

received 05/31/2019 @ 12:55 pm
Gonni & Angus ATC

MEMBERS OF THE WPCA THAT ARE UNABLE TO ATTEND THIS MEETING, PLEASE CALL ETHER DIAZ, (860) 644-2511, EXT. 243, ON OR BEFORE 4:30 P.M. ON THE DAY OF THE MEETING

**WATER POLLUTION CONTROL AUTHORITY
TOWN OF SOUTH WINDSOR**

**REGULAR MEETING
SPRENKEL ROOM at 7:00 P.M.**

AGENDA

TUESDAY, JUNE 4, 2019

A. ROLL CALL

B. ACCEPTANCE OF MINUTES OF PREVIOUS MEETINGS

1. April 24, 2019, Public Hearing
2. April 24, 2019, Special Meeting
3. May 7, 2019, Public Hearing
4. May 7, 2019, Regular Meeting

C. NEW BUSINESS

1. 375 Rye Street – (Approval to Connect)
2. Asset Management Report (Wright Pierce to Present)
3. Inflow/Infiltration Study Summary Report (Wright Pierce to be present)
4. Water Pollution Control Budget FY 2019/2020 (Approval)
5. Sewer User Charges, Surcharges, Sewer Assessment Schedules, Septic Disposal Fees and Qualifying Income Sewer User Charge Discount for Fiscal Year 2019/2020 (Set Rates)
6. Set Time and Date for July 2019 Regular Meeting
7. Residential Billing Insert (Discussion)

D. COMMUNICATIONS AND REPORTS

1. CIP Report
 - a. Vegetation Management Plan
 - b. Sullivan Avenue Siphon
 - c. Ellington Road Manhole Raising
 - d. Ellington Road Sewer Extension Design
 - e. Miller Road Sewer Extension
2. Collection of Delinquent Accounts
3. Public Works Week
 - o Food Drive
 - o CREC School Tour
4. Carla's Pasta

E. PUBLIC PARTICIPATION (Items not on the agenda)

F. BILLS, CHANGE ORDERS, DISBURSEMENTS

G. UNFINISHED BUSINESS

1. Fee Structure (Discussion)
2. Unassessed Properties
3. WPCA Member Backgrounds

H. EXECUTIVE SESSION

I. ADJOURNMENT

received 09/05/2019 @ 4:15 pm
K. J. Aug ATC

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A. ROLL CALL

Members Present: Richard Aries, Erik Dabrowski, Carol Fletterick, Toby Lewis, Ashwatha Narayana, and Thomas Ruby

Members Absent: Stephen Wagner

Alternates Present: Vicki Paliulis

Alternates Absent: Anitha Elango

Staff Present: Tony Manfre, Superintendent of Pollution Control
Ether A. Diaz, Recording Secretary
Michael Gantick, Director of Public Works

Others Present: Kenneth Pudeler, Pudeler Engineering
Dennis Dievert Jr., PE - Wright-Pierce
Lisa M. Muscanell – DePaola, PE - of Wright Pierce
Andrew Paterna, Mayor

Chairman Richard Aries called the meeting to order at 7:03 p.m. The following actions were taken during the June 4, 2019 Regular Meeting of the Water Pollution Control Authority (WPCA).

B. ACCEPTANCE OF MINUTES OF PREVIOUS MEETINGS

1. April 24, 2019, Regular Meeting

Motion to accept the minutes of the April 24, 2019, regular meeting as presented.

The motion was made by Mr. Toby Lewis and seconded by Mr. Erik Dabrowski.
The motion carried unanimously.

2. April 24, 2016, Special Meeting

Motion to accept the minutes of the April 24, 2019, special meeting as presented.

The motion was made by Mr. Toby Lewis and seconded by Mr. Erik Dabrowski.
The motion carried unanimously.

3. May 7, 2019, Public Hearing

Motion to accept the minutes of the May 7, 2019, public hearing as presented.

The motion was made by Mr. Toby Lewis and seconded by Mr. Erik Dabrowski.
The motion carried unanimously.

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4. May 7, 2019, Regular Meeting

For those that were not in attendance of the meeting, Mr. Toby Lewis asked Chairman Richard Aries to clarify the following statement: On page 10, Item 3 “Subcommittee to Oversee WPCA Professional Services”, paragraph that read as follows: “Chairman Aries responded that it is very great to have people with all the varying expertise including Mr. Narayana who has definitely brought to the table a higher level of expertise with regards to some of the particular issues discussed. However, the better way is to avoid having to be liable or responsible for the review and approval of plans...” “Mr. Toby Lewis asked Chairman Richard Aries to clarify the following statement for those that weren’t in attendance.

Chairman Aries explained that members of the WPCA have a role to play as the Authority. They are not expected to review with expertise the various plans of projects in Town. It is the Superintendent of Pollution Control, Tony Manfre with Town Engineers, the Town Planner and all other professionals who do have the expertise within the Town to assume responsibility to review every plan. If the Authority were to assume responsibility for review of every plan to that level then it could be in fact a liability should those plans be found to cause injury or problems.

Mr. Ashwatha Narayana stated that the liability goes to the person who prepares and signs the plans, not the person who approves the plans. There’s exemptions that exist in state statutes for liabilities; also, liability can be found in a lot of different areas, said Chairman Aries.

Motion to accept the minutes of the May 7, 2019 regular meeting as presented.

The motion was made by Mr. Toby Lewis and seconded by Mr. Erik Dabrowski. Mr. Ashwatha Narayana abstained.

With no further questions, Chairman Richard Aries asked to change the language on the paragraph so that it reads as follows: “However, the better way is to avoid liability for having responsibility to review and approve the plans”.

Motion to accept the minutes of the May 7, 2019 regular meeting as amended.

The motion was made by Mr. Toby Lewis and seconded by Mr. Erik Dabrowski. Mr. Ashwatha Narayana abstained. The motion passed.

C. NEW BUSINESS

1. 375 Rye Street – (Approval to Connect)

Mr. Tony Manfre, Superintendent of Pollution Control explained that when the sewer on Rye Street was designed and constructed by the developer, a stub was put in at each developed and undeveloped; the sewer was installed and is accounted for future

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capacity. Mr. Kenneth Pudeler, applicant, has subdivided the lot known as 443 Rye Street into two residential lots and now he's seeking approval to connect the "buried lot" to the sanitary sewer on Rye Street. This is a lot that is off the road but has access to the existing sewer main on Rye Street, said Mr. Manfre.

Mr. Kenneth Pudeler, of Pudeler Engineering was in attendance this evening and explained that this is a one lot subdivision, 76 acres. He explained that as part of the approval granted by the Planning and Zoning Commission, approval from the WPCA was needed. However, they are not building for a number of years, said Mr. Pudeler. Therefore, he was seeking approval to connect in the near future the proposed single family house to the existing sanitary sewer main on Rye Street.

Chairman Richard Aries expressed that since they are not going to build for a while, he'll like for the applicant to come back to the WPCA when they are ready for connection. Mr. Manfre responded that once the WPCA gives them approval to connect the approval letter is on the Mylar and they are not required to come back.

Chairman Aries asked that if there's any other changes upon the final plan for construction, the applicant will be required to come back to the WPCA. Mr. Manfre agreed and explained that if there's a change to the wastewater characteristics; if the lot gets changed to a commercial or industrial lot, or if the 76 acres lot is re-subdivided, the applicant will be required to come back.

Mr. Manfre also explained that the new lot was not assessed, therefore, there's going to be a benefit of assessment to the property at the time of connection.

Chairman Aries asked if there's any easement on this property. Yes, there's an existing easement, responded Mr. Pudeler.

Motion to approve the application as submitted for connection to the Town's sewerage system for proposed single family house at 375 Rye Street, CT. This approval is subject to the following conditions: Payment of the following charges will be due at the time of connection: Connection Charge, Capacity Charge, and payment of a Benefit Assessment Charge in an amount to be determined when connected. (2) If there is a change of use of the property from residential to commercial/industrial or if the lot is re-subdivided, the applicant must return to the Water Pollution Control Authority for approval to connect to the Town's sewerage system.

The motion was made by Mr. Thomas Ruby and seconded by Mr. Toby Lewis. The motion carried unanimously.

2. Asset Management Report (Wright Pierce to Present)

Ms. Lisa M. Muscanell – DePaola, PE and Mr. Dennis Dievert, Jr., PE of Wright Pierce were in attendance this evening to present the Asset Management Report. Included

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with the agenda was a copy of a brief overview report (see Exhibit A). Mr. Manfre offered to provide members of the Authority copy of the full report upon request.

Mr. Dennis Dievert provided a presentation overview on what is asset management, the project's approach, asset inventory and database and the implementation of a 15 year capital improvement plan for the Authority to plan on the future (see Exhibit B.) He explained that they did the asset management following the EPA Reference document which is a four page guide that explains the appropriate steps to take when developing an asset management plan. In South Windsor there is 130 miles of gravity sewer pipe, 11 sewer pumping stations, 4.5 miles of force mains from the sewer pump stations and 3.75 mgd wastewater treatment facility.

What is Asset Management? Mr. Dievert explained that the initial steps is to know what do you own and where it is, and also, to identify what is its condition and useful life. The best practices as defined by EPA is to prepare an asset inventory and a system map; also, to develop a condition assessment and rating system, assess remaining useful life and replacement/upgrade costs, and prioritize needs into a multi-year capital improvements plan (CIP). Mr. Dievert explained that they've selected fifteen years for the Town of South Windsor based upon the number of assets that they have, the miles of sewer pipes and the number of pump stations and their age. However, they could very well made it a ten years plan or a twenty years plan. As far as funding strategies, the Town can consider increasing the sewer rates, they can also create a dedicated reserve account for capital improvements. Also, there's loans available through the Clean Water Fund program at a 2% interest rate or they can speak with the Finance Department which may be able to obtain bonds at a lower interest. On page 3 of the power point presentation, there's a sample map of the Clark Street pump station drainage area. A map for all eleven pump stations has been created, said Mr. Dievert. They also highlighted in yellow all the sewer mains that drains to each pump station. This is a snap-shot that was generated utilizing the Town's GIS data.

Mr. Dievert explained that the project approach that they took was looking at all the existing information that the town had. They also did several days of onsite evaluations and documenting the condition of the equipment. They developed an electronic database. Mr. Dievert explained that Ms. Lisa Muscanell had a conference call with Mr. Jeff LeMay, Treatment Plant Supervisor, and Mr. Thad Dabrowski, GIS Tech as they will transfer the electronic data to the Town so it can be use in the future.

Mr. Dievert talked about the Data Review and Site Inventory. He explained they reviewed available data and recommendations from previous studies. They visited each location and inventory all assets including structures, equipment, electrical, etc. They verified pumping rates and evaluated future needs. The table "Pump Station Available Capacity" represents the historical flows to determine if any of the town's pump stations are under capacity. For example if the town has two pumps and there's a pump failure, can one pump keep up with the stations peak flow? That's something an example of what they looked in to. All the pump stations have sufficient capacity, said Mr. Dievert. He explained that several pump stations were upgraded in the last fifteen

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years, however, the Clark Street pump station and the Benedict Drive pump station are just the two that stand out a little bit. The Benedict Drive pump station has about 14% of capacity remaining and the Clark Street pump station has 31% of capacity remaining.

Chairman Aries asked Mr. Dievert to explain what capacity means in this particular content (slide 7). Mr. Dievert explained that the capacity of a pump station is defined as how much flow it can move or convey with the largest pump out of service. If a station has three pumps rated for 100 gpm, assuming that when all three pumps are running the flow is 300 gpm. The design capacity of that station will be two pumps running at 100 gpm. The capacity is how much it can pump. The peak flow is based on some flow meter readings or pump stations run times or various different ways that you can calculate that. Mr. Dievert explained that they installed some portable flow meters on the piping to get the estimated peak flow. The capacity remaining is the difference between the pump station capacity and the estimated peak flow, said Mr. Dievert.

Mr. Toby Lewis asked if they've visited every site. Yes, responded Mr. Dievert. He explained that they were not able to do a test on one of the pump stations at Pleasant Valley Road as it was out of service the first time and it continues to be out of service today. Why it was out of service, asked Mr. Erik Dabrowski. For safety reasons, it clogs a lot, and there is very little room for the staff to work while unclogging the pump, responded Mr. Tony Manfre. However, there are two other pumps in that location. Is it unnecessary to have that pump at that station, asked Mr. Dabrowski. Mr. Manfre responded that when they do the upgrade they are going to look for a physically smaller pump so that it can easily be pull out.

Mr. Dievert distributed a copy of the asset evaluation for Benedict Drive pump station (see Exhibit C). This is really the main goal of this project, said Mr. Dievert. It was to inventory in every single asset at every single pump station. Every single asset has a form like this and that's what in the data base. There's a form like this on every heater, every sump pump, electrical panel, check valve, plug valve, said Mr. Deivert. This is a 1500 page report. They assigned an asset I.D. to each pump station. They did a physical assessment, the year that it was installed, how many hours around it, current value of the equipment, and its capacity. They also did a consequence of failure evaluation such as what are the problems with it; if there's corrosion, does it clog with rages, etc.

The focus of this asset management report was solely on the pump stations. Mr. Dievert provided the following recommendations. He explained that the most critical pump stations are Benedict Drive pump station, Clark Street pump station and the Pleasant Valley pump station and therefore require an upgrade in the next five years. He also recommended to conduct a radio path study to define better ways of communicating in receiving alarms from the eleven remote sites. Also, Benedict Drive pump station still have a lot of inflow and infiltration (i/i) problems, therefore, he recommended an Inflow/Infiltration study.

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Also, there are steel cans at 6 pump stations; those can become corroded and weak overtime. Mr. Dievert recommended hiring a company to perform a structural integrity evaluation of the steel cans. He also recommended to continue to inspect all known concrete gravity pipe, sewer manholes, and force mains and downstream sewers for deterioration.

Mr. Toby Lewis asked if this is all based on the Town's current population; does it account for the proposed developmental growth. Mr. Dievert responded that they've met with Ms. Michele Lipe, Town Planner and discussed the future growth areas in Town. However, Mr. Dievert recommended doing an evaluation of the plan of conservation and development of growth in town when doing the treatment plant upgrade.

Ms. Lisa Muscannel added that the Clark Street pump station is one of the first pump stations over the next couple of years that the Town should be looking at upgrading. During the preliminary design phase of the project it is recommended to meet with the Town Planner again to discuss the development of growth in the town and take into considerations the added flow when looking at the pump replacement for design for that station.

Chairman Aries asked Mr. Dievert what he identifies among his recommendations for additional studies that may be more time sensitive. Mr. Dievert responded that the I/I in town is not bad, however, it becomes a problem when upsizing a pump station. The pump station should handle a certain amount of flow based on who's connected. Therefore, doing an I/I study on the Benedict Drive pump station again would be helpful and to continue to have town staff do their own visual inspections, recommended Mr. Dievert.

