

REPOR

WATER AND WASTEWATER TASK FORCE

SEPTEMBER, 2024

Table of Contents

Executive Summary	02
Background	03
Task Force Members	06
Terms of Reference	07
Summary of Meetings	09
Meeting Minutes	10
Recommendations	17
Appendix 'A'	25
Appendix 'B'	161

Executive Summary

The Water & Wastewater Task Force was formed by the Council of the Corporation of the Township of Whitewater Region in response to increasing water and wastewater rates and the affordability constraints faced by many residents. Over the course of its mandate, the Task Force conducted a thorough evaluation of Whitewater Region's water and wastewater systems, focusing on their operational efficiency, financial sustainability, and long-term viability. The Task Force's focus was driven by the need to ensure that these essential services remain reliable, affordable, and capable of meeting the community's current and future needs.

The Task Force convened seven times, comprising of six sessions and one tour of water and wastewater treatment plants. It engaged with a broad range of stakeholders, including municipal staff and external experts, to gather data, insights, and perspectives. This collaborative approach was vital in developing 45 recommendations addressing water quality, wastewater system capacity, financial implications, and rate structure. Key recommendations in the report include immediate actions such as enhancing public education, improving communication during water-related incidents, creating by-laws, exploring alternative funding options, investigating metered rate structures and flat-rate classes, and undertaking an independent audit/third-party review of the Cobden Wastewater Treatment upgrade project. These are complemented by medium and long-term strategies designed to optimize system operations, ensure financial stability, and incorporate innovative solutions like energy efficiency measures and revenue diversification opportunities.

The Task Force also placed a strong emphasis on fairness and equity, considering the impacts of rate structures on different customer segments and striving to balance financial sustainability with affordability. The recommendations call for a transparent and inclusive approach to decision-making, ensuring that the community remains informed and engaged in the management of water and wastewater services.

In summary, the Task Force's report provides a clear and actionable roadmap to inform users and provide recommendations and advice to Council relating to operating and affordability of water and wastewater systems in the Township of Whitewater Region. The recommendations address immediate challenges while laying the groundwork for sustainable growth and long-term resilience. By following this roadmap, the municipality will be better equipped to provide highquality, reliable services that protect public health, support economic development, and safeguard the environment

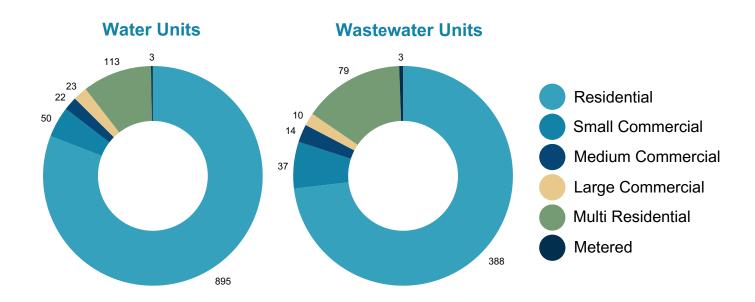
Background

The Township of Whitewater Region operates and maintains three drinking water systems in Cobden, Beachburg, and Haley Townsite and one wastewater system in the village of Cobden. Water and wastewater treatment plants, water distribution systems, and the wastewater collection system are owned by the Township and operated under contract by the Ontario Clean Water Agency (OCWA).

The three drinking water systems and the wastewater system serve 947 customers and 425 customers respectively, as of September 2024. The breakdown of customers for each system is as follows:

- Haley Drinking Water System: 34
- Beachburg Drinking Water System 458
- Cobden Drinking Water System: 455
- Cobden Wastewater System: 425

The rate structure for water and wastewater is flat rate except for 3 metered units in the village of Cobden. The flat rate structure consists of 5 categories: residential, multi residential, small, medium and large commercial.



A harmonized water rate was introduced in 2020 to combine all water systems operating and capital as recommended in the 2019 Water and Wastewater Rate Study prepared by Watson & Associates Economists Ltd.

The Utility Billing & Collection Policy was updated in December 2019 to bill utility charges every other month starting in 2020. This change in billing frequency helped the Township maintain a consistent cash inflow from utilities and assisted in lowering arrears.

The 2019 Water and Wastewater Rate Study recommended a 10-year rate forecast based on net expenditures (operating, future capital replacement, and debenture) divided by the weighted number of forecasted customers. The rate study projected a 122%, or \$896, increase in the annual residential water bill over the 10-year period, rising to \$1,631 by 2029. The wastewater bill for the same period is forecasted to reach \$2,196, an increase of \$1,275, representing a 138% rise from 2019.

At the Council meeting on September 5, 2023, Anne Guest, a resident of the Village of Cobden, presented to Council concerns about the increasing water and wastewater rates and affordability challenges faced by many residents. With the support of concerned citizens of Cobden, Anne provided an overview of her delegation request, stating that "several home and business owners in Cobden would like the opportunity to address the excessive increase in our water/wastewater bills over the past three years, as well as the proposed increase to come. We would like to discuss other options for repayment of the wastewater treatment plant upgrades to avoid further financial distress for the members of our community."

At the October 18, 2023, Council meeting, Council received a presentation from the Township's Public Works Manager regarding water and wastewater systems, the Cobden Wastewater Treatment Plant, user fees, and next steps. At the same meeting, Council passed a motion to:

- 1. Issuance of letters to the Association of Municipalities of Ontario (AMO) and the Rural Ontario Municipal Association (ROMA) outlining the affordability challenges relating to Whitewater Region's water and wastewater rates.
- Request a joint meeting with Cheryl Gallant, MP Renfrew Nipissing Pembroke, John Yakabuski, MPP - Renfrew - Nipissing - Pembroke, and County of Renfrew Warden Peter Emon outlining the affordability challenges relating to Whitewater Region's water and wastewater rates.
 - a. Issue a request via Cheryl Gallant to request a delegation of the Minister of Infrastructure Canada requesting additional funding to subsidize the total cost of wastewater treatment plant reconstruction.
 - b. Issue a request via MPP John Yakabuski for a joint or individual delegations with the Hon. Kinga Surma, Minister of Infrastructure, and Hon. Andrea Khanjin, Minister of Environment, Conservation and Parks, requesting additional funding to subsidize the total cost of wastewater treatment plant reconstruction.

3. Direct staff to provide a report on options relating to efficiencies and/or revenue generation (i.e. water meters, septage treatment, funding model, OCWA Optimization, etc.)

Mayor Neil Nicholson issued a notice of motion at the December 6, 2023, Council meeting, supporting the investigation of unaffordable water and wastewater rates. Council passed the notice of motion to support the following:

- 1. Advocate to the County of Renfrew
 - a.to make County Council aware that rural and small urban water and wastewater systems are financially unsustainable and seek a resolution to support advocacy for additional financial supports from the provincial and federal levels of government; and
 - b.to seek support from the Association of Municipalities of Ontario (AMO), the Rural Ontario Municipalities Association (ROMA) and the Federation of Canadian Municipalities (FCM) to examine if the unaffordability of water and wastewater system operational costs is systemic provincially and nationally.
- 2. Establish a "Water and Wastewater Task Force," that would report to Council with advice and policy recommendations relating to operating and life-cycle costs of water and wastewater systems, including a review of existing programs, policies, and solutions both locally and in other relevant jurisdictions.
- 3. That this resolution be circulated to the Honorable Cheryl Gallant MP, John Yakabuski MPP, AMO, ROMA, FCM, all municipalities within the County of Renfrew, County of Renfrew Warden, and the City of Pembroke.

The Water & Wastewater Task Force Terms of Reference was approved by Council on January 17, 2024. By-law 24-02-1663, being a by-law to establish through Terms of Reference the Water and Wastewater Task Force and appoint members, was passed on the 7th day of February 2024.



Task Force Members

Community Members:

- Randi Keith
- Robyn Voisey
- Julie HennessyJim Labow
- Anne Guest

Members of Council

- Mike Moore | Public Works Lead
- Chris Olmstead | Corporate Services Lead

Whitewater Region Staff

- Deanna Nicholson | Superintendent of Environmental Services
- Lane Cleroux | Manager of Public Works



Terms of Reference

1.0 MANDATE

The Water and Wastewater Task Force will provide information, recommendations, and advice to Council relating to operating and life-cycle costs of water and wastewater systems, including a review of existing programs, policies, and solutions both locally and in other relevant jurisdictions.

2.0 FOCUS

- The Task Force will review existing programs, policies, and solutions with specific focus on the following:
- Reviewing and analyzing the existing water and wastewater rates.
- Evaluating the financial sustainability and adequacy of the rates in funding the operation, maintenance, and improvement of water and wastewater services.
- Evaluating alternative rate structures and pricing methodologies, including potential changes to fixed fees, consumption charges, and tiered usage pricing.
- Considering the impacts of rate adjustments on various customer segments, including residential, commercial, and industrial consumers, and customer affordability while seeking ways to mitigate any disproportionate burden.
- Identifying opportunities for promoting water conservation, including implementing incentives and penalties.
- Identifying opportunities for revenue diversification and exploring potential funding sources to support long-term infrastructure planning needs.
- Recommending a fair and efficient rate structure that supports the long-term financial viability of water and wastewater services.
- Developing recommendations for a sustainable, equitable, and transparent rate structure that balances the financial needs of the utility with the affordability and conservation goals of the community.
- Engaging with relevant experts to gather input, address concerns, and ensure transparency in the rate-setting process.
- The Task Force will consider, among others, the following documents in their review:
- The Water and Wastewater Rate Study prepared by Watson & Associates Economists Ltd. dated December 17, 2019.
- The Water Financial Plan prepared by Watson & Associates Economists Ltd. dated January 28, 2020.
- The 2022 Asset Management Plan prepared by PSD Citywide.

3.0 TERM

The Task Force is appointed by Council consistent with appointment practices. Vacancies will be filled on an as-needed basis. The Task Force will conduct its work between February 1, 2024, with a final report by July 31, 2024. Verbal updates will be provided to Council by the Task Force Chair.

4.0 COMPOSITION

The Task Force will be comprised of two Council Members, up to five community members and stakeholders, with support from municipal staff representatives being the Manager of Public Works and Superintendent of Environmental Services or designate. Subject matter advisors, including the external consultant firms and/or employees of neighbouring municipalities, will be invited to participate in meetings and working groups as required.

5.0 COMPENSATION

No compensation shall be made to members of the task force for their participation.

6.0 ATTENDANCE AND PROCEDURES

A Member of Council will serve as Chair. A quorum comprised of more than 50 percent of appointed members will be required to hold a meeting. To maintain a strong level of commitment, members who are absent for three consecutive meetings (without good cause) will be deemed to have resigned. The Task Force will work in a collaborative manner seeking consensus. Recommendations shall be formulated for consideration by Council. The Task Force does not have delegated authority to direct municipal staff. Action items will be recorded in writing.

7.0 MEETINGS

The Task Force will generally meet once per month with re-occurring meeting dates being set in advance. Additional meetings may occur based on urgency and need at the call of the Chair. Members will be notified of any additional meetings via email, allowing as much prior notice as possible. Meetings will be held virtually or at the Township Municipal office.

8

Summary of Meetings

Session	Date	Topics	Presenters
1	March 7, 2024	Introductions, Terms of Reference, ROMA presentation, water and wastewater systems overview presentation	Lane Cleroux, Manager of Public Works
Plant Tours	April 4, 2024	Tour of the Beachburg Water Treatment Plant, Cobden Water Treatment Plant, Cobden Wastewater Treatment Plan	Hosted by OCWA
2	April 22, 2024	Water and wastewater financials presentation, system rate comparisons, challenges and questions presentation	 Kurtis McGonegal, Treasurer Deanna Nicholson, Environmental Services Superintendent Lane Cleroux, Manager of Public Works
3	May 8, 2024	Water and wastewater rate study and water financial plan presentation	Daryl Abbs, Watson & Associates Economists Ltd.
4	June 24, 2024	Reviewed Terms of Reference, development of recommendations	
5	July 23, 2024	Wastewater Treatment Plant upgrade presentation, editing and voted of recommendations	Lane Cleroux, Manager of Public Works
6	July 25, 2024	Implementation of recommendations timelines and priority	

Meeting Minutes

FIRST SESSION

Date: Thursday, March 7th, 2024

Attendees:

- Task Force Members: Randi Keith, Robyn Voisey, Anne Guest, Julie Hennessy, Jim Labow, Mike Moore, Chris Olmstead
- WWR Staff: Deanna Nicholson, Lane Cleroux
- Guest: Neil Nicholson

Introduction:

The meeting began with each task force member introducing themselves and sharing their backgrounds including their reasons for joining the task force. Key points included discussions on personal experiences with water rates, roles within the municipality, and concerns about system operations and funding. Members emphasized their interest in improving public input and addressing ratepayer issues.

Review of Terms of Reference:

The Terms of Reference (TOR) were reviewed, highlighting that it is a draft open for revisions. The Task Force is expected to provide recommendations by mid to late 2024, with meetings chaired by Chris Olmstead and co-chaired by Councillor Mike Moore. The final report will include meeting minutes and recommendations. Updates to the TOR and meeting agendas should be directed to designated staff members.

ROMA Presentation:

The Task Force discussed recent advocacy efforts with the Rural Ontario Municipal Association (ROMA) and the Ministry of Infrastructure, focusing on securing funding for affordable water systems. They also addressed issues faced by other municipalities and planned further advocacy with additional ministries

Grant Opportunities:

Discussion covered available grants, noting that current opportunities are linked to new housing developments. There was mention of specific funding sources like Green Stream for the Beachburg Water Treatment Plant and Ontario Community Infrastructure Fund annual funding. Capacity issues and impacts of stormwater were also discussed.

Presentation

An overview of the water and wastewater systems was presented by Lane Cleroux, Manger of Public Works identifying the need to reevaluate system categories. It was suggested that including population data in rate comparisons would help better understand rate differences.

PLANT TOURS

Date: Thursday, April 4th, 2024

Attendees:

- Task Force Members: Randi Keith, Robyn Voisey, Anne Guest, Julie Hennessy, Jim Labow, Mike Moore, Chris Olmstead
- WWR Staff: Deanna Nicholson, Lane Cleroux
- · OCWA Staff: Jake Dewal, Greg Davidson, Ashley Pilgrim, Kaylee Saar

Introduction:

The session began with a tour of the Cobden Wastewater Treatment Plant (WWTP) followed by the Cobden and Beachburg Water Treatment Plants (WTP), led by the Ontario Clean Water Agency (OCWA) representatives and municipal staff. Discussions touched on the importance of water quality, treatment efficiency, and ongoing maintenance. The focus was on how each plant contributes to the overall infrastructure of Whitewater Region and its alignment with environmental standards.

