

**WPCC COMMITTEE MEETING**  
**MARCH 6, 2019**

The joint WPCC meeting was held at the Eastlake City Hall. Committee Member Mr. Anderson from the City of Willoughby opened the meeting at approximately 6:00 p.m.

In attendance from the City of Eastlake: Eastlake WPCC Chair Ken Hoefle, Michael Zuren, James Overstreet. Present from Council were Jason Kasunick, David Spotton, and Council President John Meyers. Present from the Administration was City Engineer Gwydir. Also in attendance was City of Eastlake Council Clerk Mrs. Simons.

In attendance from the City of Willoughby: Willoughby WPCC Chair Daniel Anderson, Bob Harrold, Service Director Dave Bock, and Willoughby City Engineer Jim Sayles. Also in attendance was City of Willoughby Council Clerk Alisa Novak. Katie McNeil was absent and excused

In attendance from the Water Pollution Control Center: WPCC Plant Superintendent Jack Gorka, Assistant Superintendent John Hall, and WPCC Industrial Associate Diana Passwaiter.

1. WPCC COMMITTEE MONTHLY REPORT

Mr. Anderson: I will now turn the meeting over to Mr. Gorka.

2. ANNUAL REPORT: EXECUTIVE SUMMARY: (Executive Summary attached)

3. Waverly Relief Sewer Project Phase I Update

Mr. Gorka: I will now turn it over to Mr. Gwydir.

Mr. Gwydir: Good evening. The Waverly Relief Sewer is underway...we've been down to the pump station today and according...and starting off the map they will be crossing Lakeshore Boulevard here in the next couple of days. Lakeshore Boulevard should be closed for a total of about three weeks. We will start in the corner and make our way down Waverly. The project and this is a reminder it is approximately \$3.5 Million and right now it will run all the way down Waverly Road to Willowick Drive. There is another relief sewer called for Waverly II, which goes from there to Vine Street. Mr. Gorka right now when we were talking I don't know of any inclination that that will show up in the next permit cycle or not.

Mr. Gorka: I'm thinking probably, because I think it would be the logical next thing for the EPA to do. The only thing that I have is and it is not intended to be a delaying factor or anything, but I mentioned that we have to update the SSES by March of 2021...what we discussed this with the EPA, because this will end up being an negotiation and I feel again like it was last time. And say that "If you want us to evaluate that stuff we can't start another project until we do that and evaluate it." That would be my approach, cities approach, and the engineer's approach, when we discuss that with them. Because I would like to say "Hey we know how all this stuff works" and it will just buy us some more time so we can push off these projects a year or two down the road. If you feel that it's advantageous to push them off farther...does it cost more a few years from now or will it cost less if we get into a recession

prices go down. I don't know when you want to do it sort of thing. I think that holds true for Waverly II and for the East Island EQUALIZATION BASIN tank. I know they are going to want to do something with that. That's our last Over Flow in the system...is the East Island over Flow. And quite frankly you know Quentin all totaled isn't even close to what goes over that one, when that actually goes. I'm surprised they wanted Quentin Road instead of East Island first, but I think that you could use that to delay that too, but that's going to come to at some point in there.

Mr. Gwydir: Just for Eastlake here Waverly Phase II is estimated right around \$1.7 Million and Lakeshore East if we get similar pricing to what we got for Quentin Road could come in as low as \$5 Million for that size basin. Depending on how far it's pushed off, it could work its way up to \$8 Million. The push with that is going to be where we are going to put it, there's not a lot of room and not a lot of land free area over there. So at some point we are going to have to acquire real estate. Right now they are clearing an area that they just bought between McDonald's and the daycare. That was one area that it could potentially be located in and the other is in front of the school, which is a big open area. That has its draw backs as well and there are no particular roaming areas over there. We will find out when the permit cycle comes up. It's been our wish and hopes to extend some of these things reasonably as long as we can. One is so that we don't have all of these expenditures up front, but the second is as we introduce these various improvements to the system they may or may not cause us not to have to do certain things over time. I think that you can talk about that with the Enhancement Project and the EQUALIZATION BASIN that was scheduled for outside the plants, so there's hope that some of these things will be sufficient to maybe not cause to have to do everything and expend it. So that is the reason for spreading it out as well. Not just to spread it out for the fun of it.

