



OFFICIAL NOTICE AND AGENDA
of a meeting of a City Board, Commission, Department
Committee, Agency, Corporation, Quasi-Municipal
Corporation, or Sub-unit thereof.

A Meeting of Wausau Water Works Commission will be held in the
Council Chambers, 1st Floor City Hall, Wausau, WI 54403 at 1:30 p.m. on
Monday, August 7th, 2023.

Members: Katie Rosenberg (President), Dawn Herbst, Jim Force, Joe Gehin, John Robinson

AGENDA

1. Approve Minutes of July 10th 2023 Meeting.
2. Director's Report on Utility Operations
 - Drinking Water Solar Array Task Force
 - US Environmental Protection Agency (USEPA) Technical Assistance for testing drinking water
 - USEPA Technical Assistance for Lead Service Line Accelerator Program
 - Update on the Request for Qualifications for Lead Service Line Replacement Program Project
 - Drinking Water Distribution Maintainer Position-3rd posting cycle
 - Drinking Water Senior Plant Technician-Kevin Behnke retired July
 - Drinking Water Plant Operator has separated employment
 - Drinking Water- July's PFAS Sample Results
 - Wastewater Facility Construction Update
 - Wastewater Discharging Quality Effluent
 - Wastewater Collection System Technician (Sewer Maintainer)- 1 Job offer/ accepted.
 - Wastewater Plant Operations Technician- 4 Applicants interviewed, 1 Job offer is expected to follow
 - Hiring/Training of New Staff Challenges
3. Discussion and Update on Utility Finances.
4. Discussion and Possible Action Approving the Proposed 2024 to 2028 Capital Improvement Projects (CIP) and Related Budget.
5. Discussion and Update on Proposed Staffing Updates and Organizational Changes for Utility Staff.

Adjourn.

**Next meeting scheduled for September 5th at 1:30 P.M.*

Signed by: /s/ Katie Rosenberg, Mayor
Presiding Officer or Designee

THIS NOTICE POSTED AT CITY HALL AND EMAILED TO CITY PAGES AND DAILY HERALD: August 3rd, 2023 at 2:15 p.m.

This meeting is being held in person. Members of the public who do not wish to appear in person may view the meeting live over the internet, cable TV, Channel 981, and a video is available in its entirety and can be accessed at <https://tinyurl.com/wausaucitycouncil>. Any person wishing to offer public comment not appearing in person may e-mail gina.vang@ci.wausau.wi.us with "Water Commission Public Comment" in the subject line prior to the meeting start. All public comment, either by email or in person, will be limited to items on the agenda at this time. The messages related to agenda items received prior to the start of the meeting will be provided to the Chair.

In accordance with the requirements of Title II of the Americans with Disabilities Act of 1990 (ADA), the City of Wausau will not discriminate against qualified individuals with disabilities on the basis of disability in its services, programs or activities. If you need assistance or reasonable accommodations in participating in this meeting or event due to a disability as defined under the ADA, please call the ADA Coordinator at (715) 261-6622 or ADAServices@ci.wausau.wi.us to discuss your accessibility needs. We ask your request be provided a minimum of 72 hours before the scheduled event or meeting. If a request is made less than 72 hours before the event the City of Wausau will make a good faith effort to accommodate your request.



Minutes of July 10, 2023

A meeting of the Wausau Water Works Commission was called to order at 1:30 p.m. in City Hall on Monday, July 10th, 2023. In compliance with Wisconsin Statutes, this meeting was posted and receipted for by the Wausau Daily Herald on July 6th, 2023.

Members Present: President Rosenberg, Commissioners Herbst, Robinson, Force, Gehin
Others Present: Eric Lindman, Scott Boers, Ben Brooks, Anne Jacobson, James Henderson, Tonia Westphal/ Clark-Dietz, Joe Kafczynski/ Becher Hoppe.

1) Approve Minutes of June 6th 2023 Meeting.

Herbst motioned to approve minutes. Seconded by Gehin.
Motion Carried 5-0.

2) Director's Report on Utility Operations.

Lindman began there's an update on the Water Research Foundation forum that Brooks, Boers and I attended in Chicago with some highlights that may trigger questions from the Commission. Mayor had an update on budget impact and where things were at with the \$125 million for PFAS.

Rosenberg stated Governor Evers signed the budget into law last Wednesday. The money is there but we don't have any rules governing how we spend that money so we will await any legislature action, but we know it's been allocated.

Robinson commented the importance of the engagement and monitoring of the biosolids. Understanding the reluctance and the many people that need to become engaged in the monitoring of the biosolids but would like to point out some opinions in there. The State of Maine and Michigan are concerned about biosolids relative to PFAS in agricultural products. Michigan is a leader in trying to set some of those standards. If you look to the North in Wisconsin in Oneida County with concerns of elevated PFAS in groundwater that may be of concern in the land application of the biosolids. We can't take our eye off of it and there are a number of people pushing for the development of standards not because of politics but because the lack of uncertainty that creates fear. There are a number of counties looking to ban the land application of biosolids. We need to stay on top of the effluent and the biosolids moving forward and look at product in terms of what we are producing and the short/long term ramifications and liabilities associated with this use. We are hoping with the GAC system, much of the input into the system will be removed but we don't know what the products are. We have concerns in the community with all 6 wells, we need to be vigilant and cautious in where we go and what we do going forward.

Rosenberg replied this was a good discussion to continue at the MPO as it included County key players and this would be a good opportunity to have a discussion with the DNR about the expectations. Last time we weren't sure what would happen after we got our PFAS results.

Robinson replied the focus would be more on water at the MPO. It's an issue that is not unique to Wausau if other communities were experiencing it. It's evident by the PFAS conference that was held earlier this year in Wausau where the Wisconsin's Town Association Co-sponsors. This is an evolving issue about what's in the stream from wastewater perspective as the WPDES permit renews, there would be sampling requirements relative to effluent and issues to where we go from here. It's uncomfortable because we don't fully understand science but we are looking across the states and the spreading of the land application of the solids. MPO is a good venue and there are other parties too.

Brooks stated we have been notified by the Municipal Environmental Group that the DNR will be testing our biosolids sometime in the near future (possibly July) and hopefully that puts your mind at ease that the DNR is taking action.

Lindman replied that is part of the start of it. We are taking this seriously and will continue to do that. Wausau has always been proactive and we want to maintain that and be proactive but we don't want to be proactive and then have a regulatory agency make it punitive on us for doing so. Just like discussion on the Leachate, we've got a meeting set up in July with DNR and the County to make sure what we are going to do together to set a program up is not punitive to the users of Wausau or the County. The Regulatory Agencies fail to see or recognize local impacts. We really saw that when we went down to the Water Resource group and talked with other Municipalities around the country. There's great research happening as far as how these biosolids react in the soils. What they are seeing is the regulated PFAS being tested for going into the water treatment plant are lower than what's coming out so they are having these bio-transformations of the precursors. So, you are right, there are a lot of things happening that we don't understand yet. We want to make sure we are working with the regulatory authorities and not one against the other. Your point is well taken but the discussion by experts is that we are not there yet and it's been a struggle across the country and we will get there. DNR seems to be onboard but further discussion needs to happen.

Force questioned the number of LSL's reported being 55 vs estimated 90. Are all 55 identified and remediated, have we had a big pushback, if we started testing PFAS at the plant and if we were well below those requirements?

Lindman replied the 55 services are all bid and scheduled to be replaced. The homeowner will make the final determination of replacement. There's one final step and we have a contractor on board signing contracts. The homeowner will meet with the contractor. As far as pushback, we've had at least one that has refused to let us go in but nothing like what we had in the past.

Boers replied we have started testing and the results just came back. PFOA/PFAS combined are at 9.9. The 4 precursors that EPA plan on regulating came back with 3 non-detects, and one at 1.42 PPT so we were not close to that hazard index so we are well below that requirement.

Robinson questioned the number of identified lead service lines confirming that in the estimated 90, only 55 were identified, and if we were updating those databases based on those findings?

Lindman replied correct. We set up temporary water for all those individuals and where they connect in the temporary water is at the curb stop. When they dug down, there were a number of those lines they didn't find lead leaving the curb stop going to the home and that eliminated a number of those sites. We are updating that as we get more information especially the field data but what we are finding is that we may have to spend some upfront money in planning so that we can do some hydro excavating ahead of time. The difference from what we had in GIS to what's in the field just shows our inventory is not accurate.

Gehin questioned if LSL replacement would be an open trench construction? Gehin asked if there was a defined testing protocol for the monitoring of PFAS in the sludge? If Michigan is in

the lead then testing should be uniform through all the plants.

Lindman replied the contractor that bid LSL replacement is proposing open trench excavation this year for the water lines. If people wanted to do their sanitary line, they'd be able to do that.

Brooks replied there is not a standard in place yet for the testing but they are testing. The walk away from the program we went to didn't define that but there are labs testing but no standard for the State of Wisconsin. A lot that comes into play are the precursors that everyone's been referring to. There's a lot of unknowns with biotransformation short chain PFAS within the treatment itself.

Lindman stated we won't be sure what method the State of Wisconsin will use but they were talking about the DOD or what Michigan was using.

Director's Report Placed on File.

3) Discussion and Possible Action Approving the Sole Sourcing of Polymer for the new Belt Filter Presses and Gravity Belt Thickeners from Midwest Chemical.

Herbst motioned to approve the sole sourcing of Polymer for the new Belt Filter Presses and Gravity Belt thickeners from Midwest Chemical. Seconded by Gehin.

Motion Carried 5-0.

4) Adjourn.

Herbst motioned to adjourn. Seconded by Gehin.

Motion Carried 5-0.