Plant Tour Details:

Participants were briefed on the technical aspects of the treatment plants. OCWA representatives explained the filtration processes and the impact of seasonal changes on water quality. The Cobden Wastewater Treatment Plant tour highlighted the plant's role in safeguarding local waterways and managing wastewater effluents. Maintenance challenges, capacity concerns, and recent upgrades were discussed in detail.

The tour at the Cobden Wastewater Treatment Plant focused on the membrane filtration system, a critical component of the plant's operation. This advanced filtration technology uses semipermeable membranes to remove contaminants, suspended solids, and microorganisms from the wastewater, ensuring that only treated water is discharged back into the environment. The membrane system is highly effective in meeting stringent environmental standards where protecting local water bodies is essential. Challenges such as membrane fouling and maintenance schedules were also discussed, along with the system's long-term sustainability.

Grant Opportunities:

The team discussed various funding opportunities, noting that the ICIP Green Stream funding for the Beachburg Water Treatment Plant Rehabilitation with the project commencing in summer/ fall 2024. Funding model and use contribution was discussed. Municipal staff provided insight into how grants, such as the Ontario Community Infrastructure Fund (OCIF), and other sources could be leveraged to support necessary upgrades for water treatment.

SESSION TWO

Date: Thursday, April 22nd, 2024

Attendees:

- Task Force Members: Randi Keith, Robyn Voisey, Anne Guest, Julie Hennessy, Jim Labow, Mike Moore, Chris Olmstead
- WWR Staff: Deanna Nicholson, Lane Cleroux, Kurtis McGonegal

Review of Previous Meeting Minutes: The meeting began with a review of questions from the first session. Topics included the relationship between WTP and WWTP capacities and housing growth, current grant opportunities, the impact of Customer Price Index on rate increases, and the age of plants across the County, which Task Force members are tasked with researching.

Parking Lot Questions: Discussions addressed various topics including the state of infrastructure in comparable municipalities, the timeline for the WWTP upgrade tendering, the number of users in each comparable system, water and sewer-use bylaws, and Well Head Protection Area policies.

Presentation: The Treasurer presented water and wastewater financials, covering the 2024 budget, financial concepts such as debentures and reserves, expenses versus revenue, system customers/ users, and available funding sources.

A subsequent presentation by Deanna Nicholson and Lane Cleroux addressed water system challenges, including water quality issues, system capacity, and future growth. Wastewater discussions focused on system capacity, inflow and infiltration problems, and collection influent quality.

Round Table Discussion: Members discussed neighbouring communities' water and wastewater rates submitted by Anne Guest and Robyn Voisey (spreadsheet is included in Appendix 'B')

SESSION THREE

Date: Wednesday, May 8th, 2024

Attendees:

- Task Force Members: Randi Keith, Robyn Voisey, Anne Guest, Julie Hennessy, Jim Labow, Mike Moore, Chris Olmstead
- WWR Staff: Deanna Nicholson, Lane Cleroux, Julie Parr, Ivan Burton
- Guests: Daryl Abbs (Watson & Associates Economists Ltd.)

Review of Previous Meeting Minutes: The meeting, led by co-chair Councillor Moore until Chair Councillor Olmstead arrived, began with the approval of minutes from Session #2

Presentation by Watson & Associates: The session featured a presentation by Daryl Abbs from Watson & Associates Ltd. focusing on the rate study and rate structures. Key points included:

- Affordability: Rates reflect costs divided by users and are designed to manage costs and avoid sharp increases.
- Cost Drivers: Primarily influenced by regulations and safety standards, such as those arising from the Walkerton inquiry.
- Metering: Meter installation is currently optional due to the lack of a by-law, but it could be enforced with future regulations.
- Rate Classification: Ratepayer classifications can be adjusted and are reviewed periodically. The last review was in 2019.

Round Table Discussion:

- Anne Guest expressed concern specifically about wastewater rates rather than water rates, which she found comparable to other municipalities.
- Ivan Burton asked the Task Force members to start brainstorming ideas for future recommendations to make equitable rates, meter implementation, and conservation.
- Mike Moore suggested exploring funding options through general taxation, with some support for including municipal buildings in rate categories.
- Clarification was provided on administrative costs included in the budget and the OCWA Cost Plus" contract.

Next Steps: Task Force Chair ask members to come prepared with a list of recommendations for consideration.

SESSION FOUR

Date: Monday, June 24th, 2024

Attendees:

- Task Force Members: Randi Keith, Robyn Voisey, Anne Guest, Julie Hennessy, Jim Labow, Mike Moore, Chris Olmstead
- WWR Staff: Deanna Nicholson, Lane Cleroux, Carmen Miller
- Members of Council: Mike Moore, Chris Olmstead
- · Guests: Donald Deer, Ben Blommesteijn

Review of Previous Meeting Minutes: The task force members reviewed the previous meeting minutes, and no edits or omissions were found.

Review of Focus of Terms of Reference: The Task Force Terms of Reference were viewed to ensure alignment with the objectives.

Recommendations: The Task Force developed 49 recommendations during the session, focusing on various aspects of the water and wastewater systems.

Round Table Discussion:

- A member asked about Freedom of Information requests regarding the Cobden Wastewater Treatment Plant (WWTP) upgrade project.
- Another request was made to invite Jp2g to a future session to explain the WWTP project.

SESSION FIVE

Date: Tuesday, July 23rd, 2024

Attendees:

- Task Force Members: Randi Keith, Robyn Voisey, Anne Guest, Julie Hennessy, Jim Labow, Mike Moore, Chris Olmstead
- WWR Staff: Deanna Nicholson, Lane Cleroux, Ivan Burton
- Guests: Donald Deer, Ben Blommesteijn, Trevor Pearce

Review of Previous Meeting Minutes: The task force members reviewed the previous meeting minutes, and no edits or omissions were found.

Address by the Chair:

- Chris Olmstead expressed gratitude to the Task Force for their practical and forward-thinking recommendations. He highlighted that the recommendations would significantly assist staff and council in future decisions and serve as a reference for other municipalities.
- He thanked the staff for their expertise and the members for their dedication and time, emphasizing the importance of their contributions.
- Chris pledged to continue advocating for the recommendations after the Task Force concludes. He noted that the information collected would be consolidated into a final report and stressed the significance of members' presence at the report presentation to Council, expected in September.
- The meeting concluded with the acknowledgment that the Task Force's mandate had been successfully fulfilled.

Presentations: Manager of Public Works, Lane Cleroux presented the Cobden Wastewater Treatment Plant timeline and project costs.

Recommendations: The Task Force members voted on each recommendation from session #4 to either carry or defeat the recommendation.

SESSION SIX

Date: Thursday, July 25th, 2024

Attendees:

- Task Force Members: Randi Keith, Robyn Voisey, Anne Guest, Julie Hennessy, Jim Labow, Mike Moore, Chris Olmstead
- WWR Staff: Deanna Nicholson, Lane Cleroux, Ivan Burton

Recommendations: The Task Force members reviewed recommendations and consolidated to 45. Members voted on each carried recommendation on the implementation timelines and priorities.



Recommendations

The Water & Wastewater Task Force has outlined a comprehensive set of recommendations aimed at enhancing the quality, capacity, and financial sustainability of the Township's water and wastewater systems.

Timeframes for Implementation

- Immediate (0 12 months)
- 1 3 years
- 3 5 years

1.0 WATER QUALITY

• 5+ years

Cost in dollars -\$: Savings

- \$: 0-5,000
- \$\$: 5,000-50,000
- \$\$\$: 50,000+

	Recommendation	Cost	Priority	Timeline
1.1	Increase proactive public education on water system quality issues (e.g., THMs, manganese, flushing, outages) using targeted community mail-outs (such as The Current and water billing inserts), the Township's website, and social media channels.	\$	High	Immediate
1.2	Improve public communication by implementing an automated notification system that users can sign up with to receive notifications of water quality and quantity-related issues or emergencies.	\$	Medium	1-3 Years
1.3	Develop a policy for public engagement when water quality issues occur.	\$	High	Immediate
1.4	Examine the timing and frequency and communication of water quality issues and track their occurrence.	\$	Medium	1-3 years
1.5	Investigate local weather stations to track and correlate weather events impacting water quality for long-term trending and forecasting.	\$	Low	3-5 years

2.0 WASTEWATER SYSTEM CAPACITY

	Recommendation		Priority	Timeline
2.1	Undertake a public education exercise on advertising what not to flush.	\$	High	Immediate
2.2	Seek out and support water conservation opportunities, such as providing financial support for rain barrels at cost or discounts and increase public education on water conservation.	\$	Medium	1-3 Years
2.3	To encourage water conservation, enact year- round outdoor watering restrictions (for lawns, gardens, and other outdoor water use) through a water and wastewater bylaw.	\$/-\$	Medium	1-3 Years
2.4	Include conservation requirements/policies in a water and wastewater bylaw that requires new construction and major renovations to include water conservation measures (e.g., low-flow toilets).	-\$	High	1-3 Years
2.5	Require all new development to include stormwater management infrastructure in urban areas.	-\$	High	Immediate
2.6	Investigate the feasibility for all road reconstruction projects to include stormwater management infrastructure in urban areas.	\$\$\$ taxation/ -\$ W/W	Medium	Immediate

2.0 WASTEWATER SYSTEM CAPACITY CONTINUED

2.7	Implement a policy in a water and wastewater bylaw requiring the removal of roof leaders and sump pumps from sanitary connections in all existing buildings and new construction.	\$/-\$	Medium	3-5 Years
2.8	Include a strategy in the Township's Strategic Plan to address infiltration and inflow into the Cobden Wastewater Treatment Plant.		High	Immediate
2.9	Include wastewater effluent quality limits in a water and wastewater bylaw to ensure the continued and uninterrupted operation of the Cobden WWTP.	-\$	Medium	1-3 Years
2.10	Include policies in a water and wastewater bylaw permitting the municipality to require engineering controls (e.g., holding tanks or pre-treatment) to ensure that effluent discharges meet all quality and quantity limits.	-\$	High	1-3 Years
2.11	Include fines in a water and wastewater bylaw.	\$	Medium	1-3 Years
2.12	Investigate and test effluent discharged from commercial properties to reduce negative impacts on the Cobden WWTP.	\$	High	Immediate
2.13	Investigate how many sump pumps and roof leaders are currently tied into the Cobden WWT collection system.	\$\$	High	1-3 Years

3.0 FINANCIAL IMPLICATIONS

#	Recommendation	Cost	Priority	Timeline
3.1	Engage in public outreach for larger upcoming projects.	\$	High	Immediate
3.2	Continue to examine opportunities other than user pay to fund the water and wastewater system, such as OCIF.		High	Immediate
3.3	Establish a policy of 'shovel readiness' for major projects before submitting funding applications.	\$	High	Immediate
3.4	Require the fire department to pay for access to year-round water with this revenue directed to the water budget.	-\$/\$ taxation	Medium	1-3 Years
3.5	Investigate the appropriate reserve levels to meet future obligations for water and wastewater reserves and set these levels in policy.	\$	High	Immediate
3.6	Ensure continuous updating of 10-year capital plans/asset management plans.	\$	High	Immediate
3.7	3.7Investigate the affordability of the current system to use this information as part of the grants application process.		High	Immediate

3.0 FINANCIAL IMPLICATIONS CONTINUED

3.8.1	Identify available programs that provide financial assistance to senior and low-income households that help reduce household expenses.	\$		
3.8.2	Inform the public about financial assistance programs that help reduce household expenses.	\$	High	Immediate
3.8.3	Advocate to the County or Province to develop and increase financial assistance programs that reduce household expenses, including tax reduction initiatives.	\$		
3.9	Investigate septic dumping stations and bulk water sales to increase revenue for the water/wastewater reserves.	\$\$	Medium	1-3 Years
3.10	Investigate energy efficiency initiatives and potential funding for water and wastewater systems.	\$	High	Immediate

4.0 RATE STRUCTURE

#	Recommendation	Cost	Priority	Timeline
4.1	Re-evaluate rate classes (groupings and multiplication factors) as part of the 2024 Water and Wastewater Rate Study.	\$	High	Immediate
4.2	Meter all high commercial users.	\$\$	High	1-3 Years
4.3	Meter all municipal buildings.	\$	Medium	1-3 Years
4.4	Meter all users subject to the Township receiving full funding for the purchase and installation of water meters.	-\$	High	1-3 Years

5.0 OTHER RECOMMENDATIONS

#	Recommendation	Cost	Priority	Timeline
5.1.1	Investigate the bylaws and policies of other municipalities regarding water, sewer, andstorm infrastructure with respect to ownership and property lines.	\$		
5.1.2	Define in a water and wastewater bylaw the ownership and financial responsibilities of underground water and wastewater infrastructure (such as water mains and sanitary and storm sewers) between the Township and system users.		1-3 Years	
5.1.3	Communicate ownership obligations to system users.	\$		
5.2	Investigate the cost of proactively enforcing water and wastewater bylaw-related issues.	\$	Low	1-3 Years
5.3	Advocate to the County of Renfrew to prepare an annual County-wide comparison report detailing water/wastewater rates in each municipality.	\$	Medium	Immediate
5.4.1	Undertake an independent audit/ 3rd Party Review of the Cobden WWTP plant project. High Immed		Immediate	
5.4.2	Request a legal opinion based on the results of the independent audit/ 3rd Party Review.	\$\$		
5.5	Explore tendering the operation of the water and wastewater systems.	\$\$	High	1-3 Years

5.0 OTHER RECOMMENDATIONS CONTINUED

5.6	Explore the tendering or sharing of services/operations/staff with other municipalities.	\$	High	1-3 Years
5.7	Explore moving the operation of the water and wastewater systems in-house.	\$\$	High	Immediate
5.8	Review the implementation of the water and wastewater portion of development charges.	\$	High	Immediate



Summary

The Water & Wastewater Task Force was formed to address the pressing challenges facing Whitewater Region's essential water and wastewater systems. Through extensive analysis and collaboration with stakeholders, the Task Force has developed a comprehensive set of recommendations aimed at ensuring these systems remain reliable, sustainable, and affordable for all residents.