In terms of addressing a pump station such as Pleasant Valley Road pump station, Mr. Thomas Ruby asked if Mr. Dievert is referring to replacing the equipment or rebuilding the pump station. Replacing the equipment at that particular location, responded Mr. Dievert. Is that because it is inaccessible for staff, asked Mr. Ruby. Yes, there is accessibility issues, electrical issues, valve issues and the pump clogs a lot, said Mr. Dievert. Also the control panels are antiquated, added Ms. Muscannel. Mr. Dievert recommended a comprehensive upgrade to the Pleasant Valley pump station, utilizing as much of the existing structure as possible. The same recommendation applies for the Clark Street pump station and the Benedict Drive pump station. He explained that for Benedict Drive he'll recommend converting it to a submersible pump station based on the fact that the Town is unable to get the pumps in and out of there; it requires a confined space entry and three guys to get a pump out. Ms. Muscannel added that the cost for the Benedict Drive pump station upgrade includes conversion to a submersible style station. Ms. Muscannel also explained that the wet well at this pump station is in a relatively good condition, therefore, they recommend considering using the wet well during the upgrade design.

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Chairman Aries thanked Ms. Lisa Muscannel and Mr. Dennis Diever for the hard work they've done.

With regards to the database, Mr. Dievert explained that they've created all the forms that are snapped shot in time. The database goes to the town which allows to keep up to date information such as when the pump was replaced, the model number, the capacity, etc. of the pump station. Chairman Aries explained to Mr. Tony Manfre that he needs to have somebody to make sure the information gets into the system. Mr. Dievert explained that he believes that the next step is to utilize the database as part of some sort of maintenance software program where it generates work orders, etc which is something that the Treatment Plant staff is handling separately.

Mr. Tony Manfre explained that they'll be using a lot of the data available. He explained that Mr. Tom Bjorkland, the Chief Mechanic knows a lot of the assets in the pump at the treatment plant. Therefore, they'll be using a lot of the data to implement and help them make decision on where to spend money. Mr. Thomas Ruby asked if there will be a training component on how to use the database when transferred. Mr. Manfre stated that they have some knowledge in using it. Mr. Jacob Plona is involved with the collection system and GIS, therefore he'll be most hands on with it. Mr. Dievert expressed that they did provide some training of the program initially, however, they are available to assist the Town in using it. Also, the GIS knows how to use the database as well.

Mr. Thomas Ruby explained that Mr. Dievert mentioned funding from other grants may be available, he asked if this asset management plan serves as an essential prerequisite for qualifying for those funds. No, responded Mr. Dievert and explained that the asset management plan rather serves as a prerequisite if the Town were to be audited by the EPA. If the Town could show them that they did an asset management plan on the pump stations and they are maintaining the sewer system, this can satisfy that federal requirement.

Mr. Ashwatha Narayana expressed that he reviewed the asset management report and made some comments for Mr. Dievert to review and respond. Mr. Dievert responded that he prefer to meet with him and go over his comments.

Ms. Muscannel expressed that some of the engineers involved in this asset management plan commented during their site visits that they were very impressed overall with all the pump stations in Town, except for Benedict Drive pump station, Clark Street pump station and the Pleasant Valley pump station. She as well is very impressed of the sewer system maintenance. She explained that Mr. Bjorkland, Chief Mechanic particularly, really knows his stuff and takes good care of the assets. Ms. Muscannel expressed that the Authority and the Treatment Plant staff are doing a great job of being aware of what needs to be accomplished over the next couple of years and this is a great step in the right direction. Thank you, responded Chairman Aries and asked Mr. Manfre to convey Ms. Muscannel comments to his staff.

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3. Inflow/Infiltration Study Summary Report (Wright Pierce to be present)

Mr. Tony Manfre reported that this matter is regarding the Griffin Road collapsed pipe. He explained that during the last WPCA meeting questions were raised on the different pipes in Town and different assets. He explained that an inflow/infiltration (I/I) study was done in 2011 by Wright-Pierce. Mr. Dennis Dievert and Ms. Lisa Muscanell were in attendance to answer any questions from members of the Authority. Mr. Michael Gantick, Director of Public Works reported that the Authority have done I/I studies periodically over the years, the most recent one was done by Wright Pierce.

Mr. Manfre expressed that after the I/I study was performed the project was broken into four phases. Was it implemented, asked Mr. Ashwatha Narayana. Yes, responded Mr. Manfre and explained that the project was divided into four phases. Phase IV is the final phase; there's a lot of truss pipe relining to be done. As part of this project, Chapel Road sewer was relined in 2017 and more will be done this year. Also, some segments on Chapel Road need to be relined as part of the Phase III of the study. Twenty three (23) manholes were identified that need attention and Griffin Road truss pipe needs to be repaired as it is starting to collapse, said Mr. Manfre. The pipe life is reaching the fifty year mark. Also, they are inspecting the reinforced concrete pipe that seems to have a high deterioration rate as well.

4. Water Pollution Control Budget FY 2019/2020 (Approval)

Mr. Tony Manfre explained that this evening the Authority will be voting on approving the budget (see Exhibit D) that was presented at the last WPCA public hearing. He explained that he realized that the Year To Date (YTD) was not updated in the summary page of the budget. He distributed an updated copy of the budget summary page to reflect that change (see Exhibit E). Also, the Authority presented at their last public hearing the proposed sewer rate of \$425 (see Exhibit F). At the last regular meeting the Authority discussed the proposed sewer user rate and wanted to consider a \$415 sewer user rate and what that'll do to the budget. Mr. Manfre distributed a budget projection with a \$415 sewer rate and a \$420 sewer rate (see Exhibit G).

Mr. Manfre explained that the big part of the budget is the three pump stations upgrade. Following the recommendation of members of the Authority for financing projects, Mr. Manfre proposed financing two of the three pump stations. He expressed that the Authority wants to keep the user rate as low as possible, however, they need to be cognoscente of the projects that need to be done, said Mr. Manfre. The infrastructure is getting older and needs to be addressed as they are at a critical point where the pipes in particular need to be addressed. Two funds available for these projects are from the Clean Water Fund and FEMA. The Clean Water Fund has loans available for pump stations at a 2% interest rate over a twenty year period. For fiscal year 2019 they had \$30 million earmarked that was available for municipalities. Also, they removed the \$4 million spending cap prior to last year. Mr. Manfre proposed to finance Clark Street pump station and the Benedict Drive pump station which is going to be approximately \$5 million. Where are we in the process; is there deadline factors, asked Chairman

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Aries. Also, how much of the \$30 million earmarked has been committed. Mr. Manfre responded that this needs to be further discussed as they'll be looking at this next year more in depth. There are grants available as well, reported Mr. Manfre. Chairman Aries asked who would be writing the grants proposals for these project. Mr. Michael Gantick explained that in the past there's been a combination. The former Superintendent of Pollution Control helped in writing the proposals as well as the consultant engineer; and DEEP also helps to fill out the applications as well.

Mr. Manfre explained that the Tighe and Bond did a study in 2016, and the statewide average user rate in 2016 was \$472. Mr. Manfre discussed the user fee assumptions.

How old are these two pump stations, asked Mr. Narayana. They are about 18 to 20 years old, said Mr. Manfre. What's the primary reason for replacing the stations, asked Mr. Narayana. Mr. Manfre responded that the Clark Street pump station is receiving more flow. About 45% of the Town's flow including all the Evergreen Walk flow. There's a lot of ragging in those two particular pump stations and some mechanical failures. Mr. Narayana explained that one of the major comments in the asset management plan report was that almost every station have issues with ragging, however, Wright Pierce did not proposed any solution. Replacing the pump stations is not going to solve the problem, said Mr. Narayana. There are other pumps designed and new technologies to take care of that issue, said Mr. Manfre. Another primary driving factor is that the system is getting antiquated; it is getting harder to find replacement parts. Mr. Narayana explained that they are also replacing most of the valves. Just because the valve could not operate that doesn't mean change the valve, said Mr. Narayana and expressed that "in a valve if you keep replacing the seals it will last forever". That's very true, said Mr. Dabrowski. Mr. Manfre responded that the staff does maintain them. Mr. Dabrowski explained that at the previous meeting he stated why not rebuild the pump stations in stages as opposed to go and do a whole new pump station. Perhaps by buying the parts in bulk. He agreed with Mr. Narayana that a valve is a very simple thing, "you change the seals and lubricate it". Mr. Manfre responded that some of the issues they are experiencing at the Pleasant Valley Road pump station is that the check valves aren't properly working and one of the manual valves isn't working and this is from corrosion.

In regards to replacing parts piece wise, Mr. Gantick commented that's something that the staff does in between pump stations upgrades. The staff is always going out there, identifying these issues, and they are replacing parts as needed. He gave as an example buying a car. If someone decides to replace it piece by piece the \$10,000 car is going to cost now \$30,000 for replacing it piece by piece. He further explained that a lot of the seals and the valves are beyond the life expectancy; they don't seal properly. Most of the pump stations have been in the ground since 1968; they've been upgraded, but not all the valves. There's a problem with the bypass valve in the Clark Street pump station. The cost of trying to fix that now doesn't make sense, said Mr. Gantick. He explained that in doing the asset management the job is to try to find a cost effective way to maintain the sewer system "because the bottom line is that if something doesn't work then what do we do". We tell people to stop flushing their toilets, or taking a

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shower, asked Mr. Gantick. We can't have the system work 98%, we need to have these things working 100% at all time, said Mr. Gantick. He also explained that the problems at these pump stations are different types of expectations. The actual cans are in since 1968 or 1970. Mr. Narayana expressed that he didn't see any report on the cans in the asset management plan. He asked what the conditions of the cans are. Mr. Gantick responded that a different study is needed to determine the conditions of the cans, it was not part of this study.

A discussion ensued with regards to the debt service and Mr. Manfre explained what projects are included in that. Mr. Manfre explained that the variable that he was using to adjust the user rates was how much to put in to the replacement reserve. A user rate of \$415 will allow contributing \$340,000 in to the replacement reserve which will increase the balance to \$1.1 million. A user rate of \$420 will allow contributing \$400,000 in to the replacement reserve which will increase the balance to \$1.16 million and a user rate of \$425 will allow contributing \$460,000 and the balance will increase to over \$1.2 million.

New developments are coming to Town and million dollar houses are being built in Town, said Mr. Narayana. He asked Mr. Manfre if he looked into the possibility of increasing the permit fees and sanitary sewer connection fees. Mr. Manfre responded that last year the fees were revised to include the benefit assessment and the capacity charge. Also, the surcharge is adjusted every year per the calculations.

Chairman Aries explained that at the WPCA public hearing the Authority proposed a sewer user charge of \$425 with the understanding that there will be further discussion. Our economy is strong now, said Chairman Aries, however, there's a broad demographic of South Windsor. There's people who are doing really well, and there's people who are still struggling a lot and that will be addressed later in terms of variation of the sewer user fees. Mayor Andrew Paterna was in attendance this evening and commented that South Windsor is a community that has the largest population growth in the entire central Connecticut region. So there is going to be more houses paying the sewer user fees which is a benefit.

Chairman Aries expressed that it is very daunting to see all the things that need to be done, including the future upgrade of the Treatment Plant. He explained that there is a very strong impulse to say "just keep the rates low", however, if the Authority does that right now with the strong economy they are going to have an even tougher time raising the rates later. Chairman Aries was not opposed to maintaining the proposed rate of \$425 or \$420.

Mayor Paterna commented on a couple of points. One, he said that the Town Manager is very aware of the sewer use in terms of economic development. He explained that there is a new project on Ellington Road that is coming in, and the Town Manager is putting as part of the project negotiation that the developer be responsible to pay for the proposed forcemain or pump station. Also, Mayor Paterna expressed that the Town Council worked hard with the Board of Education, and the taxes are increased by

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1.95% this year. They are trying to keep things down at the same time the Town Council is aware that the treatment plant has to be upgraded in the near future and the Town may have to play a role in that and help out, said Mayor Paterna. Chairman Aries thanked Mr. Paterna for his words.

Chairman Aries asked Mr. Tony Manfre to provide a summary of the proposed budget. Mr. Tony Manfre explained that the budget has been reviewed and discussed since January of this year and it represents an increase of 1.1% over last year budget. How does the 1.1% increase effect the sewer user rates, asked Mr. Toby Lewis. Mr. Manfre responded that the replacement reserve provides the flexibility to adjust the sewer user rates. Mr. Manfre asked members of the Authority to keep in mind that the challenge with wastewater is that all the assets are underground. The assets are crumbling and they need attention, they need to be addressed. Are there any penalties from the State of Connecticut Department of Energy and Environmental Protection (DEEP) to the Town if there is a sewer failure, asked Mr. Thomas Ruby. Yes, there are fines if the Town violates the permit that allows the Town to discharge to the Connecticut River. Is there a line item in the budget to cover those penalties, asked Mr. Ruby. No, it is not included in the budget. Mr. Gantick expressed that it's approximately up to \$25,000 penalty fee for an illegal bypass per day. Mr. Tony Manfre expressed that they are hitting that critical point where the sewer pipes are coming to the 50 to 75 year life expectancy.

"There's a lot of stuff coming down the pipe from the State level; is a burden to people", expressed Mr. Erik Dabrowski and explained that even though the economy in CT is good, it is not as good as other states. He further expressed that Connecticut is kind of the lower end spectrum and that was even said in Governor Ned Lamont letter to the people; the state didn't really recovered from recession. He asked the Authority if they are going to add to that burden too. I don't like being the guy that adds to that, said Mr. Dabrowski. Chairman Aries responded that in terms of growth, "South Windsor is our jewel of central Connecticut though" and in part of it is the ability to demonstrate that the Town run the government and agencies well.

Chairman Aries appointed Ms. Vicki Paliulis to sit in for Mr. Stephen Wagner.

Motion was made to approve the Water Pollution Control Budget FY 2019/2020, as presented.

Motion was made by Ms. Vicki Paliulis and seconded by Mr. Thomas Ruby. The motion passed with Chairman Aries, Ms. Vicki Paliulis, Mr. Thomas Ruby, and Ms. Carol Fletterick in favor, and Mr. Erik Dabrowski, Toby Lewis and Ashwatha Narayana voting against. Roll Call Vote: AYE – Aries, Paliulis, Ruby, and Flettrick: NAY – Dabrowski, Lewis, and Narayana. The motion passed.

**WATER POLLUTION CONTROL AUTHORITY
TOWN OF SOUTH WINDSOR**

MINUTES

MADDEN ROOM, TOWN HALL

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REGULAR MEETING

JUNE 4, 2019 AT 7:00 PM

5. Sewer User Charges, Surcharges, Sewer Assessment Schedules, Septic Disposal Fees and Qualifying Income Sewer User Charge Discount for Fiscal Year 2019/2020 (Set Rates)

Chairman Richard Aries explained that this matter has been discussed carefully. He asked for any comments on this matter. Mr. Erik Dabrowski expressed that he'll like to maintain the sewer user fee at \$404 based upon where he have seen the state ranks economically. The fact that people are struggling, the fact that Governor Ned Lamont expressed in his initial open letter to the state that the State have not recovered full from recession. Therefore, he expressed that he was not in favor of increasing the sewer user fees. Chairman Aries asked him if in lieu of increasing the rates, if he rather accepts taking on loans to pay for it. Sometimes financing things responsibly can work, responded Mr. Dabrowski. Ms. Vicki Paliulis expressed that she agrees with Mr. Dabrowski as she as well does not want to increase the sewer user rates every year. Chairman Richard Aries explained that during the economic recession period, the WPCA lowered the sewer user rates. However, they began to raise it but to keep it steady with the idea to build up the replacement reserves. Also, in comparison to other municipalities the sewer rate hasn't really reached the medium average sewer rates in the state.