Link to view meeting in its entirety: <https://tinyurl.com/wausaucitycouncil>

Gina Vang, Recording Secretary

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MEMORANDUM

TO: President Rosenberg
Commissioner Herbst
Commissioner Force
Commissioner Gehin
Commissioner Robinson

FROM: Eric Lindman, P.E.
Director of Public Works & Utilities

SUBJECT: Director's Report – August 2023

- Force Update: Solar Array Task. See attached.
- Update: USEPA Technical assistance grant for testing drinking water for PFAS and USEPA using data from Wausau as part of their national research and study. See attached.
- Update: USEPA Technical assistance for the Lead Service Line Accelerator program working with Horsley Witten Group (Engineering Firm) – Waiting on scope of work to be approved by the USEPA. See attached.
- Update on the Request for Qualifications for Lead Service Line Replacement Program Project Delivery. See attached.

WATER DIVISION

1. Recruitment for our Water Distribution Maintainer Position has been challenging. We are currently in our third posting cycle, hopefully, the third times' the charm.
2. Senior Water Plant Technician, Kevin Behnke, had retired in July. We wish Kevin well and good luck with his future ventures.
3. Our Water Plant Operator has separated employment with the utility. Our intent is to reclassify this position prior to refilling it.

4. July's PFAS Sample Results. See attached.

WASTEWATER DIVISION

1. Wastewater Facility Construction Update: See attached.
2. The Wastewater Treatment Plant continues to discharge a quality effluent. Optimization throughout the plant continues to ensure a quality effluent is being discharged.
3. Collection System Technician (Sewer Maintainer): Interviews for the vacant position commenced on July 17, 2023 and a job offer has been made and accepted. Waiting on an official start date from Human Resources.
4. Wastewater Plant Operations Technician: Advertising for the vacant position has closed receiving four qualified applicants. Interviews for the vacant position commenced on August 2, 2023 and ended on August 3, 2023. Job offer is expected to follow.
5. Hiring and training of new staff continues to be a challenge for the utility. After losing close to 70 plus years of combined experience due to two retirements and a death, training has become even a bigger issue. The treatment plant is operating with a very small and inexperienced crew making it difficult to schedule vacations, on-call rotation and perform daily task. New hires require in depth knowledge of complex treatment processes and equipment being used and it takes a great amount of time to train to a level that new staff can operate equipment confidently and take the on-call status.

Department of Public Works & Utilities



Eric Lindman, P.E.
Director of Public Works and Utilities

TO: Wausau Waterworks Commission

FROM: Eric Lindman, P.E.
Director of Public Works & Utilities

DATE: August 7, 2023

SUBJECT: Solar Task Force Update

The Solar Task Force has met three times since its inception and is moving forward with a public outreach plan, has set goals to help with proposed decision making when it comes to solar and will be looking at options for establishing an array near the new drinking water treatment facility.

The Task Force has established an initial set of FAQ's that will be posted to the city website, it is anticipated this will be a living document and updated as questions are asked and answered through the public outreach campaign.

There will be a tour of the new facility on August 9, 2023 for the Task Force members and our next scheduled meeting is September 13, 2023.

Solar Array Task Force
Communication Plan & Timelines

Background

Develop background information on:

Overview of Solar Power

Environmental Factors including noise and appearance.

How effective are systems?

What is the life cycle of the system?

What funding is available

How much energy can be generated by area (acre)

Current Utility Needs

What is the current energy need for the utility (KWH)

How much of the need could be met with solar energy?

At what cost? Impact on rate payer.

What savings could be realized by the utility

What size would the system need to be?

Hold public informational meeting Fall 2023

Developing conceptual options

Solar Array

Size

Configuration

Location

Design

Potential locations

Setbacks/Berming

Do Nothing

Disposition of property

Gather public input on range of options (December 2023)

Evaluate options

Evaluation Options

- Long Term Effectiveness

- Short Term Effectiveness

 - Impact on Neighborhood

- Implementability

 - Ability to construct and operate the system

 - Reliability of the technology

 - Ability to monitor the effectiveness of the system

 - Availability of Services and materials

- Costs

 - Short Term

 - Long Term

 - Present value

 - Funding

- Community acceptance

Public meeting and comment period (Early 2024)

Develop Recommendations for Utility and City Council



Frequently Asked Questions with Answers and Sources

- What happens to the value of my property?
 - A study conducted across Illinois determined that the value of properties within one mile increased by an average of 2 percent after the installation of a solar farm.
 - An examination of 5 counties in Indiana indicated that upon completion of a solar farm, properties within 2 miles were an average of 2 percent more valuable compared to their value prior to installation.²
 - An appraisal study spanning from North Carolina to Tennessee shows that properties adjoining solar farms match the value of similar properties that do not adjoin solar farms within 1 percent.
 - Source:
 - [Solar Property Value FactSheet 2019-PRINT 1.pdf \(seia.org\)](#)
- How noisy is a solar farm?
 - Solar projects are effectively silent. Tracking motors and inverters may produce an ambient hum that is not typically audible from outside the enclosure.
 - Source:
 - [Solar Property Value FactSheet 2019-PRINT 1.pdf \(seia.org\)](#)
- How much electricity does the new plant use?
 - In the month of May 2023, the new plant used 163.976 MWH with an average of 4.969 MWH per day.
 - In the month of April 2023, the new plant used 140.25 MWH with an average of 4.836 MWH per day.
 - Source: The plant's electricity bill
- Will there be increased traffic?
 - Solar projects do not attract high volumes of additional traffic as they do not require frequent maintenance after installation.
 - Source:
 - [Solar Property Value FactSheet 2019-PRINT 1.pdf \(seia.org\)](#)
- How tall are solar panels?
 - Maximum of 15 feet
 - Source:
 - [WI-Solar-Ordinance-2020.pdf \(growsolar.org\)](#)



Frequently Asked Questions with Answers and Sources Continued

- Solar panel maintenance of snow, dirt, or dust?
 - The dark silicone cells of solar panels are designed to absorb heat from sunlight. Once any portion of a panel is exposed to the sun, a small amount of heat spreads throughout the panel and melts the snow. You see this same effect with a blacktop driveway, once a hole in the snow becomes exposed to the sun, it quickly grows. Other weather like rain clears off any dirt or dust that the solar array accumulates.
 - Tracking solar panels have even less snow that accumulates since it moves and the snow that it accumulates slides off due to gravity.
 - Sources:
 - [Here's Why You Don't Have To Worry About Snow On Solar Panels This Winter | Simplaray Solar](#)
 - [How Do Tracker Mounted Solar Panels Perform in Snow? - Solaflect](#)
- Do solar panels cause glare?
 - No Solar panels are built to absorb the sun's light and energy it would cause as much glare as a blacktop driveway.
 - Sources:
 - [Here's Why You Don't Have To Worry About Snow On Solar Panels This Winter | Simplaray Solar](#)
 - [How Do Tracker Mounted Solar Panels Perform in Snow? - Solaflect](#)
- Where are solar panels made?
 - 74% of the world's solar panels production is in China.
 - Source:
 - [Solar Power by Country 2023 \(worldpopulationreview.com\)](#)
- How weather resistant are solar panels?
 - Solar panels are extremely weather resistant, being able to withstand winds up to 160mph and hail no problem.
 - Source:
 - [How weather resistant are solar panels - SolarPowerGenie.com](#)
- What is the lifespan of a solar panel?
 - Around 30 years is when they should be replaced.
 - Source:
 - [How Long do Solar Panels Last? Solar Panel Lifespan 101 | EnergySage](#)



Frequently Asked Questions with Answers and Sources Continued

- Why is it better to have the array close to a major consumer?
 - If the array is not directly hooked up to the major consumer it must be sold to the utility company at a significantly lower rate.
 - Source:
 - [PSC Customer-Owned Electrical Generation \(wi.gov\)](#)
- What is the ROI of a solar power plant?
 - Between 5 – 15 years.
 - Source:
 - [What Is the Solar Farm Return on Investment? \(angi.com\)](#)
- Will construction take a long time?
 - It takes a relatively short time for an array to be built since the panels are pre-built in the factory. The only lengthy part is landscaping and installing the racking for the panels.
 - Source:
 - [How Long do Commercial Solar Projects Take? | EnergyLink \(goenergylink.com\)](#)
- What types of materials are solar panels made of?
 - The one in the solar plant would be monocrystalline since it provides the highest efficiency.
 - Source:
 - [Monocrystalline solar panels vs. polycrystalline solar panels: Find out which ones are right for you - CNET](#)
- Can solar panels be recycled?
 - Yes, solar panels can be recycled through the installer or a 3rd party.
 - Source:
 - [Utility-Scale Solar Panel Decommissioning – We Recycle Solar](#)
- Are there tax incentives for solar energy?
 - Yes, the Inflation Reduction Act states that for a utility solar power plant 30% of the tax-exempt debt will be given as a tax credit.
 - Source:
 - [FACT SHEET: Inflation Reduction Act Advances Environmental Justice | The White House](#)
- How much power can solar produce in WI?
 - 15.5 – 46.5 kWh of energy each month per panel.
 - Source:
 - [Average Solar Production In Wisconsin USA - Shrink That Footprint](#)



TO: Wausau Waterworks Commission

FROM: Eric Lindman, P.E.
Director of Public Works & Utilities

DATE: August 7, 2023

SUBJECT: USEPA Drinking Water Testing Approved

In April 2022 we had initial conversations with the USEPA about providing assistance to Wausau as we completed our Pilot Testing program for PFAS treatment options. The EPA at the time did not have any programs in place to assist with testing costs or pilot costs, only aiding with analysis.

The USEPA reached out to us in July 2023 and stated they have a program in place to begin gathering data for research of PFAS in drinking water. The program will pay for PFAS testing at various stages of the treatment process, from raw water to finished water.

