

Minutes of the Regular Monthly Meeting of the  
Suffield Water Pollution Control Authority  
Suffield Water Pollution Treatment Facility  
844 East St. South, Suffield, CT 06078  
August 9, 2016

**MEMBERS PRESENT:** Chairman Bruce Remington, Wallace Rodger, Kris Barthelmess, Roger Ives, Janet Davis, John P Murphy, Charles Roumas

**ALSO PRESENT:** Superintendent Shane McCannon, Business Administrator Julie Nigro, Assistant Business Administrator Kira Kilosky, Attorney Michael Lanza

**CALL TO ORDER:** Chairman Bruce Remington called the Regular Monthly Meeting for August 9, 2016 to order at 7:05 p.m., and requested that Julie Nigro read the Roll Call. Ms. Nigro noted the presence of Chairman Bruce Remington, Commissioners Wallace Rodger, Kris Barthelmess, Janet Davis, and Roger Ives. John P Murphy arrived at 7:15 p.m. and Charles Roumas arrived at 7:30 p.m. Also present, Superintendent Shane McCannon, Assistant Business Administrator Kira Kilosky, Business Administrator Julie Nigro, as well as Attorney Michael Lanza.

**APPROVAL OF MINUTES:** Kris Barthelmess made a motion to approve the Regular Meeting Minutes of July 12, 2016. Wallace Rodger seconded the motion; it passed unanimously.

**CITIZEN INPUT:** None

**CHANGES TO THE AGENDA:** None

**TREASURER'S REPORT:** Wallace Rodger moved to disperse from the Administration Fund for Accounts Payable for 2015/2016 \$43,833.64. Kris Barthelmess seconded the motion. Mr. Rodger went over the expenses over \$1,000. It passed unanimously. Wallace Rodger moved to disperse from the Administration Fund for Accounts Payable for 2016/2017 \$55,654.42. Kris Barthelmess seconded the motion. Mr. Rodger went over the expenses over \$1,000. It passed unanimously. Wallace Rodger moved to disperse from the RCM fund for 2015/2016 \$13,570.00. Kris Barthelmess seconded the motion. Mr. Rodger went over the expenses over \$1,000. It passed unanimously. Wallace Rodger moved to disperse from the RCM fund for 2016/2017 \$50,474.50. Kris Barthelmess seconded the motion. Mr. Rodger went over the expenses over \$1,000. Motion was rejected; payment to Butler Construction Company is withheld until work is finalized. Wallace Rodger moved to disperse \$2,262 from the RCM fund for 2016/2017. Kris Barthelmess seconded the motion; it passed unanimously. Wallace Rodger moved to disperse from the Administration Fund \$55,206.26, for July payroll; with \$25,318.45 coming from the 2015/2016 Administration Fund and \$29,887.81 coming from the 2016/2017 Administration Fund. Kris Barthelmess seconded the motion; it passed unanimously.

**COMMITTEE REPORTS:** *Planning Committee* – Nothing to report.

**SUPERINTENDENT'S REPORT:** Superintendent Shane McCannon reported as follows:  
Daily plant flow for July averaged 0.87 mgd. Of that flow, 0.266 mgd was from the Prison and 0.11 mgd was from HOOD.

BOD & TSS removal were both 99%.

Nitrogen – The plant averaged 14 lbs. /day for July and the limit is 45 lbs. /day. The total nitrogen concentration (TN) was 1.8 mg/L.

**\*PLEASE SEE ATTACHED SUPERINTENDENT'S REPORT\***

**BUSINESS ADMINISTRATOR'S REPORT:** Julie Nigro went over the June financials. The variance report shows we are 5% unexpended versus 0% by the end of June. There may be a few more 2015/2016 bills to pay in September. Ms. Nigro noted that we billed out \$1,211,660.34 July 1<sup>st</sup>, 2016 for residential and commercial sewer use fees, this does not include HOOD or the prison, which are billed quarterly. Regarding the delinquent accounts, Kira Kilosky stated that in July we received a little less than \$1,800, or a little less than 6%; one account paid in full.