Mr. Manfre explained that with the proposed plan of financing the two pump stations it will allow to save for the Pleasant Valley pump station as well. Once the sewer fee is at \$425 or \$430 earmark that will level out for the next eight years and that's an opportunity to use the reserve funding to help stabilize sewer user rates. However, it is critical to increase the sewer user fees to \$425 to get the projects done, to maintain the sewer system, and in future years to finance responsibly and then hopefully be able to maintain a \$430 user rate for the next several years, said Mr. Manfre.

Mr. Thomas Ruby explained that the preliminary discussion was to propose a \$460 sewer rate. Mr. Manfre responded that \$460 was the original earmark in order to pay upfront for all the upgrades. Mr. Ruby explained that maintaining a \$404 sewer rate is actually a retrenchment with a budget increase of 1.1%. The current sewer user fee of \$404 covers the existing budget not the proposed. Mr. Ruby expressed that while he's interested in building reserves he's sensitive to Mr. Dabrowski's point, given the assumptions. He recommended to increase the sewer user rate to \$415 but keeping in mind that the WPCA will be having a work session in the July meeting to discuss the sewer rate structure.

Motion was made to set the sewer user rate at \$415.

Motion was made by Mr. Thomas Ruby and seconded by Ms. Carol Fletterick. Mr. Erik Dabrowski, Mr. Toby Lewis and Mr. Ashwatha Narayana opposed. The motion passed.

Chairman Aries expressed that he hopes that members of the Authority don't end up regretting this decision when one, two, or three years from now they find their selves

**WATER POLLUTION CONTROL AUTHORITY
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really having to raise the rates substantially. He explained that in comparison to other towns, their sewer fee is below average. Also, there is not enough funding in the replacement reserves to cover problems and emergencies.

Chairman Aries asked for an amendment of the motion to cover the surcharges fees and the user charge discount fees as presented at the public hearing.

Motion was made to adjust the proposed sewer user fees schedule from \$425 to \$415, edit the prorated fees and to adopt the surcharges, sewer assessment schedules, septic disposal fees and the qualifying income sewer user charge discount for fiscal year 2019/2020.

Motion was made by Mr. Thomas Ruby and seconded by Ms. Carol Fletterick. Mr. Erik Dabrowski, Mr. Toby Lewis and Mr. Ashwatha Narayana opposed. The motion passed with

6. Set Time and Date for July 2019 Regular Meeting

Mr. Tony Manfre explained that per the WPCA Rules and Regulations the Authority is not required to have meetings in the month of July or August. However, due to the amount of applications received over the past years the Authority have gotten to the habit of having a July meeting. Therefore, Mr. Manfre proposed to hold the meeting on July 16, 2019.

Motion was made to schedule the July regular meeting for Tuesday, July 16, 2019 at 7:00 p.m. in the Sprekel Room of the Town Hall.

The motion was made by Mr. Erik Dabrowski and seconded by Mr. Toby Lewis. The motion carried unanimously.

7. Residential Billing Insert (Discussion)

Included with the Agenda was a draft copy of a brochure to be included with the residential sewer bill (see Exhibit H). It was reviewed by members of the Authority. Chairman Richard Aries recommended some language regarding rags, such as "Don't throw rags in the toilet" as this has become a significant expense to the Town. Ms. Carol Fletterick expressed that the brochure does contains great information, however, most people are not going to read it. The information needs to draw attention. Perhaps, she recommended a change in the title to "Why are the rates going up?" Everyone agreed and Chairman Aries asked Mr. Manfre to edit the document for further review.

**WATER POLLUTION CONTROL AUTHORITY
TOWN OF SOUTH WINDSOR**

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MADDEN ROOM, TOWN HALL**

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**REGULAR MEETING
JUNE 4, 2019 AT 7:00 PM**

D. COMMUNICATIONS AND REPORTS

1. CIP Report
 - a. Vegetation Management Plan: Mr. Tony Manfre reported that the contractor is completing spraying on Areas 1, 2 and 3 of Phase IV; Area 4 is already completed.
 - b. Sullivan Avenue Siphon: Mr. Tony Manfre reported that they are still resolving the top soil issues and the sidewalks issues as well.
 - c. Ellington Road Manhole Raising: Mr. Tony Manfre reported that he's holding retainage for this project and is to be released in October 2019.
 - d. Ellington Road Sewer Extension Design: Mr. Tony Manfre reported that there's been some changes; the original design was for a retail area including two hotels and two or three restaurants. In discussing this matter with the developer, there's going to be two large distribution warehouse facilities. Therefore, they are reconsidering the need for a pump station. A better option may be putting in a forcemain on Ellington Road with five or six connections to each property. Each property will have their own pump station to maintain, and they can pump into the Town owned forcemain, explained Mr. Manfre.
 - e. Miller Road Sewer Ext.: Mr. Manfre reported that top soiling needs to be completed.
2. Collection of Delinquent Accounts:

Included with the Agenda was a collection report from TaxServ (see Exhibit I) for the outstanding accounts placed with TaxServ Capital Services, LLC for the month of May 2019. TaxServ collected a gross of \$24,807.53. Also, the Collector of Revenue reported over 96% collection rate for the residential and 100% for the commercial from last year.

Chairman Richard Aries explained that in a previous meeting with the Collector of Revenue, Jennifer Hilinski, she had made it very clear that the sewer bill form includes a message stating that if there's people who are struggling to pay the amount due, they can call the Tax Office and work something out. However, in reviewing the bill, Chairman Aries noted that he didn't really see the message in any prominent way, like he saw other messages. It is not clear for people to call the Tax Office if they are struggling; instead the language is that "if you don't pay now you are going to get hit with interest", said Chairman Aries. Therefore, he explained that he'll be seeking for next year sewer bill suggestions from the Authority to include a very clear message to people who are going to be hit with the higher sewer rates.

**WATER POLLUTION CONTROL AUTHORITY
TOWN OF SOUTH WINDSOR**

MINUTES

MADDEN ROOM, TOWN HALL

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JUNE 4, 2019 AT 7:00 PM

3. Public Works Week
Food Drive
CREC School Tour

Mr. Tony Manfre reported that the Public Works Week was in May. In honor of that, the WPCA combined efforts with the Town Garage and the Parks and Recreation Department toured 70, 2nd grade students from CREC School. They divided up the 70 students into two groups that went to the Town Garage and the Treatment Plant facility for a tour. A Fill-Up a Public Works Truck event was held at Geisslers Supermarket and at Stop & Shop Supermarket; the food that was collected was donated to the South Windsor Food and Fuel Bank. Mr. Manfre reported that Mr. Michael Gantick does a lot of work helping to promote this event. Also, Mr. Gantick was recognized by the American Public Works Association (APWA) as the New England APWA member of the year. Members of the Authority praised Mr. Gantick for this achievement.

4. Carla's Pasta

Mr. Manfre distributed a copy of the summary report (see Exhibit J). A copy of the full report is available to members of the Authority upon request. Mr. Manfre explained that the startup with the new facility was delayed until July now. In April they tested a new product line. The Total Suspended Solids (TSS) was 500; and the BOD was 890.

Ms. Vicki Paliulis explained that in reviewing the June 3rd report that was provided to her via email, Carla's Pasta is doing composite sampling whereby they take a flow reading sample over a course of a 24 hour period. That was an interesting track to look at in regards to where they are having their spikes during the day, said Ms. Paliulis. There are some things that she can recommend. All their spikes were at particular periods of timing each day, said Ms. Paliulis. Mr. Manfre responded that it is during their cleaning process at night. Is there a solution to that, asked Ms. Paliulis. Mr. Manfre responded that in the future they are going to probably need a holding tank, an oil water separator. Ms. Paliulis commend Carla's Pasta for making improvements, however, she'll like to further review their report and figure out more of a correction action. Ms. Paliulis also explained that the permit issued to Carla's Pasta by the State have different parameters than the permit issued by the WPCA. Therefore, in regards to the parameters, Carla's Pasta is still within their state permit limits but not the Town's permit limits. This is costing the Town resources to keep up with their discharge. How much further we are willing to prolong this, asked Ms. Paliulis. Chairman Aries responded that there is an agreed settlement in place for the next several months and Carla's Pasta is scheduled to report back to the Authority in September 2019.

E. PUBLIC PARTICIPATION (Items not on the agenda)

Mayor Andrew Paterna reported that the Town is using goats in an effort to combating invasive plants in the open space behind the Town Hall. The goats are

**WATER POLLUTION CONTROL AUTHORITY
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JUNE 4, 2019 AT 7:00 PM

available, if the Authority want to have them for the Vegetation Management project, said Mayor Paterna.

F. BILLS, CHANGE ORDERS, DISBURSEMENTS

None

G. UNFINISHED BUSINESS

1. Fee Structure (Discussion)

Chairman Richard Aries expressed that he was a “huge” proponent of maintaining uniform rates. As these rates are going up, he looks at the ability to alter the system. However, his thought is that there are people who are still struggling but also, there are people who are doing really well in this economy. Chairman Aries is looking at this matter seriously about how the Authority can modify the system to create a system that will allow to get the fees needed to maintain the system without overburdening those who are still struggling in Town.

Included with the Agenda packet was a flow basis analysis that Mr. Manfre created if the minimum flow of 84,000 gallons is reduced as recommended by Mr. Stephen Wagner; and where the burden is going to be in residential versus commercial (see Exhibit K). This matter will be further discussed at the next WPCA meeting.

2. Unassessed Properties

Mr. Tony Manfre had nothing to report on this matter.

3. WPCA Member Backgrounds

Mr. Tony Manfre reported that this request was previously made by Mr. Ashwatha Narayana. He recommended perhaps going around the room so that each member provide their professional background. This matter will be discussed at the next meeting.

H. EXECUTIVE SESSION

None

I. ADJOURNMENT

Motion was made to adjourn the meeting at 9:33 p.m.

The motion was made by Mr. Erik Dabrowski and seconded by Ms. Carol Fletterick. The motion carried unanimously.

Respectfully Submitted,

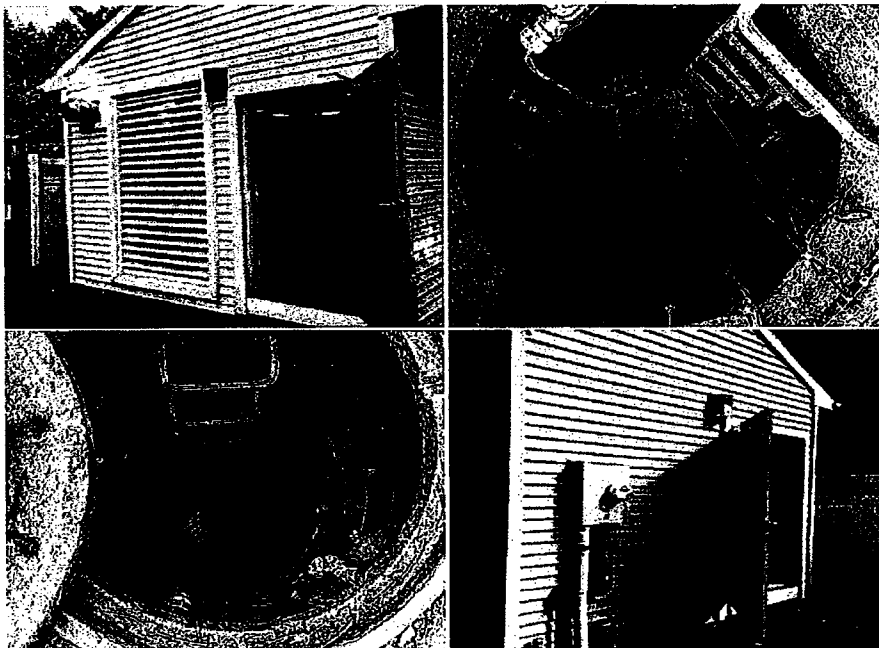
Ether A. Diaz
Recording Secretary



**SOUTH WINDSOR, CT
WATER POLLUTION CONTROL AUTHORITY (WPCA)**

MAY 2019

**Wastewater Pump Stations Asset
Evaluation and Management Plan
FINAL DRAFT**



May 23, 2019
W-P Project No. 14176A

Mr. Anthony Manfre, Superintendent Pollution Control
South Windsor Town Hall
1540 Sullivan Avenue
South Windsor, CT 06074

Subject: South Windsor Sewer Pump Stations Asset Evaluation and Management Plan –
FINAL DRAFT

Dear Tony:

Attached is the Final Draft of the South Windsor Sewer Pump Station Asset Evaluation and Management Plan addressing all comments received to date for your review and comment. The electronic database developed during this project will be provide separately.

As part of our scope, we visited and evaluated all eleven wastewater pump stations. Our evaluations considered operator comments, visual observations, energy efficiency, flood protection, and analyses based on age and anticipated life expectancy of equipment and systems. Our findings and recommendations are summarized in Section 6 of this report. The report also includes a cost table for future study efforts and a table of anticipated capital improvement costs to be used as a planning tool for future budgeting. The table of anticipated capital improvements costs should be reviewed every fiscal year to make necessary changes as assets are re-inventoried. Based on Wright-Pierce's asset evaluation, we recommend comprehensive and / or partial upgrades to the Benedict Drive, Clark Street, and Pleasant Valley Pump Stations over the next three fiscal years.

The following additional investigations outside of our current scope are also recommended and have been integrated into the Capital Improvement Plan (CIP) table in Section 6 of this report:

- Additional Inflow and Infiltration investigations in the Benedict Drive Pump Station drainage area;
- System-wide radio path communications study at all 11 sewer pump stations;
- Structural integrity evaluation of existing steel drywell cans at the Barrington, Benedict, Ellington, Pleasant Valley, Route 5 and Rye Pump Stations; and
- Conduct visual inspections of force main interior piping, discharge manholes and downstream gravity sewer piping from the Scantic Meadow #1 Pump Station force main.

Mr. Anthony Manfre, Superintendent Pollution Control
May 23, 2019
Page 2 of 2



If you have any questions or concerns, please do not hesitate to contact us.