Mr. Sayles: As Mr. Gorka said inflation...if you keep delaying projects inflation makes those projects more expensive. But maybe because we do this once step at a time and hold off on the next step we maybe don't have to do that next step...there's a possibility. Or it could be a smaller project. If what we've been doing is maybe a little more effective than we thought the plant was taking. Should we rush ahead and do all of these projects while there less expensive or maybe there's a chance we can actually reduce ultimately what we have to do. Personally in my mind that's the right approach.

Mr. Gorka: And as a reminder the SSES that we put in was in 2011 and we had a 30 window on it that the EPA never pushed back on. They never said "No that they wanted it done yesterday."

Mr. Sayles: They did say "No" they wanted it done in five years and we submitted a 35 year schedule. They said that's not acceptable. But that was ultimately when they came back and said "Well do Quentin Road and evaluate the treatment plant...do the stress test on the treatment plant." So they never said "Okay" they said "No that's too long," but they didn't say "ten years is okay, twenty years is okay." It went to let's just do these initial projects and see how affective they are.

Mr. Gorka: There's hope for the delaying some of the stuff.

Mr. Gwydir: Mr. Gorka you're getting some benefit too out of the way that you're operating your system with some of these new improvements like Quentin Road if I'm not mistaken. Is that correct where you're able to take advantage of some of the things that maybe we didn't contemplate originally when they were constructed.

Mr. Gorka: Yeah and I don't know on a bigger scale or whatever that we could look at what our existing basins. What we see in a big rain event is that not all of them fill up...some of them don't get anything. But other ones do fill up depending on where it rains and all of that, because we are kind of spread out geographically to two cities and all of that. And what we started using Quentin for is a storage. We would shut off Quentin Pump Station and flood the EQUALIZATION BASIN, so we effectively can store a million gallons up there that normally would come through the system and be by-passed. So there's a benefit now and I think to look at putting in gauges and controlling...most of our EQUALIZATION BASIN Tanks are passive. It backs in and it backs out. Meadowlands we have no control over any of them, but if we had some ability to go "You know what it's not raining much over there, let's just store half a million over there." It's half a million less and we have more capacity to deal with here, because it's not coming from up there. To create like a little network during certain rain events and to create some protocols...we are still working on the Quentin one to figure out when, but what we can see is that with Quentin when we shut it off and turn it on you see a bump. You see a bump at Lakeshore EQUALIZATION BASIN Tank every time, so it's like we can affect it. We can lessen our by-pass. So I've actually started doing that and reporting that to the EPA. That through these actions we are actually...half a million gallons or 450 gallons that we store at Quentin that normally would have just come to us and been by-passed. We had no response on the EPA but once again this is something that when we talk to them...

Mr. Sayles: You're building your case.

Mr. Harold: They are seeing the effort being made for sure.

Mr. Gorka: Our permit cycle is this year, so it starts at the end of this year and we have to put our app in by June 1<sup>st</sup>. I believe this negotiation will be going in July and August of this year. That's what it did last time. It's a five year permit cycle, so it should be an interesting year. We have this stuff to bring up to them and see what they think about it. Another thing for me down the road is to how can you interconnect all of these sigs and put enough gates in so we can start storing water in different spots. So maybe we don't need to build relief sewer or an equalization basin tank here or there, because we're actually using capacity that goes unused during rain events. Thank you for bringing it up I thought it was a good idea.

There were no further questions or comments.

#### 4. Capacity Enhancement Project

Mr. Gorka: I don't know Mr. Sayles if you want to...

Mr. Sayles: The Capacity Enhancement Project came out of that stress test that Mr. Gorka mentioned that the EPA asked us to do on the treatment plant. And the point of that stress test was to try and determine can that plant actually operate beyond its design capacity and

still operate effectively to treat the sewage? So Mr. Gorka ran it through a series of tests and evaluations and Mr. Wooldridge was working with Mr. Gorka on evaluating the result and the bottom line was yes he can handle more peak flow. It can go from twenty up to twenty-four.