**CORRESPONDENCE:** None

**OLD BUSINESS:** a. Ongoing Capital Projects:

- Stony Brook Erosion Repairs – Shane McCannon stated that we have to apply again to Army Corp of Engineers for another permit as ours has expired. Work at the Stony Brook Interceptor is at a standstill as it is in the hands of attorneys right now.
- Instrumentation/Control and Process Equipment Upgrade – Shane McCannon stated that the contractors are at various points but we are about 75% complete. We will have an application sent to Eversource proving we completed the agreed upon upgrades. We will be requesting a rebate from them for our upgrades, which could be around 40% of our expenses.

b. Facilities Plan Application – Status – Shane McCannon stated that we sent a response letter back to Yvonne from CT DEEP around 10 days to 2 weeks ago, which we asked for her to lift some of the concerns she had. We are awaiting her comments. This is the final review, if she does not accept our proposal as is, then we will trim some aspects of the plan and accomplish them by other means. We would do that by competitive bid, which would be four core jobs that we could begin this fiscal year.

c. Dakota Partners/The Hamlet Homes – Shane McCannon stated that a meeting was arranged, but not everyone involved could attend, so it was delayed. No new meeting has been proposed at this time.

d. Discussion of New Hire – Shane McCannon stated that we received about 20 applications for the Maintainer position. Mr. McCannon suggested organizing an interview committee which would include himself, Julie Nigro, a Commission member, a staff Operator, and Human Resources. Charles Roumas suggested the interviewing be done in house with Shane McCannon, Julie Nigro, an Operator and Human Resources to do the background check. The Commission agreed. Julie Nigro stated that by next month's meeting we will have our selection narrowed down for approval.

**NEW BUSINESS:** a. 2016 Sewer Benefit Assessments – Kris Barthelme made a motion to approve the 2016 Sewer Benefit Assessments for TREVIMAC SPA at 19 Austin Street in the amount of \$34,928.40 and Connecticut CVS Pharmacy, LLC at 163 Mountain Road in the amount of \$26,995.80. Charles Roumas seconded the motion; it passed unanimously.

b. Legal Counsel – Michael Lanza – Attorney Michael Lanza stated that he was contacted by Julie Nigro inquiring about new legal counsel. Mr. Lanza gave a brief overview of his working background including he was on the Commission of the South Windsor WPCA, and at this time serves as legal counsel for East Windsor and their WPCA. He stated he is usually paid a retainer fee of about \$2,500 twice a year for collections and other minor projects. Any work done regarding collections, the fees would be collected by the homeowner or third party. Mr. Lanza stated he would give us recommendations on how we could go about our collections. He also works with Developer's Agreements, as well as other documents. He suggested we look at adjusting our three years in arrears policy, as he feels three years is too long. He spoke of how he goes about the collection process of delinquent fees/taxes. Michael Lanza addressed the concerns of the Commission regarding the autonomy of the board. He stated that the WPCA should have full autonomy. He recommended we ask for advice, but ultimately the WPCA makes the final decisions. The Charter and Statute seem to be stated pretty clearly, so he suggested following those. Regarding payment, Mr. Lanza stated that he usually collects a retainer of \$2,500 twice a year; any work outside the scope of work, requiring extra efforts would cost extra. But any fees associated with collections would be collected by the third party. Mr. Lanza also stated he would like to attend some of the WPCA's monthly meetings in order to answer any questions and to get a feel for the process. The Commission agreed. Kris Barthelme made a motion to hire Michael Lanza as the WPCA's new legal counsel. Janet Davis seconded the motion; it passed unanimously.

c. Capacity Letter – 112 Hill Street – Carol Zaczynski (previously expired 6/13/14) – Kris Barthelmess made a motion to approve a Capacity Letter for 112 Hill Street to Carol Zaczynski. Wallace Rodger seconded the motion; it passed unanimously.

d. Septic/Liquid Waste Receiving Policy – Shane McCannon stated that there are a few changes with the policy. We are affecting the way we charge the haulers, the way they dump, the way we keep records of dumping, etc. Kris Barthelmess made a motion to approve the Septic/Liquid Waste Receiving Policy as written. Charles Roumas seconded the motion; it passed unanimously.

**APPLICATION REQUESTS - NEW:** a. Planning Application – 40 Canal Road – Shane McCannon explained that this is a Connection Permit to tie into the existing system, which was reviewed. Kris Barthelmess made a motion to approve the Connection Permit for 40 Canal Road. Wallace Rodger seconded the motion; it passed unanimously.

b. Suffield Academy Planning Applications – Shane McCannon stated that there are two separate Planning Applications, one for a new dormitory and one for an expansion on the main hall. Kris Barthelmess made a motion to accept the two Planning Applications from Suffield Academy. Charles Roumas seconded the motion; it passed unanimously.

c. Fiddlehead Farm (9 lot subdivision) - F&L Construction – Shane McCannon stated that we are awaiting design standards. Kris Barthelmess made a motion to table this topic until the next meeting. Janet Davis seconded the motion; it passed unanimously.

