessment formula which will be primarily based on municipal wastewater flows and wastewater strength. Billing using a flow/strength based assessment formula means that Inflow and Infiltration will be accounted for in the quarterly charges to each community. The new flow based assessment formula is projected to be in place in 2018.

Expenditures:

- A significant portion of City Sewer Department's Capital Expenditures on the City portion of our budget have been utilized to meet National Pollutant Discharge Elimination System (NPDES) Permit Requirements for the City's Wastewater Collection System which took effect since 2009.
- Operation and Maintenance (O&M) costs continue to increase annually primarily due to costs passed on to the municipalities by NHDES. The City has kept up these increases by the WRBP by increasing the sewer "Disposal Charge" to support the expenditures, equal to the amount that the NHDES assesses the City.
- City collection system improvements have been limited as the available revenue we have to work with is basically what is left after we pay annual WRBP assessments. We do continue to perform adequate annual maintenance to keep the City collection system operable and in compliance with our permits. That is a positive step.
- Service requests and subsequent repairs due to the age and size of the sewer collection system continue to increase. This takes time and labor.
- The ten-member WRBP Advisory Board has become very pro-active in reviewing and assisting NHDES Staff on various projects. Many continue to be undertaken simultaneously.
- Flow meters throughout the WRBP sewer interceptor lines are now in place and we are collecting data on municipal flows. Municipal flow is the basis for establishing and resetting a future assessment formula (shares) for each WRBP community. This is the incentive to identify and eliminate as much I and I as feasible.
- Customer outreach and education is essential to keep them informed of our progress.

Fiscal Impact Water Fund:

Section 2, Water Fund including Water Rates; Challenges; Revenues and Expenditures:

Water Rates:

- Support Operations, Maintenance and Administrative costs for the Water Department.
- Support Capital Projects.
- Fund Debt Service.
- Are necessary to keep a public water system reliable, operable and in compliance.
- Franklin's water commodity charge had remained unchanged since October 2007 until the \$ 0.25 cent increase in FY15.
- In FY15 the annual cost to fund the necessary budget was actually \$0.75 and that increase was requested. As an alternative the decision was to use retained earnings (\$140,730) to offset the increase over three years. The current FY16 "Water Commodity Charge" is \$5.81 for 748 gallons of water. Over the past seven years were fortunate to offset increases to operations and maintenance by utilizing money from retained earnings.
- To meet the goal of reestablishing 25% of the annual operating budget in the Water Fund Retained Earnings, it will take \$.48 increase in the "Water Commodity Charge"
- Communities with higher rates tend to be very proactive by investing in necessary Capital Projects.
- In February of 2015 the City increased the quarterly "Availability Charge" from \$20 to \$30 per quarter generating an additional \$92,000 in annual revenue. This increase is being used to pay off 10 year debt service on the Cross Street Water Tank Rehabilitation Project and the Route 3 Water Main Relocation Project. Prior to this increase the "Availability Charge" had not increased in 27 years. Of this \$92,000, raised the ten year annual debt service payment is about \$71,839 per year. This leaves a balance of an approximate \$20,161 that is being used in the Capital Improvement Project entitled "Phase 1 Acme #2 Well Replacement Project".

Challenges:

- The most critical issue facing the department now is the condition of our wells, pumps and motors. Sanbornton Wellfield needs continuous well point rehabilitation to meet demand and more importantly to add a level of redundancy to the water distribution system, as this well operates independently of the Water Treatment Plant. In other words if we have to shut down the plant for maintenance Sanbornton Wells become the City's primary source of water.
- Acme #2 well is in need of complete replacement. Its production rate has dropped from 650 to 300 G.P.M since its last rehabilitation 3 years ago. Well water pumping rates and well production continues to be on this downward trend and each time we rehabilitate we will be throwing away about \$45,000. We performed a visual inspection of the well point and found sections of the brass well screen compromised. This well point has been in place since its installation in 1964. The aquifer is fine, the issue is the wellpoint deterioration and the gravel pack surrounding the well casing is not allowing the volume of water to penetrate through the gravel pack due to iron and manganese saturation.

We depend heavily on this well and it should be fully redeveloped immediately. The FY budget includes a request for funding to begin well redevelopment by starting with the installation of the first phase which is installing a "TEST WELL" which in year two will be converted to a full well replacement. The total cost of well replacement with new well casing, pump, motor and building enclosure will be upwards of \$225,000.

- Extensive aging infrastructure, in need of on-going capital investment, spread out over a large geographic area with extensive infrastructure.
- Meeting future regulatory requirements.