As we discussed with EPA in 2022 our raw water is challenging due to the high concentration of Total Organic Compounds (TOC). This was one of the issues we addressed with the new treatment facility, removing TOC, to improve water quality and better assist us with addressing future regulations regarding emerging contaminants. The better water quality we have the better opportunity we will have to address removal of other contaminants. Without this new treatment system in place, we would not be able to manage PFAS as we are currently.

The EPA is interested in our water as it has high TOC and we are currently removing the TOC with the the anion exchange resin. The EPA is proposing to test bi-weekly and possibly more frequently as needed for them to gather the data they need over an extended period of time. The EPA is interested in the water characteristics and PFAS removal currently and also when we change out the resin, they are also interested in getting samples of the spent resin once it is replaced to perform some bench testing on the resin. Staff is currently working with the EPA to get this program started over the next couple of weeks.

Department of Public Works & Utilities



Eric Lindman, P.E.
Director of Public Works and Utilities

TO: Wausau Waterworks Commission

FROM: Eric Lindman, P.E.
Director of Public Works & Utilities

DATE: August 7, 2023

SUBJECT: USEPA LSL Replacement Accelerator Program

In April 2022 we had an initial meeting with the USEPA and their hired engineer consultant to develop a Needs Survey and Technical Assistance Planning. The meeting was with the EPA, Consultant, Wisconsin Rapids Utility and Wausau Water Works. Wausau's Needs Assessment was sent to the EPA for their review and approval in late June 2023. We are waiting on EPA to approve the scope of work for Wausau. Some of the items we are requesting:

1. Develop a mandatory replacement ordinance
2. Complete a PSC application request for using user rates to fund private side LSL replacement
3. Assist with LSL inventory
4. Assist with public outreach and communication plan

Once EPA approves the proposed scope of work we will begin working with the consultant on the above listed items. Depending on timing of the work above will determine if Wausau needs to hire a consultant to complete the work. Some of these items are critical for our replacement schedule and need to be completed this fall.

LSLR Accelerators Pilot Program
Wausau Water Works, WI - TA Needs Assessment and Workplan

Intent and Content

This needs assessment and workplan documents lead service line replacement (LSLR) planning and capacity development activities to be conducted by the Horsley Witten Group, Inc. (HW) and Eastern Research Group, Inc. (ERG) for Wausau Water Works (Wausau). These activities are intended to advance the community’s compliance with Lead and Copper Rule Revision (LCRR) requirements, as well as work toward the Biden-Harris Administration’s goal of replacing 100% of lead service lines. By supporting Wausau, in collaboration with the State of WI and other key stakeholders, to inventory and replace lead service lines these activities will support EPA’s administration of the Bipartisan Infrastructure Law (BIL) LSLR funding. A summary of the LSLR-related infrastructure and capacity development needs are provided below, followed by a draft plan¹ for addressing those needs.

TA Needs Assessment

Community Characteristics

Community/System Name	Wausau Water Works
Location (City, County, State)	City of Wausau, Marathon County, WI
Utility Representative	Eric Lindman, Director of Public Works & Utilities Wausau Water Works Eric.Lindman@ci.wausau.wi.us 715-261-6740 [Engineering Department]
Utility Representative II (if available)	Scott Boers, Lead Operator Wausau Water Works Scott.Boers@ci.wausau.wi.us 715-261-7286
Population served by the utility	39,106 ²
Current Governance Type	Governed by a five-member commission (three citizens, Wausau Common Council Member, Mayor)
State definition of disadvantaged community (include reference)	WI DNR SRF and Intended Use Plan definition ³
Does community meet state definition of disadvantaged community?	HW/ERG are confirming with WI DNR.

¹ The plan is currently being drafted based on the needs identified herein, and will be finalized in coordination with Wausau, following Wausau's review of the TA Needs Assessment.

² Per EPA’s Safe Drinking Water Information System (SDWIS) database.

³ https://dnr.wisconsin.gov/sites/default/files/topic/Aid/loans/intendedUsePlan/SDWLP_SFY2024_IUP.pdf

LSLR Accelerators Pilot Program
Wausau Water Works, WI - TA Needs Assessment and Workplan

<p>Which type(s) of issue(s) are the biggest challenge for community?</p>	<ul style="list-style-type: none"> • Inventory completion, particularly determining which areas to focus on to verify materials. • Lack of public interest in service line replacement, and no current mandatory replacement ordinance. • Rental properties. • Research done by Wausau did not identify any formal local policy (i.e., other than the state-wide ban) prohibiting the use of lead. • Contractor staffing for replacements.
<p>Should this community be referred to another WaterTA program for additional TA?</p>	<p>Not at this time.</p>
<p>Are language interpretation and translation services needed to facilitate effective community outreach and engagement? (include languages needed)</p>	<p>Yes, Spanish and Hmong. There is a significant Hmong population in Wausau, and an active Hmong community center. There is also a significant Hispanic population in Wausau.</p>

System Infrastructure Description – Lead Service Lines

<p>System Name</p>	<p>Wausau Water Works</p>
<p>PWSID</p>	<p>WI7370102</p>
<p>System Type</p>	<p>Community Water System</p>
<p>State Primacy Agency Contact</p>	<p>Kyle Priest, Water Supply Engineer Wi DNR – Drinking Water and Groundwater 715-315-8094 Kyle.Priest@wisconsin.gov</p>
<p>Population served by the utility</p>	<p>39,106⁴</p>
<p>Number of Service Connections</p>	<p>15,643⁵</p>
<p>For CWS only, do multi-family residences comprise at least 20% of the structures you serve?</p>	<p>Unknown, to be confirmed with Wausau.</p>
<p>Treatment System</p>	<p><u>Source Water</u>: Groundwater from four active production wells installed between 1951 and 1988. <u>Drinking water treatment plant (new in Dec 2022)</u>:</p> <ul style="list-style-type: none"> • Packed tower aeration for VOC removal; • Coagulation, flocculation and sedimentation for iron and manganese removal; • Rapid sand filtration for particulate removal;

⁴ Per EPA’s Safe Drinking Water Information System (SDWIS) database.

⁵ Per EPA’s Safe Drinking Water Information System (SDWIS) database.

LSLR Accelerators Pilot Program
Wausau Water Works, WI - TA Needs Assessment and Workplan

	<ul style="list-style-type: none"> • Ion exchange for PFAS removal until granular activated carbon (GAC) system is operational; • Fluoridation; • Silicate corrosion control; and • Chloramine disinfection. <p><u>Storage</u>: six elevated reservoirs</p>
Lead Service Line Inventory Completed?	In progress. An estimated 6,000 properties still need to be verified.
Inventory Summary (if started)	<p>According to 2021 PSC data:</p> <ul style="list-style-type: none"> • Public: 5,401 lead, out of 15,781, • Private: 793 lead, 106 galvanized, out of 3,995
Inventory Documentation	Wausau has service/tap cards and has gone through most, if not all of them. They go back in time, but don't have much information on service line material. They are trying to get that information into GIS.

Current and/or Past Issues

- PFAS and lead are the top two issues for Wausau. Recent PFAS exceedances and new pressures on rate payers over the last few years may be causing some strong feelings/anger among residents.
- Wausau has service/tap cards and has gone through most, if not all of them. The tap cards go back in time, but have limited information on service line material. Wausau has been working to get that information into GIS. Many service lines are still characterized as unknown.
- There is some indication that Wausau stopped approving and using lead in 1968. However, lead service lines were found from the 1970s, so search parameters have been expanded to include the mid-1970s. Wausau's research found no formal local policy prohibiting the use of lead.
- Voluntary support from residents has been low, and Wausau does not currently have a mandatory replacement ordinance. In the past, a lead exceedance succeeded in drawing the public's attention, but recent interest has been limited. Wausau has presented a mandatory ordinance to their commission, but no further action has been taken.
- Wausau Water Works staff have been very busy with the new water plant and PFAS issues, and have limited capacity for additional work.
- Meter replacements have been one opportunity to access homes, and identify service lines, but material shortages have posed challenges obtaining meters.
- There is uncertainty regarding the availability of local plumbers to staff the significant number of replacements planned for the next two fiscal years. Wausau will need to rely heavily on contractor support to accomplish the work, and will take on the responsibility for managing the contracting side of the project.
- Wausau received no WI DNR funding this year. DNR funding will change to partial principal forgiveness, and loans on the private side will need to go through PSC approval. Funding will require a mandatory ordinance that is not currently in place for Wausau.

LSLR Accelerators Pilot Program
Wausau Water Works, WI - TA Needs Assessment and Workplan

Relevant Plans/Initiatives to Address Issues

- LSL Inventory Process – Identify the staff, processes, and methods to develop a LSL Inventory, and minimize the number of service lines classified as ‘unknown’ in that inventory, prior to the regulatory deadline.
 - Wausau has an extensive GIS system, but it is a work in progress. It can accommodate both the public and private side. On both the private side and public side, Wausau knows exactly where service lines come in.
 - Wausau should be able to rely on their GIS system to collect the inventory information, and export it to a format acceptable to WI DNR.
 - Wausau is working to gather relevant information from its billing software (e.g., whether material may be lead, if the property is a rental).
 - Wausau is isolating properties based on the age of homes to start and then may focus on those, selecting a number to verify. Wausau will probably need some assistance to determine which areas to focus on.
 - **Additional training, staff, and methods will be discussed further with Wausau and integrated into the process to complete the LSL Inventory.**
- Historical Record Review for Data Collection and Verification – Identify and prioritize system record review to improve the quality of the LSL inventory, and minimize the number of service lines classified as ‘unknown’.
 - Wausau has started organizing data for its LSL inventory, based on available tap card, billing, and other information.
 - Tap card and other information is being compiled within the GIS system, with support from Wausau’s contractor (CDM Smith).
 - Locations for ongoing Lead & Copper monitoring may provide information on existing lead service lines, and/or areas/neighborhoods where such lines may be more prevalent. Wausau is conducting an optimization study and incorporating a corrosion inhibitor to their treatment train. They are also conducting a corrosion control study with a treatment facility that came online in December. **The first sampling round will be in June, and may provide valuable information for locations with ongoing monitoring.**
 - Other than the state ban on lead solder in 1984, Wausau is not aware of any local, lead-specific regulations.
 - Wausau may have access to other potential water system records (e.g., construction records) and external records that could be utilized to complete the LSL Inventory. **Wausau would welcome a discussion/review of other potential relevant records.**
- Routine Distribution Work Data Collection – Review, develop, update, and implement policies and procedures that take advantage of existing work tasks to acquire service line data for the LSL Inventory.
 - Wausau has started with a LSL Replacement plan, based on DNR guidelines for LSL inventory.
 - The public side has been easier than the private side. As Wausau performs meter replacements, data is being collected based on EPA guidelines, and information is being documented on cards.