**EXECUTIVE SESSION:** None

**ADJOURNMENT:** Kris Barthelmess made a motion to adjourn the Regular Meeting of August 9, 2016 at 9:18 p.m. Wallace Rodger seconded the motion; it passed unanimously.

Respectfully submitted,



Kira Kilosky, Assistant Business Administrator

**TOWN OF SUFFIELD**

**WATER POLLUTION CONTROL AUTHORITY**



**MONTHLY REPORT – JULY, 2016**

## **Environmental Health and Safety/ Staff Energy awareness meeting**

There was a Safety Meeting on July 29, 2016. The following new issues were discussed:

- There were no near misses or other incidents to report.
- Staff discussed machine guarding as it related to the new process equipment that is being installed. We want to ensure that all guards are added as they should be, and that pipes and other ancillary equipment are labeled as needed.
- Contractor Safety was discussed. All Contractors and employees will take extra precautions during the equipment upgrade project. We made hard hats and safety glasses mandatory in all buildings that have construction activities in progress. All equipment will be locked out by both the contractor's and staff and verified prior to working on the equipment and the same applies to when the new equipment is placed into service.
- The facility Hoists received their annual inspection. We received the reports on their condition and will repair any deficiencies.

## **Energy:**

The plant power graph is attached to this report. We noted a large increase in power use in July which was caused by a very heavy load from Hood. They have had high production rates so the amount of waste product they send us remains high. This caused our energy use to soar because our Aerator equipment runs at higher speeds for longer periods. We also use four mixers instead of two mixers more often. The oldest lead Aerator, #1, is almost 30 years old and showing severe signs that it is worn. It does not input as much oxygen to the wastewater as the newer mixer; #4, which was purchased and installed in 2007. We contacted the system manufacturer to schedule an inspection in September so we can quantify our observations and plan for replacement. We had planned work for the Aerators in 2014 but delayed any work until a more complete picture of the system needs was available. The ultimate decision will also be based on the energy analysis and possibly incentives for adding more efficient equipment.

## **Staffing**

The WPCA posted an advertisement for a new "Maintainer" position. To date we received approximately 20 applications from a wide variety of candidates. The applications will be reviewed in early August and we hope to have a decision made by the third or fourth week of August.

## **Technical Training and Certification**

There was no activity in July, 2016.

## **Facility Tours**

There were no tours in July, 2016.

## **Septage Receiving**

The facility received just 17,400 gallons of septage in July, 2016.

The new Septage Rock trap was installed by plant staff, who helped to ensure the equipment was installed and working as good as we needed it to. There were some corrections that staff made to the fabricated equipment to make it fit better and work better. Their efforts are appreciated, as always.

We now remove most of the materials that caused the Prison Interceptor line to plug up from time to time which in turn would cause sewage overflows at the facility. A review of past Sewage Overflow Reports showed we had several incidents from this same issue so we hope to eliminate all future problems. We still have to camera and clean the line because there are still signs that the pipe is partially plugged despite our best efforts to clean it. In August, we will take the pipe out of service and use out new camera equipment to visually show us what the problem is and also to help us ensure we completely clean the line. It's not an easy task because the prison discharges 100 – 400 gallons per minute of sewage so we will have to bypass the entire flow while performing the work.

## **Plant Operations**

There were no permit related incidents to report in July, 2016. Flows have been very low because there have been drought conditions throughout the Northeast. Many treatment plants are reporting record low flows. The past 5 years have been very dry when compared to the years 2000 – 2010. This is a blessing and a curse because older sewer systems were designed for higher flows to handle more inflow and infiltration, storm flows (in some cases), and also old plumbing standards back when toilets and sinks used large quantities of water to convey the pollution. Now, most fixtures are efficient and use a lower flow which does not reduce the waste; but it increases the concentration of the waste but also reduces the heavy flows that would flush the system out from time to time.

The monthly Discharge Monitoring report and Nutrient Analysis Reports are attached as well as the nitrogen discharge graph. . The monthly total nitrogen concentration (TN) was 1.8 mg/l with a monthly discharge average of 14 pounds per day. The permit limit is 45lbs/day. As stated above, the influent waste concentrations have been higher, but the main reason for the higher effluent nitrogen numbers this month is the Aeration system and its inability to automatically accommodate for the drastically higher oxygen demand. That problem will be corrected as part of the equipment upgrade project. This was the same issue that contributed to our fecal coliform permit limit violation last summer, but this summer we are managing it proactively. In any case, we will probably always have process challenges/problems to address but the biggest difference will be in the solutions we develop and the method we use to develop solutions.

We removed 99% of both BOD and Suspended solids as usual. Seasonal disinfection of our plant effluent was excellent, with only 12 colonies/100ml of sample.