Revenues:

- Metered water consumption is the primary source of revenue for the department.
- Over the past three fiscal years water consumption is down by about 1,275,000 cubic feet. This equates to about a \$74,077 loss in revenue from water sales over the past three years. The issue is we still need to perform the same amount of maintenance to the system.
- The reason for less water consumption is primarily due to vacant properties, loss of customer base and water conservation measures by customers. Unfortunately we still must maintain the extensive water system regardless of the number of customers
- The last "Water Commodity Charge" increase was raised in FY16. The current FY16 "Water Commodity Charge" is \$5.81 per 100 cubic feet which is equivalent to 748 gallons.
- For every 12 cent increase in the "Water Commodity Charge" the fund generates an additional \$25,000 in annual revenue
- Retained Earnings in the Water Fund have gone from approximately \$125,000 in 2005 to \$313,947 at the end of FY 2015 (without the effects of (GASB 68) This will leave us short of the recommended amount of maintaining 25% (\$411,094) of our annual operating budget in retained earnings.
- Because of the vote to defer the FY15 increase over 3 years, the City did use an additional \$46,910 in retained earnings for FY16 thus bringing our retained earnings down even further.
- As stated in the Managers Budget Memo for FY17 we partially deferred necessary Capital Projects again in order to limit the rate increase to \$0.25 for FY 17. This means we have deferred capital projects originally recommended in FY 15.
- The \$0.25 increase will bring the water Commodity charge from \$5.81 to \$6.06

Expenditures:

- The overall cost of doing business to pump, treat, meter and deliver water has steadily increased since 2003 at an average cost of 3.5% to 4% per year.
- The overall percentage for fuel, oil, vehicle parts, heating fuel, electricity, disinfection chemicals, and personnel related expenses and most other costs directly associated with operation and maintenance of a water system have increased by 24% since 2007.
- Although there have been numerous improvements and the costs for operation and maintenance have risen, in the past we have been able to absorb these costs by offsetting them with retained earnings , rather than propose increasing water rates.
- Unfortunately we are no longer in this position and this trend can continue. Again the increases are basically covering capital and maintenance projects to keep an expansive water system operable and in compliance.
- Regulatory requirements relative to operating a public water system have also become complex complicating budget stability.
- Costs associated with specialized contractual services such as engineering; well rehabilitation; meter replacement; reconditioning of pumps and motors; laboratory analysis, scada communications and programming and many other types of maintenance/service contracts are all essential to the operation of the system.
- A significant amount of distribution system maintenance is necessary to keep the system operable. Customer assistance due to the age and size of the system has also increased. This involves considerable staff time.
- For the first time since 2007, the proposed Water Department Budget for FY15 only funded basic operation and maintenance costs with no provisions for capital projects.
- The Water Department "Capital Efficiency Plan" (CEP) was completed in September 2015. The CEP identifies and prioritizes short and long term capital needs. The last study performed on the system was finalized in 2003. The CEP supports the recommendations brought to your attention in this updated C.A.R.

Alternatives:

Operation of both the Water and Sanitary Sewer Enterprise Funds are necessary to support clean potable water; fire protection; and the sanitary sewer collection, disposal and treatment of City wastewater. These are the most basic and primary components of municipal infrastructure. Without reliable facilities there is the negative effect towards attracting and maintaining residential, commercial and industrial growth. We must also consider the quality of life these two essential services provide to our customers!

Because both funds are State and Federally regulated and involve public health, there is little choice but to operate and maintain each system in the most economical manner, satisfying our permit requirements while always considering the long term effect on the ratepayer. As you can see from this report I have great concerns with respect to future costs and revenues for both the short and long term. More important, Franklin is not the only municipal water and wastewater systems system facing the challenges I bring to your attention.

Alternatives relative to the long-term operation of the City's Water System are very limited other than to sell off the assets and operate the system by contract operators. **I have concluded that this is not a viable alternative because most of our long term challenges and costs are less related with the operation and maintenance of the system and far more heavily weighted on system wide Capital Infrastructure needs.** These needs will be the most significant impact to the Water Fund rate payer.

In closing, as the registered owner and operator of the Franklin systems I have the obligation under my Public Water System Operators License to protect public health by insuring the delivery of an adequate supply of clean, safe, potable drinking water for HUMAN CONSUMPTION and FIRE PROTECTION.

I need to advocate for the long term viability of Franklins Water and Wastewater Systems as much as I do for the ratepayer. Should something happen due to the result by the inability of the City Staff to correct a problem, we could run into significant financial burdens and potential enforcement action coupled with bad publicity. This will far outweigh adjusting rates thus, allowing us to operate pro actively. Unfortunately rising consumer costs are the trend in ALL public utilities and Franklin's two public utilities are no different.