LSLR Accelerators Pilot Program
Wausau Water Works, WI - TA Needs Assessment and Workplan

- Routine work can be leveraged through training, standard operating procedures, work orders, and other tools to collect LSL Inventory data in the short-term to inform the initial LSL Inventory and going forward to inform future updates to it.
- Community Engagement for Private Service Line Data Collection – Identify and utilize communication tools available to the water system to enlist customer and community cooperation to acquire LSL Inventory data.
 - Wausau is working with the mayor to outline groups for information distribution and outreach.
 - Various communication methods can be prioritized for their potential to improve the LSL Inventory private service line data collection process when appropriate.
- Capital Project and Other Opportunities – Identify current and future projects that may provide opportunities to collect or improve LSL Inventory data that would not typically be available during routine water system tasks.
 - Wausau will be testing its lead service line replacement program with a pilot this summer. The pilot will include public meetings, development of a right of entry form, and FAQs with translation. The pilot will include a utility-managed contractor.
 - Street reconstruction projects are planned to start in June, and service lines are slated to be replaced in July/August. Pending a final decision, Wausau will fund both the public and private side with a partial loan.
 - As it has over the last few years, the city received ARPA funding for private side LSL replacement this summer, strictly related to street reconstruction projects for 98-99 replacements. Wausau has a five-year street reconstruction plan, including full replacement of utilities. This will include areas of lower-income and environmental justice communities. Approximately 70% of the capital improvement plan work is based on where old utilities are located. Work focus areas have yet to be prioritized. Options include prioritizing areas with old utilities. However, council priorities may take precedent.
 - Wausau could incorporate LSL Inventory considerations to the budget, project design, permitting, and other processes to scan for opportunities to improve the LSL Inventory in the long-term.

LSLR TA Draft Community Workplan

Draft being developed, and will be shared with Wausau once Wausau's needs have been confirmed.

Attachments, as they become available

1. Community/System Map(s) (*no sensitive information should be collected*)
2. Community Technical Assistance Summary Report (Notes & Attendance)
3. Other as appropriate

Department of Public Works & Utilities



Eric Lindman, P.E.
Director of Public Works and Utilities

TO: Wausau Waterworks Commission

FROM: Eric Lindman, P.E.
Director of Public Works & Utilities

DATE: August 7, 2023

SUBJECT: UPDATE: LSL Replacement Plan – Performance Contracting

City staff prepared a Request for Qualifications (RFQ) to solicit Statement of Qualifications (SOQ) from qualified firms who have had experience in establishing performance-based contracting and establishing Community Based Public Private Partnerships (CBP3) to complete infrastructure projects. Community Infrastructure Partners (CIP) was the only firm who submitted a state of qualifications. There was interest from three other professional firms but none of them submitted and SOQ for review.

The SOQ provided by CIP was reviewed and scored by staff and brought to the Board of Public Works (BPW) for consideration to move forward. BPW approved moving forward to work with CIP to begin establishing a scope of work for the project. The first meeting with CIP was held on August 2, 2023.



Wausau Waterworks
1801 Burek Ave
Wausau, WI 54403

Project: Investigative PFAS Testing
Project Number: 2023 WDNR Drinking Water Requirements
Project Manager: Scott Boers

Reported:
7/28/23 7:08

Work Order:
CB08107

Sample Results

Sample: Water Plant EP500
CB08107-01 (DW) Sampled: 07/18/23 11:26

Analyte	Result	Qualifier	LOD	LOQ	MCL	Units	Date Prepared	Date Analyzed	Analyst	Method	Lab Cert Code
Semi-Volatiles											
11-chloroicosafafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		0.30	0.98		ng/L	7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		0.33	1.1		ng/L	7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		0.36	1.2		ng/L	7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
hexafluoropropylene oxide dimer acid (HFPO DA)	ND		0.40	1.4		ng/L	7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	8.4		0.46	1.6		ng/L	7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
n-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.39	1.3		ng/L	7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
perfluorobutanesulfonic acid (PFBS)	0.56	J	0.29	0.98		ng/L	7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
perfluorodecanoic acid (PFDA)	ND		0.32	1.1		ng/L	7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
perfluorododecanoic acid (PFDoA)	ND		0.23	0.75		ng/L	7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
perfluoroheptanoic acid (PFHpA)	4.6		0.43	1.5		ng/L	7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
perfluorohexanoic acid (PFHxA)	4.6		0.46	1.6		ng/L	7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
perfluorohexanesulfonic acid (PFHxS)	0.54	J	0.33	1.1		ng/L	7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
perfluorononanoic acid (PFNA)	0.67	J	0.45	1.5		ng/L	7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
perfluorooctanoic acid (PFOA)	12		0.48	1.6		ng/L	7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
perfluorooctanesulfonic acid (PFOS)	2.3		0.30	0.98		ng/L	7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
perfluorotetradecanoic acid (PFTA)	ND		0.33	1.1		ng/L	7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
perfluorotridecanoic acid (PFTrDA)	ND		0.42	1.4		ng/L	7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
perfluoroundecanoic acid (PFUnA)	ND		0.29	0.98		ng/L	7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
Surrogate: (SURR) C13-PFHxA	88%		Limits: 70-130%				7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
Surrogate: (SURR) C13-HFPODA	88%		Limits: 70-130%				7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
Surrogate: (SURR) C13-PFDA	96%		Limits: 70-130%				7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
Surrogate: (SURR) d5-NEtFOSAA	93%		Limits: 70-130%				7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2

Wastewater Treatment Facility Improvements Project – Engineer During Construction

City of Wausau, Wisconsin

Donohue Project Number 13229

Period | June 11, 2023-July 15, 2023

Invoice 73

Engineer Activities This Period

- Construction administration services related to the remaining project close-out efforts associated with the technical review of contractor shop drawings, responding to contract interpretation questions (RFIs), initiating requests for proposals (RFPs), attending random construction progress meetings, processing work changes to the contract, and contractor monthly payment requests.
- Prepared and submitted Clean Water Fund disbursement request and provided CWF administration.
- The Engineer's application engineering staff continues to fine tune the various systems as unit process systems are being operated.
- Change Order 26 was executed and approved by WDNR.
- Majority of final Certificates of Substantial Completion for those process systems that the Owner has begun to operate have been provided to the Contractor with necessary constraints.
- Continued to address punch list items including the following areas of focus: DG boilers and dryer.
- Continued to assist Owner with WDNR Class A biosolids approval.

Engineer Near-Term Activities

- As the project proceeds to closure, the engineer will continue to provide construction administration services including preparing WCDs, attending random construction progress meetings, processing near final change orders, reviewing contractor payment requests, and providing on-site engineering services as needed.
- Application Engineering programming to fine tune operations.
- Review punch list items as they are completed by the Contractor.
- Provide requested Plant Tour to group of WDNR representatives.

Project Status Report

Wastewater Treatment Facility Improvements Project – Engineer During Construction