Overall Synopsis:

The Task Force's recommendations address immediate challenges, such as infrastructure upgrades and policy enhancements, while also setting the stage for long-term resilience through strategic financial planning and innovative solutions. These recommendations provide a clear path forward, ensuring that Whitewater Region's water and wastewater systems can continue to meet the community's needs efficiently and sustainably. This report serves as a roadmap for future actions, guiding the Council in making informed decisions that balance the needs of the community with the necessity of maintaining high standards for water quality and environmental stewardship.

Contact

P.O Box 40 44 Main Street Cobden, ON K0J 1K0 www.whitewaterregion.ca info@whitewaterregion.ca @TwpWhitewaterRegion

Appendix 'A'

Meeting Minutes and Presentations

Session One

Meeting Minutes and Presentation



Name	Resident / Organization/ Member of Council / WWR Staff	Present / Absent
Randi Keith	Resident	Р
Robyn Voisey	Resident	Р
Anne Guest	Resident	Р
Julie Hennessy	Resident	Р
Jim Labow	Resident	Р
Deanna Nicholson	WWR Staff	Р
Lane Cleroux	WWR Staff	Р
Mike Moore	Member of Council	Р
Chris Olmstead	Member of Council	Р
Neil Nicholson	Guest	Р

#	Item	Discussion
1	Introduction	Chris Olmstead started opening comments. This is the introductory session. The meeting outline is a draft document. It is not written in stone and is meant as a kick-off spot for discussion. Please go around the circle and let us know who you are why you joined this
		task force.
		Neil – Stated that he is excited to hear the public input that will be provided and how your thoughts will help shape what Council decides.
		Ivan B- CAO – Introduced himself and his role at the Township.



<	R E G I D N 🗕	
		Councillor Mike Moore – Mike stated that he is a ratepayer. First bill as a rate payer over 3 months was \$89. Mike is also the lead for PW.
		Jim Labow – Former Beachburg Councillor. Rate payer, water user. During his term of Council switched from in house operation of the WTP to OCWA.
		Randi – former Westmeath Clerk for 25 years.
		Julie Hennesy – Stated that she is a property owner, landlord and business owner and is concerned over rates.
		Anne Guest – Stated that she is a retired teacher. Anne made up a rate sheet of surrounding communities, which was passed around.
		Robin Voisey – Stated that she is a rate payer and real estate agent and is on this task force for the buyers & sellers that she represents.
		Lane Manager of Public Works since Dec 2019 – looking forward to speaking with the public and forward to touring public task force members around the plants.
		Deanna – Environmental Services Superintendent. Stated that she has been in this role for about 1 year and in a similar role previously for 10 years. Stated that she is looking forward to working with the public members to incorporate their ideas into our long-term plans for the systems.
		Chris Olmstead – Chair – Stated that he is lifetime resident, third term on Council (lots over the last 10 years) and also a local business owner. Covered that there are lots of different experiences in members of the task force.



2	Review of Terms of Reference	Ivan went over the Terms of Reference. Final approval for the task force came from Council in February. TOR open for edits. Please direct to Lane or Deanna.
		Mandate: clearly highlights that this task force is importantly forward looking.
		Task force expected to be completed by July/August/September 2024.
		Council Olmstead will chair the meetings with Councillor Moorse as co-chair.
		Collaboration to come up with recommendations. Encouraged to speak with neighbours and businesses. Need to come up with cohesive recommendations.
		Will bring in experts.
		Final outcome will be a report that outlines meeting minutes and recommendations.
		No confidential information is being shared here. This is all public information.
		TOR term requires updating (states Feb 1, 2023).
		Respect is key with this task force. Time is important, we need to stick to the time frames set out.
		Agendas will be updated. Please send any requested updated to Deanna in advance of the next meeting.
3	ROMA Presentation	Rural Ontario municipal association. It is an advocacy association for rural . Subsidiary of AMO. Annual conference. Can request delegation with a Minister.



	Request submitted for a delegation with the Ministry of Infrastructure. Met on Feb 26 th with the parliamentary assistant. Neil – We were provided a 15 minute delegation to address the ministry staff on the call. There is no "Minister of Affordability". There are no grants for the system you already can't afford. John Yakabuski said to start with Minister of Infrastructure. Three municipalities gave the Ministry Assistant a presentation on each Townships that we can't afford the existing system. And asked that we be provided money for the next grant they offer.			
4	Emon spoke to other municipalities that are having affordability issues. Three Mayors, the County and John Yakabuski were all represented at the meeting. The message to the Ministry was loud and clear from the 5 parties. Our next steps are to go to the other Ministries too. One other advocacy piece currently underway, gone to ROMA, AMO, and to FCM. County has representative on each one of those boards. We are now on the agenda of all three organizations. Will this go onto their agendas for advocacy going forward? Robin – What are available for grants? New, upgrades? Neil, the grants available are reflective of the 'flavour of the government'. The current grant available will only be provided if it produces more houses. Spoke to upcoming subdivisions to be built in Cobden. Robin asked if we can currently support development. Neil responded that this is something that will be covered.			



	<u>REGION</u>	
		Lane spoke to Green Stream funding for Beachburg Water Treatment plant. \$550k funded by the Township. Tender going out shortly.
		One time grants, OCIF annual funding.
		Anne: asked about WWTP capacity and new building development.
		Chris: spoke to storm water intrusion and how that affects capacity.
5	Overview and W/WW Systems	Lane delivered a PPT which provided an overview of the W & WW systems.
		Action item ID'd during the presentation: Water-wastewater categories – can/should the be re-evaluated?
		Deanna: Rate comparison table is a helpful discussion point. It would be helpful to determine what about each system is different compared to WWR. For instance, this table should include population data. Such data may help to show the cause and provide understanding for the rate differences.
6a	Next Steps	Plant Tours set for March 26 th 1:00pm – 4:00 pm, meeting at WWTP 1 Astrolabe.
		The task force determined that the date for Session # 2 is April 4^{th} @ 2:30 – 4:00 pm.
		 Deanna to send out: meeting invitations for Plant Tours and Session # 2. Meeting notes for comment.



WHITEWATER WATER & WASTEWATER TASK FORCE SESSION # I

MARCH 7 2024

VERSION I

SESSION # I AGENDA

- Introductions
- Review of Terms of Reference
- Summary of ROMA presentation
- Overview of the Water and Wastewater Systems
- Current Rates

INTRODUCTIONS

Community Members

Randi Keith Robyn Voisey Anne Guest Julie Hennessy Jim Labow

<u>Members of Council</u> Mike Moore

Chris Olmstead

WWR Staff

Deanna Nicholson Lane Cleroux

TASK FORCE TERMS OF REFERENCE

<u>Mandate</u>

The Water and Wastewater Task Force will provide information, recommendations, and advice to Council relating to operating and life-cycle costs of water and wastewater systems, including a review of existing programs, policies, and solutions both locally and in other relevant jurisdictions.

TASK FORCE TERMS OF REFERENCE

Focus

The Task Force will review existing programs, policies, and solutions with specific focus on the following:

- Reviewing and analyzing the existing water and wastewater rates.
- Evaluating the financial sustainability and adequacy of the rates in funding the operation, maintenance, and improvement of water and wastewater services.
- Evaluating alternative rate structures and pricing methodologies, including potential changes to fixed fees, consumption charges, and tiered usage pricing.
- Considering the impacts of rate adjustments on various customer segments, including residential, commercial, and industrial consumers, and customer affordability while seeking ways to mitigate any disproportionate burden.

TASK FORCE TERMS OF REFERENCE

Focus

- Identifying opportunities for promoting water conservation, including implementing incentives and penalties.
- Identifying opportunities for revenue diversification and exploring potential funding sources to support long-term infrastructure planning needs.
- Recommending a fair and efficient rate structure that supports the long-term financial viability of water and wastewater services.
- Developing recommendations for a sustainable, equitable, and transparent rate structure that balances the financial needs of the utility with the affordability and conservation goals of the community.
- Engaging with relevant experts to gather input, address concerns, and ensure transparency in the ratesetting process.

TASK FORCE TERMS OF REFERENCE

<u>Term</u>

The Task Force is appointed by Council consistent with appointment practices. Vacancies will be filled on an asneeded basis. The Task Force will conduct its work between February 1, 2023, with a final report by July 31, 2024. Verbal updates will be provided to Council by the Task Force Chair.

Attendance and Procedures

- A Member of Council will serve as Chair.
- A quorum comprised of more than 50 per cent of appointed members will be required to hold a meeting. To maintain a strong level of commitment, members who are absent for three consecutive meetings (without good cause) will be deemed to have resigned.
- The Task Force will work in a collaborative manner seeking consensus. Recommendations shall be formulated for consideration by Council. The Task Force does not have delegated authority to direct municipal staff.
- Action items will be recorded in writing.

ROMA PRESENTATION

Monday February 26, 2024 – Virtual

- Minster of Infrastructure parliamentary assistant
- MPP John Yakabuski
- County of Renfrew Warden Peter Emon
- Mayor Neil Nicholson (Township of Whitewater Region)
- Mayor Mark Willmer (Township of Madawaska Valley)
- Mayor Tom Sidney (Town of Renfrew)
- CAO's Ivan Burton (WWR), Suzanne Klatt (MV) and Robert Tremblay (TR)

TOWNSHIP WATER AND WASTEWATER SYSTEMS

Water Systems

- Beachburg Drinking Water System
- Cobden Drinking Water System
- Haley Drinking Water System

Wastewater Systems

Cobden Wastewater System

BEACHBURG DRINKING WATER SYSTEM

- Licence Number: 203-102
- Licence Issue Date: September 24, 2020
- Water Treatment Plant
- Water Plant located at 31 Robertson Drive
- Water Source: 2 ground water wells
- Rated Capacity: 973 (m3/day)
- Class 2 Water Treatment

Distribution System

- Class I Water Distribution
- Approximately 10 km of watermains, and 64 fire hydrants.

• 458 users

COBDEN DRINKING WATER SYSTEM

- Licence Number: 203-202
- Licence Issue Date: September 24, 2020

Water Treatment Plant

- Water Plant located at 28 Bonnechere Street
- Water Source: Muskrat Lake
- Rated Capacity: 1,364 (m3/day)
- Class 2 Water Treatment

Distribution System

- Class I Water Distribution
- Approximately 9.2 km of watermains, and 61 fire hydrants.
- 900 m3 elevated water storage tank
- 455 users



HALEY DRINKING WATER SYSTEM

- Licence Number: 203-103
- Licence Issue Date: September 24, 2020
 Water Treatment Plant
- Water Plant located at 565 Heather Place
- Water Source: 2 ground water wells
- Rated Capacity: I 65 (m3/day)
- Class 2 Water Treatment

Distribution System

- Class 2 Water Distribution
- Approximately 2 km of watermains, and 0 fire hydrants.
- 34 users



COBDEN WASTEWATER SYSTEM

- Environmental Compliance Approval Number 4306b2ykk4
- Wastewater Treatment Plant
- Wastewater Treatment Plant located at I Astrolabe Road
- Capacity
 - Average Daily Flow 1,000 (m3/day)
 - Maximum Daily Flow 3,500 (m3/day)
 - Peak Hourly Flow 5,000 (m3/day)
- Class 3 wastewater treatment

Collection System

- Class I wastewater collection
- Approximately 7.4 km of sanitary sewers
- I pump station
- 425 users



MUNICIPAL DRINKING WATER LICENCES

In order to become licensed, a municipality must satisfy the following requirements as per section 44(1) of the Safe Drinking Water Act (SDWA), 2002, S.O. 2002, c. 32

- a drinking water works permit has been issued for the system
- the operational plans for the system satisfy the requirements in the Director's directions under Part III for the particular system or type of system
- the system will be operated by an accredited operating authority
- the financial plans for the system, if required, satisfy the requirements of SDWA
- a permit to take water has been issued under the Ontario Water Resources Act
- the Director is satisfied that the system will be operated in accordance with the requirements of the SDWA and the conditions in the licence.

WATER & WASTEWATER CUSTOMERS

Water Systems

- Beachburg Drinking Water System: 458 Customers
- Cobden Drinking Water System: 455 Customers
- Haley Drinking Water System: 34 Customers

Wastewater Systems

Cobden Wastewater System: 425 Customers

WATER & WASTEWATER UNIT BY CATEGORY

RESIDENTIAL UNIT (1.0 Weighting Factor)

- Water: 946 units
- Wastewater: 387 units

SMALL COMMERCIAL UNIT (1.0 Weighting Factor)

- Water: 48 units
- Wastewater: 32 units

MEDIUM COMMERCIAL UNIT (1.5 Weighting Factor)

- Water: 22 units
- Wastewater: 14 units

HIGH COMMERCIAL UNIT (2.0 Weighting Factor)

- Water: 12 units
- Wastewater: 6 units

MUL TI RESIDENTIAL (0.8 Weighting Factor)

- Water: 113 units
- Wastewater: 79 units

Metered

- Water: 3 units
- Wastewater: 3 units

WATER & WASTEWATER RATE CATEGORIES

RESIDENTIAL UNIT (1.0 Weighting Factor)

Self Contained Residential Units including Apartments, Churches

SMALL COMMERCIAL UNIT (1.0 Weighting Factor)

- Commercial Operations consisting of Office Space, Retail Space, Repair Shop, Service Station
- Less Than 1000 sq. ft. of Floor Area
- Laundromat (1 unit per four machines)
- Carwash (1 unit per bay)

MEDIUM COMMERCIAL UNIT (1.5 Weighting Factor)

- Commercial Operation consisting of Office Space, Retail Space over 1000 sq. ft. of Floor Area
- Commercial Operations requiring water as a process for their operation excluding Washroom Facilities
 - Eating Establishment Take Out and Full Service Under 1000 sq. ft.
 - Food/Convenience Store under 1000 sq. ft.
 - Bed and Breakfast
 - Funeral Home
 - Hairdressing Shop

HIGH COMMERCIAL UNIT (2.0 Weighting Factor)

- Commercial Operations consisting of large grocery, Food Retail and multiple business development over 1000 sq. ft. of Floor Area
- Commercial Operations requiring water as a process for their operation excluding Washroom facilities
 - Eating Establishment Take out and Full Service over 1000 sq. ft.
 - Food/Convenience Store over 1000 sq. ft.
- Motel Facility
- Industrial Type Business
- Cleaning Type Business
- Medical, Dental and Physician Type facilities (less than 1000 sq. ft. 1 unit - Over 1000sq. ft. - 2 Units)

MUL TI RESIDENTIAL (0.8 Weighting Factor)

 Apartment building consisting of more than one Residential Dwelling shall have one Residential Unit followed by 80% of the Residential unit rate of all other Residential dwellings within the building

WATER & WASTEWATER RATE DEFINITIONS OF SUB-RATES

FARM

- 1/2 Small Commercial for Hobby Farm using water for animals 5 head and under
- Small Commercial Farm Operation No livestock and/or using water
- Medium Commercial for Farm using water for animals 40 head and under
- High Commercial for Farm using water for animals over 41 head

HOME OCCUPATION

 1/2 Residential - Commercial operation which is carried on as an accessory use within a dwelling

HALLS (Single Purpose)

1/2 Small Commercial - Halls without kitchen/ server facilities

HALLS (with a Kitchen/ Servery)

- Small Commercial Maximum Seating capacity of 200 people or less
- High Commercial Maximum Seating capacity of 201 people or more

GEOTHERMAL

 Structures using municipal water as its heat, A/C source shall be applied a Standard Commercial Unit

MISCELLANEOUS

- Curling Club Medium Commercial Unit
- Royal Canadian Legion including Hall Small Commercial
- Covered Arenas and all associated operations 3 Units of High Commercial
- School 6 Units of High Commercial
- Small Commercial Attached Hall in excess of 1500 sq. ft.