Mr. Gorka: We had twenty-four and it just depends on whether our ability to move inside...that's what's lacking.

Mr. Sayles: Exactly...we can see that became a little bit of a problem. But what became evident in that analysis was he has some and call them spare tanks for capacity. So we were able to figure out a...Mr. Wooldridge did...a way of actually using that storage inside the plant to even exceed a higher peak flow. We don't treat it through at a high rate but actually start utilizing some of that unused storage capacity that is within the plant within the tanks. And actually if you remember and I don't know if you were around from the SSES Plan you were supposed to build Quentin Equalization basin utilization...Quentin sized equalization basin utilization basin in the front yard of the treatment plant on Erie Road there. This capacity enhancement and modifications inside the plant we've eliminated the need for that equalization basin utilization basin. So this is a \$3.8 Million project to modify the internal workings in the plant, adding a pumping station to pump to the storage that available and the aeration basins for the east end of the plant. You don't need to know all the gory details, but we won't have to build a \$4 Million equalization basin utilization basin out in front of the treatment plant. We're about 80% done with the plans for that. We've been approved for an EPA loan to do that. So as re-equalization basin utilization by the EPA we are moving down that path. That was basically in his permit re-equalization basin meant was to do that stress test and implement what the stress test told us to do. That project is moving along. The bid won't be until later this year.

Mr. Gorka: We're falling a little behind schedule.

Mr. Sayles: But we are making good progress and that's really good news. We can eliminate that one equalization basin utilization basin and use the gray infrastructure to concrete tanks that are in Mr. Gorka's plant.

Mr. Gorka: They really weren't being used...some of that is we ended up using 1.4 Million in capacity that we were only supposed to build on. Less than a million out front...the 900,000 gallon tank or whatever...so we actually have another half a million in capacity within the plant already built. The way that I was looking at it is that instead of 5 Million we're paying 3.8, because we're using what we already have within the plant.

Mr. Sayles: And that came about based on what seemed like small improvements and operational improvements that Mr. Gorka has implemented through the years internally to the plant. When this was designed 35 years ago you needed that entire gray infrastructure to handle what the projected future peak flows were. But changing diffusers and all of that kind of making things more efficient and functional inside the plant has set up a situation where he has six equalization basin utilization basins, but it turned out once he made some improvements he only needs to use four. So there is storage that is available inside the plant, so let's use that instead of building more storage out in front of the plant. It's kind of fallen

into place...it's still costly obviously...we're all cognoscente of that. It's accomplishing the goal of stopping the by-passing to Lake Erie.

Mr. Gorka: I want to throw in to is that even though it's in gory detail or whatever the 3.8 million verses that five million for the equalization basin tank...of that 1.2 million is actual other stuff that we need to do within the plant. That was in our replacement plan that's on the back sheets...the 20 year plan. It's the improvements to the primary clarifiers they've been in service since 1986. One and two are rusted really badly. They actually have perforations in the center column's and all that they need replaced...all that stuff was due to be painted and clean and the same with some improvements to the grid conveyor and all that. All of that was on the plan anyways so we are coupling that together. So realistically we're getting about 2.5 Million or 2.4 Million worth of equalization basin within the plant. I had a bigger size verses a 5 Million out front.

Mr. Sayles: All of that equalization basin equipment that Mr. Gorka is talking about on the plant is now beyond its design service life. We've talked before that Mr. Gorka has a really great maintenance staff and the equalization basin equipment is still running and doing well. But who knows how much longer that will happen, so we are able to get all of this accomplished internally in the plan.

Mr. Gorka: We've already patched those primaries a couple of times with metal. I give some kudos to the EPA at least they made us look internal like this. It was mandated to look internal. I don't know if we would have ever done it unless they told us to look internal. I wanted it to be on the record that it was nice that the EPA at least once. But we did benefit from it and actually the tax payers benefit too with lower costs. That's the Capacity Enhancement Project and it is moving along. It should go out to bid and once again you will see legislation and stuff like that and authorization, loans and all that sort of stuff.