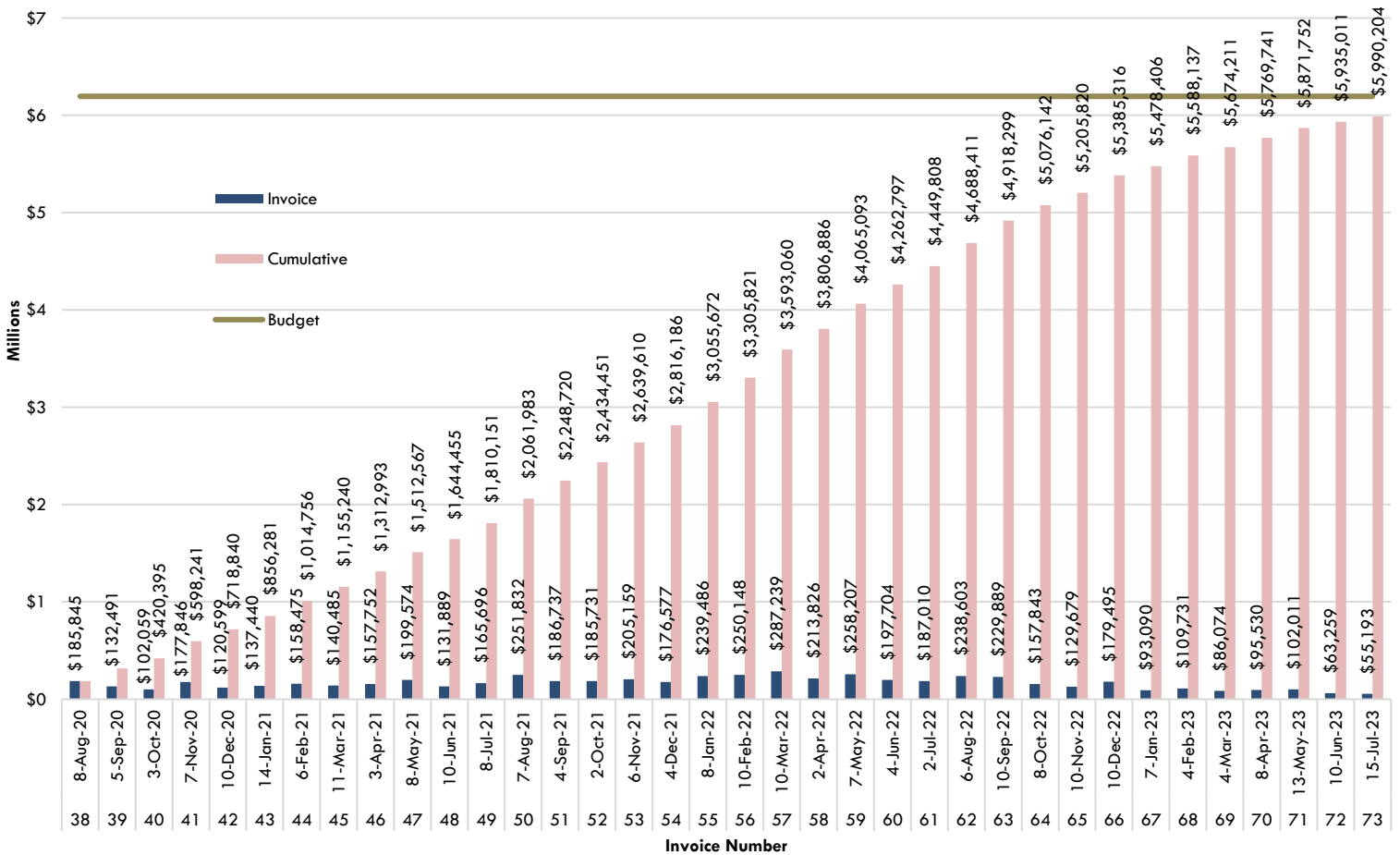
City of Wausau, Wisconsin

Donohue Project Number 13229

Period | June 11, 2023-July 15, 2023
Invoice 73

Project Related Budget Snapshot

Construction Engineering Budget



Project Status Report

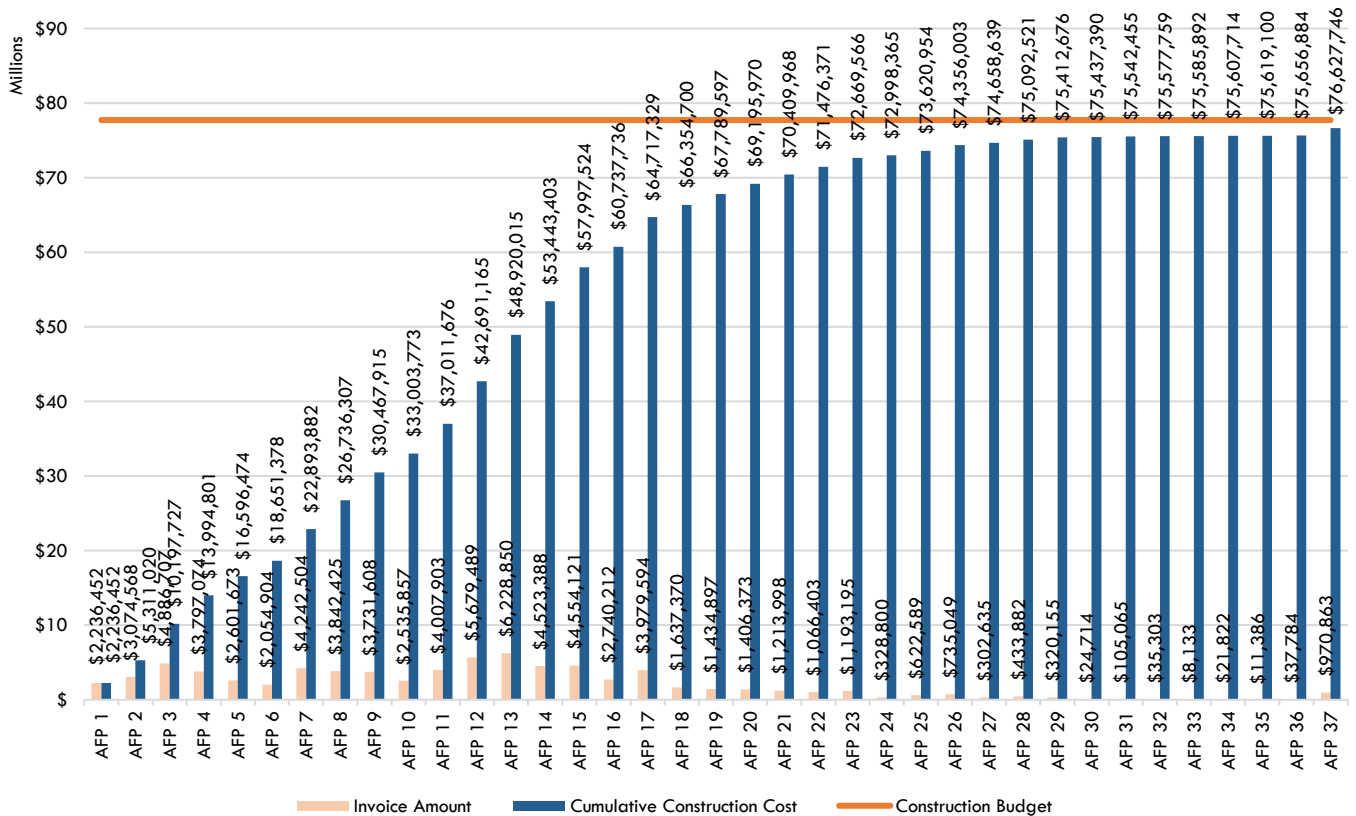
Wastewater Treatment Facility Improvements Project – Engineer During Construction

City of Wausau, Wisconsin

Donohue Project Number 13229

Period | June 11, 2023-July 15, 2023
Invoice 73

Construction Budget: Pay Applications Approved by Engineer



Project Status Report

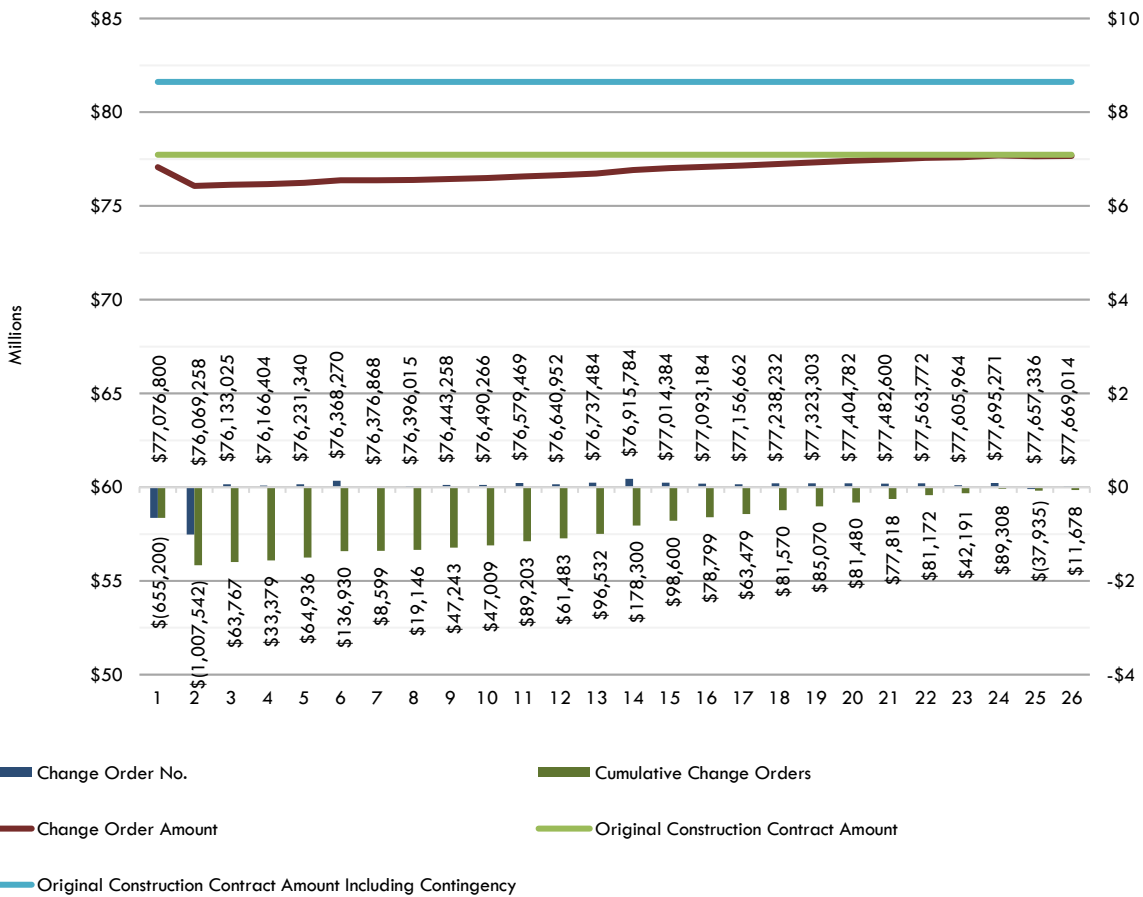
Wastewater Treatment Facility Improvements Project – Engineer During Construction

City of Wausau, Wisconsin

Donohue Project Number 13229

Period | June 11, 2023-July 15, 2023
Invoice 73

Overall Project Budget



Budget Notes:

1. No budget issues at this time.

Remarks

1. Construction is complete except for punch list corrective work; therefore, construction photographs are no longer beneficial to document project progress.