The average daily flow to the facility in June was 0.87 MGD.

The average flow from Hood was 106,800 gallons in July which was nearly identical to June. Their BOD loading was 3453 lbs. /day. They were 60% of the plants BOD load. They were 12% of the flow.

The Prison discharged an average flow of 0.266 MG in July.

We removed 99% of both BOD and Suspended solids and seasonal disinfection of our plant effluent was excellent, with only 12 colonies/100ml of sample.

The average daily flow to the facility in June was 0.95MGD.

The average flow from Hood was 106,000 gallons in June. Their BOD loading was 2825 lbs. /day. They were 68% of the plants BOD load. They were 12% of the flow. A graph is attached which shows their flow trend. Wethersfield Sweeping started the annual cleaning of their pipe in June, and it was needed.

The Prison discharged an average flow of 0.266 MG/D in July. Their flows remain slightly lower as seen on the attached graph, but it's too early to see if the issue is related to the flow meter, which is calibrated semi-annually, or if their efforts to reduce water use are paying off. We will reach out and ask for an update on that project as it progresses.

### **Sludge Dewatering and Disposal**

The plant processed gallons of waste sludge which generated 277 wet tons of sludge cake transported to MDC in 16 loads. We are running approximately 5 less loads/month to MDC with the new truck as compared to the old truck. This translates to savings in fuel, labor, emissions, etc. The average sludge cake concentration was 14.3 percent solids, and we will try to focus on getting our sludge cake concentration back to 15 or 16 percent solids.

### **Maintenance**

There were several maintenance items completed in July. Highlights are below and do not include more routine tasks generated by our Work Order system:

- Staff cleaned the clarifiers and scum tank.
- TAB computer completed a short punch list of remaining IT issues. We are now saving all of our data to a remote location off site, just as the Town IT department does. This occurs every night and will ensure the integrity of our data as we move from the paper to digital world. The maintenance office now has one of two computers installed, and a printer/scanner as well. Again, this is all part of the same effort to bring the plant and its staff up to speed with technology and it will also improve their skills both directly and by "osmosis".
- A wide variety of preventative maintenance tasks were performed such as greasing, oiling, and exercising of plant equipment.
- All accessible sewer easements were mowed and staff also took extra time to identify and paint manholes that are hard to find.
- Staff replaced all of the corroded water piping used for spray water on the Step Screen.
- HARP mechanical installed 3 replacement Air Conditioning units that were original to the 1989 upgrade. We now have air conditioning throughout the Main/Administration building for the first time in many years. We are now looking at heating systems.
- Charter Oak Mechanical installed a new Air Conditioner in the Pump Building MCC room. This was done to protect the climate of all of the new and very expensive equipment that will help to run the facility efficiently for years to come. The new climate will increase the life of the equipment substantially.
- The new Ford F250 pickup truck arrived in July. Staff coated the bed with a corrosion preventive lining and added tool boxes that were needed. They did a great job.
- The Prison line on site was cleaned.

- The scrap metal pile was taken to the local vendor to recycle the metal. We receive a small amount of money for the metal depending on the type(s) and amount. We usually take it annually. I am looking into a vendor which will provide a dumpster and pick up as needed and who will also account for the steel types and quantities prior to sending us a check for the product. This will reduce our effort and also help our accounting practices for all metal disposals.

## Capital Projects

Below is a brief update of the equipment upgrade/energy efficiency project as of the date of this report:

- Electrical Systems installation completed by ECI – estimated at 70% complete. Nine electrical motor drives were installed,
- SCADA systems upgrade completed by NIC Systems Corporation – estimated 80% complete. Most of the progress is/was completed off site and all hardware is installed on site. NIC will be here the week of August 8 to put systems on line. There have been delays in this project on both ends, but none that are causing any major problems or cost over-runs.
- Mechanical Systems upgrade – estimated 20% complete, but the first units are always the most difficult and take the longest time to install. RH White started their portion of the work on July 25. We are moving along steady, but all of this work is being done in coordination with the above two contractors and they are interdependent on one another.

Cox Cable was on site to quote a business class security system. It's a new service they offer, and we wanted to have them quote the system because of concerns we had last summer when the plant was broken in to. Last summer I received three quotes for a new system and the cost was substantial enough to justify a better review of the needs and long term impacts. We also have to consider what system we want if/when the land adjacent to our facility is developed. There are pros and cons to both systems:

- The COX system costs a small/moderate monthly fee, and a one-time installation charge. The fee would allow us to put the maintenance burden on Cox, as well as the burden to keep the system up to date.
- Other vendor systems require purchase and install; a significant investment which is estimated at over \$10,000 for the system we need. We also have to maintain a system long term, and keep it up to date with technology which includes a dedicated server to store video footage.