There were no further questions or comments.

5. Retro fit of Siphon Underground EQUALIZATION BASIN Tank Cleaning System and Cleaning of Lakeshore and Dalton Underground EQUALIZATION BASIN Tanks

Mr. Gorka: We've been talking about those forever. The bubble system that we didn't do and a lot of stuff that we didn't perform...we've done pieces parts. Two of the equalization basin utilization tanks are good and rolling. The above ground ones and the underground ones are difficult if not impossible to clean. This project where we look at the retro fit the actual cost is \$6 Million to do all three of them. I don't want to do all of them at this time it's just a lot to bite off. So we are going to do one and we are going to do the siphon which is right were all of the problems are and convert that to a tipping bucket. For like \$1.5 Million to \$1.6 Million we can do that and clean Lakeshore and Dalton. The other two tanks that haven't been clean that aren't working effectively and all of that, but we figure if we clean them good once then we can keep an eye on them and keep them clean. Send his guys down there every so often with some squeegees.

Mr. Sayles: The plan is too originally retro fit all three equalization basin utilization basins.

Mr. Gorka: But there is no mandate to do that. I'll throw that out there we are not under any gun to do that other than lost capacity, because they are filling with debris and sludge. We have to at least clean that out of there and it will be back up to capacity, but there is no mixing system or cleaning system in them. So it's going to be manual for a little while here until we are ready to take on some more projects down the road. That and it all depends on what the EPA is going to do this summer too and tell us what they want out of the equalization basins or Waverly II and all of that stuff. I can only spend so much money and can only do so much. I don't want to and you know me I don't like spending money that much.

There were no further questions or comments.

#### 6. Plains Rd. Force main Repair Status

Mr. Gorka: We already did that so with that does anybody have any questions. Is there anything else to talk about? Page 42 I thought this would be...because I and just like everybody else I you lose track of all the stuff that we spend and all these projects. I have spreadsheets and all the ordinances and all that sort of stuff on them. I have to keep them up to date and formulate all of that with the different authorizations to all the different things that we have to do in order to access money. But I thought this would be useful for everybody at the table to look at...item number one was the equalization basin rehab that's all done and closed out, but where did the money come from? How do we pay for that? And so we have a 0% loan and we got a grant for \$281,000.00. I don't think anybody ever really goes over these things enough for people to realize like where did the money...it was me going where did this money come from? See the loan up top is actually pretty big but from what I understand with financing going through them the OWDA...if allocate a certain amount of money they can certify a certain amount of money for the project itself, which was \$2.3 Million. That they set aside that loan money even though there was a change order that was deductive of \$1.2 Million they hold it on the books that way until they do their reconcile a year later or whatever. But I thought it was interesting in that okay that's where it comes from and I just learned a whole lot. Our Finance Director or department was going don't worry it's not going to be that it's going to get reduced down. But they keep it on the books that way until the project is closed out there and there is one year of certifications and all sorts. It takes forever to end a project...end a loan. It strings out way longer than...

Mr. Sayles: Your first payments are based on the larger...

Mr. Gorka: The largest amount.

Mr. Sayles: But once everything is all closed out and finalized...

Mr. Gorka: Debt service is always fluxuating and that's why I've taken a couple of years to figure out like why is that always like a moving target? Because it's changing on...not based on the money you draw but based on the money that you had to allocate, because they couldn't lend it to somebody else. Because they said that they were going to lend it to you.

Mr. Sayles: Even though you haven't spent it.

Mr. Gorka: Yeah.

Mr. Sayles: They took it from out of the bank basically and had it sitting there. So someone needs to...on it sitting there.

Mr. Gorka: I think it's a cool system for not that we're here to do...but the way that the state revolving fund is that the federal government gave that state and jump in here if I get this wrong...gave the state like say \$5 Billion. They in turn lend it to us cheap for like 1% or 2% but we have to pay it back. They get the money back but the feds give them \$2 Billion the next year. So they build this huge pool up and then they have this money...we're paying them back and they start doing loan forgiveness and grants to people who can't afford it and stuff like that.