INVOICE



3311 Weeden Creek Road
Sheboygan, WI 53081
Phone: 920-208-0296
www.donohue-associates.com

Invoice To:

City of Wausau
Attn: Ben Brooks
407 Grant Street
Wausau, WI 54403

Invoice Date:

July 20, 2023

Donohue Project No.:

13229

Invoice No:

13229-73

Project Manager:

Mike Gerbitz

Terms:

Net 30 Days

Billing Period:

06/11/23 - 07/15/23

Project Description:

Wastewater Facilities Plan & Design

Your Authorization:

Engineering Services Agreement, Signed 03/29/17
Amendment No. 1, Signed 06/28/18
Amendment No. 2, Signed 03/05/19
Amendment No. 3, Signed 01/27/20
Amendment No. 4, Signed 05/07/20
Permit Review Fees Payment Request, 02/27/20

Compensation:

Time and Expense	\$	129,220.00
Time and Expense	\$	984,565.00
Time and Expense	\$	3,323,900.00
Time and Expense	\$	4,351,831.00
Time and Expense	\$	1,843,325.00
Permit Review Fees	\$	12,534.50
Total	\$	10,645,375.50

Billing Summary:

Total Charges to Date	\$	10,441,438.94
Charges Previously Billed	\$	10,386,246.22
Current Charges	\$	55,192.72

Summary of Current Charges

Labor (280.5 hours)	\$	52,777.50
Reimbursable Expenses	\$	241.22
Permit Review Fees	\$	-
Subconsultants	\$	2,174.00
Total	\$	55,192.72

Current Charges Due	\$	55,192.72
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Please Remit to:

Donohue & Associates, Inc.
3311 Weeden Creek Road
Sheboygan, WI 53081
Phone: 920-208-0296
Fax: 920-208-0402

Aged Receivables

<u>Current</u>	<u>31 - 60 Days</u>	<u>61 - 90 Days</u>	<u>91 - 120 days</u>	<u>≥120 days</u>
\$55,192.72	\$63,258.69	\$102,011.28	\$96,529.71	\$10,240.73

WAUSAU WATER WORKS - DRINKING WATER DIVISION									August 2023
CAPITAL PLAN - CAPITAL ASSETS 2023-2028									
IMPROVEMENTS/PROJECTS	COST EST 2023-2028	FUND SOURCE	2023	2024	2025	2026	2027	2028	Comments
WATER TREATMENT PLANT									
TOWERS/ RESERVOIRS/ BOOSTER STATIONS									
GENERATOR - ONSITE (W. WAUSAU)	240,000	ARPA		240,000				0	0
SCADA UPGRADES - BOOSTER STNS	360,000	BORROW			360,000				
Elm St. Booster Station Reconstruction	580,000					80,000			500,000
MONROE BOOSTER STATION RECONSTRUCTION	560,000	BORROW		60,000		500,000			
SUBTOTAL	\$1,740,000		\$0	\$300,000	\$360,000	\$580,000	\$0	\$500,000	
WELLS									
FUTURE WELL	650,000	BORROW					650,000		0
SUBTOTAL	\$650,000		\$0	\$0	\$0	\$0	\$650,000	\$0	
TOOLS, SHOP AND GARAGE									
BACKHOE/ WHEELED EXCAVATOR	\$485,000	BORROW		160,000			325,000		0
Valve turner/vac	100,000	BORROW							100,000
SUBTOTAL	\$585,000		\$0	\$160,000	\$0	\$0	\$325,000	\$100,000	
DISTRIBUTION/SUPPLY MAINS									
STREET PROJECTS									
Emerson Street, EauClaire to Kent	55,000	BORROW		55,000					
Mount View Blvd., EauClaire to Kent	48,000	BORROW		48,000					
Pied Piper Lane, EC to Kent	70,000	BORROW		70,000					
Eau Claire BLVD	822,000	BORROW		822,000					
10th Ave (Bridge to West Wausau)	420,000	ARPA	420,000						ARPA Funded
Grant St (6th St to 7th St)	100,000	ARPA	100,000						ARPA Funded
Stark St (5th St- 12th St)	1,200,000	BORROW			1,200,000				
Hennrietta St (Bellis St - 13th St)	320,000	ARPA	320,000						ARPA Funded
W. Randolph (Burek to Merrill)	350,000	BORROW				350,000			
S. 11th Ave (W. Thomas to Flieth)	180,000	BORROW				180,000			
North 17th Ave, Stewart to Elm	220,000	TID	220,000						TID Funded
Short Street	77,000	BORROW		77,000					
SUBTOTAL	\$3,862,000		\$1,060,000	\$995,000	\$1,200,000	\$530,000	\$0	\$0	
GENERAL DISTRIBUTION PROJECTS									
Stewart Ave Looping-12"-60/68 Ave.	315,000	TID		315,000					TID Funded
Looping main Stettin Dr. Stewart to the Park	114,000	BORROW		114,000					
Looping Main Stettin Drive, 48th Ave to 52nd Ave	260,000	BORROW					260,000		0
14" WM Replace (Elm St; 14th- 17th Ave & 17th Ave; Elm St to HWY)	450,000	TID				450,000			TID Funded
LSL Replacements (Public Side)	0								Moved to Operating
14" WM Extension Bugbee & Campus	0	ARPA or IJA							
Misc Extensions	0								
SUBTOTAL	\$1,139,000		\$0	\$429,000	\$0	\$450,000	\$260,000	\$0	
TOTAL CAPITAL	\$7,976,000		\$1,060,000	\$1,884,000	\$1,560,000	\$1,560,000	\$1,235,000	\$600,000	
BORROW			\$0	\$1,406,000	\$1,560,000	\$1,030,000	\$1,235,000	\$100,000	
CUMULITIVE CAPITAL			\$1,060,000	\$2,944,000	\$4,504,000	\$6,064,000	\$7,299,000	\$7,899,000	

WAUSAU WATER WORKS - WASTEWATER DIVISION									August 2023
CAPITAL PLAN - CAPITAL ASSETS 2023-2028									
IMPROVEMENTS/PROJECTS	COST EST 2023-2028	FUND SOURCE	2023	2024	2025	2026	2027	2028	Comments
WWTF IMPROVEMENTS:									
Headworks upgrade:	800,000	ARPA	800,000						06/30/22: ARPA funded & possible CWF. Alt. 3B proj cost= \$3.75M
Cellular Amplification in underground tunnels:	300,000	BORROW	300,000						7/25/23: Postpone until CCIT activates all WiFi at plant. (May purchase skidsteer/blower/sweeper and Vertical Jib lift instead)
Sludge Barn floor replacement:	250,000	BORROW						250,000	7/25/23: Postpone, new asphalt overlay done in 2022
SUBTOTAL	1,350,000		1,100,000	-	-	-	-	250,000	1,100,000
SEWER LIFT STATIONS									
Lift Station Engineering Report & Design:	400,000	BORROW		150,000		250,000			Set of 4 Lift Sttns per study. Report, design & preconst mtgs.
Airport Lift Station upgrade:	700,000	BIL			700,000				2024 Additional Engineering to relocate of Crocker St. lift station
Greenwood Hills & Northwestern LS upgrades:	400,000	BORROW	400,000						Possible BIL Funding
Cherry & Crocker St. lift station upgrades:	1,700,000	BIL		1,700,000					Total Project Cost= \$921,525.92
24th & 44th Ave LS Upgrades	1,100,000	BIL					1,100,000		Possible BIL or WDNR CWF Funding
Industrial Park LS Parallel Force Main	800,000	BORROW						800,000	Possible BIL Funding
32nd Ave lift station upgrade:	600,000	BIL				600,000			07/26/22 Moved 2027 to 2028, inspect condtn of existing FM
SUBTOTAL	5,700,000		400,000	1,850,000	700,000	850,000	1,100,000	800,000	4,900,000
TRANSPORTATION/EQUIPMENT									
Dump truck or Sludge Hauling Eqpt.	240,000	BORROW			120,000			120,000	Keep until Class A sludge destination is known
TV truck, lateral launch/Software & Trimble GPS	550,000	BORROW		550,000					Order 2023 & Expense 2024. Total cost= \$550,000. includes service pkg.
Bobcat toolcat	120,000	BORROW				120,000			
SUBTOTAL	910,000		-	550,000	120,000	120,000	120,000	-	910,000
COLLECTION INFRASTRUCTURE									
Street Projects									
Pied Piper Lane, EC to Kent	30,000	BORROW		30,000					
Eau Claire BLVD	280,000	ARPA or IJA		280,000					12/28/21 IJA GRANT?
North 10th Ave (Oak St. to West Wausau Ave.)	320,000	ARPA	320,000						ARPA Funded
Grant St (6th St to 7th St)	85,000	ARPA	85,000						ARPA Funded
Stark St (5th St- 122th St)	800,000	BORROW			800,000				
Hennrietta St (Bellis St - 13th St)	200,000	ARPA	200,000						ARPA Funded
Fulton Street (1st St to 6th St)	225,000	ARPA or IJA			225,000				12/28/21 IJA GRANT?
North 17th Ave, Stewart Ave to Elm St.	200,000	TID	200,000						TID Funded
SUBTOTAL	2,140,000		805,000	310,000	1,025,000	-	-	-	2,140,000
Proposed Developments/Extensions									
Northwestern Avenue (Higgenbotham)	120,000	BORROW				120,000			05/17/21 Moved from 2022 to 2026
SUBTOTAL	120,000		-	-	-	120,000	-	-	
Sewer Collection System Projects									
Stewart Ave Force Main & Sewer Improvement	1,700,000	TID	200,000	1,500,000					TID Funded
River Crossing (Washington St Siphon)	-	BORROW							
Unanticipated Sewer Projects	900,000	BORROW	150,000	150,000	150,000	150,000	150,000	150,000	
SUBTOTAL	2,600,000		350,000	1,650,000	150,000	150,000	150,000	150,000	
TOTAL PLANNED CAPITAL	12,820,000		\$2,655,000	\$4,360,000	\$1,995,000	\$1,240,000	\$1,370,000	\$1,200,000	
TOTAL CAPITAL BORROWING:			\$850,000	\$2,860,000	\$1,995,000	\$1,240,000	\$1,370,000	\$1,200,000	TID & ARPA funded projects deducted from Total Planned Capital, not IJA Grant projects
CUMULATIVE CAPITAL			\$2,655,000	\$7,015,000	\$9,010,000	\$10,250,000	\$11,620,000	\$12,820,000	