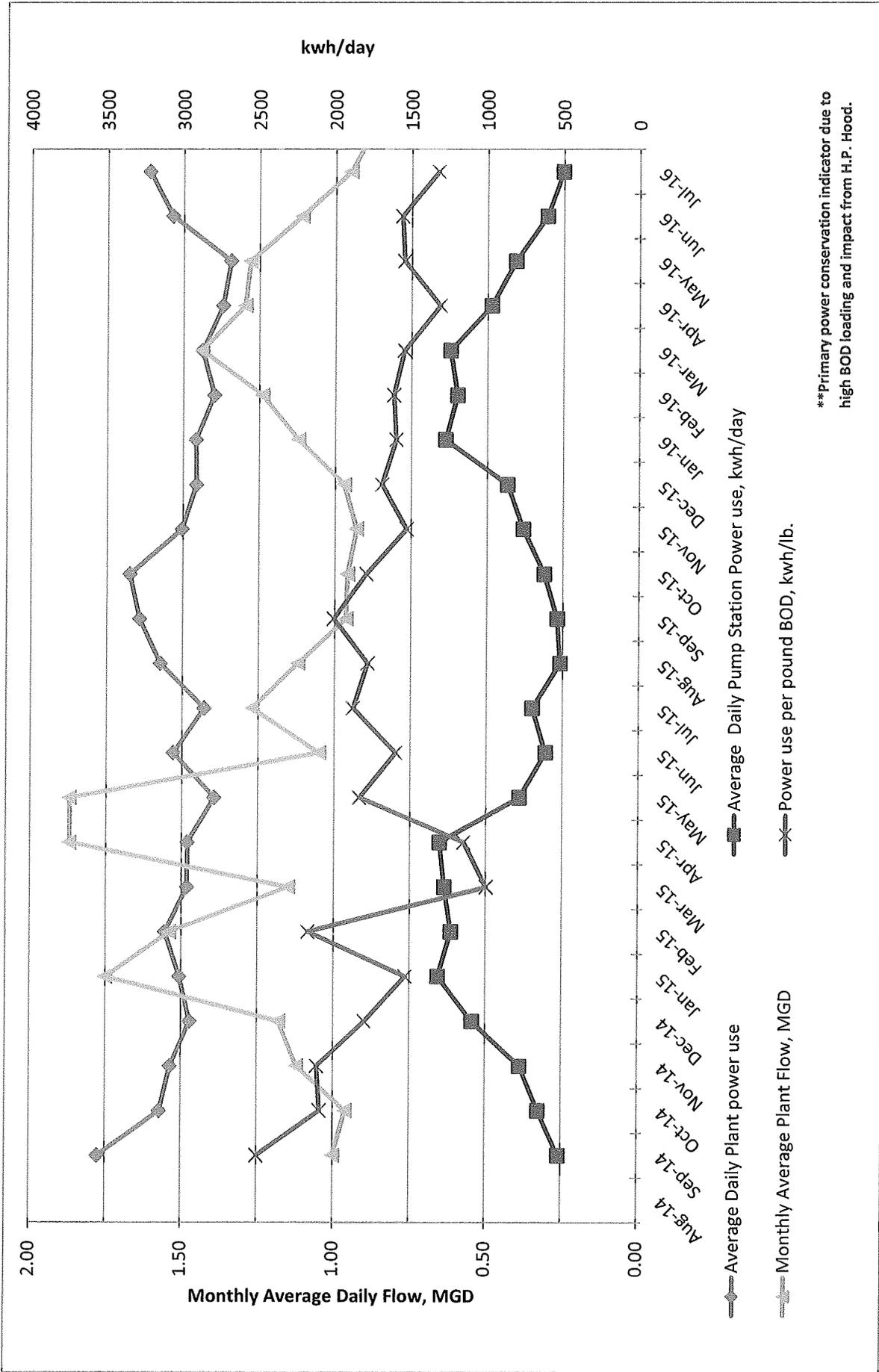
We will make a decision on this in August, and plan to have the system installed in September or October.

## Collection System and Pump Stations

- Staff completed over 70 Call before you dig requests.
- **A resident from the Suffield Meadow condominiums called to report a backup of his properties sewer line on two occasions in 2015.** We had no record of the overflows, which reportedly caused a lot of damage to his properties. The owner stated that he did not know who to contact at the time and tried many avenues but the WPCA was not one of them. Preliminary evidence shows that there may have been a problem with the main sewer which caused the overflows, but since it was quite a while ago, we are waiting for a full report with all of the necessary receipts and pictures. We added the line to our list of "Hot Spots" and cleaned it. We will also inspect it with our camera to see if there are any pipe defects which may contribute to the problem. There will be more follow up with the customer in August which we will report as needed. The overflows will be reported to DEEP, as required.