Mr. Sayles: But it's a revolving loan. So you stop...the feds have to stop putting money into so now the state just has a chunk of money that's going out is coming in.

Mr. Gorka: It just keeps going.

Mr. Sayles: There's always tens, hundreds of millions of dollars available for these projects in the revolving loan fund.

Mr. Gorka: It's a pretty cool concept rather than just giving people money.

Mr. Sayles: That would be much nicer.

Mr. Gorka: But in the end they do have some money left to give. You do get like the OPWC the grant...they have so much money after a while they go well we'll give some back. You can have some for free and stuff like that. The control structure is the same thing. What paid for that project was a 0% loan and another grant and then sewer fees. Just out of Willoughby and Eastlake you guys paid for them out of your fees. Pooh gone no loan no nothing it's over and done with. Like I said that project just finished. Quentin Road the same thing it's another loan and right now I think it's \$3.5 Million, but I think that once again is subject to reconciliation, because that just ended in December. So they are going to reconcile the last change over, which is kind of interesting to see. The change over's add to the loan amounts, because they lend you more money outside of what they original said, because they build in 10% contingency. So they expect to lend you extra and I think in Quentin Roads case it was only like 3% over budget. Quentin's project by the way went good. Kudos to the engineer's for a great project and the thing works perfect. Everything is designed...it works perfect and I couldn't be happier with the way it works. It fills and drains exactly...only a waste water guy would be so excited about that. The Waterline Project is in there too and you can see the adopted budgets. We approved a certain amount. Once again it kind of...it's all just to keep track of the numbers and who's got the purchase orders and all of that. Once again it's all out of the replacement fund, so no cost to anybody other than the money that we've been putting in the replacement that we have stored up.

Mr. Sayles: No additional cost.

Mr. Gorka: Nothing that's not...

Mr. Sayles: And I'd like to add to that. The problem that we have negotiating with the Lake County Utilities on this...if you are maintaining the line from Lakeshore Boulevard to the plant...was a service line a privately owned by WPCC City of Willoughby. But sometime and who knows when allowed the trailer park to tap-in and we suspect it was Cleveland Water. Back when Cleveland Water the order of the system.

Mr. Gorka: So much so it's kind of a Lake County meter on it in the middle of the drive way on the line.

Mr. Sayles: Exactly. But Lake County keeps saying you guys let them tap-in so it's your problem. It's kind of the official approach they are taking. Lee and I have met with the utilities director Mr. Rotherburger and we're going to set up meetings with the trailer park owners and the utilities department in the City of Willoughby. To work on how do we resolve this? The trailer park owner really needs to run another waterline internally to make this work. It's really the approach that we are going to take. I think that Mr. Gorka has talked to him and he's certainly not receptive to spending a dime. So that's where we're going with that and quite frankly our attempt is going to be very polite. We're not trying to get the county to kind of take that on as their problem. And let us move ahead with the City of Willoughby disconnecting the plant from this line and putting in a new one. And let the county continue to negotiate and deal with the trailer park owner on giving Lake County's customers good service. It's not Willoughby and Eastlake to provide those people with water. It's the Lake County Utilities. Sounds good and we are preaching to the choir in here, but Lee and I had a good meeting with Mr. Rotherburger to kind of kick off these conversations up at that level. I hope it doesn't have to get up to Commissioner Level but we'll see. We don't want to approach it with any kind of threats or anything like that it would get nowhere.

Mr. Gorka: My offer still stands. I'll cap that line whenever they work out the problem. In the mean time I'll cap it right on my property line.

Mr. Sayles: Let us transfer over...sometime in the future when somebody runs another line to properly serve the trailer park...Willoughby will go back cap that old line at Lakeshore Boulevard as if it was ours like it was originally apparently way back when...we'll take care of that. But the City of Willoughby can't be spending Willoughby and Eastlake's money inside that trailer park to run water lines for them. We just can't do that...that's probably against the law for us to do that and that's where we are.

Mr. Gorka: That is a problem, because the time it broke twice and our pressure was down to 40 psi, which is barely running the plant.