TO: Human Resources

FROM: Eric Lindman, P.E.
Director of Public Works & Utilities

DATE: August 14, 2023

SUBJECT: Wausau Water Works – Certification Incentive Pay

Over the past 2-3 years the water and sewer utility has struggled to recruit and maintain employees. The last wage study completed in 2018 and implemented in 2019 created issues that were not conducive to properly maintaining a utility work force. Some of the critical issues that were created with the past wage study are as follows:

1. No advancement possible in the pay grades
2. Pay scale established for starting wages was well below market for the job descriptions and duties. Due to this low pay we have reduced minimum qualifications as low as possible in order to receive qualified applicants.
3. Once employees are hired there is no advancement in pay grades unless there is an open position for a promotion.
4. There are no incentives or pay grade advancement for employees earning certifications and credentials.

It is proposed the utility take a two phased approach to address staffing issues at water and wastewater.

Phase I (establish in 2023) – Establish incentive pay for employees earning certifications and education certificates that are significantly beneficial to Wausau Water Works.

Phase II – (establish in 2024) – Establish job descriptions that allow employees to advance pay grades as the employee earns competencies and proves their knowledge of competencies earned.

This memo and supporting documentation proposes to implement Phase I of the above approach by establishing incentives to encourage employees to earn their certifications and successfully complete training certificates to enhance their knowledge of their positions. For the water and wastewater industry there are various certifications and training certificates, some are required by the WDNR and others are beneficial to the organization. The utility would like staff to earn and maintain certifications to have a workforce that is resilient and knowledgeable. These training certificates and certifications will need to be earned by each employee and maintained. It is the intent of the utility to pay for the training, testing fees and continuing education credits for earning and maintaining these certifications.

The tables below show the various certifications and trainings for water and wastewater which are beneficial to Wausau's utility. These are broken out for drinking water and wastewater.

Wastewater - Certifications & Sub-classes	
Sub-class/Certification	Certification Description
A-1	Biological treatment
B	Solids Separation
C	Solids Treatment
D	Disinfection
P	Nutrient Removal
L	Laboratory
SS	Collection System
NA	Subsurface Utility Locating
NA	Sewer Cleaning 102
NASSCO Certifications	Pipeline Assessment Certification Program (PACP)
NASSCO Certifications	Lateral Assessment Certification Program (LACP)
NASSCO Certifications	Manhole Assessment Certification Program (MACP)
NASSCO Certifications	Inspector Training Certification Program - CIPP (ITCP-CIPP)
NASSCO Certifications	Inspector Training Certification Program - Manhole Rehabilitation (ITCP-MH)

Drinking Water - Certifications & Sub-classes	
Sub-class/Certification	Certification Description
D	Distribution System
G	Groundwater
I	Iron Removal
S	Surface Water
V	VOC
Z	Zeolite Softening
SPS	Cross Connection TR

The sub-classes and trainings are the basis the utility is proposing to use for creating employee incentive pay. Employees will be required to successfully complete the sub-class or training and provide proof prior to receiving their incentive pay. To maintain and keep their incentive pay the employee will need to maintain their certifications through continued education.

The below tables are the proposed incentive pay for employees who successfully complete the trainings and earn their certifications and certificates. This special education and skills are extremely beneficial for the utility to have a well-educated workforce with the skills to perform tasks/duties at every level of operations. Employees who have these certifications should be compensated for achieving this level of specialized education and certifications.

Wastewater Collection System Employees - Certification Pay			
	Description/Certification/Sub-class	¹Grade level	Pay Incentive (per hour)
Upon Completion of:	Subsurface Utility Locating	Basic	\$0.75
	Sewer Cleaning 102		
Upon Completion of:	SS	Basic	\$0.50
	PACP		
	LACP		
	MACP		
Upon Completion of:	ITCP-CIPP	NA	\$0.25
	ITCP-MH		
	Total =		\$1.50
Wastewater Treatment System Employees - Certification Pay			
	Description/Certification/Sub-class	¹Grade level	Pay Incentive (per hour)
Upon Completion of:	A-1	Basic	\$0.50
	B		
	C		
Upon Completion of:	D	Basic	\$0.50
	P		
	L		
Upon Completion of:	SS	Basic	\$0.25
Upon Completion of:	All Classes	Advanced	\$0.25
	Total =		\$1.50

¹Basic Level - Sub-class exam successfully completed and 1-year of satisfactory experience in operations

¹Advanced Level - Basic level plus Advanced WW Treatment Plant Operator Certification earned

Drinking Water System Employees - Certification Pay			
	Description/Certification/Sub-class	¹Grade level	Pay Incentive (per hour)
Upon Completion of:	D	1	\$0.40
	G		
Upon Completion of:	SPS	NA	\$0.30
Upon Completion of:	I	T	\$0.10
		1	\$0.10
Upon Completion of:	V	T	\$0.10
		1	\$0.10
Upon Completion of:	Z	T	\$0.10
		1	\$0.10
Upon Completion of:	S	T	\$0.20
	Total =		\$1.50

¹Grade T (Operator-in-Training) — Pass waterworks subclass exam(s)

¹Grade 1 — Pass the appropriate sub-class exam(s), plus one year of satisfactory experience



City of Wausau

Water Department Incentive Pay

July 31, 2023

In Wisconsin, municipal waterworks systems are by code required to be operated by state certified operators. The certification program ensures professional operators have adequate training to perform the necessary tasks at their facilities. Although only one “operator in charge” is required to be designated for each system, there are many benefits to other staff being certified. Not only are educated employees more engaged and vested in the organization but they also make better decisions and are able to communicate a greater understanding to our customers. Other objectives such as employee progression and succession are also accomplished through education and greater understanding.

To meet these objectives and realize these benefits, it is fitting to incentivize specific certifications relevant to waterworks operators. Certifications included in the incentive program will include WDNR Certifications; Distribution, Groundwater, Iron Removal, VOC/GAC, Zeolite Softening and Surface Water and Wisconsin Department of Safety and Professional Services; Cross Connection Control Tester Registration.

Subclass	Name	Description
D	Distribution	Containing a distribution system
G	Groundwater	Utilizing a groundwater source
I	Iron removal	Providing iron removal by oxidation and filtration
S	Surface water	Utilizing a surface water source
V	VOC	Providing special treatment such as, but not limited to, air stripping, granular activated carbon or others
Z	Zeolite softening	Providing zeolite softening or specific contaminant removal by resins.
SPS	Cross Connection TR	theory of cross connection control, the operation, testing and maintenance of cross connection control assemblies, and the national standards for these cross-connection control assemblies

Training/Study Time: Prior approval is required for any time spent at training or studying to be “compensable time.”

- The training cost will be covered by the city for any staff interested in obtaining these certifications. This may include conferences, regional training programs, online training, or self-study from textbooks and/or manuals.
- Online training may be scheduled during the workday, with the approval of the supervisor and based upon the department workload and as budget permits.
- Training provided by any outside agency will be scheduled evenly among the staff and as the workload and budget permits.
Study time for the certification exams must be done outside of work hours and will not be considered as compensable time.

Costs for WDNR exams will be reimbursed to employees after successful completion of the subclass exam.

Municipal waterworks operators need continuing education to maintain their certifications. This continuing education requirement is designed to help operators keep current on new requirements and technical innovations. Continuing education also helps operators acquire additional knowledge and skills.

Continuing Education Units (CEU’s) – employees will be required to track their own CEU’s and ensure they meet the requirements set by the State. The city will cover the cost to attend trainings and conferences that provide CEU’s in order for the employee to maintain current with certifications as workload and budget permits.

Certification Incentive Pay as follows:

Distribution and Groundwater Grade 1	\$0.40 per hour
SPS Cross Connection TR	\$0.30 per hour
Iron Removal Grade T/Grade 1	\$0.10/\$0.20 per hour
VOC, Specialized Treatment Grade T/Grade 1	\$0.10/\$0.20 per hour
Zeolite Softening Grade T/Grade 1	\$0.10/\$0.20 per hour
Surface Water Grade T	\$0.20 per hour

GRADE LEVELS

The requirements for waterworks operator certification for each grade are:

Grade T (Operator-in-Training) — Pass waterworks subclass exam(s).

Grade 1 — Pass the appropriate subclass exam(s), plus one year of satisfactory experience in the operation of a waterworks plant subclass(es).



City of Wausau
Wastewater Department Incentive Pay
August 1, 2023

In Wisconsin, wastewater treatment plants are assigned a basic or advanced level classification rating. WDNR subclasses are also assigned to wastewater treatment plants that are specific to the processes to that plant. Wisconsin Administrative Code NR 114.56 and 114.57 requires that one designated operator-in-charge be fully certified at the plant in all specific levels and subclasses. Each collection system in the state of Wisconsin must also have a designated person certified with the Sanitary Sewage Collection System subclass. It is highly recommended that a contingency succession plan be in place in the event of the loss of the Operator In Charge (OIC) to ensure the continued proper operation and maintenance of the plant. The following certification incentive plan will ensure the professional development of staff and that each have the proper training and education to perform the necessary tasks required at the plant.