VACANCY

- Units unoccupied for a period of at least two (2) consecutive calendar months with water service maintained are eligible for the vacancy rate (20% of regular water & sewer rates). The vacancy rate will take affect in the 3rd month of the vacancy period.
- Regular charges will begin for the full month when occupancy is resumed part way through a month.
- This applies to commercial rate categories only.

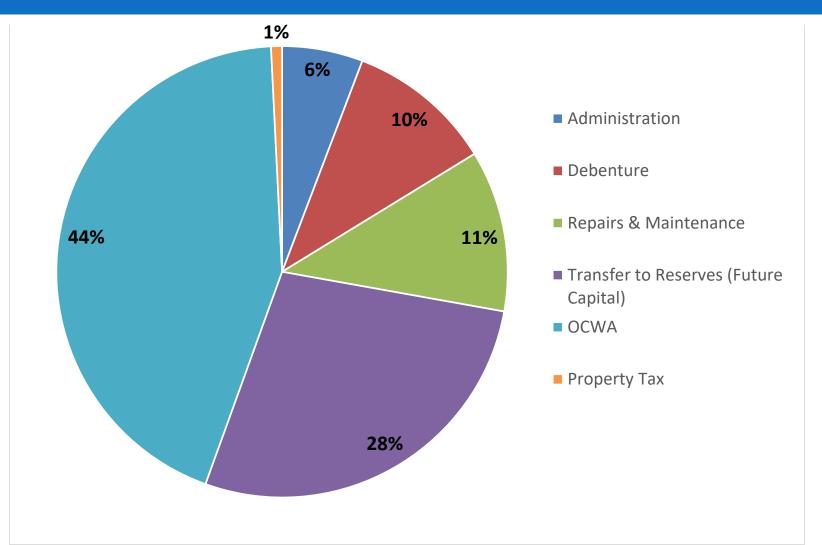
NOTE: Municipality reserves all rights to make any necessary adjustments to all rates based on:

- Factors not currently addressed in policy
- Adjustment to rates based on volume content and nature of use of water
- Units unoccupied for a period of at least two

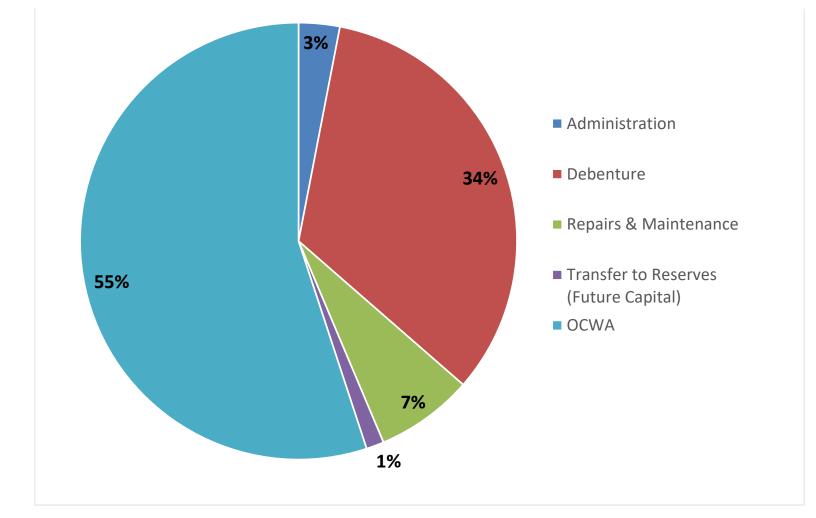
WATER & WASTEWATER BILLING HISTORY

- The 2019 Water and Wastewater Rate Study prepared by Watson & Associates Economists Ltd. recommended that the Township move from three separate area rates, to one combined flat rate while maintaining the volume rate (with minimum charge) for metered customers.
- During 2020 budget deliberations, a harmonized water rate was introduced to combine all water systems operating and capital.
- The Tax Billing & Collection Policy was updated in December 2019 for utility charges will be billed every other month. The change in billing frequency assisted the Township will have consistent cash inflow from utilities and assist in lowering arrears.
- 2019 water and wastewater arrears were \$103,188.97
- Current water and wastewater arrears are \$33,912.97

WATER RESIDENTIAL FLAT RATE FEE STRUCTURE (\$1,173.33)



WASTEWATER RESIDENTIAL FLAT RATE FEE STRUCTURE (\$1,901.73)



WATER & WASTEWATER RATE INCREASE HISTORY

Water Rates

	2020	2021	2022	2023	2024	2025-2029 Proposed
Actual Increase	21%	9%	2%	9.3%	8.5%	7.8% - 5.9%
Rate Study Recommended	20%	10%	10%	10%	10%	8% down to 3%

Wastewater Rates

	2020	2021	2022	2023	2024	2025-2029 Proposed
Actual Increase	20%	30%	5%	12%	12.55%	4.8% - 4%
Rate Study Recommended	20%	60%	5%	4%	3%	2%

WATER & WASTEWATER TASK FORCE MEETING OUTLINE

Plant Tours (Approximately 2 – 3 hours)

Date: March 26th @ 1:00 pm - 4:00 pm

- OCWA System Operator
- Schedule:
 - I:00 PM Cobden Wastewater Treatment Plant
 - 2:00 PM Cobden Waste Treatment Plant
 - 3:00 PM Beachburg Water Treatment Plant

Session Two

Meeting Minutes and Presentation



Water and Wastewater Task Force

Thursday, April 22, 2024 at 11:40 p.m. Council Chambers

Name	Resident / Organization/ Member of Council / WWR Staff	Present / Absent
Randi Keith	Resident	Present
Robyn Voisey	Resident	Present
Anne Guest	Resident	Present
Julie Hennessy	Resident	Present
Jim Labow	Resident	Present
Deanna Nicholson	WWR Staff	Present
Lane Cleroux	WWR Staff	Present
Mike Moore	Member of Council	Present
Chris Olmstead	Member of Council	Present
Kurtis McGonegal	WWR Staff / Guest	Present

#	Item	Discussion
1	Item Review of Previous Meetings Minutes	 Discussion Session # 1 Parking Lot Questions WTP Capacity, WWTP capacity and housing growth. How do they all relate to each other? - (included in presentation and attached as Appendix 2) What grants are available currently? - (included in presentation and attached as Appendix 2) Treasurer to please explain how rate increases are impacted by CPI-Included in Session # 2 discussion (Appendix 1)
		 Age of plants across the County – discussed as item for task force members to populate if possible.



Water and Wastewater Task Force

Thursday, April 22, 2024 at 11:40 p.m. Council Chambers

2.	Parking Lot Questions	Session # 2 Parking Lot Questions & other items to bring forward			
		State of comparable municipalities infrastructure.Timeline of WWTP upgrade tendering			
		 # of users of each comparable system 			
		Water and Sewer-Use Bylaw			
		Well Head Protection Area policies			
3. Discussion Treasures McGonegal PPT @ 11:44am - 12:30 pm		Treasures McGonegal PPT @ 11:44am - 12:30 pm			
		WWR Water and Wastewater Financials (PowerPoint presentation attached as Appendix 1)			
		Treasurer to present 2024 W/WW Budget			
		Basics of finance			
		 Debentures 			
		 Reserves 			
		 Expenses (Fixed vs Variable) vs Revenue 			
		 Funding (OCIF, CCBF, Grants) 			
		 Number of users 			
		 Asset replacement value, lifespan (Filters) 			
		12:30 – Lunch served			
		 Presentation - System Challenges and Questions received in advance of sess PPT Delivered by Deanna Nicholson & Lane Cleroux began at 12:40pm (PowerPoint presentation attached as Appendix 2) Discussion of Water Rates Spreadsheet (430L/day vs 630 L/day) System challenges Quality (THMs, Manganese, Blue-green Algae, Iron, Lead, Sodium) System capacity 			



Water and Wastewater Task Force

Thursday, April 22, 2024 at 11:40 p.m. Council Chambers

	R E G I O N 🗕	
		 Warm weather Large water users Future Growth Well Head Protection Areas WHPA Implementation policies required. WASTE WATER System Capacity Addressing Inflow and Infiltration
3	Member questions received in advance of meeting	 Included in PPT Appendix 2 Questions received from Robyn Voisey (received April 14, 2024) Questions received form Julie Hennesey (received April 5, 2024 following plant tours)
4	Round Table	No comments received
5	Next Steps	Session # 3 – May 8, 2024 @ 2:00pm, to include presentation by Watson & Associates. Session # 2 concluded at 1:22pm



WHITEWATER WATER & WASTEWATER TASK FORCE SESSION # 2

APRIL 22, 2024

VERSION I

SESSION # 2 OUTLINE

- System Rate Comparisons
- System Challenges
 - Quality
 - Warm Weather
 - Large Users
 - Future Growth
- Well Head Protection Area

WATER & WASTEWATER SYSTEMS – RATE COMPARISONS





Microsoft Excel Worksheet Microsoft Excel Worksheet

630 L/day

430 L/day

DRINKING WATER QUALITY CHALLENGES

- THMs
 - OCWA POTS study
- Manganese
- Blue-green Algae
- Iron
- Lead
- Sodium



Review of the Cobden Drinking Water Treatment Facility Options for Addressing Water Quality Challenges





Review of the Cobden Drinking Water Treatment Facility – Evaluation of Options to Handle Water Quality Challenges



AESTHETIC CHALLENGES

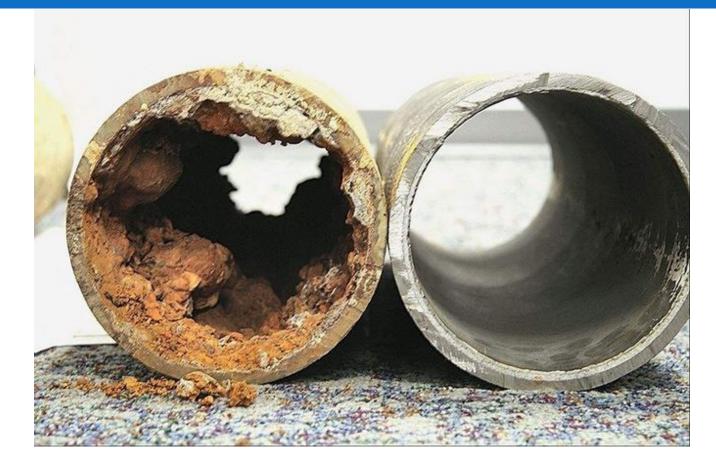
Manganese

- At concentrations greater than 0.05 milligrams per liter (mg/L), manganese may cause a noticeable color, odor, or taste in water.
- Potential health effects from manganese are not a concern until concentrations are approximately six times higher.
- Potassium permanganate oxidizes iron and manganese into particles. The particles are then removed with anthracite filter media.
- Permanganate is effective within a very narrow range. Excess permanganate dosing can cause pink coloured water.

Iron

Distribution System Piping

CITY OF PENTICTON – CAST IRON WATERMAIN EXAMPLE



SODIUM IN DRINKING WATER

How does Sodium get into drinking water?

- Sodium in raw water sources can vary dramatically depending on if the water source is from a lake, river or well.
- Bedrock
- Road salting
- What is an acceptable level of sodium in drinking water?
 - There is no maximum acceptable concentration of sodium in drinking water, because it is not a toxic element. However, the aesthetic objective (i.e. non-health related). for sodium in drinking water is ≤200 mg/L, at which point it can be detected by a salty taste by the average person.
 - O. Reg. 170/03 requires that a report be made to the local Medical Officer of Health if a sodium result exceeds 20 mg/L in a sample of drinking water.