Very Truly Yours,

WRIGHT-PIERCE

Dennis Dievert, PE
Senior Project Manager
dennis.dievert@wright-pierce.com

Lisa M. Muscanell-DePaola, PE
Lead Project Engineer
lisa.muscanell@wright-pierce.com

Enclosures

cc: *Jeffrey Lemay, South Windsor Pollution Control*
Michael Gantick, PE, Director of Public Works
WPCA Members

Section 6
Implementation Plan



SECTION 6

IMPLEMENTATION PLAN

6.1 INTRODUCTION

To plan for the necessary improvements at each pump station, a sewer pump station Capital Improvements Plan (CIP) was developed over a 15-year planning period and updated with the working CIP that the Town of South Windsor Pollution Control and Wright-Pierce have been revising over the last several fiscal years for all wastewater improvements (treatment plant, collection system, and pump stations projects). In general, CIP's can range from 5 years to as long as 50 years. For South Windsor, a 15-year CIP was selected to capture all required expenditures for long term reliable operation and maintenance of assets based on current conditions. Planning-level project costs have been prepared for the recommended improvements and are presented in **Appendix F**. These planning-level costs were developed using standard cost estimating procedures consistent with industry standards utilizing concept layouts, unit cost information, and planning-level cost curves, as necessary. The upgrade costs in **Appendix F** and in **Table 6-1** include addressing the current deficiencies notes in **Section 5**, as well as other typical housekeeping items such as:

- Installing state of the art control panels and instruments
- Repairing or replacing bituminous driveways, retaining walls and fencing
- Replacing doors, windows and roofing
- Replacing interior and exterior site lighting with LED type fixtures
- Installing/upgrading bypass connections and portable generator hook-ups
- HVAC upgrades to maintain current code compliance at the time of the upgrade
- Installing new access hatches and fall protection

The project cost information presented herein is in current dollars. The Town should use this CIP as a planning tool and adjust it every fiscal year to reprioritize the upgrade projects based on current conditions. The total estimated project cost for the recommended pollution control improvements is approximately \$28,155,000 in 2019 dollars which account for inflation over the

15-year planning period. A summary of the 15-year CIP is presented in **Table 6-1**. The town should review and update the CIP on an annual basis.

6.2 FUNDING OPTIONS FOR RECOMMENDED IMPROVEMENTS

There are several potential funding sources available to the Town of South Windsor Pollution Control for the design and construction of the recommended upgrades. The recommended improvements could be funded locally through a bonding referendum facilitated by the Town Council if approved by the Town's general voting community or through the new reserve for pump stations in the DEEP Clean Water (CWF) priority list currently of 100% low interest loan program. The former funding option would increase the Town's debt service, and the later funding option would increase the WPCA's debt service. Because the new CT DEEP reserve is "first-come, first served", there is no guarantee that this type of funding will be available when the Town moves forwards with any or all of these upgrades. Therefore, the full estimated costs of the recommended facilities should be budgeted for by the Town. The CT DEEP CWF recently made a revision to the Priority List Section 3c: Collection System Improvement Program to eliminate the \$4 million project limit per year per municipality. Refer to **Appendix G** for this memorandum.

Alternatively, there may be some energy efficiency funding and grant monies available for the larger pump stations in Town (Benedict Drive, Clark Street, and Pleasant Valley Pump Stations) from Eversource. The CT DEEP and the electrical utilities in Connecticut have also created programs that assist in projects that reduce energy demand and consumption.

It is Wright-Pierce's understanding that Pollution Control would like to obtain funding through the CT DEEP reserve discussed above and modestly increase the sewer user rates. Without financing this CIP, the Town's sewer user rate would have to increase a significant amount.

6.3 FUNDING OPTIONS FOR FLOOD MITIGATION ONLY PROJECTS

In addition to possible FEMA grants that may be available depending upon current programs, the Connecticut Institute for Resilience & Climate Adaptation (CIRCA) offers funding options assist Connecticut towns and cities adapt to a changing climate and to enhance the resilience of their

infrastructure. Under the Matching Funds Program, up to \$100,000 is available to municipalities for projects that are in line with the institute's mission. This includes projects that 'foster resilient actions and sustainable communities, particularly along the Connecticut coastline and inland waterway, that can adapt to the impacts and hazards of climate change and reduce the loss of life and property, natural systems and ecological damage, and social disruption from high-impact events.

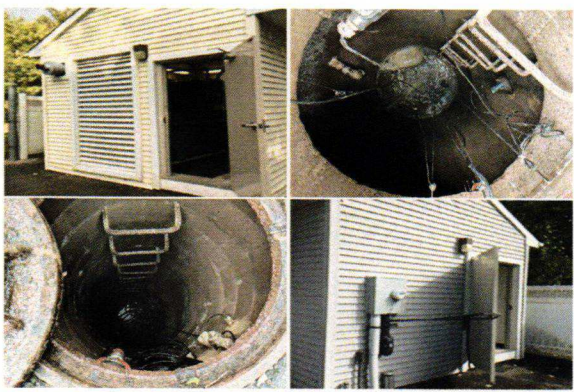

This CIRCA Matching Funds program and other potential funding opportunities can be found on their website at the University of Connecticut's website the institute: <http://circa.uconn.edu/>.

Exhibit B

Wastewater Pump Station Asset Evaluation and Management Plan

June 2019

Dennis Dievert Jr., PE
Lisa Muscanell-DePaolo, PE



WRIGHT-PIERCE
Engineering a Better Environment

Presentation Overview

Introductions & Project Background
What is Asset Management?
- EPA Reference Document
Project Approach
Asset Inventory and Database
Implementation Plan - CIP

Wastewater Infrastructure



> **130**
Miles of Gravity
Sewers

11
Sewer Pumping
Stations

> **4.5**
Miles of Force
Mains

3.75
MGD Wastewater
Treatment Facility

What is Asset Management?

Initial Steps

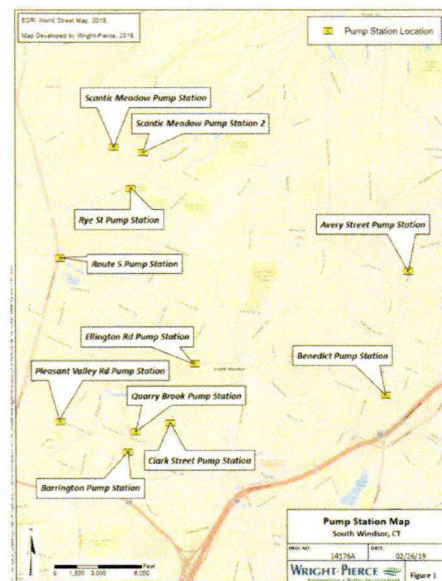
- What do you own and where is it?
- What is its condition and useful life?

Best Practices

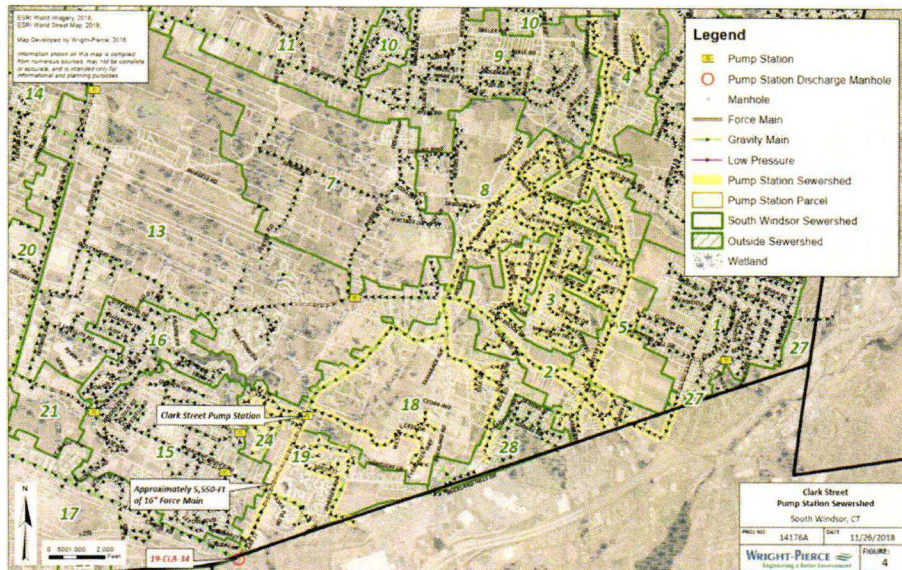
- Prepare asset inventory and system map
- Develop condition assessment and rating system
- Assess remaining useful life and replacement/upgrade costs
- Prioritize needs into a multi-year capital improvements plan (CIP)

Funding Strategies

- Is the rate structure sustainable for long term needs?
- Create a dedicated reserve
- Obtain loans through CWF program or other means



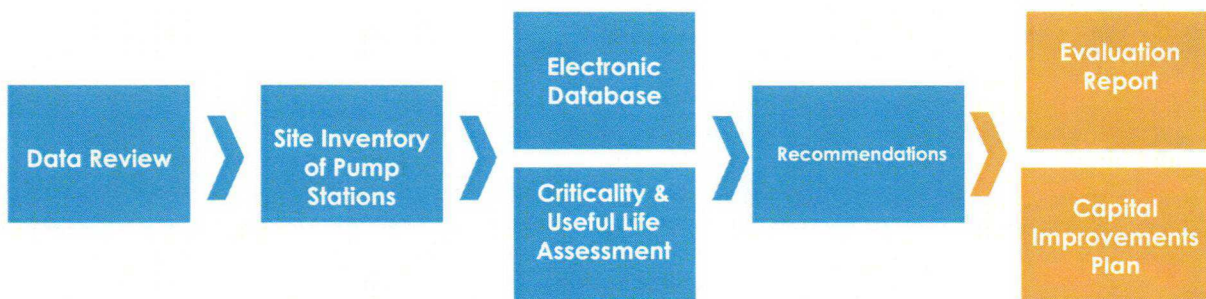
What is Asset Management?



WRIGHT-PIERCE
Engineering & Better Environment

5

Project Approach



WRIGHT-PIERCE
Engineering & Better Environment

6

Project Approach: Recommendations and CIP

- **Prioritize deficiencies**
 - Comprehensive upgrades to 3 stations over next 5 years
- **Identify additional studies**
 - Radio path study for better communications
 - Benedict drive I/I study
 - Structural integrity evaluation of steel cans at 6 pump stations
 - Inspect force main and downstream sewers for deterioration
- **Develop CIP over 15-years**
 - Combine with collection system and treatment plant work
 - Budgeting Tool for planned expenditures
- **Identify funding strategies**
 - Sewer user rates, CWF programs, low interest loans, reserve account


THANK YOU

TOWN OF SOUTH WINDSOR	
15 YR CAPITAL IMPROVEMENTS PLAN	
Updated May 1, 2019	

Item/Equipment	Target Replacement/Upgrade Fiscal Year ⁽¹⁾															
	FY 2019 Budget Cost	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Inflation factor @ 3%	1.00	1.03	1.06	1.09	1.13	1.16	1.19	1.23	1.27	1.30	1.34	1.38	1.43	1.47	1.51	1.56
Collection System Rehabilitation and Improvements																
Phase IV Sewer Rehabilitation	\$1,500,000						\$1,791,078									
Miscellaneous / Unforeseen Sewer System Rehabilitation	\$750,000	\$51,500	\$53,045	\$54,636	\$56,275	\$57,964	\$59,703	\$61,494	\$63,339	\$65,239	\$67,196	\$69,212	\$71,288	\$73,427	\$75,629	\$77,898
Re-Evaluate Clark Street Force Main (Complete during upgrade design)	\$50,000		\$53,045													
Rehabilitation 2,250 LF on Chapel Road - Phase 2A	\$900,000	\$927,000														
Rehabilitation 2,250 LF on Chapel Road - Phase 2B	\$900,000								\$1,140,093							
Sewer Maintenance, CCTV & Manhole Inspection Program (by WPCF Staff)	\$150,000	\$10,300	\$10,609	\$10,927	\$11,255	\$11,593	\$11,941	\$12,299	\$12,668	\$13,048	\$13,439	\$13,842	\$14,258	\$14,685	\$15,126	\$15,580
Vernon Flow Evaluation - Pump Station vs Treatment at Vernon WPCF	\$75,000							\$92,241								
Develop Sewer Service Area (SSA) Map	\$50,000	\$51,500														
WPCF Improvements and O&M																
Loading Dock Replacements	\$52,500	\$54,075														
Rail and Grating Mods (Secondary Clarifiers 1 and 2)	\$52,500		\$55,697													
Outfall Pipe Stabilization	\$120,000	\$123,600														
Miscellaneous O&M (Budget 100,000/yr)	\$1,500,000	\$103,000	\$106,090	\$109,273	\$112,551	\$115,927	\$119,405	\$122,987	\$126,677	\$130,477	\$134,392	\$138,423	\$142,576	\$146,853	\$151,259	\$155,797
WPCF Facilities Plan	\$300,000													\$440,560		
WPCF Preliminary Design	\$1,500,000														\$2,268,885	
WPCF Final Design	\$3,000,000														\$2,268,885	\$2,336,951
Pump Station Studies and O&M																
Re-Evaluate Pump Stations	\$40,000															\$62,319
Structural Testing of Steel Cans at Barrington, Benedict, Ellington, Pleasant, Route 5 & Rye	\$20,000	\$20,600														
Pump Station Radio Path Study	\$50,000	\$51,500														
Miscellaneous O&M - (Budget \$25,000/yr)	\$375,000	\$25,750	\$26,523	\$27,318	\$28,138	\$28,982	\$29,851	\$30,747	\$31,669	\$32,619	\$33,598	\$34,606	\$35,644	\$36,713	\$37,815	\$38,949
includes instrument calibrations and replacements, wetwell cleaning, etc.																
Comprehensive Pump Station Upgrades or New Construction																
New Pump Station(s) for Vernon Flows (Placeholder for New Construction)	\$4,000,000								\$1,689,027	\$1,739,698	\$1,791,889					
Ellington Road No. 2 and New Gravity Sewer Line	\$2,300,000	\$2,369,000														
Flood Protection Improvements at Rye	\$50,000	\$51,500														
Benedict Drive	\$2,100,000			\$2,294,727												
Clark Street	\$2,680,000		\$2,843,212													
Pleasant Valley	\$1,270,000	\$1,308,100														
Quarrybrook	\$1,290,000							\$1,586,537								
Avery	\$890,000											\$1,231,968				
Scantic Meadow 1	\$370,000													\$543,357		
Scantic Meadow 2	\$400,000													\$587,413		
Ellington	\$930,000												\$1,325,958			
Rye	\$900,000															\$1,402,171
Route 5	\$650,000														\$983,183	
Barrington Estates	\$740,000															\$1,152,896
Total	\$29,955,000	\$5,147,425	\$3,148,221	\$2,496,881	\$208,219	\$214,466	\$2,011,978	\$1,906,304	\$3,063,472	\$1,981,081	\$2,040,513	\$1,488,051	\$1,589,723	\$1,843,010	\$5,800,782	\$5,242,560