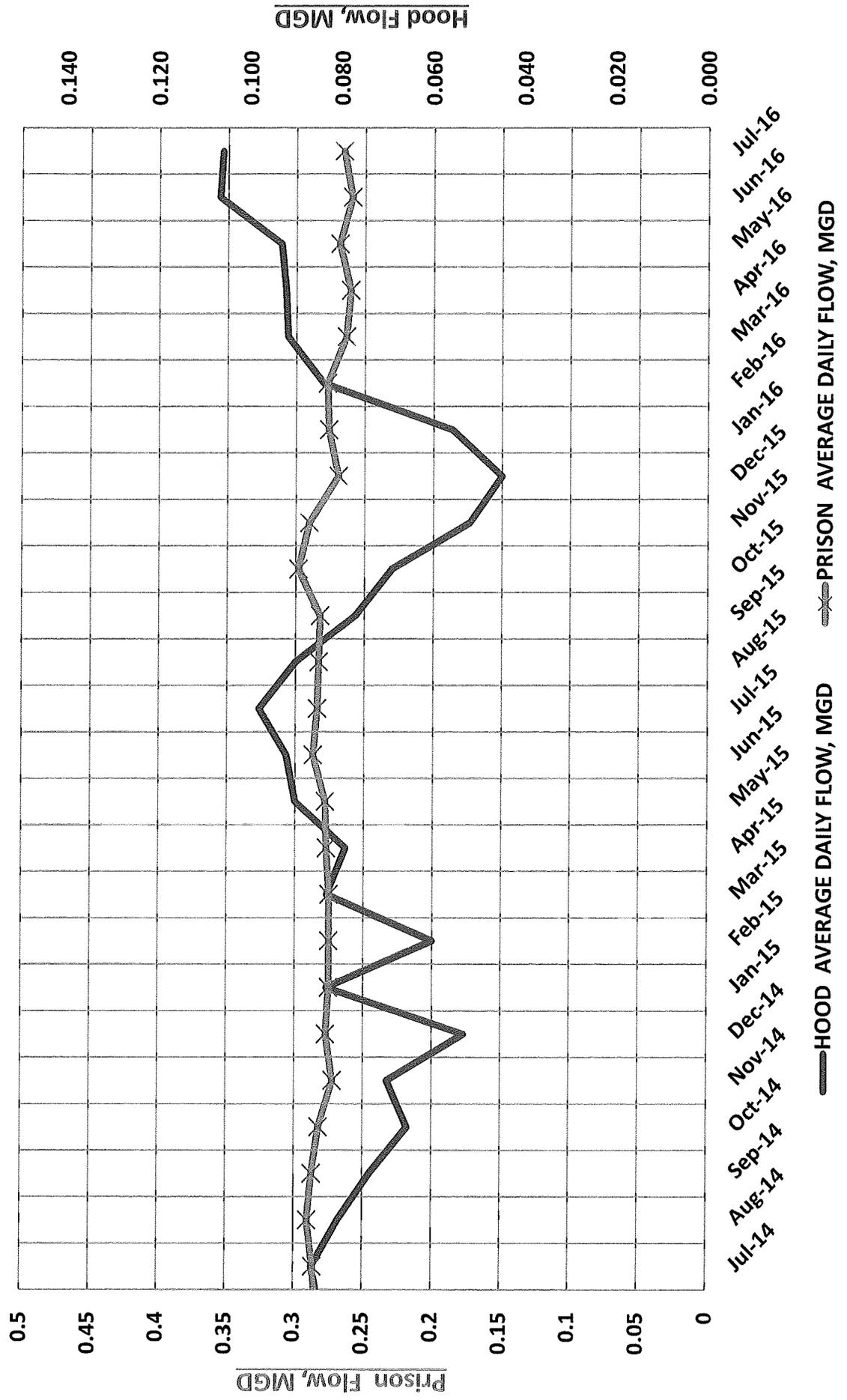
- There were no sewer overflows in July.
- There was no progress on the Stony Brook erosion repair project due to ongoing complications. We have made progress in that area, and hope to resume work in August. We have the opportunity to re-look at the project as bid, and make improvements to the current plan as needed. While the conditions that led to the work stoppage were not ideal, we are learning from any mistakes and taking the time to make the project improvements that are needed to ensure we do not have to go back there prematurely to perform related work.
- There were four new connection permits issued in July 2016. One connection permits was issued for the Roes Hill Farm development, two were issued for the Redstone development, and one was issued for Canal Road; a single grinder pump system.
- The Roes Hill Farm Development sewer installation is nearly complete, aside from the home connections. Five homes are connected to a low pressure sewer system and the rest of the homes are connected to gravity sewers. This is called a hybrid Low Pressure sewer system and it was the first of its kind in Suffield.
- Staff completed a substantial amount of grounds work at the pump stations, and cleaned some wet wells.
- There was one manhole on Thompsonville Road which was noisy and we received a number of complaints. We found the manhole ring was broken, which we replaced. We also added a compound to reduce the rattling noise. The manhole remains a little low, but the street was paved recently (last two years) and we are weighing our options for repair and coordinating that effort with the Town Engineer, because we also want to preserve the Town roads and ensure the minimum amount of cuts in the new pavement. We will follow up on it in August, and decide how best to proceed after all things are considered.