	January 9, 2024	January 16, 2024
Haley DWS	69.1 mg/L	65.5 mg/L
Beachburg DWS	27.4 mg/L	24.7 mg/L
Cobden DWS	17.4 mg/L	n/a

WARM WEATHER & CHLORINE RESIDUALS

- Chlorine is added to water is it exits the WTP to provide disinfection.
- The regulatory requirement for chlorine is a minimum of 0.05 mg/L free chlorine at all times.
- Chlorine is highly volatile especially as temperatures rise.
- Summer months require a higher dose of chlorine in order to remain at 0.05 mg/L throughout the distribution system.
- Water age
- Dead ends and mains with few users

BLUE-GREEN ALGAE

- Blue-green algae, technically known as cyanobacteria, are microscopic organisms that are naturally present in lakes and streams.
- Under certain conditions, blue-green algae can become abundant in warm, shallow, undisturbed, nutrient-rich surface waters that receive a lot of sunlight.
- Weekly sampling is undertaken at the Cobden WTP to test for microcystins during the warmer months.
- Microcystin has never been detected in raw water samples from Muskrat Lake at the WTP

WELL HEAD **PROTECTION PLAN**



Source Water Protection Plan

Beachburg and Haley Townsite, Ontario

Final Report Prepared for:

Township of Whitewater Region 44 Main Street, P.O. Box 40, Cobden On K0J 1K0

Submitted By:

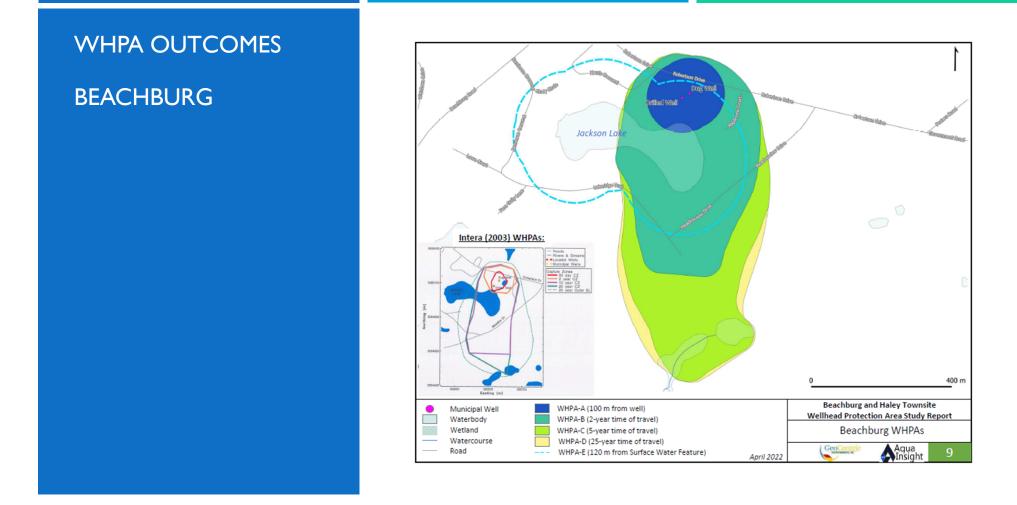
Geocentric Environmental Ltd. 1117 Castle Hill Crescent, Ottawa, ON, K2C 2B1

In association with Aqua Insight Inc. 203- 55 Northfield Drive East, Waterloo, ON. N2K 3T6

January 30, 2023

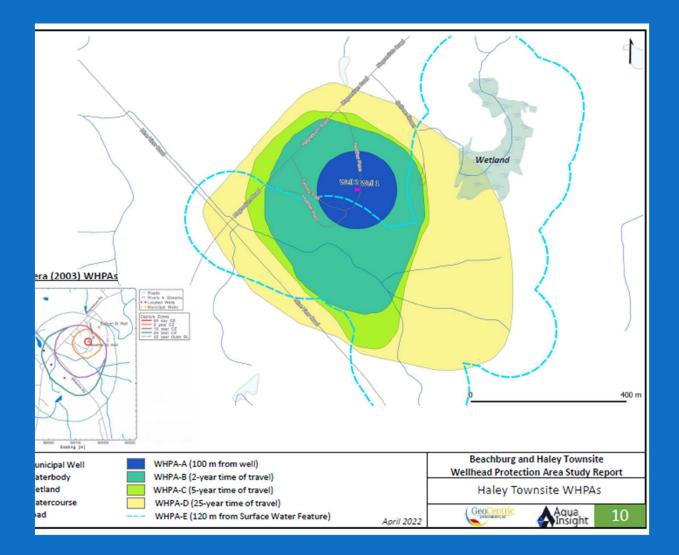






WHPA OUTCOMES

HALEY TOWNSITE



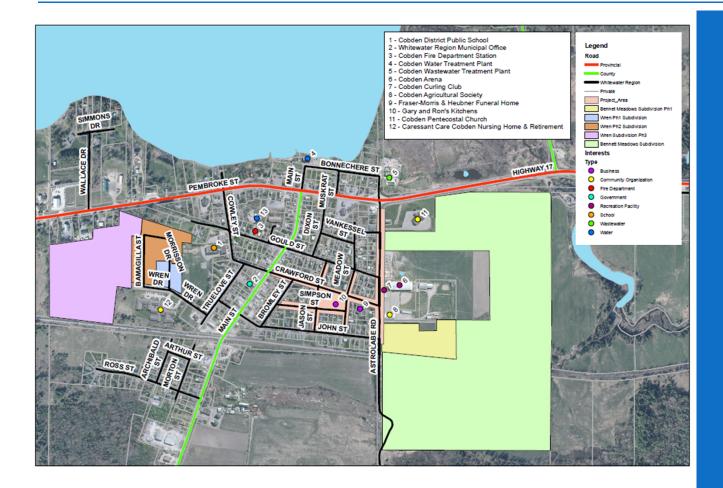
GROWTH

Bennett Meadows Phase I

- 50 housing units comprised
- I four-unit townhouses and three semi-detached dwellings.

Wren Phase 3

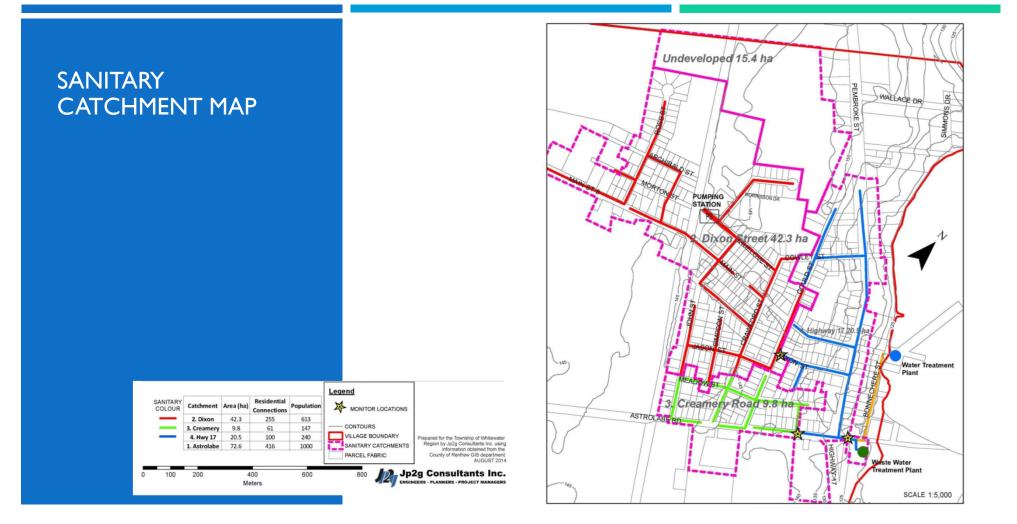
46 single-family units



GROWTH MAP

STORM WATER I&I AND IMPACTS TO THE WW SYSTEM

- Stormwater Infiltration and Inflow
- Jp2g 2015 Report informed the EA
- Impacts on the Wastewater Treatment Plant



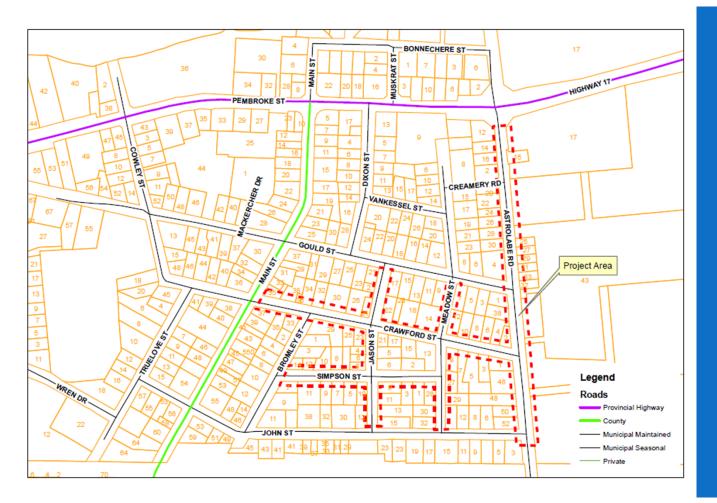
HOUSING-ENABLING WATER SYSTEMS FUND

<u>Cost</u>

- Project Cost: \$8,392,057.81
- Provincial Share (73%): \$6,126,202.20
- Townships: (27%): \$2,265,855.61

<u>Timeline</u>

- Engineering: 2024
- Construction: 2025-2026



HOUSING-ENABLING WATER SYSTEMS FUND MAP

We understand one membrane has been inspected. When did that happen, who did it and what were the results?

- Train 2 Cassette I was removed from service during the week of March 26th
- H20 Innovations and OCWA preformed the cleanings



When are the other three membranes being inspected and who will be doing it?

OCWA will be removing the cassettes from service and perform the cleanings

Schedule for cleanings

- Week of April 22nd (Train 2 Cassette 2)
- Week of May 6th (Train I Cassette I)
- Week of May 20th (Train 2 Cassette 2)



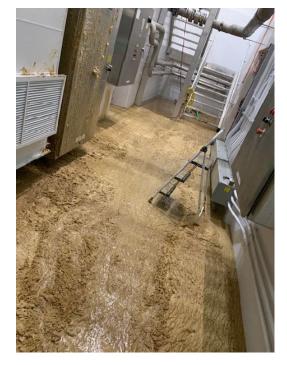
What is the lifespan of the current membranes and what is the warranty?

- Membrane system has a 5-year warranty
- 2-year full replacement and 3-year prorated warranty.

How is the town going to pay for new membranes when the time comes and when do you anticipate this happening?

- Membrane life expectancy is between 7 to 12 years
- Membranes are expected to be replaced between 2029 and 2034.
- Membrane replacements will be a capital item

What caused the overflow that occurred before we had our tour?





During the tour, we were told that the plant is at approximately 50% capacity. Is this accurate? Has it ever reached more than 70% capacity?

 The annual average daily flow for 2023 was 846 m3/d, which represents 84.6% of the facility's 1000 m3/d rated capacity.

4000												
3500												
3000												
2500				×								
2000	×				_							
1500												
1000		X	×			-			~	\sim		
500	Ж.				ZN	20		2413		213		1442
0	lan	Fals	N /	A	Maria	Lun	Lat	A	Com	0.4	New	Dee
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Plant Max Design Flow (m3/d)	3500	3500	3500	3500	3500	3500	3500	3500	3500	3500	3500	3500
ECA Rated Capacity (m3/d)	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Average Daily Flow (m3/d)		762	950	1557	1111	685	733	633	591	715	667	751
→ Maximum Daily Flow (m3/d)	1916	1022	1553	2,377	2190	885	1024	747	733	828	815	1160
→ 5 Year Average Flow (m3/d)	541	526	946	1295	733	739	582	569	615	575	592	693



Over \$50,000 was spent on the old wastewater plant when the upgrades occurred. What was this money spent on?

Two pumps were installed in old clarifier that pump head of the new plant.
Used during overflow events

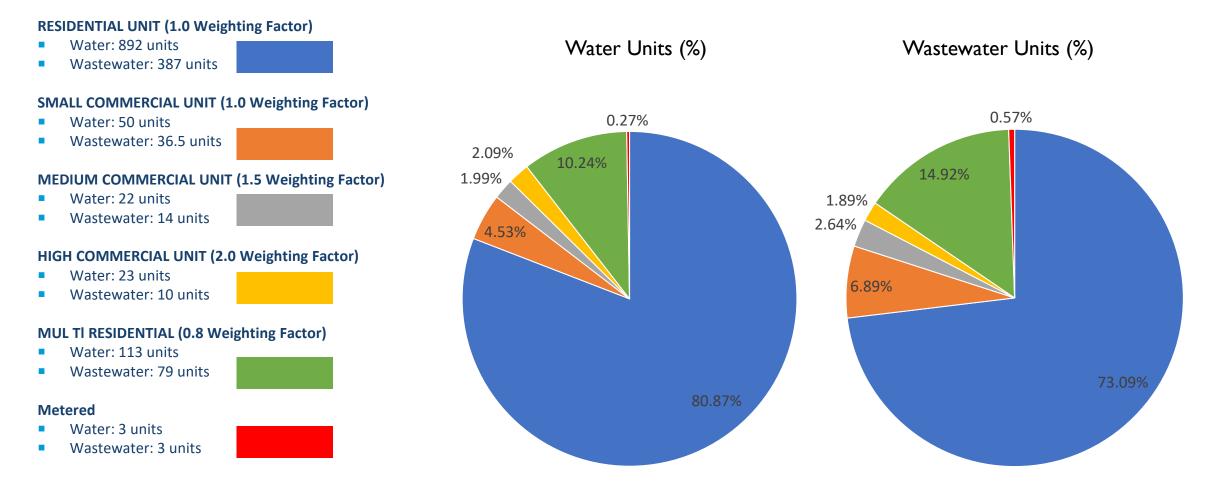


WATER & WASTEWATER TASK FORCE FINANCIAL INFORMATION

OBJECTIVES

- Users of the Systems
- User Rate Structures
- Revenue and Expenses
- Replacement Cost of Assets
- Other Sources of Funding
- Current Debentures (terms and payments)
- Reserves

WATER & WASTEWATER UNIT BY CATEGORY



WATER & WASTEWATER RATE CATEGORY DEFINITIONS

RESIDENTIAL UNIT (1.0 Weighting Factor)

Self Contained Residential Units including Apartments, Churches

SMALL COMMERCIAL UNIT (1.0 Weighting Factor)

- Commercial Operations consisting of Office Space, Retail Space, Repair Shop, Service Station
- Less Than 1000 sq. ft. of Floor Area
- Laundromat (1 unit per four machines)
- Carwash (1 unit per bay)

MEDIUM COMMERCIAL UNIT (1.5 Weighting Factor)

- Commercial Operation consisting of Office Space, Retail Space over 1000 sq. ft. of Floor Area
- Commercial Operations requiring water as a process for their operation excluding Washroom Facilities
 - Eating Establishment Take Out and Full Service Under 1000 sq. ft.
 - Food/Convenience Store under 1000 sq. ft.
 - Bed and Breakfast
 - Funeral Home
 - Hairdressing Shop

HIGH COMMERCIAL UNIT (2.0 Weighting Factor)

- Commercial Operations consisting of large grocery, Food Retail and multiple business development over 1000 sq. ft. of Floor Area
- Commercial Operations requiring water as a process for their operation excluding Washroom facilities
 - Eating Establishment Take out and Full Service over 1000 sq. ft.
 - Food/Convenience Store over 1000 sq. ft.
- Motel Facility
- Industrial Type Business
- Cleaning Type Business
- Medical, Dental and Physician Type facilities (less than 1000 sq. ft. 1 unit - Over 1000sq. ft. - 2 Units)

MUL TI RESIDENTIAL (0.8 Weighting Factor)

 Apartment building consisting of more than one Residential Dwelling shall have one Residential Unit followed by 80% of the Residential unit rate of all other Residential dwellings within the building

WATER & WASTEWATER RATE DEFINITIONS OF SUB-RATES

FARM

- 1/2 Small Commercial for Hobby Farm using water for animals 5 head and under
- Small Commercial Farm Operation No livestock and/or using water
- Medium Commercial for Farm using water for animals 40 head and under
- High Commercial for Farm using water for animals over 41 head

HOME OCCUPATION

 1/2 Residential - Commercial operation which is carried on as an accessory use within a dwelling

HALLS (Single Purpose)

1/2 Small Commercial - Halls without kitchen/ server facilities

HALLS (with a Kitchen/ Serveries)

- Small Commercial Maximum Seating capacity of 200 people or less
- High Commercial Maximum Seating capacity of 201 people or more

GEOTHERMAL

 Structures using municipal water as its heat, A/C source shall be applied a Standard Commercial Unit

MISCELLANEOUS

- Curling Club Medium Commercial Unit
- Royal Canadian Legion including Hall Small Commercial
- Covered Arenas and all associated operations 3 Units of High Commercial
- School 6 Units of High Commercial
- Small Commercial Attached Hall in excess of 1500 sq. ft.