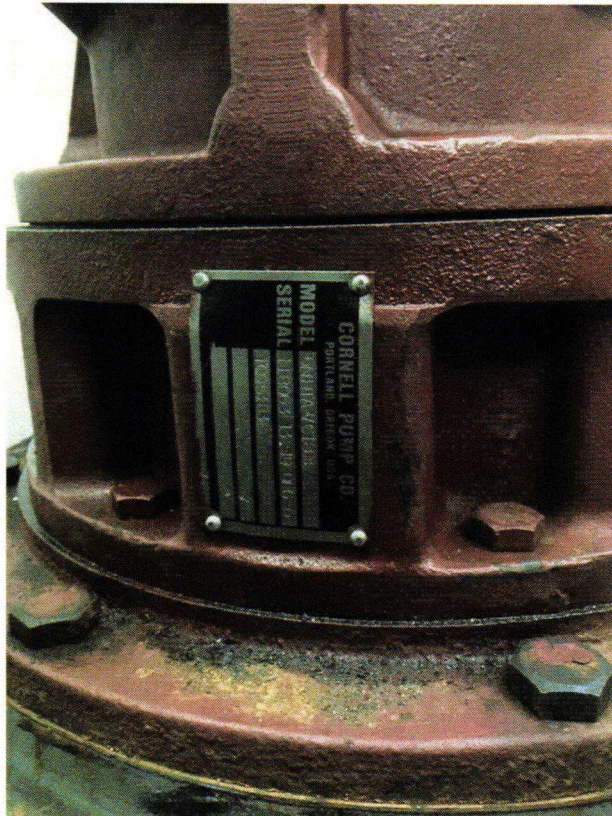
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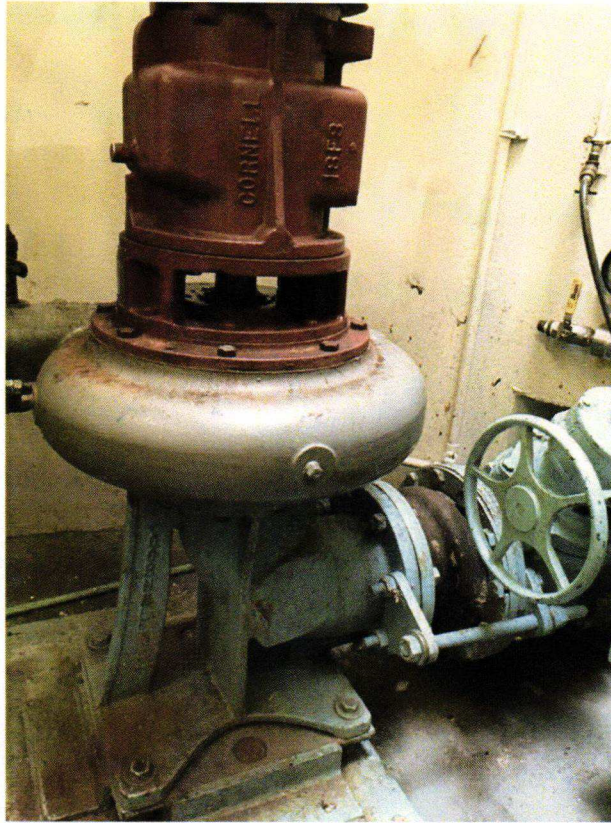
Pump 2

Project	Process
Created	2018-10-10 13:25:53 UTC by Nicole Ouimet
Updated	2019-02-28 02:21:06 UTC by Lisa Muscanell
Location	41.820585, -72.516401
Status	 All Complete
South Windsor Ct - Asset Management Plan	
Asset ID	BDPS P2

Asset Details

Description	Pump 2
Location	Benedict Drive Pump Station
Installed Date (Year)	2000
Install Date Estimated	No
Asset Class	Pump
Current Equipment Cost \$	32000
Manufacturer	Cornell Pump Co
Model Number	6NHTA-VC18DB
Serial Number	118063 13.19 DEG 0 TC05383
Speed (RPM)	1770
Capacity (GPM)	1130
TDH (Ft.)	153
Pump Type	Centrifugal
Pump Impeller Size (inches)	13.19
Pump Suction Size (inches)	6
Pump Discharge Size (inches)	6
Asset Photo(s) Closeup	





Location Photo



Asset Assessment Section

Physical Assessment

Equipment or Structure

Equipment

Equipment Inspection

Verify Operation, Does the Asset Run?	Yes
Installation Problems	No
Excessive Vibration	No
Excessive Noise	No
Abnormal Temperature	No
Condition of Coatings	Excellent
Signs of Wear or Corrosion	None
Leakage of Fluids	None
Condition Rating	6-Moderate to Significant Deterioration
Reliability Rating	5-Continuous Breakdown (Multiple Times per Year)

Non-Physical Assessment

Current Performance	5-Does not meet any Performance Targets
---------------------	---

Maintainability

7-More Frequent Corrective Maintenance

Consequence of Failure

Replacement Time

4->3 Months

Loss of Service

5-Cannot be down a week

Safety Impact

7-Moderate Impact on Public Safety

Agency's Image

5-Adverse Media

Financial Impact

5-High Cost

Economic Impact

5-<\$50k

Spill, Flood Impact

7-Many Inconvenienced, Moderate Health and Habitat Issues

Permit Compliance

5-Regulatory Sanction Possible

Redundancy

3-50% Backup

Risk Driver

Redundancy

General Comment

Over the last 10 years 2 impellers have been replaced (in total) for the pumps at the station. , due to grit damage. Pumps get blocked 1-2 times a year. If pumps go down the Town needs to use a Godwin pump and septage haulers. If the station is down the station will back up into the sewer system and local houses. Houses closest to the station have backflow preventers installed on their laterals. In order to maintain pumps the motors need to come off. 2 people are needed to move/adjust. Highest head station in Town. There is no bypass connection at this station. Cost includes motor. During peak flow conditions, Operators report both pumps required to operate.

	FY1718 Adopted	FY1819 ADOPTED	YTD AS OF 3-28-19	FY1920 PROPOSED	DELTA FROM LAST YEAR	% CHANGE
100 Personal Services						
110 Full-time Salaries	\$ 963,940	\$ 998,895	\$ 734,477	\$ 1,010,251	\$ 11,356	1.1%
111 Overtime	\$ 51,969	\$ 107,319	\$ 65,832	\$ 113,539	\$ 6,220	5.8%
112 Longevity	\$ -	\$ -	\$ 700	\$ 700	\$ 700	0.0%
113 Part-time Salaries	\$ -	\$ -	\$ -	\$ -	\$ -	0.0%
130 Employee Benefits	\$ 572,606	\$ 599,684	\$ 560,201	\$ 498,475	\$ (101,209)	-16.9%
Subtotal:	\$ 1,588,515	\$ 1,705,898	\$ 1,361,210	\$ 1,622,965	\$ (82,933)	-4.9%
200 Materials & Expenses						
210 Office Supplies	\$ 1,600	\$ 1,600	\$ 550	\$ 1,600	\$ -	0.0%
221 Operating Materials	\$ 84,000	\$ 91,450	\$ 57,487	\$ 131,450	\$ 40,000	43.7%
222 Motor Vehicle Supplies	\$ 24,620	\$ 24,620	\$ 4,934	\$ 27,550	\$ 2,930	11.9%
223 Uniforms & Clothing	\$ 15,750	\$ 15,750	\$ 8,908	\$ 15,750	\$ -	0.0%
232 Equipment Repair	\$ 65,000	\$ 83,000	\$ 71,829	\$ 97,000	\$ 14,000	16.9%
Subtotal:	\$ 190,970	\$ 216,420	\$ 143,708	\$ 273,350	\$ 56,930	26.3%
300 Contractual Services						
310 Advertising	\$ -	\$ -	\$ -	\$ -	\$ -	0.0%
320 Professional	\$ 155,999	\$ 160,252	\$ 151,921	\$ 161,500	\$ 1,248	0.8%
330 Rentals & Leases	\$ 26,020	\$ 30,420	\$ 17,887	\$ 33,400	\$ 2,980	9.8%
360 Utilities	\$ 491,450	\$ 501,950	\$ 307,344	\$ 529,650	\$ 27,700	5.5%
371 Maintenance Contracts	\$ 464,855	\$ 497,255	\$ 251,811	\$ 567,100	\$ 69,845	14.0%
373 Repair Maintenance Equip.	\$ 19,000	\$ 29,700	\$ 31,078	\$ 32,000	\$ 2,300	7.7%
374 Fees & Memberships	\$ 1,520	\$ 2,670	\$ 750	\$ 2,670	\$ -	0.0%
375 Recruitment & Training	\$ 25,300	\$ 23,480	\$ 8,762	\$ 24,200	\$ 720	3.1%
390 Other Purchase Services	\$ 296,500	\$ 326,000	\$ 66,983	\$ 326,000	\$ -	0.0%
393 Internal Service Charge	\$ 37,240	\$ 37,240	\$ 37,240	\$ 45,000	\$ 7,760	17.2%
Subtotal:	\$ 1,517,884	\$ 1,608,967	\$ 873,776	\$ 1,721,520	\$ 112,553	7.0%
400 Capital Outlay						
430 Capital Projects	\$ 43,000	\$ 65,000	\$ 18,620	\$ 45,000	\$ (20,000)	-30.8%
441 Office Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	0.0%
442 Department Equipment	\$ 50,000	\$ 96,600	\$ 8,506	\$ 72,500	\$ (24,100)	-24.9%
Subtotal:	\$ 93,000	\$ 161,600	\$ 27,126	\$ 117,500	\$ (44,100)	-27.3%
Department Total:	\$ 3,390,369	\$ 3,692,885	\$ 2,405,820	\$ 3,735,335	\$ 42,450	1.1%

CODE NO. & DESCRIPTION	PROGRAM	COST
100 PERSONNEL SERVICES		\$ 1,622,964.61
110 FULL TIME SALARIES	ANNUAL	
	SUPERINTENDENT*	\$ 83,796
	PLANT SUPERVISOR	\$ 85,640
*SALARY IS 80% FUNDED BY WPCA	FACILITIES MECHANIC	\$ 81,830
**SALARY IS 25% FUNDED BY WPCA	TECHNICIAN 4	\$ 81,830
	TECHNICIAN 4	\$ 81,830
	TECHNICIAN 3	\$ 75,784
	MECHANIC 2	\$ 75,784
SALARY INCREASES:	MECHANIC 2	\$ 75,784
MANAGEMENT	MECHANIC 2	\$ 75,784
CSEA UNION 2%	LABORTORY ANALYST	\$ 75,784
AFSME UNION 2%	MECHANIC 1	\$ 75,041
	TECHNICIAN 2	\$ 69,207
	TECHNICIAN 1	\$ 60,296
	ADMINISTRATIVE SECRETARY**	\$ 11,861
	Salary Total	1,010,251
111 OVERTIME		
SCHEDULED OVERTIME:		
SATURDAYS (52 DAYS)		
# OF HRS # OF STAFF WAGE x 1.5		
2 2 \$ 59.01	SATURDAY OVERTIME	\$ 12,275
	SUNDAY OVERTIME	\$ 16,366
SUNDAYS (52) AND HOLIDAYS (13)	HOLIDAY OVERTIME	\$ 4,092
# OF HRS # OF STAFF WAGE x 2	SCHEDULED OT TOTAL	\$ 32,732
2 2 \$ 78.68		
UNSCHEDULED OVERTIME:	ALARMS	\$ 55,077.96
ALARMS/YR 100	LINE BLOCKAGES	\$ 1,101.56
LINE BLOCKAGES/YR 2	REPAIRS	\$ 10,327.12
PLANT/PS REPAIR (HRS.) 75	UNSCHEDULED OT TOTAL	\$ 66,507
# OF HRS # OF STAFF WAGE x 1.75		
4 2 \$ 68.85		
STAND BY COMP:	STAND BY COMPENSATION	\$ 14,300
WKS/YR COST/WK.	TOTAL	\$ 14,300
52 \$ 275		
112 LONGEVITY		
	LONGEVITY PAYMENT	700
	TOTAL	\$ 700

CODE NO. & DESCRIPTION	PROGRAM	COST
------------------------	---------	------

114 TEMPORY HELP

TEMPORARY/SEASONAL HELP	\$	-
TOTAL		\$ -

130 EMPLOYEE BENEFITS

FICA	\$	86,631
BC/BS	\$	207,035
DEARBORN LIFE	\$	7,752
LTD	\$	1,374
STD	\$	221
W/C	\$	38,924
ICMA	\$	56,579
LAB CERTIFICATION	\$	1,500
AETNA PENSION	\$	91,359
CDL LICENSE	\$	2,500
STATE LICENSES	\$	4,600
TOTAL		\$ 498,475

CODE NO. & DESCRIPTION	PROGRAM	COST
200 MATERIALS AND SUPPLIES		\$ 273,350
210 OFFICE SUPPLIES		
PAPER, PENS, FAX, AND PRINTER CARTRIDGES	SUPPLIES	\$ 1,600
	TOTAL	\$ 1,600
221 OPERATING SUPPLIES		
221.1 PLANT SUPPLIES	\$	1,000
221.2 PUBLICATIONS	\$	-
221.3 SHOP SUPPLIES	\$	4,000
221.4 SIGNS	\$	1,200
221.5 EMERGENCY	\$	1,500
221.6 CUSTODIAL SUPPLIES	\$	3,500
221.7 LINE CLEANING SUPPLIES	\$	25,000
221.8 SAFETY SUPPLIES	\$	4,000
221.9 CHEMICALS	\$	25,000
221.10 BUILDING SUPPLIES	\$	1,750
221.11 PLUMBING SUPPLIES	\$	2,000
221.12 LABORATORY SUPPLIES	\$	18,500
221.13 HARDWARE SUPPLIES	\$	3,500
221.14 SLUDGE DISPOSAL	\$	2,500
221.15 LUBRICANTS	\$	4,500
221.16 ELECTRICAL SUPPLIES	\$	3,500
221.17 MECHANICAL SUPPLIES	\$	30,000
	TOTAL	\$ 131,450
222 MOTOR VEHICLE SUPPLIES	USE (GAL.)	
ASSUMPTIONS:	FUEL: Diesel Generators - Pump Stations	600 \$ 2,100
GASOLINE \$ 3.40	81SW - 2017 Ford F-250	400 \$ 1,360
DIESEL \$ 3.50	82SW - 2014 Ford E-350 Camera Truck	500 \$ 1,700
	83SW - 2005 F450 Utility Truck	800 \$ 2,720
	1995 Ford LN9000 Vacuum Truck	300 \$ 1,050
	80SW - 2009 Ford Explorer	300 \$ 1,020
	86SW - 2008 Combination Truck	1500 \$ 5,250
	87SW - 2014 Ford F-350 Utility Truck	400 \$ 1,360
	Pumps/Misc Equipment	100 \$ 340
	TOTAL	\$ 16,900
REPAIR PARTS:	Portable Equipment	\$ 1,200
	80SW - 2009 Ford Explorer	\$ 500
	81SW - 2017 Ford F-250	\$ 750
	82SW - 2014 Ford E-350 Camera Truck	\$ 500
	83SW - 2005 F450 Utility Truck	\$ 1,200
	84SW - 1995 Ford LN9000 Vacuum Truck	\$ 1,500
	86SW - 2008 Combination Truck	\$ 4,500
	87SW - 2014 Ford F-350 Utility Truck	\$ 500
	TOTAL	\$ 10,650