There are many benefits to having staff that are fully certified. Not only are staff more educated, but they are more engaged and vested within the organization making better decisions. Staff communicate at a higher level to the public, customers and colleagues. Professional development in a whole creates staff progression and aides in succession planning.

To meet these objectives and realize these benefits, it is fitting to incentivize specific certifications relevant to the Wausau Waterworks - Wastewater staff.

Wausau Waterworks – Wastewater Incentive Plan

WDNR Wastewater Certification Incentive/ Wastewater Staff Only: It is proposed to establish an incentive for all eligible Wastewater Treatment and Collection Staff. All staff must successfully pass the following WDNR Certification Subclasses. (1) Category: Biological Treatment – subclass letter: **A-1**, Suspended Growth Processes. (2) Category: Solids Separation, subclass letter **B**, Solids Separation. (3) Category: Solids Treatment, subclass letter: **C**, Biological Solids/Sludge Handling, Processing, and Reuse. (4) Category: Disinfection subclass letter **D**. Disinfection. (5) Category: Nutrient Removal, subclass letter **P**, Total Phosphorus. (6) Category: Laboratory, subclass letter: **L**, Laboratory. (7) Category: Collection System, subclass **SS**, Sanitary Sewage Collection System.

Wastewater Treatment Plant Staff, pursuing certification, must successfully pass the following WDNR certification subclasses to be eligible for the following incentive pay steps. Those employees holding WDNR certifications prior to the effective date of this incentive plan will be eligible immediately to receive the incentive pay for those certifications they currently have.

1. Plant Staff successfully completing the A-1, B and C subclasses at the Basic grade level, will be eligible to receive an \$0.50/hour pay increase added to their current hourly wage scale base pay.
2. Plant Staff successfully completing the D, P and L subclasses at the Basic grade level, will be eligible to receive an additional \$0.50/hour pay increase added to their current hourly wage scale base pay.
3. Plant Staff successfully completing the SS subclass at the basic grade level, will be eligible to receive an additional \$0.25/hr increase added to their current hourly wage scale base pay.
4. Plant Staff successfully completing the **Advanced** level certification, will be eligible to receive an additional \$0.25/hour pay increase added to their current hourly wage scale base pay.
5. Plant Staff must maintain the certification levels listed above to continue receiving the incentive pay.

WDNR Wastewater Certification and Training Certificate Incentive/ Wastewater Collections System Staff Only:

It is proposed to establish an incentive for all eligible Collections System Staff. All Staff must successfully pass the following WDNR Certification Subclass and NASSCO Certification Courses. (1) Subsurface Utility Locating course. (2) Sewer Cleaning 102 course. (3) WDNR Collection System, subclass: **SS**, Sanitary Sewage Collection System. (4) NASSCO Pipeline Assessment Certification Program (PACP). (5) NASSCO Lateral Assessment Certification Program (LACP). (6) NASSCO Manhole assessment Certification Program (MACP). (7) Inspector Training Certification Program for cured-in-place pipe installation (ITCP-CIPP), and for manhole rehabilitation.

Wastewater Collection System staff pursuing WDNR Certification or NASSCO Certification Staff, must pass the following WDNR exam and NASSCO certification levels to be eligible for the following incentive pay:

1. Collection System Staff successfully completing the Subsurface Utility Locating and Sewer Cleaning 102 courses will be eligible to receive an \$0.75/hour pay increase added to their current hourly wage scale base pay.
2. Collection System Staff successfully completing the WDNR Subclass SS certification at the basic level and successfully completing the NASSCO PACP, LACP and MACP courses will be eligible to receive an additional \$.50/hr pay increase added to their current hourly wage scale base pay.
3. Collection System Staff successfully completing the NASSCO ITCP-CIPP and ITCP-MH courses will be eligible to receive an additional \$0.25/hr pay increase added to their current hourly wage scale hourly base pay.
4. Collection System Staff must maintain the certification levels to continue to receive the incentive pay.

Training/Study Time: Prior approval is required for any time spent at training or studying to be “compensable time.”

- The training cost will be covered by the city for any staff interested in obtaining these certifications. This may include conferences, regional training programs, online training, or self-study from textbooks and/or manuals.
- Online training may be scheduled during the workday, with the approval of the supervisor and based upon the department workload and as budget permits.
- Training provided by any outside agency will be scheduled evenly among the staff and as the workload and budget permits.
- Study time for the certification exams must be done outside of work hours and will not be considered as compensable time.
- The city will cover the cost of each subclass and training course, as workload and budget permits. The city will only provide two opportunities for the employee to pass each **Basic** and NASSCO exam. Any future attempts of that exam will be at the cost to the employee.
- The City will cover the cost of the Advanced Wastewater Exam and application fee, which can be taken to achieve points toward the Advanced level certification (see chart

on page 5). The city will only provide one opportunity to pass the Advanced level exam. Future attempts of the Advanced level exam will be at the cost to the employee.

Continuing Education Units (CEU's) – employees are required to track their own CEU's to ensure they meet the requirements set by the State. The City will cover the cost to attend trainings and conferences that provide CEU's in order for the employee to maintain current with certifications as workload and budget permits.

NASSCO TRAINING:

NASSCO Training and Certification covers the assessment, maintenance, rehabilitation (pipe and manhole), and emerging technologies of underground wastewater infrastructure. NASSCO's Pipeline Assessment Certification Program (PACP) allows field workers to use a common language to classify conditions and record their level of severity. These results are then used to determine the best course of action to maintain or rehabilitate a compromised pipe, or section of pipe. With PACP as a prerequisite, laterals and manholes may also be assessed using NASSCO's Lateral Assessment Certification Program (LACP) and Manhole Assessment Certification Program (MACP). NASSCO's ITCP training and certification program provides comprehensive learning and tools to understand and inspect trenchless pipeline renewal technology. NASSCO offers this program for cured-in-place pipe (CIPP) and manhole rehabilitation, with other technologies such as grouting currently being developed. NASSCO'S Sewer Cleaning 102 covers safety and best practices for operation of high pressure jetters and combination trucks. This course also covers pneumatic bypass plugs and how to safely use them.

WI Wastewater Operator Certifications - Subclasses

Current WI certifications that apply to Wausau Wastewater are highlighted

Wastewater treatment plants are assigned a basic or advanced classification rating. Subclasses are also assigned to wastewater treatment plants that correspond to the processes used at the plant. Each plant must have a designated operator-in-charge certified at the plant class level and in the same subclasses as the processes used at the plant.

Category	Subclass Letter	Subclass Name	Description
Biological Treatment	A1	Suspended Growth Processes	Activated Sludge and variants
	A2	Attached Growth Processes	Trickling filters, RBCs and biotowers
	A3	Recirculating Media Filters	
	A4	Ponds, Lagoons, and Natural Systems	
	A5	Anaerobic Treatment of Liquid Waste	High strength liquid waste treatment system
Solids Separation	B	Solids Separation	Clarifiers, membranes, filters, tertiary phosphorus removal, etc.
Solids Treatment	C	Biological Solids/Sludge Handling, Processing, and Re-use	Aerobic and anaerobic digestion, thickening, dewatering, land application
Disinfection	D	Disinfection	Chlorination, ultraviolet radiation, ozone
Laboratory	L	Laboratory	Registered or certified on-site laboratories
Nutrient Removal	N	Total Nitrogen	
	P	Total Phosphorus	
Collection System	SS	Sanitary Sewage Collection System	Effective January 1, 2023
Special	U	Unique Treatment Systems	Unique, special treatment plants that use biological, chemical or physical methods

Levels

The requirements for wastewater operator certification for each level are:

- **Operator-in-Training (OIT):** Pass Basic General Wastewater Exam* and Basic Subclass Exam
- **Basic:** One year of subclass specific experience
- **Advanced:** Obtain 10 advanced points and submit an advanced certification application

*Note: The Basic General Wastewater Exam is not required for the Collection System certification or the Special U certification.

Advanced Certification

10 points total is required to obtain advanced level certification. At least 4 of the points must be obtained through hands on experience; the operator must have at least 4 years of hands-on experience in order to apply for advanced certification. A maximum of 6 years of hands-on experience can be used towards points. An [Advanced Wastewater Treatment Plant Operator Certification Application](#) must be submitted, along with the appropriate application fee.

Type	Point Method	Points	Minimum Hours
Experience	4 years hands-on	4	4,000
	5 years hands-on	5	5,000
	6 years hands-on	6	6,000
Degree	Undergrad or Graduate Degree	6	At least 240 hours wastewater related courses
	Water/Wastewater associate degree	6	N/A
Apprenticeship	Completion of State Approved Apprenticeship Program	6	N/A
Exam	100 Question Multiple Choice Exam	4	N/A
		2	80
Advanced Coursework	Pre-approved by the DNR and on list of approved courses	1.5	60
		1	40
		0.5	20

Advanced coursework must be from the [approved advanced coursework list](#) in order to be eligible for advanced certification points. This list is updated September 1st of every year.

There are numerous combinations to obtain 10 points. At least 4 years of hands-on experience is a requirement for all. <https://dnr.wi.gov/regulations/opcert/wastewater.html>

Non-Exempt Employees that receive incentive pay and staff that have reached the highest incentive step level of the incentive plan, will receive annual wage adjustments based solely on the employees current hourly rate of pay on the wage scale and not the total hourly plus incentive pay sum. Future wage adjustments will occur on the employees six-month review or annual anniversary date and dependent on a successful performance review.

Exempt Wastewater Supervisor that has reached Step 4 and Exempt Collections Supervisor that has reached Step 3 of the incentive plan are only eligible to receive annual wage adjustments upon the annual anniversary date of that employee with a successful performance review.