VACANCY

- Units unoccupied for a period of at least two (2) consecutive calendar months with water service maintained are eligible for the vacancy rate (20% of regular water & sewer rates). The vacancy rate will take affect in the 3rd month of the vacancy period.
- Regular charges will begin for the full month when occupancy is resumed part way through a month.
- This applies to commercial rate categories only.

NOTE: Municipality reserves all rights to make any necessary adjustments to all rates based on:

- Factors not currently addressed in policy
- Adjustment to rates based on volume content and nature of use of water
- Units unoccupied for a period of at least two

WATER & WASTEWATER BILLING HISTORY

- The 2019 Water and Wastewater Rate Study prepared by Watson & Associates Economists Ltd. recommended that the Township move from three separate area rates, to one combined flat rate while maintaining the volume rate (with minimum charge) for metered customers.
- During 2020 budget deliberations, a harmonized water rate was introduced to combine all water systems operating and capital.
- The Water/Wastewater Billing & Collection Policy was updated in December 2019 for utility charges will be billed bi-monthly. The change in billing frequency assisted the Township will have consistent cash inflow from utilities and assist in lowering arrears.

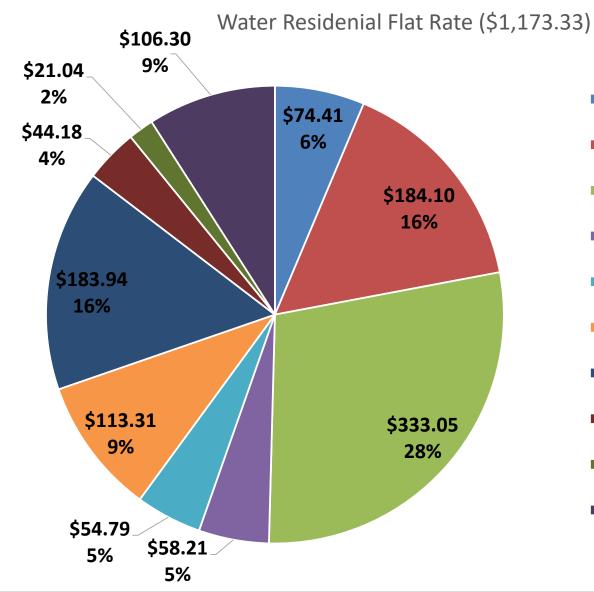
WATER & WASTEWATER RATE CHANGES

	2020	2021	2022	2023	2024	2025-2029
Actual Increase	21%	9%	2%	9.3%	8.5%	7.8% - 5.9%
Rate Study Recommended	20%	10%	10%	10%	10%	8% down to 3%

Water Rates

Wastewater Rates

	2020	2021	2022	2023	2024	2025-2029
Actual Increase	20%	30%	5%	12%	12.55%	4.8% - 4%
Rate Study Recommended	20%	60%	5%	4%	3%	2%





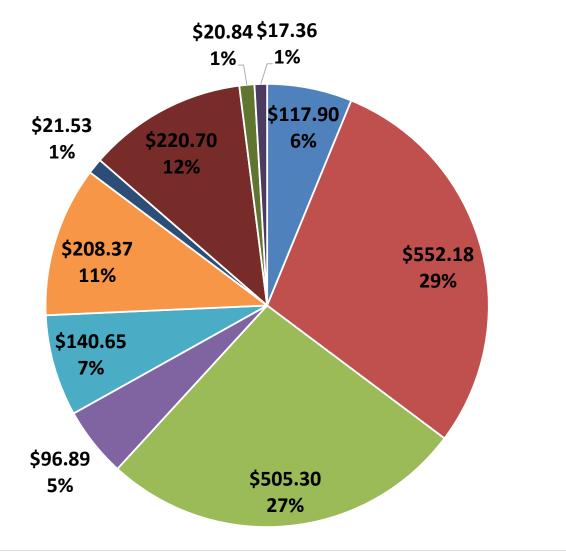
RESIDENTIAL FLAT RATE FEE STRUCTURE (\$1,173.33)

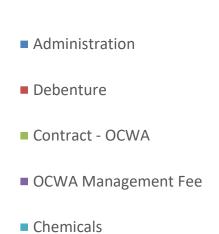
WATER EXPENSES:

Heat

Capital/Studies







Repairs & Maintenance

- Transfer to Reserves (Future Capital)
- Electricity
- Heating

Capital

WASTEWATER EXPENSE: RESIDENTIAL FLAT RATE FEE STRUCTURE (\$1,901.73)

SYSTEM ASSETS AND THEIR REPLACEMENT COST

- Water Network
 - Asset Inventory and Replacement Cost per the 2022 Asset Management Plan: \$211,375,380
 - This includes reservoirs and wells, hydrants, water main systems, and water equipment & vehicles.
 - Per the Asset Management Plan, the average annual capital requirements are \$3,000,695
- Sanitary Sewer Network
 - Asset Inventory and Replacement Cost per the 2022 Asset Management Plan: \$14,259,069
 - This includes Cobden Wastewater Treatment Plant (old), lift/pumping station, and the system of sanitary sewer force mains.
 - Per the Asset Management Plan, the average annual capital requirements are \$480,293

CURRENT WATER PROJECTS UNDERWAY

- Beachburg Water Treatment Plant Renewal and Optimization
 - Total Estimated Project Costs: \$2,062,593.60
 - Funding: Investing in Canada Infrastructure Program (ICIP) Green Stream Funding Intake II
 - Federal: (40.00%) \$825,037.44, Provincial: (33.33%) \$687,462.45, Whitewater Region: (26.67%) \$550,093.71
 - Construction: March 2024 to March 2025
 - Township portion funded by water reserve



FUTURE PROJECTS (TO BE CONSIDERED)

- Cobden WWTP Membrane Replacement
 - Cost: \$880,000
 - Timeline: 2029 2032
 - Not part of 2019 Financial Plan
- Cobden Water Treatment Plant Filter #I Replacement/ Upgrade
 - Cost: \$1,900,000/ \$500,000
 - Engineering proposed: 2024
- Crawford Street*
 - Total Cost: \$1,420,000
 - Water portion: \$210,000
- Hume Street
 - Total Cost: \$650,000
 - Water portion: \$250,000

- Simpson Street*
 - Total Cost: \$715,000
 - Wastewater portion: \$280,000
- Master Servicing Plan
 - Total Cost: \$300,000
 - Water portion: \$150,000
 - Sanitary portion: \$80,000
- Beachburg Water Tower

- Total Cost: 4,000,000
- Financial Plan estimated: 1,732,000
- Financial Plan/ Rate Study
 - Cost: \$35,000
 - Timeline: 2024

OTHER SOURCES OF FUNDING

- Provincial and/or Federal Grants
- Ontario Community Infrastructure Fund (OCIF)
 - Eligible capital expenditures:
 - Capital expenditures on core infrastructure projects (such as roads, bridges, water and wastewater, including sanitary and stormwater facilities) that are part of an asset management plan are eligible, including:
 - capital construction of new core infrastructure to be owned by the recipient that addresses an existing health or safety issue
 - capital maintenance for the renewal, rehabilitation and replacement of core infrastructure owned by the recipient (this may include municipally-owned infrastructure assets that are owned by a municipality's municipal services corporation)
 - debt-financing charges specifically associated with the capital construction and maintenance of core infrastructure
- Canada Community-Building Fund (CCBF)
 - Eligible projects:
 - Wastewater infrastructure
 - Drinking water infrastructure
 - Capacity building

WATER DEBENTURES

Project	Principal	Water %	Water Principal	Rate	Loan Term	Start Date	End Date	2024 Interest	2024 Principal	2024 Total Payment	2024 Ending Balance	
Haley WTP & Cobden WTP	\$ 1,321,747.98	100%	\$ 1,321,747.98	4.94%	30	2010-06-01	2040-06-01	\$ 46,504.24	\$ 38,438.22	\$ 84,942.46	\$ 912,435.36	
Haley Distribution	\$ 189,104.04	100%	\$ 189,104.04	3.90%	30	2011-12-01	2041-12-02	\$ 5,333.45	\$ 5,415.51	\$ 10,748.96	\$ 132,680.25	
Beachburg Distribution	\$ 120,090.98	100%	\$ 120,090.98	3.59%	20	2011-12-01	2031-12-01	\$ 3,030.29	\$ 8,297.67	\$ 11,327.96	\$ 78,167.53	
Truelove, John & Crawford	\$ 1,600,000.00	20%	\$ 320,000.00	3.39%	20	2019-02-15	2039-02-15	\$ 8,888.65	\$ 13,273.81	\$ 22,162.46	\$ 252,218.98	
Cameron, & Earl St, Vera Cres.	\$ 2,500,000.00	25%	\$ 625,000.00	4.51%	10	2023-12-15	2033-12-15	\$ 27,622.03	\$ 50,717.95	\$ 78,339.98	\$ 574,282.05	
Total Approved Debt			\$ 2,575,943.00					\$ 91,378.66	\$ 116,143.16	\$ 207,521.82	\$ 1,949,784.17	

WASTE WATER DEBENTURES

Project	Principal	Wastewater %	V	Vastewater Principal	Rate	Loan Term	Start Date	End Date	2024 Interest	202	4 Principal	2024 Total Payment	2	2024 Ending Balance
Cobden Sewer (Highway 17)	\$ 280,751.58	100%	\$	280,751.58	3.59%	20	2011-12-01	2031-12-01	\$ 2,040.43	\$	6,427.03	\$ 8,467.46	\$	52,001.70
Truelove, John & Crawford	\$ 1,600,000.00	5%	\$	80,000.00	3.39%	20	2019-02-15	2039-02-15	\$ 2,222.16	\$	3,318.46	\$ 5,540.62	\$	63,054.74
Sewer	\$ 6,000,000.00	100%	\$	6,000,000.00	2. 9 8%	30	2021-10-15	2051-10-15	\$ 170,184.30	\$	133,754.02	\$ 303,938.32	\$	5,610,319.89
Total Approved Debt			\$	6,360,751.58					\$ 174,446.89	\$	143,499.51	\$ 317,946.40	\$	5,725,376.33

WATER AND WASTEWATER RESERVES

Approximate As of December 31, 2023

- Sewage System Debenture Reserve Fund
 - **\$26,437.10**
- Reserve for Sewer Upgrading
 - **\$333,967.63**
- Reserve for Water
 - **\$694,823.55**
- Development Charges Water Reserve
 - **\$15,000**
- Development Charges Wastewater Reserve
 - **\$12,000**

QUESTIONS?

Session Three

Meeting Minutes and Presentation



Water and Wastewater Task Force

Name	Resident / Organization/ Member of Council / WWR Staff	Present / Absent
Randi Keith	Resident	Х
Robyn Voisey	Resident	Х
Anne Guest	Resident	Х
Julie Hennessy	Resident	Х
Jim Labow	Resident	Х
Deanna Nicholson	WWR Staff	Х
Lane Cleroux	WWR Staff	Х
Mike Moore	Member of Council	Х
Chris Olmstead	Member of Council	
Daryl Abbs	Guest – Watson & Associates Economists Ltd.	X
Julie Parr	WWR Staff / Deputy Treasurer	Х
Ivan Burton	WWR Staff / CAO	X

#	Item	Discussion
1	Review of Previous Meetings Minutes	Meeting called to order by co-chair Mike Moore @ 2:30pm
		Session # 2 Minutes
		Approved
2	Presentation by Watson & Associates	Watson Presentation began at 2:32pm. See Appendix 1 attached for PDF of presentation.
		Member Question – Is affordability part of the rate study? Does the process account for household income?



Water and Wastewater Task Force

 -Mr. Abbs responded that the rates are reflective of the costs being incurred divided by the number of users. Affordability is considered throughout the study by actions such as: identifying when required projects can or must be undertaken (delayed if
 possible) to reduce costs in a given year. Smoothing rates over time to avoid sharp increases.
2:38 pm Chair Chris Olmstead arrived.
Costs are driven mainly by Walkerton inquiry & associated regulations to ensure that the system is safe.
Chris Olmstead responded that Council has a 'Standard of Care' to the water system and their personal liability to the system for any potential disasters that could occur (like Walkerton), this is their primary driver for ensuring that the system is appropriately funded.
 Member question: Can meters be enforced? Deanna Nicholson responded that yes and metering requirements are handled through the implementation of a by-law. However, metering is currently the users choice as there is no by-law requiring meters currently in place.
 Question: Is the weighting of rate payer classes set? Can they be adjusted? Who determines the classifications? Lane responded that they can be adjusted and that this is typically done during the rate study for incorporation into the upcoming rates. Was last reviewed in 2019 and the classes and weighting are based off usage



	REGION 🗕	
		 typically seen in other jurisdictions with meters. These can be reviewed again and adjusted. Question: Do Meters have to be calibrated and/or have a life expectancy? Deanna responded: Yes, meters may occasionally require calibration & testing. A neighbouring municipality (Arnprior) started to see meter failures in the 10 year range.
		Staff reached out to Arnprior staff for further comment on meter life expectancy following Session # 3 and received the following response:
		"Our warranty was 20 years, however only the first 10 years was a full warranty. After 10 years, it is a prorated warranty. Essentially, we get a discounted price on a new meter. Most of our meters were installed in 2009/2010. We started seeing an increase in failure in the last few years at 10 – 15 years."
		 Currently water meters are installed at the expense of the property owner if they elect to install a meter.
		Question: What is the typical 'base rate'? Answer: From the presentation: "Generally, the AWWA recommends a base charge recover approximately 25% of total revenues"
-	Member questions received in advance of meeting	Question received from Anne Guest (May 6 th). To be responded by staff at a future Session.
4	Round Table	Anne Guest – Water rates are not of a concern to her as they appear to be on- par with other municipalities. Her concern is specifically the wastewater rates.