CODE NO. & DESCRIPTION	PROGRAM	COST
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223 UNIFORMS

UNIFORM RENTAL	\$	7,500
SAFETY SHOES	\$	3,250
REPLACEMENT CLOTHING	\$	5,000
		TOTAL \$ 15,750

232 EQUIPMENT REPAIR

PLANT EQUIPMENT	\$	69,000
PUMP STATION EQUIPMENT	\$	28,000
		TOTAL \$ 97,000

CODE NO. & DESCRIPTION	PROGRAM	COST
300 - CONTRACTUAL SERVICES		\$ 1,721,520
310 ADVERTISING/PRINTING		
	ADVERTISING	\$ -
	TOTAL	\$ -
320 PROFESSIONAL		
320.1 JobCal Support		\$ 900
320.2 Rockwell Support		\$ 2,000
320.3 Debt Mgt.		\$ 2,000
320.4 Water Consumption Reports		\$ 1,200
320.5 Insurance Premiums		\$ 138,000
320.6 NPDES Compliance Testing		\$ 14,000
320.7 NPDES PERMIT		\$ 2,400
320.8 Drug Testing and Innoculations		\$ 1,000
	TOTAL	\$ 161,500
330 RENTAL & LEASES		
330.1 Communications		\$ 22,000
330.2 2 Way Radio		\$ 2,000
330.3 GPS Rental		\$ 2,100
330.4 SCADA Line Equipment Rental		\$ 3,300
330.5 Security System		\$ 2,000
330.6 Copier		\$ 2,000
	TOTAL	\$ 33,400
360 UTILITIES		
360.1 ELECTRICAL USE:		
TREATMENT PLANT		\$ 370,000
PUMP STATIONS:		
Avery		\$ 4,000
Barrington		\$ 2,500
Benedict		\$ 30,000
Clark		\$ 44,700
Ellington		\$ 2,900
Pleasant Valley		\$ 9,400
Quarry Brook		\$ 3,100
Route 5		\$ 2,600
Rye		\$ 3,600
Scantic I		\$ 2,100
Scantic II		\$ 3,100
HEATING FUEL COST	360.2 HEATING FUEL 15,000/YR	\$ 41,250
\$2.75	360.3 TELEPHONE LAND LINES	\$ 4,800
	360.4 WATER SERVICE:	
	TREATMENT PLANT	\$ 5,000
	CLARK ST PS	\$ 600
	TOTAL	\$ 529,650

CODE NO. & DESCRIPTION	PROGRAM	COST
371 MAINTENANCE CONTRACTS		
371.1 Treatment Plant Pest Control		\$ 1,500
371.2 Container Rental and Trash Collection		\$ 4,000
371.3 Sludge Transportation and Disposal		\$ 347,000
371.4 Grit Transportation and Disposal		\$ 24,000
371.5 Custodial Building Maintenance		\$ 18,000
371.6 Grounds Maintenance		\$ 13,000
371.7 Stormwater Inspection and Testing		\$ 6,000
371.8 Power Center and ATS Service Contract		\$ 15,000
371.9 Plant Generator Load Test/Adjustment		\$ 6,000
371.10 SCADA Maintenance		\$ 20,000
371.11 Fire Alarm System Maintenance		\$ 2,800
371.12 HACH Analyzer Maintenance		\$ 7,000
371.13 HVAC Control System Service Contract		\$ 2,800
371.14 HVAC Mechanical System Maintenance		\$ 45,000
371.15 Controls/PLC Service Contract		\$ 5,000
371.16 Easement Vegetation Management		\$ 50,000
TOTAL		\$ 567,100
373 REPAIR MAINTENANCE EQUIP.		
Service calls		\$ 6,000
Hoist Certification		\$ 4,000
Fire Extinguisher Testing		\$ 1,200
Fall Protection Certification		\$ 2,800
Backflow Preventer Certifications		\$ 1,500
Boiler Certifications		\$ 3,000
TWAS Pump Rebuild		\$ -
Machining		\$ 8,000
Flow Meter Calibrations		\$ 1,500
Equipment Calibrations/Certifications		\$ 4,000
TOTAL		\$ 32,000
374 FEES & MEMBERSHIPS		
Water Environment Federation		\$ 1,650
Annual Meetings		\$ 800
C.W.P.A.A.		\$ 220
TOTAL		\$ 2,670
375 RECRUITMENT & TRAINING		
Training materials and conferences		\$ 18,000
DEEP Licensing Exams		\$ 1,200
NASSCO		\$ 2,500
Safety and Compliance Training		\$ 2,500
TOTAL		\$ 24,200

CODE NO. & DESCRIPTION	PROGRAM	COST
390 OTHER PURCHASE SERVICES		
SANITARY SEWER SERVICES:		
	Vernon (469 Units)	\$ 260,000
	MDC	\$ 14,000
	Manchester (85 units)	\$ 52,000
		TOTAL \$ 326,000
393 INTERNAL SERVICE CHARGE		
	ENGINEERING/COLLECTOR OF REV.	\$ 45,000
		TOTAL \$ 45,000

CODE NO. & DESCRIPTION	PROGRAM	COST
400 CAPITAL OUTLAY		\$ 117,500
430 CAPITAL PROJECTS		
Aeration Air Flow Control		\$ 16,000
Alarm System Radio Replacement		\$ -
Processor Replacement - UV System		\$ 14,000
Sludge Storage Tank Floors		\$ 15,000
TOTAL		\$ 45,000
441 OFFICE EQUIPMENT		\$ -
TOTAL		\$ -
442 DEPARTMENT EQUIPMENT		
Portable Flow Meters		\$ 15,000
Trailer		\$ 8,000
Gantry		\$ 3,500
Portable DO Meter		\$ 4,000
Aeration Air Flow Meters		\$ 8,000
Aeration Air Control Valve Actuators		\$ 8,000
CCTV Inspection Camera		\$ 26,000
TOTAL		\$ 72,500

DEBT SERVICE/CIP/RESERVE TOTAL **\$ 1,701,582**

DEBT SERVICE - PRINCIPAL AND INTEREST

PROJECT NAME	COST
1 TOWN OF VERNON UPGRADE	\$ -
2 STATE GRANT UV SYSTEM (FINAL PAY. 7/1/21)	
PRINCIPAL	\$ 46,576
INTEREST	\$ 1,537
SUBTOTAL	\$ 48,113
3 PLEASANT VALLEY PS UPGRADE (FINAL PAY. 2026)	
PRINCIPAL	\$ 21,728
INTEREST	\$ 2,503
SUBTOTAL	\$ 24,231
4 SUBMERSIBLE PS UPGRADE (FINAL PAY. 2027)	
PRINCIPAL	\$ 82,611
INTEREST	\$ 11,692
SUBTOTAL	\$ 94,303
5 DRY PIT PS UPGRADE (FINAL PAY. 2028)	
PRINCIPAL	\$ 100,000
INTEREST	\$ 39,935
SUBTOTAL	\$ 139,935
TOTAL DEBT SERVICE	
	\$ 306,582

CAPITAL IMPROVEMENT PROJECTS

PROJECT LOCATION	PROJECT NAME	COST
TREATMENT PLANT COLLECTION SYSTEM	OUTFALL STABILIZATION	\$ 60,000
	CLARK ST. UPGRADE	\$ -
	Chapel Rd Phase 2A	\$ 845,000
	I/I REMOVAL AND MH REHAB.	\$ 30,000
CIP TOTAL		\$ 935,000

RESERVE FUND CONTRIBUTION

FUND NAME	COST
OPERATING RESERVE	\$ -
REPLACEMENT RESERVE**	\$ 460,000
TOTAL	\$ 460,000

**\$310,000 is earmarked for Clark St. PS upgrade

PUBLIC WORKS
POLLUTION CONTROL

FISCAL YEAR
2019/2020

ACCOUNT NO.
3252

Sources of Revenue	Actual FY1617	Actual FY1718	ESTIMATED FY1819	PROJECTED FY1920
Sewer User Charges	\$ 4,224,366	\$ 4,427,505	\$ 4,727,535	\$ 5,067,568
Industrial Surcharges		\$ -	\$ 100,000	\$ 25,000
Septic Dumping Fees	\$ 8,242	\$ 10,400	\$ 15,000	\$ 12,000
Grant Reimbursement/Loan	\$ -	\$ -	\$ 27,450	\$ -
Interest Income	\$ 145,270	\$ 188,456	\$ 160,000	\$ 145,000
Lien Fees	\$ 22,270	\$ 35,552	\$ 25,000	\$ 25,000
Gen. Gov. Sundry	\$ 990	\$ 2,035	\$ 3,000	\$ 2,000
Permit Fees	\$ 4,184	\$ 4,820	\$ 4,000	\$ 5,000
Assessments	\$ 59,860	\$ 11,336	\$ 10,000	\$ 15,000
Connection Charges	\$ 94,982	\$ 205,508	\$ 100,000	\$ 100,000
Capacity Charge	\$ -	\$ 1,303	\$ 26,000	\$ 30,000
Investment Interest Earnings	\$ 110	\$ 464	\$ 300	\$ 400
Cancel Pr. Year Encumbrances	\$ 9,156	\$ (2,248)	\$ -	\$ -
Internal Services	\$ 28,350	\$ 46,591	\$ 33,000	\$ 40,000
Fund Balance Appropriations	\$ -	\$ -	\$ -	\$ -
	\$ 4,597,780	\$ 4,931,722	\$ 5,231,285	\$ 5,466,968

DEFINITIONS

Ct = Total annual cost for operation, debt service, capital projects, contributions to reserves

Cr = Surcharges for removal of excess TSS/BOD

Ro = Other sources of revenue: dumping fees, permit fees, assessments, interest, liens, connection charges, grants, transfers from reserves, internal services transfers, and investment earnings

Qo = Annual individual user discharge (84,000 gallons)

Qt = total annual indust/comm and residential discharge

$$\text{USER CHARGE} = \frac{(\text{Ct} - (\text{Cr} + \text{Ro})) \times \text{Qo}}{\text{Qt}}$$

ASSUMPTIONS

Ct=	OPERATIONS	\$ 3,735,335
	DEBT SERVICE	\$ 306,582
	REPLACE. RESERVE	\$ 460,000
	OPERATING RESERVE	\$ -
	CAP. IMPROVEMENT	\$ 935,000
	WPCA	\$ 2,900
	TOTAL EXPENDITURES	\$ 5,439,817

Cr=	SURCHARGES	\$ 25,000
Ro=	OTHER SOURCES OF REVENUE	\$ 374,400
Qt=	RESIDENTIAL FLOW	713,342,770
	COM/IND FLOW	297,069,230
	TOTAL FLOW	1,010,412,000
Qo=	USER DISCHARGE FLOW	84,000 GAL

USER CHARGE =	\$ 419.03
ALLOWABLE FOR UNCOLLECTABLES 1.4%	\$ 5.87

USER CHARGE	\$ 424.90
FINAL USER CHARGE	\$ 425

RESIDENTIAL USERS	8,390
COM/IND REVENUE	\$ 1,502,670
RES. REVENUE	\$ 3,564,898
TOTAL	\$ 5,067,568

Exhibit E

	FY1718 Adopted	FY1819 ADOPTED	YTD AS OF 6-3-19	FY1920 PROPOSED	DELTA FROM LAST YEAR	% CHANGE
100 Personal Services						
110 Full-time Salaries	\$ 963,940	\$ 998,895	\$ 897,375	\$ 1,010,251	\$ 11,356	1.1%
111 Overtime	\$ 51,969	\$ 107,319	\$ 81,058	\$ 113,539	\$ 6,220	5.8%
112 Longevity	\$ -	\$ -	\$ 700	\$ 700	\$ 700	0.0%
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Department Total:	\$ 3,390,369	\$ 3,692,885	\$ 3,126,978	\$ 3,735,335	\$ 42,450	1.1%

TOWN OF SOUTH WINDSOR
Sewer User Rates, Surcharge Rates, Sewer Assessment Schedule, and
Septic Disposal Fees for FY 2019/2020

Received 4/14/19 @ 11:30 AM
Country Cannelled, etc

Exhibit F

Pursuant to Chapter 103 Sections 7-245 through 7-255 of the Connecticut General Statutes, notice is hereby given that the South Windsor Water Pollution Control Authority will hold a Public Hearing on Tuesday, May 7, 2019 at 6:30 p.m. at the Town Council chambers in the Town Hall, 1540 Sullivan Avenue, South Windsor, Connecticut to present the proposed Water Pollution Control Budget and to establish proposed sewer user charges, surcharges, sewer assessment schedules, septic disposal fees, and to present the proposed sewer user charge discount rates for qualified income residents for fiscal year 2019-2020. The proposed sewer user charge rates, surcharge rates, assessment schedules, septic disposal fees will be available on Tuesday, April 9, 2019 for review in the Town Clerk's Office in the Town Hall, 1540 Sullivan Avenue, South Windsor, Connecticut. Any appeals from such charges must be taken within twenty-one days after such filing

Sewer User Rates

Class of User

July 1, 2019 – June 30, 2020

Residential (single family, condo unit)

\$425– Flat rate per unit

Commercial/Industrial

\$425– Minimum charge per

(per 84,000 gallons)

business or condo unit.

The Pro-rate adjustment for Fiscal Year 2019-2020 shall be as follows:

	<u>Date of Permit</u>	<u>Amount</u>	<u>Date of Permit</u>	<u>Amount</u>
Between	7/01/19 – 7/31/19	\$425.00	1/01/20 – 1/31/20	\$212.48
	8/01/19 – 8/31/19	\$389.58	2/01/20 – 2/29/20	\$177.06
	9/01/19 – 9/30/19	\$354.16	3/01/20 – 3/31/20	\$141.64
	10/01/19 – 10/31/19	\$318.74	4/01/20 – 4/30/20	\$106.22
	11/01/19 – 11/30/19	\$283.32	5/01/20 – 5/31/20	\$ 70.84
	12/01/19 – 12/31/19	\$247.90	6/01/20 – 6/30/20	\$ 35.42

Sewer User Surcharge Rates for Excessive Solids:

Biochemical Oxygen Demand (B.O.D.)

\$0.40/lb.

Total Suspended Solids (TSS)

\$0.66/lb.

Sewer Assessment Schedule

	<u>Base</u>	<u>Frontage</u>	<u>Lateral</u>	<u>Connection Charge</u>
Residential, School	\$2,708	\$43 per foot	\$1,225 per lateral	\$1,225 per unit
Commercial/Industrial	\$2,708	\$82 per foot	\$1,225 per lateral	\$3,920 per acre

Septic Disposal Fees: \$145 Per 1,500 gallons

Equivalent Dwelling Unit (EDU) Table:

EDU	BEDROOMS	EDU	WATER METER SIZE
0.75	2 OR LESS	1	<1"
1	3	2	1"
1.25	4	3	1.5"
1.5	5	4	2"
2	6	6	3"
3	7-9	8	4"
4	10-12	12	6"
5	13-15	16	8"
6	16-18	20	10"
7	19-21	24	12"
8	22-24		
9	25-27		
10*	28-30		

*1 EDU will be applied for every 3 bedrooms over 30 bedrooms
Qualifying Income Sewer User Charge Discount

Home Owners
FY 2019/2020
Full Undiscounted Residential User Charge is \$425
Filing Period February 1, 2019 – May 15, 2019

Income		User Charge Credit %		Discounted User Charge	
Over	To	Married	Unmarried	Married	Unmarried
\$0	\$18,100	50%	40%	\$212.50	\$255.00
\$18,100	\$24,200	40%	30%	\$255.00	\$297.50
\$24,200	\$30,200	30%	20%	\$297.50	\$340.00
\$30,200	\$36,000	20%	10%	\$340.00	\$382.50
\$36,000	\$43,900	10%	0%	\$382.50	\$425.00

The foregoing user rates are established based upon estimated budget requirements and operating costs for the Pollution Control Division of the Public Works Department.