Mr. Sayles: You need a good service.

Mr. Gorka: We need the water line and that's why we wanted to put a new one in. So the Capacity Enhancement Project you see the layout for what it's going to cost. Once again it's not been bid out so we don't know what it is the engineer's estimate on probably cause. But you can see where the money is going to come from. The same with the retro fit of the



underground storage tank on what's already been done. The engineering is being paid out of the replacement fund for both of those projects. The design part...aspect parts so it would just be the projects they could...

Mr. Harold: Until the change orders come in.

Mr. Gorka: Once again that project is not bid out either so it's not firm cost it's the engineer's estimate. Remember how we were...I just want to remind people that when Quentin Road was originally estimated it was pretty high...\$8 Million or something came in and the contractor was \$3.7 Million. Because twelve or fourteen guys bid on it and it was pretty competitive.

Mr. Sayles: Time is everything sometimes.

Mr. Gorka: Are there any other questions?

There were no further questions or comments.

Adjournment

The meeting was adjourned at 6:59 p.m.

tms

APPROVED: 

DATE: 8/27/19

## EXECUTIVE SUMMARY

The Superintendent's findings and recommendations for the Willoughby-Eastlake Water Pollution Control Center (WE-WPCC) for the year ending December 31, 2018 are summarized below:

1. The WE-WPCC transferred 16.0952 acres of unused WPCC property back to Eastlake for partnering with the Eastlake Port Authority for park planning purposes.
2. The WE-WPCC continued to operate within the limits of its National Pollutant Discharge Elimination System (NPDES) permit parameters in 2018. There were zero permit parameter violations for the entire year. This has not happened since 1985. The average discharge concentration of suspended solids was 6 mg/l for the entire year. The lowest since 1983.
3. The 2018 average daily flow was 6.648 million gallons per day (MGD).
4. The current NPDES permit contains requirements for additional toxicity sampling. The WE-WPCC believes that it may have a low cost biological solution to the toxicity issue by inducing partial nitrification to reduce ammonia. If the proposed solution is not effective in reducing the ammonia, it would require expensive plant modifications. The OEPA has indicated that ammonia limits are going to be included in the WE-WPCC's next permit which will be issued for 2020.
5. The Ohio Environmental Protection Agency (OEPA) issued the WE-WPCC a new permit in 2015. The permit incorporated items from the 2011 SSES:
  - The WE-WPCC must submit a "stress test" report by September 1, 2016. The Capacity Analysis Report (CAR) was submitted August 29, 2016. The OEPA approved the CAR on July 31st. The recommended improvements, called the Capacity Enhancement Project, are in design with construction expected to begin in late summer 2019. This was a capital project with costs split 50/50 between both cities.
  - The plans for an equalization tank located at Quentin Road Pump Station must be submitted by March 1, 2016 with construction completed within 12 months thereafter. Plans were submitted and approved on September 9, 2016. The Quentin Road Equalization Tank was put into service January 19th. This was a capital project with costs split 50/50 between both cities.
  - The plans for phase 1 of a relief sewer on Waverly Road must be submitted by March 1, 2018 with construction completed within 12 months thereafter. Plans were submitted by March 1st. Construction is expected to begin in January 2019. This project is being funded entirely by the City of Eastlake.
  - By March 1, 2021 the 2011 SSES must be updated. This analysis will begin after the completed construction of the above projects and will be funded 50/50 by both cities.

6. Satellite Sewer Discharge Control Program (SSDCP) for Satellite Communities
  - Satellite Communities must report water in basement occurrences to the WE-WPCC
  - Satellite Communities must report all system overflows to the WE-WPCC
7. The OEPA did not conduct a pretreatment compliance inspection in 2018. Invoices for permit fees, inspections, sampling and equipment, lab tests and extra strength wastes total \$182,512 for Willoughby and Eastlake in 2018. Of 1185 industrial samples collected for analysis, seven resulted in violations of the Sewer Use Ordinance.
8. Routine and preventive maintenance activities occupied the majority of the maintenance department's time in 2018. Noteworthy was the replacement of the aeration tanks diffuser header drop pipes with stainless steel pipe.
9. The number of employees at year end was 17 full time. Since the end of 2010 the WE-WPCC has reduced staff by a total of five full time employees. Since 1989, the last year of peak staffing, staff has been reduced by thirteen (13). The first addition to staffing since 1987 occurred with the hiring of a new full time Office Associate in 2018. The WE-WPCC is adequately staffed.
10. During 2018 plant safety at the WE-WPCC remained a staff priority. No injuries were reported in 2018.