REGION >	-
	Ivan – task force recommendations, what is the task force recommending to make rates equitable? Is it to examine the categories? Is it to examine the implementation of meters? Equity? Conservation possibilities? Asking this to get the Task Force to start considering what recommendations they would like to bring forward.
	Mike Moore – request to ask Treasurer/Watson to investigate funding W/WW system through taxation.
	What other options are there to look at distributing costs to general taxation? -Daryl commented that where water is used in a general municipal way, taxation dollars could be minimally considered (other members commented fire department use (properties not on municipal water), municipal building use (Staff commented that municipal buildings are assessed water billing).
	Suggestion for the addition of a municipal building category in the rate categories? Some agreement around the table (and seconded by Daryl Abbs that this is a great suggestion).
	Question from member: Asking for clarification on the "administrative costs" that go into the budget and rates (OCWA)
	- This information was included in the budget provided as part of Treasurer McGonegal's Session # 2 presentation (and in his final budget presentation in 2023). Budget slides that cover administrative costs attached as Appendix 2 .
	 Please note the far-right column of the budget documents "Schedule B & C" provided (pages 35 & 37) in Appendix 2. This column states which category of each line item is included in on the pie charts shown on pages 36 and 38.



Water and Wastewater Task Force

	R E G I O N 🗕	
		 Pages 39 – 41 included in Appendix 1 explain the items that are included in an OCWA 'Cost Plus' contract. Note that in 2024, electricity costs were not included OCWA's cost plus contract.
5		
6a	Next Steps	Session # 4 – Format and objectives?
		Task force members are asked to come prepared to Session # 4 with a list of the recommendations you would like to see the Task force to consider/adopt.
		Next meeting time & date: May 29^{th} @ 1:00 pm – 3:30 pm (location TBA as Council chamber may already be booked).
		Parking Lot Questions: Age of plants across the County – discussed as item for task force members to populate if possible.



Township of Whitewater Region Water and Wastewater Rate Study and Water Financial Plan

Water/Wastewater Task Force Information Session May 8, 2024

Agenda



- Overview of the Study Process
- Timelines
- How Rates are Set
- Overview of the Legislation
- Rate Structure Review
- Water Meters
- Comparison of Municipalities
- Questions

Overview of the Study Process

- Municipalities periodically undertake water and wastewater rate study reviews to ensure:
 - The rates are reflective of the costs being incurred
 - To adjust rates to match updated capital cost estimates or unexpected capital needs
 - To update the Water Financial Plan required under O.Reg 453/07
- Studies should identify rates that are financial sustainable over the forecast period

Overview of the Study Process



- Identify all current and future water and wastewater system capital needs;
- Identify cost recovery options for capital;
- Estimate future operating costs over the next 10 years;
- Review and assess the current rate structure and discuss options for an alternative;
- Review and assess water metering options for the Township;
- Recommend new rates to recover the cost of the water and wastewater systems; and
- Provide the Township with a financial plan, as required by legislation, to ensure the Township meets the requirement to be licensed to operate the water system.



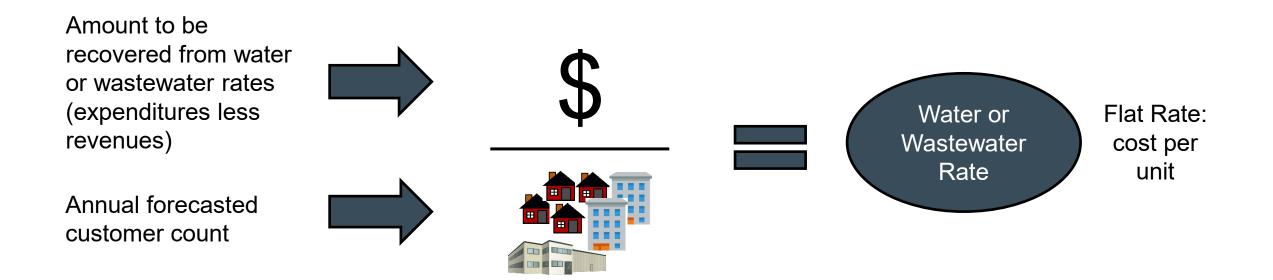
Work Plan Task	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7
1. Study Startup (1) - v	SM						
2. Data Collection and Review							
3. Council Workshop (1) - p		CW					
4. Assessment of Volumes/Flow and Consumers by Type							
5. Capital Needs and Financing							
6. Operating Costs and Lifecycle Planning							
7. Rate Structure Options Review and Calculations							
8. Review Calculations and Preliminary Rates with Staff (1) - v				SM			
9. Rate Study Report					FR		
10. Council Presentation of Rate Study (1) - p					СР		
11. Water Financial Plan and Report							
12. Council Presentation of Financial Plan (1) - v							СР

SM - Staff Meeting

CW - Council Workshop CP - Council Presentation



 Water and wastewater rates are calculated in their simplest form by dividing the total costs to maintain the water or wastewater system by the number of customers

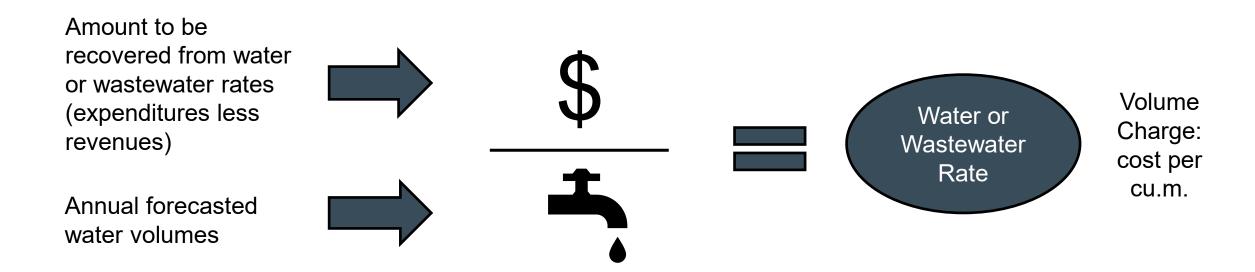


Challenges with Flat Rate Approach

- Classification of categories
 - Residential
 - Multi-Residential (1st unit)
 - Multi-Residential (2nd & subsequent units)
 - Small Commercial
 - Medium Commercial
 - High/Large Commercial
- Estimated relative volumes between categories



 Water and wastewater rates are calculated in their simplest form by dividing the total costs to maintain the water or wastewater system by the expected total volume for the period



Full Cost Recovery

- Capital Costs
- Operating Costs
 - Capital related (debt, transfers to reserves, etc.)
 - Operations and maintenance
 - Administration and overhead
- Lifecycle replacement costs (asset management)



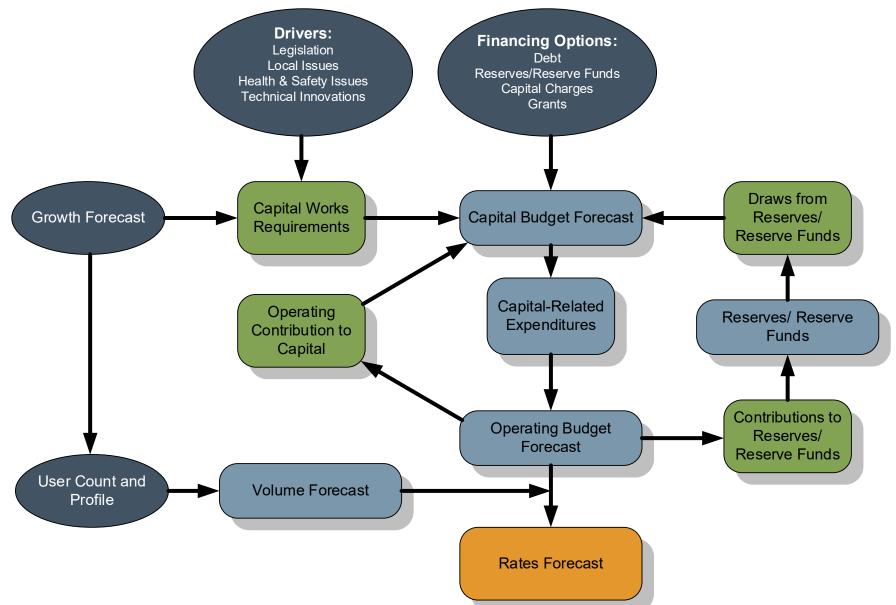




- Capital budget \rightarrow 10-year capital forecast
- Development Charges Study \rightarrow 10-year capital forecast, future growth projections
- Asset Management Plan/City Wide \rightarrow 10-year capital lifecycle replacement needs
- Reserve funds \rightarrow 10-year reserve fund balance forecasts
- Outstanding/future debt payments \rightarrow 10-year debt payments
- Operating budget \rightarrow 10-year operating forecast and revenue forecast
- Historical water and wastewater customer data (customers and total volumes)→ 10-year total water and wastewater volume forecasts



- Identify how to fund the capital forecast based on discussions with staff
 - Water/Wastewater Reserve Funds
 - Development Charge Reserve Funds
 - Lifecycle Reserve Funds
 - Operating Budget Transfers (Funding Reserves)
 - Debt Financing
 - Grant Funding
 - Front-Ending Contributions
 - Municipal Act (Part 12)



Legislation for Water and Wastewater

- Since Walkerton, new legislation has been passed by the Province to enhance the provision of services. These include the following:
 - Safe Drinking Water Act;
 - Sustainable Water and Sewage Systems Act;
 - O.Reg. 453/07 Safe Drinking Water Act;
 - Clean Water Act; and
 - Water Opportunities Act.
- Further Requirements:
 - Municipal Infrastructure Strategy
 - Infrastructure for Jobs and Prosperity Act, 2015

Full Cost Recovery or Partial Tax Funding

Current Rates and Rate Structure in Whitewater

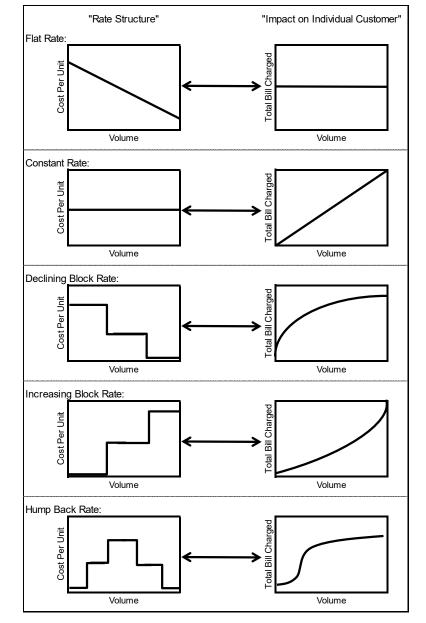
- The Township currently imposes a flat rate for non-metered customers, and a volume rate for metered customers.
- Bills are sent out bi-monthly

Township of Whitewater Region 2024 - Water Billing Rates		Т	ownship of Wh	nitewater	Region
		2024 - Wastewater Billing Rates		Rates	
Monthly Base Charge			Monthly Ba	ase Charg	je
Residential	\$97.78	Resi	idential		\$158.48
Multi-Residential (1st unit)	\$97.78	Multi-Reside	ential (1st unit)		\$158.48
Multi-Residential (2nd & subsequent units)	\$78.23		lential (2nd & uent units)		\$126.79
Small Commercial	\$97.78	Small C	ommercial		\$158.48
Medium Commercial	\$146.77	Medium (Commercial		\$237.66
High/Large Commercial	\$195.66	High/Large	Commercial		\$316.95
Volume Charge			Volume	Charge	
\$ 2.0410	per cu.m	\$	4.9140	per m ³	

 Municipalities without meters have considered implementing meters and incorporating a volume-based charge

Rate Structure Review

RATE STRUCTURE COST PER UNIT AS VOLUME INCREASES		IMPACT ON CUSTOMER BILL AS VOLUME INCREASES
Flat Rate	Cost per unit decreases as more volume consumed	Bill remains the same no matter how much volume is consumed
Constant Rate	Cost per unit remains the same	Bill increases in direct proportion to consumption
Declining Block	Cost per unit decreases as threshold targets are achieved	Bill increases at a slower rate as volumes increase
Increasing Block	Cost per unit increases as threshold targets are achieved	Bill increases at a faster rate as volumes increase
Hump Back Rate	Combination of an increasing block at the lower consumption volumes and then converts to a declining block for the high consumption	Bill increases at a faster rate at the lower consumption amounts and then slows as volumes increase



*Rate structure requires water meters

Rate Structure Review Continued



- Most municipalities (approximately 92%) who have a volume rate structure also impose a base monthly charge
- A base charge ensures a secure amount of revenue is received as a large portion of the operating cost is fixed
- Generally, the AWWA recommends a base charge recover approximately 25% of total revenues