Richard Aries, Chairman
Water Pollution Control Authority

Exhibit G

DEFINITIONS

Ct = Total annual cost for operation, debt service, capital projects, contributions to reserves

Cr = Surcharges for removal of excess TSS/BOD

Ro = Other sources of revenue: dumping fees, permit fees, assessments, interest, liens, connection charges, grants, transfers from reserves, internal services transfers, and investment earnings

Qo = Annual individual user discharge (84,000 gallons)

Qt = total annual indust/comm and residential discharge

$$\text{USER CHARGE} = \frac{(\text{Ct} - (\text{Cr} + \text{Ro})) \times \text{Qo}}{\text{Qt}}$$

ASSUMPTIONS

Ct=	OPERATIONS	\$	3,735,335
	DEBT SERVICE	\$	306,582
	*REPLACE. RESERVE	\$	460,000
	OPERATING RESERVE	\$	-
	CAP. IMPROVEMENT	\$	935,000
	WPCA	\$	2,900
	TOTAL EXPENDITURES	\$	5,439,817

Cr=	SURCHARGES	\$	25,000
Ro=	OTHER SOURCES OF REVENUE	\$	374,400
Qt=	RESIDENTIAL FLOW		713,342,770
	COM/IND FLOW		297,069,230
	TOTAL FLOW		1,010,412,000

Qo= USER DISCHARGE FLOW 84,000 GAL

USER CHARGE =	\$	419.03
ALLOWABLE FOR UNCOLLECTABLES 1.4%	\$	5.87

USER CHARGE	\$	424.90
FINAL USER CHARGE	\$	425

RESIDENTIAL USERS		8,390
COM/IND REVENUE	\$	1,502,670
RES. REVENUE	\$	3,564,898
TOTAL	\$	5,067,568

*\$310,000 EARMARKED FOR FUTURE PUMP STATION UPGRADES

DEFINITIONS

Ct = Total annual cost for operation, debt service, capital projects, contributions to reserves

Cr = Surcharges for removal of excess TSS/BOD

Ro = Other sources of revenue: dumping fees, permit fees, assessments, interest, liens, connection charges, grants, transfers from reserves, internal services transfers, and investment earnings

Qo = Annual individual user discharge (84,000 gallons)

Qt = total annual indust/comm and residential discharge

$$\text{USER CHARGE} = \frac{(\text{Ct} - (\text{Cr} + \text{Ro})) \times \text{Qo}}{\text{Qt}}$$

ASSUMPTIONS

Ct=	OPERATIONS	\$	3,735,335
	DEBT SERVICE	\$	306,582
	*REPLACE. RESERVE	\$	400,000
	OPERATING RESERVE	\$	-
	CAP. IMPROVEMENT	\$	935,000
	WPCA	\$	2,900
	TOTAL EXPENDITURES	\$	5,379,817

Cr=	SURCHARGES	\$	25,000
Ro=	OTHER SOURCES OF REVENUE	\$	374,400
Qt=	RESIDENTIAL FLOW		713,342,770
	COM/IND FLOW		297,069,230
	TOTAL FLOW		1,010,412,000

Qo= USER DISCHARGE FLOW 84,000 GAL

USER CHARGE =	\$	414.04
ALLOWABLE FOR UNCOLLECTABLES 1.4%	\$	5.80

USER CHARGE	\$	419.84
FINAL USER CHARGE	\$	420

RESIDENTIAL USERS		8,390
COM/IND REVENUE	\$	1,484,782
RES. REVENUE	\$	3,522,463

TOTAL	\$	5,007,245
--------------	-----------	------------------

*\$250,000 EARMARKED FOR FUTURE PUMP STATION UPGRADES

DEFINITIONS

Ct = Total annual cost for operation, debt service, capital projects, contributions to reserves

Cr = Surcharges for removal of excess TSS/BOD

Ro = Other sources of revenue: dumping fees, permit fees, assessments, interest, liens, connection charges, grants, transfers from reserves, internal services transfers, and investment earnings

Qo = Annual individual user discharge (84,000 gallons)

Qt = total annual indust/comm and residential discharge

$$\text{USER CHARGE} = \frac{(\text{Ct} - (\text{Cr} + \text{Ro})) \times \text{Qo}}{\text{Qt}}$$

ASSUMPTIONS

Ct=	OPERATIONS	\$ 3,735,335
	DEBT SERVICE	\$ 306,582
	*REPLACE. RESERVE	\$ 340,000
	OPERATING RESERVE	\$ -
	CAP. IMPROVEMENT	\$ 935,000
	WPCA	\$ 2,900
	TOTAL EXPENDITURES	\$ 5,319,817

Cr=	SURCHARGES	\$ 25,000
Ro=	OTHER SOURCES OF REVENUE	\$ 374,400
Qt=	RESIDENTIAL FLOW	713,342,770
	COM/IND FLOW	297,069,230
	TOTAL FLOW	1,010,412,000

Qo= USER DISCHARGE FLOW 84,000 GAL

USER CHARGE =	\$ 409.06
ALLOWABLE FOR UNCOLLECTABLES 1.4%	\$ 5.73

USER CHARGE	\$ 414.78
FINAL USER CHARGE	\$ 415

RESIDENTIAL USERS	8,390
COM/IND REVENUE	\$ 1,466,895
RES. REVENUE	\$ 3,480,027
TOTAL	\$ 4,946,922

*\$190,000 EARMARKED FOR FUTURE PUMP STATION UPGRADES

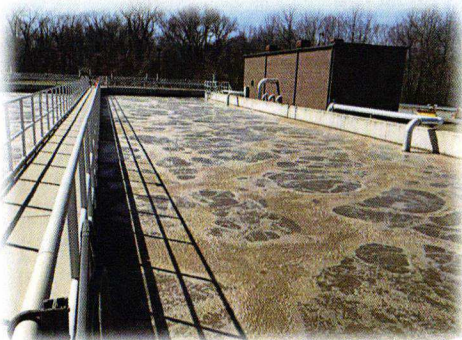
Overview

Our wastewater operators are responsible for the treatment of municipal, commercial and industrial wastewater. We maintain 11 pump stations, 130 miles of sewer pipe, and the wastewater treatment plant. The three areas that an operator can specialize in are Operations, Maintenance, or Collection Systems.

*“PROTECTING
OUR WATERS”*

Treatment

This year the wastewater treatment facility will process more than 1 billion gallons of wastewater. Our average daily effluent contains 95 pounds of nitrogen and 99% removal of BOD and TSS

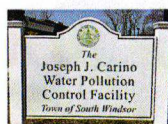


Governing Body

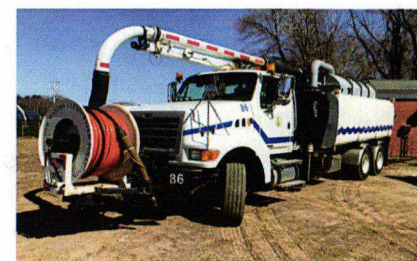
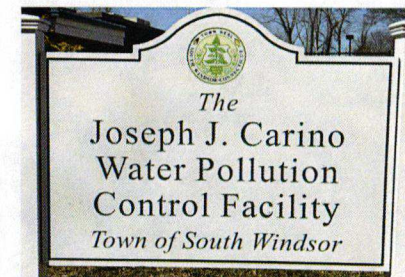
Water Pollution Control Authority

The Water Pollution Control Authority is made up of seven volunteer members and two alternates who are appointed by the Town Council. The treatment plant staff consists of 10 operators who are responsible for operation and maintenance of the treatment plant, 11 pump stations, and 130 miles of sewer pipe. Together the Authority and Operations staff work as stewards of the environment and treatment system and to provide the best value to the rate payer.

The Pollution Control Budget operates as a special revenue fund. It is the intent through the implementation of user charges to fund 100% of the operation, maintenance, and replacement costs of the treatment system from the users of the system.



South Windsor Water Pollution
Control Facility
1 Vibert Road
South Windsor, CT 06074
860.289.0185



South Windsor
Water Pollution
Control Facility

“Protecting Our Waters”



Photo: Sewer expansion project of Miller Road, July 2018.

Capital Improvement Projects Recently Completed

Chapel Road Sewer Relining Phase I \$720,000 - February 2018 As part of our ongoing sewer pipe inspection program we identified critical deficiencies in our aging sewer lines. Each section of pipe is graded and prioritized for repair. This past year we completed the relining of 3,500 feet of 27"-30" sewer pipe on Chapel Road.

Miller Road Sewer Extension \$300,000 - August 2018 The extension of 1,000 feet of sanitary sewer to serve 11 properties that have poor draining soils and are experiencing septic failures.

Sullivan Avenue Siphon \$750,000 - August 2018 This project will increase the sewer capacity on Sullivan Avenue. Construction will begin in August 2018. Commercial and residential development over time has met the high flow threshold.

Upcoming Capital Improvement Projects

Chapel Road Sewer Relining Phase II A and B \$1.6 million In 2018 we completed Phase I which entailed the relining of 3,500 feet of 27"-30" sewer pipe on Chapel Road that was Identified as NASSCO Class 5. Phase II will be completed over the next two fiscal years and will include the relining of 4,200' of the Class 3 and 4 pipe in Chapel Road.

Outfall Stabilization Project \$150,000 Over the years the outfall pipe and structure that discharge the treated wastewater from the treatment plant to the Connecticut River have been exposed due to erosion of the river bank. We are planning to stabilize the river bank, pipe, and structure with rip rap to ensure the longevity of this infrastructure.

Pump Station Upgrades \$7 million Within the next 5 years the WPCA is planning on full upgrades of the Clark Street Pump Station and Benedict Drive Pump Station. Over 40% of the treatment plants flow passes through Clark Street alone. The cost of the upgrades is anticipated to be 5 million dollars.

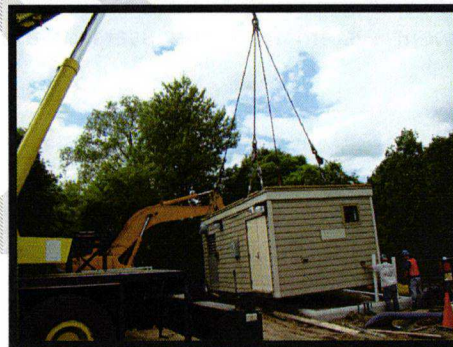


Photo: Ellington Road Pump Station building being installed in 2010.

On-going Capital Improvements

Easement Vegetation Management

In 2015 we began clearing vegetation from the sanitary sewer easements. The project was divided into four phases. We completed the fourth and final phase of the project this past June. Over the past four years the WPCA has invested \$1 million to clear the 30 miles of cross country sewer lines of trees and vegetation.

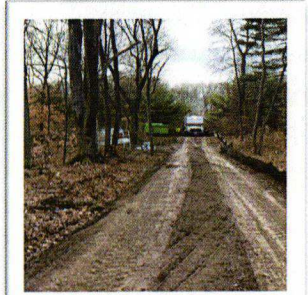


Photo: A cleared sanitary sewer easement being utilized during a CCTV pipe inspection.

Access through an easement is critical for our crews to perform maintenance and emergency operations.

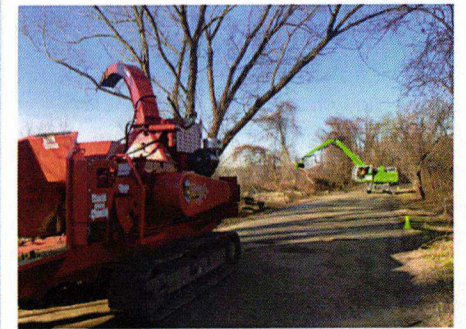
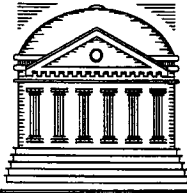


Photo: Vibert Road easement being cleared in 2019.

We will continue to maintain the easements with brush mowing and herbicide applications that will promote the growth of low growing vegetation.

**TAXSERV CAPITAL SERVICES, LLC**

MUNICIPAL TAX SERVICES

21 Oak Street, Suite 301

Hartford, CT 06106

TELEPHONE (860) 724-9100 ♦ FACSIMILE (860) 727-1080

E-MAIL: taxserv@taxserv.com

Exhibit I

May 10, 2019

Via Email

Anthony Manfre

Superintendent

Town of South Windsor

Water Pollution Control Authority

1540 Sullivan Avenue

South Windsor, CT 06074

Re: Professional Services Agreement dated April 1, 2018 ("Contract")
Monthly Collections Report for April 2019 ("Report")

Dear Mr. Manfre:

The following presents the collections report for the delinquent accounts placed with TaxServ Capital Services, LLC ("TaxServ") for the month of April 2019.

1. Status for April 2019: The following Table 1 presents the characteristics of the bills placed for collection with interest, costs accrued and collections through April 2019:

Number of Active Bills/Accounts: 786 / 365

Lien Age Range: 2008-2019

Table 1

Category	Original Balance ⁽¹⁾	Collected Amount ⁽²⁾	Current Balance ⁽³⁾
Principal	\$677,706.66	\$444,830.98	\$276,588.73
Interest	\$187,401.69	\$198,114.94	\$100,613.49
Collection Fee	\$129,766.25	\$41,869.52	\$56,580.33
Costs of Collection	\$43,060.94	\$89,100.06	\$16,814.92
Total Receivable	\$1,037,935.54	\$773,915.50	\$450,597.47

Total gross historical collections are \$773,915.50 (\$732,045.98 net of collection fees). Total gross collections in April 2019 are \$24,807.53 (\$21,647.01 net of collection fees) and described in Table 2. A report that details the Table 2 collections is attached hereto as Schedule A.

Table 2

Collected by	Principal	Interest	Costs of Collection	Net Tax Collected	Collection Fee	Total Collected
South Windsor	\$14,614.04	\$4,363.56	\$984.00	\$19,961.60	\$2,926.28	\$22,887.88
TaxServ	\$1,304.55	\$260.86	\$120.00	\$1,685.41	\$234.24	\$1,919.65
Grand Total	\$15,918.59	\$4,624.42	\$1,104.00	\$21,647.01	\$3,160.52	\$24,807.53

2. Table 3 provides a summary of Schedule B which provides total number of attempts to collect for both Outstanding and Redeemed accounts.

Table 3

Description	April 2019 Count of Attempts	Total Count of Attempts	Average of Total Count of Attempts
Outstanding	134	1,172	7
Redeemed	4	1,628	6
Grand Total	138	2,800	7

3. Collection Charts: Attached hereto as Schedule A1 through Schedule A3 are the collection charts providing for monthly and cumulative collections, monthly collection comparison and collection rates by Grand List year. Schedule B provide the detail and summary of attempts made to collect.