# Plant Power Use



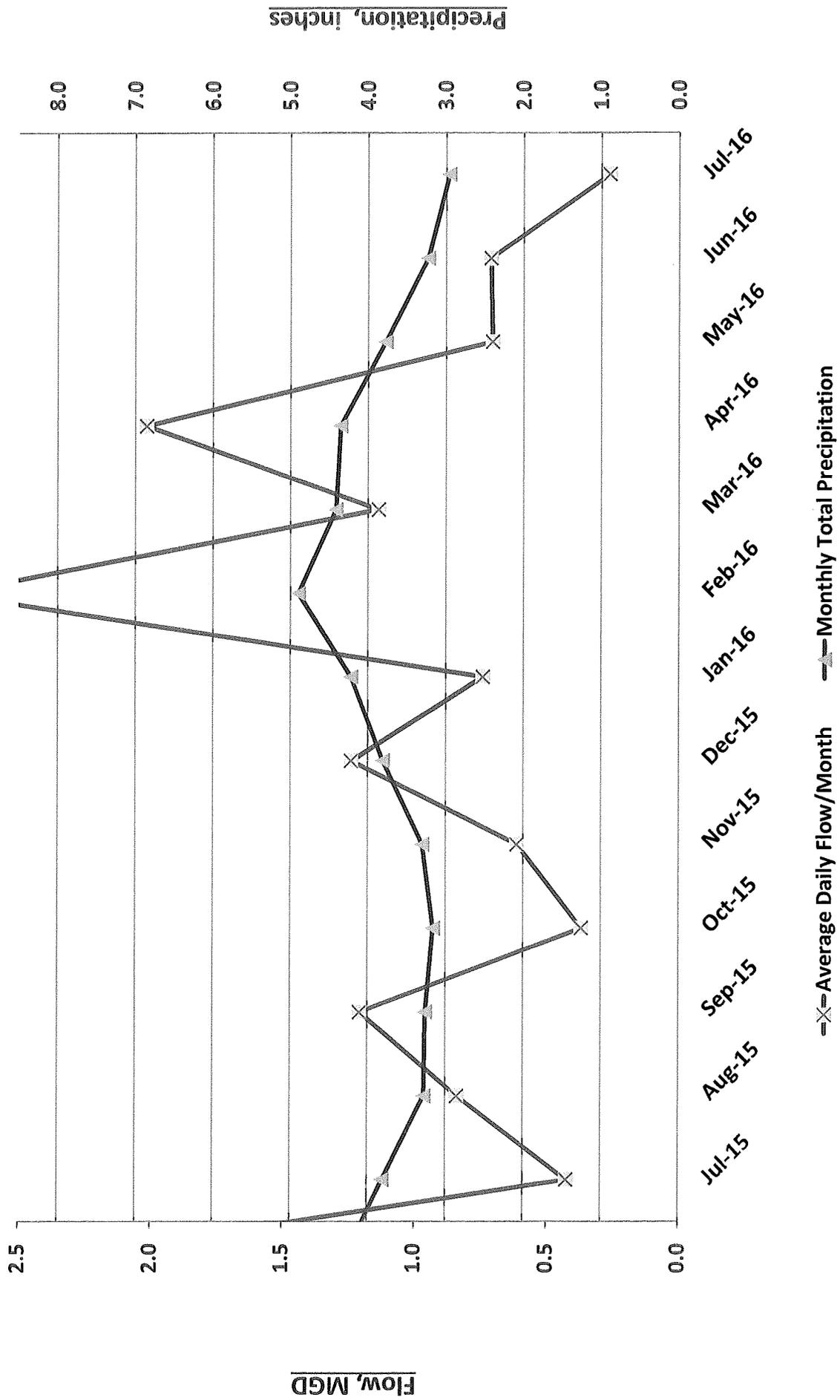
\*\*Primary power conservation indicator due to high BOD loading and impact from H.P. Hood.