11. The Joint System Facilities definitions were expanded by amendment to the Joint Agreement to include:

*WPCC host  
Willoughby  
&  
Eastlake  
split the cost.*

- ✓▪ The GIS Maintenance tracking cloud based operations management software
- ✓▪ Update the number of system equalization tanks from five (5) to six (6) to include the recently completed Quentin Road Equalization Tank
- ✓▪ The overall SCADA system is installed in both cities' pump stations and the WE-WPCC maintains the system.

12. The budget request for 2019 totals \$3,711,537. The budget is 5.5% higher than last years' adopted budget. This increase is due to a \$266,530 increase in the debt service costs. The 2018 expenditures of \$3,304,608 were 4.35% above 2017. This increase was also due to the increase in debt service costs. Plant expenditures without debt service costs increased only 0.27% or \$8,308 year over year.

13. Noteworthy in the budget request is the increasing size of debt service and the impact it has on the WE-WPCC budget going forward over the next twenty (20) years. At year end, total debt was \$7,042,770 with debt service of \$436,911 for 2019.

14. The flow meters were in use for the 2018 operation and maintenance flow split. A review of the metered wastewater flows for 2018 shows a split of 59.99% Willoughby and 40.01% Eastlake. It is recommended that the engineer assisted calibrations and review of the meter performance continue in 2019.

15. There were six (6) ongoing replacement projects in 2018. All six (6) are part of the Joint System Facilities and their cost is shared 50/50 by both cities. The Equalization Basin Rehabilitation, Equalization Basin Control Structure Rehabilitation, Quentin Road Equalization Basin, the Capacity Enhancement Project, WE-WPCC Water Main Replacement Project, and the Underground Equalization Tank Cleaning Systems Design are all in various phases of progress or have been completed.

- Equalization Basin Rehabilitation Project was closed out on August 28th. The Meadowland and Erie Road EQ tanks have been rebuilt and the above ground ventilation and electrical work is completed on the Siphon and Lakeshore EQ tanks. The three underground equalization tanks mixing systems were non-performed. Project budget \$2,410,643. Project cost \$1,119,602.
  - Equalization Basin Control Structure Rehabilitation Project is substantially complete. Amended budget \$411,428. Project cost to date \$346,312.
  - Quentin Road Equalization Basin Project was substantially completed on January 19th. Budget \$4,879,128. Project cost to date including land purchase \$4,830,501.
  - Capacity Enhancement Project is the result of the plant capacity analysis report (CAR). Project is in design phase. Current budget is between \$3,857,000 and \$4,657,000.
  - WE-WPCC Water Main Replacement Project is waiting for Lake County Department of Utilities approval. Budget estimate \$337,240.
  - Underground Equalization Tank Cleaning Systems Design Project. A no maintenance solution of retrofitting the tanks with a tipping bucket tank flushing system is recommended. Phase I would be the Siphon Equalization Tank. Project budget \$1,602,000.
16. The requests for funding of new capital projects for the WE-WPCC and Joint System Facilities for 2019 are:
- The above mentioned Underground Equalization Tank Cleaning System retrofit of the Siphon and cleaning of Lakeshore and Dalton Equalization Tanks at a total project cost estimate of \$1,602,000. A WPCLF loan has been approved.
  - The repairs to the Plains Road Pump Station Forcemain. A project estimate is not available at this time but it is anticipated that the replacement fund has sufficient funds for this project.
17. Although the 1986 expansion grant requirement, requiring that the Cities' commit to perform certain sewer rehabilitation projects to maintain plant design flow levels throughout the useful life of the funded improvements expired, the grants received from the current projects will continue this commitment.