4. Litigation to Collect: TaxServ has now reached the point where continued letters or calls to people would likely not receive much in the way of payment, as such, it is time to begin the use of litigation to collect delinquent accounts. TaxServ is aware that the Town issued an RFP to select a law firm that would help administer tax sales under CGS 12-157 for delinquent real estate taxes. The statute allows for the Town to also include sewer/water liens as part of that process. TaxServ recommends to the Town that as many sewer accounts that match to real estate tax delinquencies be included in that process once it starts. If, for some reason, the Town decides not to award a contract for tax sales, or if there will be lengthy delay before tax sales begin, then we are ready to begin batching the accounts for foreclosure, which includes approval by the Town for the accounts selected to be foreclosed and selecting an attorney firm.

Thank you and please advise if you have any questions or comments.

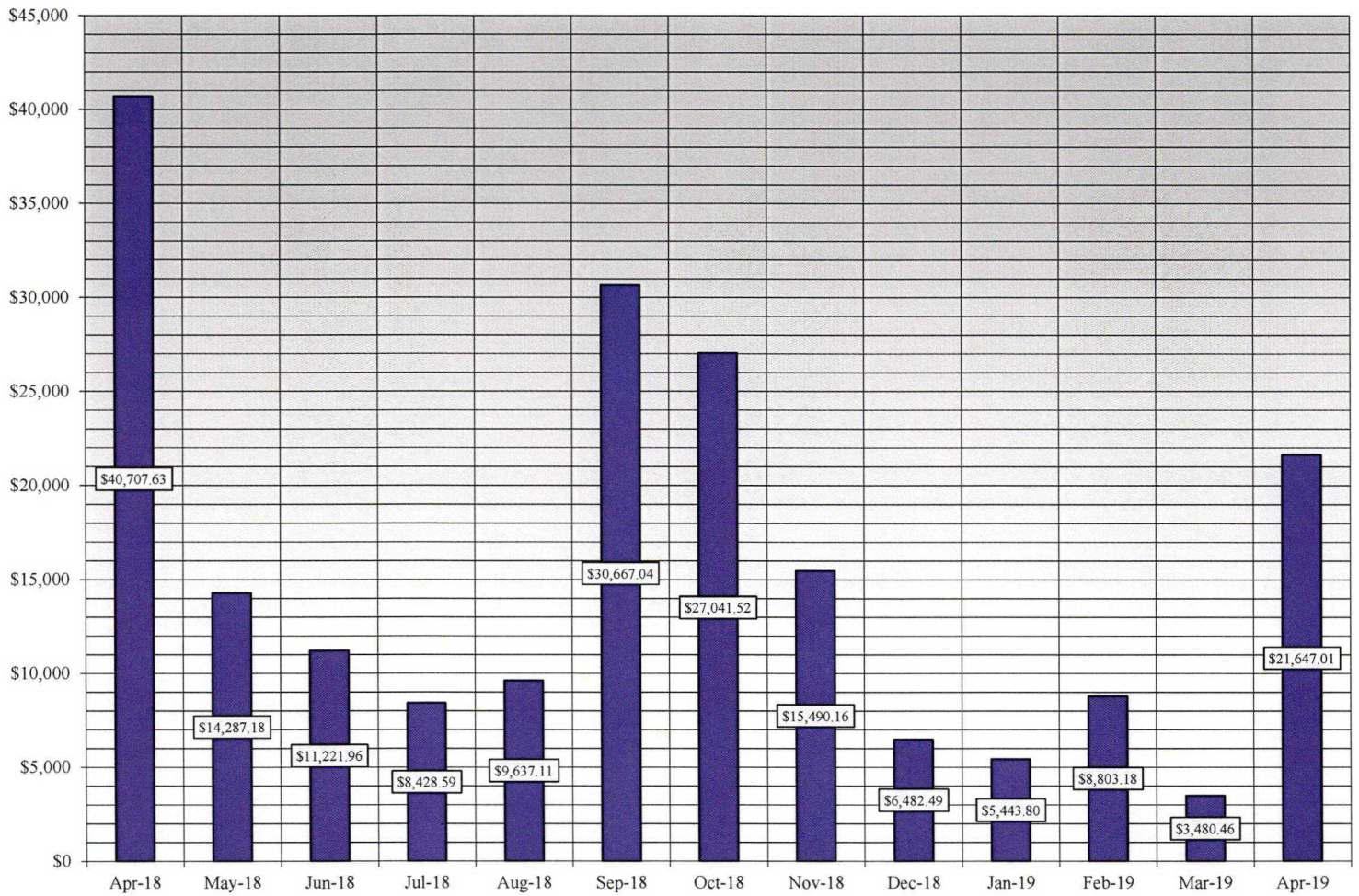
Sincerely,



Maria Thomas
Service Manager
TaxServ Capital Services, LLC
Phone: (561)799-9626 ext 303
Email: mthomas@taxserv.com

cc: Mr. Roger Blain
Ms. Rhonda Gelormino

SCHEDULE A1
South Windsor CT - TAXSERV CAPITAL SERVICES, LLC
MONTHLY COLLECTIONS FOR THE PERIOD April 2018 THROUGH April 2019





June 3, 2019

Mr. Tony Manfre
Superintendent of Pollution Control
Town of South Windsor WPCA
1540 Sullivan Avenue
South Windsor, CT 06074

RE: Carla's Pasta
Monthly Progress Report – May 2019

Dear Mr. Manfre:

On behalf of Carla's Pasta of South Windsor, Connecticut, we are providing this progress report for May 2019 summarizing the activities performed at the 50 Talbot Lane, South Windsor, Connecticut facility. This progress report addresses the requirements of the Settlement Agreement, specifically Conditions 4, 5, 6 and 8.

Status of Current Progress to Reduce Discharge of Excess Pollutants

Current Project Status: The following is an update of the status of the facility expansion and the evaluations being performed by Carla's Pasta:

- The schedule for the start-up of the facility expansion is currently scheduled for July 2019. It is anticipated that further reduction in the constituent loading will occur when the expansion becomes operational.
- Carla's Pasta continues to evaluate their operations that discharge wastewater to the wastewater collection system. The objective of this evaluation, which was initiated in December 2018, is to better understand the daily wastewater flows and estimated pollutant loads to the sanitary sewer from specific facility processes. This information will be used to target areas where Carla's can reduce these loads.
- The suspension of the large account mac & cheese production line and the reduction in the milk & cream production line in January 2019 continues to contribute to the significant reduction in wastewater concentrations and daily flows. Further reduction in the milk & cream production is anticipated when the expansion becomes operational.
- As an update to the April 2019 progress report, a summary of the additional evaluations, corrective actions, and a status update on the actions performed by Carla's Pasta (in bold) is provided as follows:

146 Hartford Road
Manchester, CT
06040
t 860.646.2469
800.286.2469
f 860.533.5143

www.fando.com

California
Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont



Mr. Tony Manfre

June 3, 2019

Page 2

- Cambrian Innovation has evaluated the feasibility for anaerobic wastewater treatment processes for the wastewater discharge and has initially recommended a membrane bioreactor (MBR) treatment system. **Status: Complete**
- Carla's Pasta has evaluated and implemented alternate chemicals for the CIP processes to reduce the pH swings. **Status: Complete**
- Carla's Pasta has evaluated and implemented alternative cleaning methods which have reduced wastewater volumes. **Status: Complete**
- Carla's has provided results of the process sampling to several wastewater consultants such that they can continue to assess how best to potentially reduce the pollutants, particularly from the more problematic sources. **Status: Ongoing**

Projected Progress for Next Month: The following is a summary of anticipated next steps for the evaluation:

- Carla's will continue to assess the sampling results and implement corrective actions on an on-going basis.
- Cambrian Innovation will refine their proposed treatment system for the wastewater discharge
- It is anticipated that Carla's Pasta will have a better understanding of the potential load reduction options in July 2019.

Potential Delays: There are no delays anticipated at this time.

Monthly Monitoring Results

On May 17, 2019, Fuss & O'Neill conducted effluent monitoring of the existing wastewater discharge. Fuss & O'Neill collected effluent samples from the sampling/metering manhole immediately downstream of the oil/water separator in accordance with the South Windsor Water Pollution Control Authority (WPCA) and DEEP *General Permit for the Discharge of Miscellaneous Sewer Compatible Wastewater* (MISC General Permit) requirements. One grab sample was collected at 8:00 a.m. on the day of sampling. In addition, samples were collected during a typical operating day over a 24-hour period starting and ending at approximately 8:00 a.m. on the day of sampling as follows:

- One flow-weighted composite sample was collected
- pH measurements were made continuously in the field over this period



FUSS & O'NEILL

Mr. Tony Manfre

June 3, 2019

Page 3

The composite sample was collected on a flow-weighted basis. The composite sample was analyzed for biochemical oxygen demand (BOD), total suspended solids (TSS), and total metals (copper, lead and zinc) by a State Certified Laboratory. The grab sample was analyzed for oil & grease (total and TPH).

A table summarizing the wastewater sampling results (*Table 1*), graphs depicting the pH and flow measurements for the May 2019 sampling period, and a copy of the laboratory results is provided in *Attachment A*. Note that the pH meter was re-calibrated on May 10, 2019 and based on the readings collected to date, the readings appear to be more representative of the actual conditions compared to the pH readings from the April 2019 sampling event.

Daily Discharge Flow Records

A copy of the daily wastewater flowmeter readings for May 2019 are provided as *Attachment B*. Daily flows for the month were less than 210,000 gallons per day (GPD) with the average daily flow calculated as 93,533 GPD.

Weekly Pumpout Records

A copy of the weekly oil/water separator pumpout records is provided as *Attachment C*.

If you have any questions or need additional information, please call one of us at (860) 646-2469.

Sincerely,

Neil P. Hickey, P.E.
Project Manager

Christopher J. Ecsedy, P.E., LEP
Senior Vice President

Enclosures

c: Sergio Squatrito, Carla's Pasta
Don Doeg, Updike, Kelly & Spellacy

CARLA'S PASTA DISCHARGE MONITORING REPORTS

MONTHLY DMR RESULTS FROM FUSS/O'NEILL

VIOLATION SURCHARGE

DATE	PH LOW	PH HIGH	TSS	BOD	O/G	Q**	TSS	BOD	GROSS SURCHARGE	NEGOTIATED DEDUCTION	NET SURCHARGE
Jan-19	6.51	11.78	180	690	-	76,639	\$ -	\$ 5,777.42	\$ 5,777.42	75%	\$ 1,444.35
Feb-19	4.91	11.47	174	420	36	94,968	\$ -	\$ 3,115.28	\$ 3,115.28	75%	\$ 778.82
Mar-19	7.55	12.75	310	1000	-	96,674	\$ 1,295.70	\$ 12,014.19	\$ 13,309.88	75%	\$ 3,327.47
Apr-19	7.72	13.05	310	1400	-	100,407	\$ 1,345.73	\$ 18,812.13	\$ 20,157.86	75%	\$ 5,039.46
May-19									\$ -	60%	\$ -
Jun-19									\$ -	60%	\$ -
Jul-19									\$ -	60%	\$ -
Aug-19									\$ -	60%	\$ -
Sep-19									\$ -	0%-25%	
Oct-19									\$ -	0%-25%	
Nov-19									\$ -	0%-25%	
Dec-19									\$ -	0%-25%	
YTD TOTAL									\$ 42,360.44		\$ 10,590.11

TOWN PARAMETERS		STATE
PH LOW	5	5
PH HIGH	10	12
TSS	238	600
BOD	212	600
O/G	100	100
Q	125,000	N/A
Q VARIANCE*	170,000	N/A
TEMP	40 *C	40*C

NEW VARIANCE OF 210,000 AS OF 12/2018

BOD SURCHARGE FORMULA

BOD, LBS. = (FLOW, MGD) x (CONCENTRATION, mg/L - 212 mg/L) x (8.34 LBS./GAL.) x (\$0.61/LBS.)

TSS SURCHARGE FORMULA

TSS, LBS. = (FLOW, MGD) x (CONCENTRATION, mg/L - 238 mg/L) x (8.34 LBS./GAL.) x (\$0.72/LBS.)

****Q = AVERAGE DAILY FLOW FOR THE MONTH**

Q, gpd = TOTAL MONTHLY FLOW / # OF DAYS OF MONTH

WATER POLLUTION CONTROL A COMPARISON OF USER FLOW OPTIONS

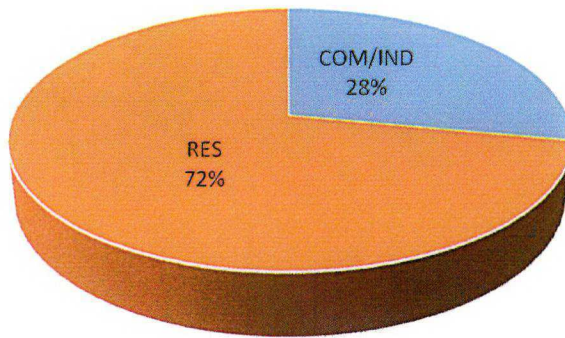
Assumptions

1. Commercial and industrial condominium units to be charged a minimum flat rate per unit or prorated based on water use.
2. Apartment units to be charged based on water use.
3. Commercial flow based on 291,250,000 gallons
4. Residential billing based on 8,390 accounts

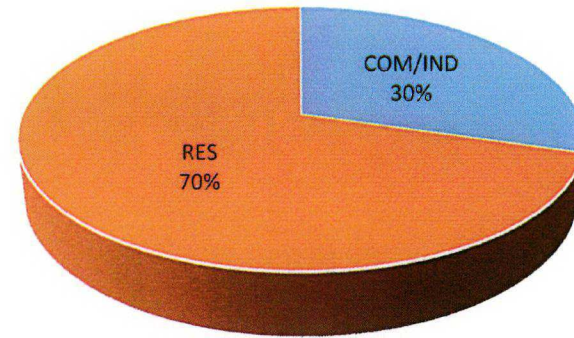
<u>Options</u>		Commercial/ Industrial Billing	% Change	Residential Billing	% Change	Total Revenue
\$404 / 84,000 Gallons		\$1,400,774		\$3,565,750		\$4,966,524
\$404 / 80,000 Gallons		\$1,470,813	4.8%	\$3,495,711	-2.0%	\$4,966,524
\$404 / 75,000 Gallons		\$1,568,867	6.3%	\$3,397,657	-2.9%	\$4,966,524
\$404 / 70,000 Gallons		\$1,680,929	6.7%	\$3,285,595	-3.4%	\$4,966,524

SHIFT IN REVENUE BURDEN

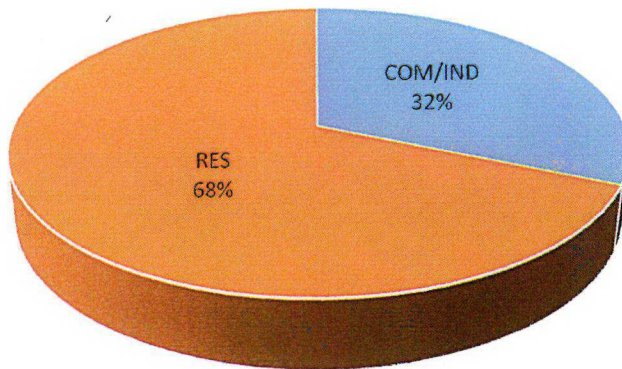
84000 gal.



80000 gal.



75000 gal.



70000 gal.