# Hood and Prison Average Monthly Flow

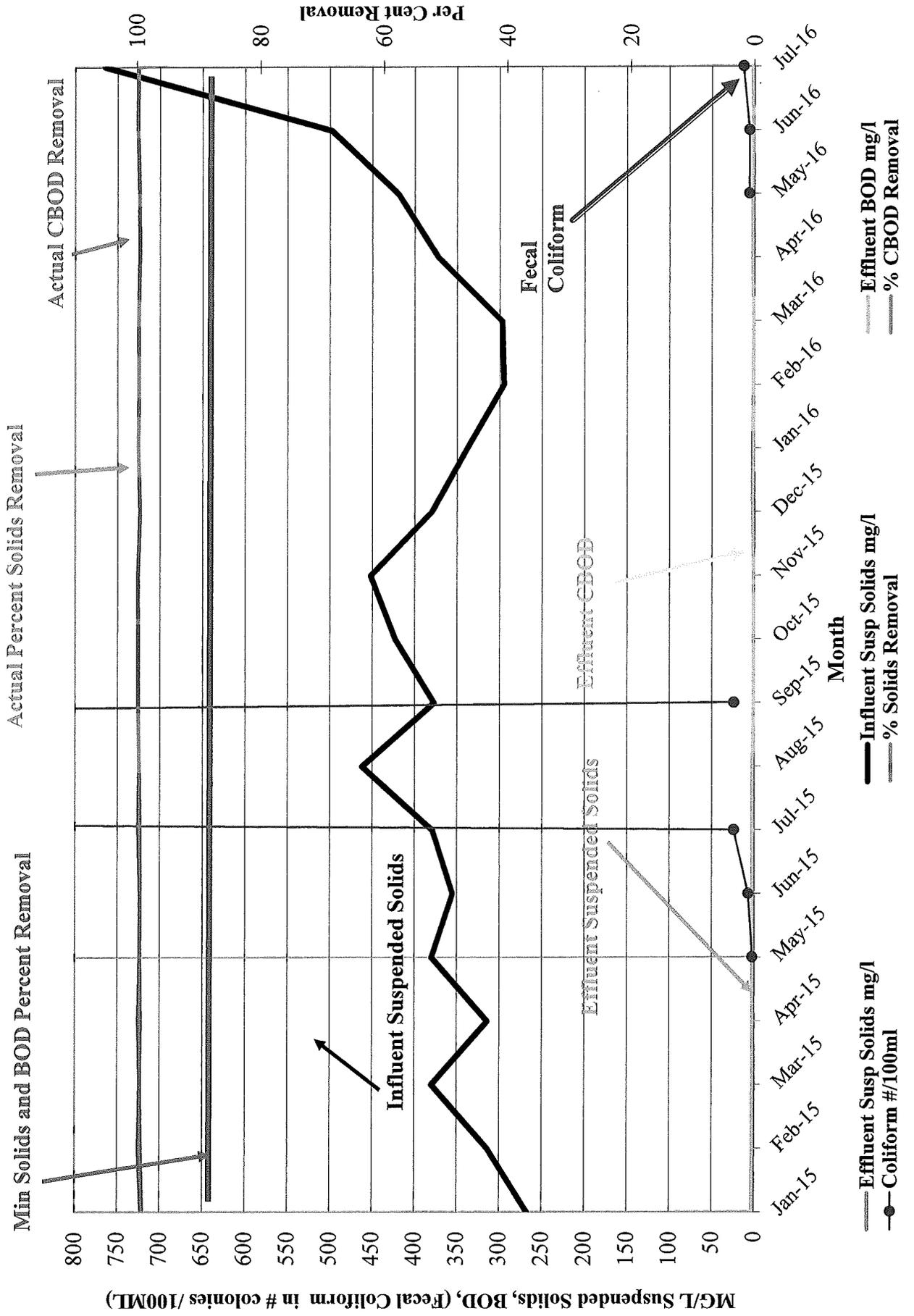


# Suffield WPCA

## Average Monthly Flow vs. Precipitation



# Town of Suffield WPCA Plant Performance Data



**SUFFIELD WPCA**  
**NITROGEN POUNDS PER MONTH VS. AVERAGE DAILY FLOW/MONTH**