Rate Structure Review Continued

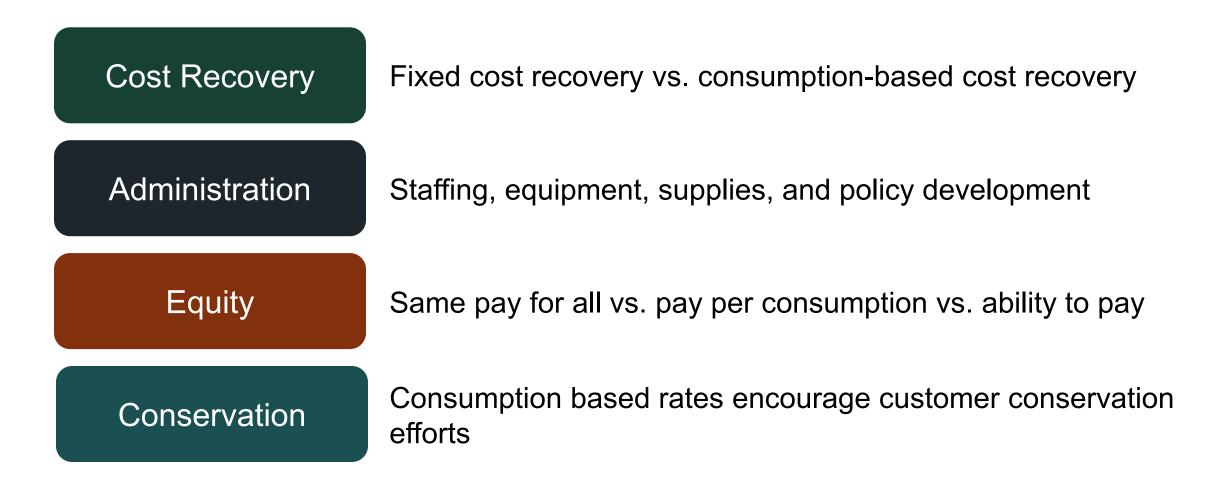


- Other Less Common Rate Structures Include:
 - Property Assessment –revenues for water or wastewater are collected through incorporating the costs within the tax rate charged on property assessment
 - Seasonal Uniform water rates increase in peak demand season
 - Excess Use Rate consumption in the peak demand season exceeding a threshold is charged a higher rate
 - Time of Use Rate usage during specific periods is charged at higher rates

Typically, most of these rate structures come with larger administrative burden

Rate Structure Review Continued Adoption of a Rate Structure





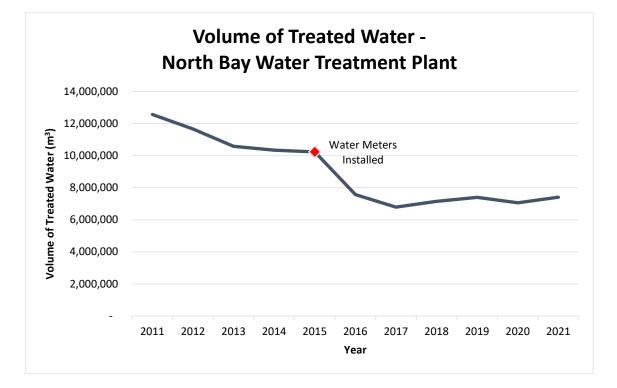
Advantages

- Data collection leading to improved management decision making abilities
 - Customer consumption habits
 - Identify classes of customers
 - Accurate and equitable billing
 - Identify Township water loss
 - Ability to repair aging infrastructure
 - Ability to add tamper detection to meters
 - Pinpoint leaks based on historical meter data
- Enhanced customer service
 - Customer data portals and real time data tracking



Advantages

- Water conservation and operating cost savings
- The City of North Bay implemented a full City-wide water meter installation program in 2015
 - Result: decreased demand on the Water Treatment Plant and operating cost savings (e.g. decreased chemical and hydro costs)





Disadvantages

- Added capital and operating costs
 - Cost of water meters and associated infrastructure and technology
 - Depending on the type of water meters installed, operating costs related to meter reading and billings
- Lack of public understanding and support
 - Largest hurdle municipalities face when implementing a water-meter installation program
 - There are best practices to gain acceptance including ongoing engagement through open houses, public information sessions, online and mailed brochures/information, etc.

Available Technologies



- The main types of meters to be considered include:
 - <u>Direct Read</u>: manual reading through visual inspection on the odometer inside the building or home;
 - <u>Remote Pulser Read</u>: manual read of odometer from the outside of the building or home;
 - <u>Automatic Remote Read (A.M.R.)</u>: meter is read at an outside remote device and recorded automatically using a hand-held interface, or in proximity without touch (e.g., drive-by in a vehicle);
 - <u>Radio Frequency Read (A.M.I.)</u>: meter is connected to a transponder unit transmitting the reading via a radio frequency signal.
 - Methods to read meter include drive by approach and fixed area network (infrastructure system collects meter reading signals and transmits to a central location (fully automated) and allows for constant meter reads).

Water Meters Available Technologies



Metering Technology	Advantages	Disadvantages
Direct Read	Low cost per meterLow installation cost	 Highly time consuming to physically access and read each meter Less frequent reads given the time it takes to undertake meter reads
Remote Pulser Read	Access to meter not required	 Higher per meter and installation cost than direct reads Highly time consuming to physically access and read each remote meter
Automatic Remote Read (A.M.R.)	 Less labour required as direct access to meter not required Increased data collection due to potential for increase in frequency of reads 	Higher per meter, installation, and maintenance costs than previous two alternatives
Radio Frequency Read (A.M.I.)	 <u>Drive-By Reads</u> Lower labour costs Increased data collection due to potential for increase in frequency of reads Access to meter is not required <u>Fixed Area Network</u> Lowest labour cost given full automation Increased data collection Access to meter not required Opportunity to use existing towers in the Township or lease towers 	 <u>Drive-By Reads</u> Higher meter and installation costs May require the need for an additional full time equivalent/data analyst <u>Fixed Area Network</u> Higher meter and installation costs Large capital investment for radio tower infrastructure May require the need for an additional full time equivalent/data analyst

Water Meters Available Technologies

Metering Options	Description	Costs
Touch Read Meters	Capital Cost: Supply and installation of water meters and remote readers. Operating Cost: Supplier support and software.	Total capital cost: Lowest Annual operating cost to directly support the water meters: Lowest
Automatic Remote Read Meters (A.M.R.)	Capital Cost: Supply and installation of water meters and remote readers. Operating Cost: Supplier support and software.	Total capital cost: Moderate Annual operating cost to directly support the water meters: Moderate (largely related to software costs)
Radio Frequency Read Meters and Infrastructure (A.M.I.)	Capital Cost: Supply and installation of water meters, remote readers, and fixed area network infrastructure. Operating Cost: Supplier support, software, cellular cost, and customer portal.	Total capital cost: Highest Annual operating cost to directly support the water meters: Highest (largely related to cellular costs)



Water Meters Survey of Municipalities in Ontario



Category	The City of Greater Sudbury	The City of North Bay	The Town of Renfrew
Number of accounts:	48,600	16,000	3,200
Current type of water meters used:	A.M.I. (Radio-Frequency - provides constant automated reads)	A.M.I. (Radio-Frequency - provides constant automated reads)	A.M.R. (Automatic Remote Read)
Project Budget:	\$17,000,000 (2021 \$)	\$7,200,000 (2015 \$)	\$1,000,000 (2010 \$)
Cost per water meter:	\$350 (2021 \$)	\$450 (2015 \$)	\$313 (2010 \$)

Other Considerations



 If meters are installed the Township can phase in a combination rate structure, e.g.

Year 1: 60% flat rate, 40% volume rate

Year 2: 50% flat rate, 50% volume rate

Year 3: 40% flat rate, 60% volume rate, etc.

- Cash Flow: the Township currently bills bi-monthly
 - Moving to touch read meters requires staff to physically read individual meters (meaning less frequent billings)
 - The automation from AMR or AMI metering technologies allows for more frequent billings



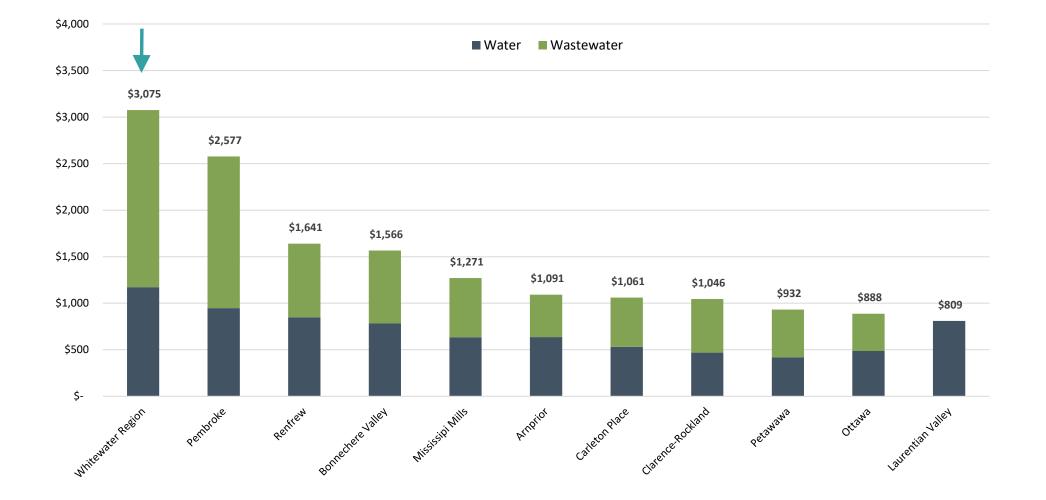
- Based on Watson's extensive database of municipal water and wastewater rate studies, we have found the average annual consumption per household to be around 200 cu.m.
- 2019 rate study identified Whitewater Region consumption at 330 cu.m (this was a high-level estimate at the time).
- However, we have seen examples of municipalities without water meters at 550-700 cu.m as there is no incentive to conserve water.



- As discussed, many factors go into the rate determination:
 - Does the municipality have development charges?
 - Does the municipality require the developer to install a large portion of the water and wastewater infrastructure?
 - Does the municipality have extensive water and/or wastewater mains?
 - Are municipalities including full replacement costs (asset management) in their rate determination?

Combined Rates – Residential (Based on 200 cu.m)





Combined Rates – Residential



Municipality/Region	Total Bill Based on 200 cu.m	Total Bill Based on 300 cu.m
Whitewater Region	\$3,075	\$3,075
Elgin County	\$1,000 to \$2,500	\$1,500 to \$3,100
Simcoe County	\$1,200 to \$2,700	\$1,500 to \$3,600
Peterborough Area	\$1,000 to \$2,500	\$1,200 to \$2,800

• Would appear rates for Whitewater are on the upper-end of rates based on sample review of other jurisdictions

Challenges with Comparing Rates

- Flat rate vs. metered rate
- Historical grant funding
- Use of Development Charges
- Purchased vs. produced water
- State of infrastructure





Session Four

Meeting Minutes



Water and Wastewater Task Force

Monday June 24, 2024 at 3:00 p.m. Council Chambers

Name	Resident / Organization/ Member of Council / WWR Staff	Present / Absent
Randi Keith	Resident	Х
Robyn Voisey	Resident	Х
Anne Guest	Resident	Х
Julie Hennessy	Resident	Х
Jim Labow	Resident	Х
Deanna Nicholson	WWR Staff	Х
Lane Cleroux	WWR Staff	Х
Mike Moore	Member of Council	Х
Chris Olmstead	Member of Council	Х
Carmen Miller	WWR Staff – Note taking	Х
Donald Deer	Guest	Х
Guest	Guest	X

#	Item	Discussion
1	Review of Previous Meetings Minutes	Meeting began @ 3:10pm
		Session # 3 Minutes – no edits requested.
2	Review of Focus of Terms of Reference	
3	Development of Recommendations	49 Recommendations developed during Session #4.
4a	Next Steps	 Recommendations list to be cleaned up and sent along with meeting minutes, for review by members.



Monday June 24, 2024 at 3:00 p.m. Council Chambers

Recommendations to be voted upon during Session #5 for inclusion in final report.
Request to see Freedom of information requests
 Request by Task force to ask Jp2g to attend future Session to detail how the WWTP project was undertaken.
Parking Lot Questions: Age of plants across the County – discussed as item for task force members to populate if possible.
July 23 rd @ 2:30 – Session # 5 July 25 th @ 1:00 – 3:00 pm – Jp2g (if accepted)
Meeting adjourned at 5:15 pm

Session Five

Meeting Minutes and Presentation



Tuesday July 23, 2024 at 2:30 p.m. Council Chambers

Session #5

Name	Resident / Organization/ Member of Council / WWR Staff	Present / Absent		
Randi Keith	Resident	X – Left at 4:35pm		
Robyn Voisey	Resident	Х		
Anne Guest	Resident	Х		
Julie Hennessy	Resident	Х		
Jim Labow	Resident	Х		
Deanna Nicholson	WWR Staff	Х		
Lane Cleroux	WWR Staff	Х		
Mike Moore	Member of Council	Х		
Chris Olmstead	Member of Council	Х		
	Guests	3 Present		
Ivan Burton	WWR Staff	X – left at 4:40 pm		

#	Item	Discussion
1	Review of Previous Meetings Minutes	Meeting opened at 2:37pm Chris Olmstead Chair
		No comments on previous minutes.
		Chris – received questions about why each person was selected to sit on the panel. It was formed to look at water and wastewater in Whitewater, not just Cobden WWTP



Tuesday July 23, 2024 at 2:30 p.m. Council Chambers

	REGION	
		 10 years of history, data, Council. That's why this group was selected. Two others were requested to be on the task force and declined the invitation. Anne Guest Expressed discontent relating the scheduling process (outlook meeting requests). Statement about freedom of information requests. Why should we be paying for FOI's? Ivan - private FOI's have been submitted. Ivan is unaware of what FOI's have been submitted from the Task Force. If the task force is asking for information, those requests can be funneled through staff and information provided if it is public. Randi indicated that she will need to leave at 4:30pm.
2	WWTP Upgrade Timeline - Presentation by Lane Cleroux	Presentation began at 2:44pm Lane indicated that if anyone has questions throughout the presentation to raise your hand and he would answer throughout.
3	Voting/editing of Recommendations	Randi left after voting on Recommendation #39.
4a	Next Steps	Session # 6 – will return on July 25 th to continue to decide on recommendation priority and implementation timing.



Tuesday July 23, 2024 at 2:30 p.m. Council Chambers

	Scheduled for July 25 th @ 1:00pm – 3:00 pm



WATER/WASTEWATER TASKFORCE COBDEN WASTE WATER TREATMENT PLANT UPGRADE

JULY 23, 2024

AGENDA

- Funding
- Jp2g
- Municipal Class Environmental Assessment
- Construction
- Financial

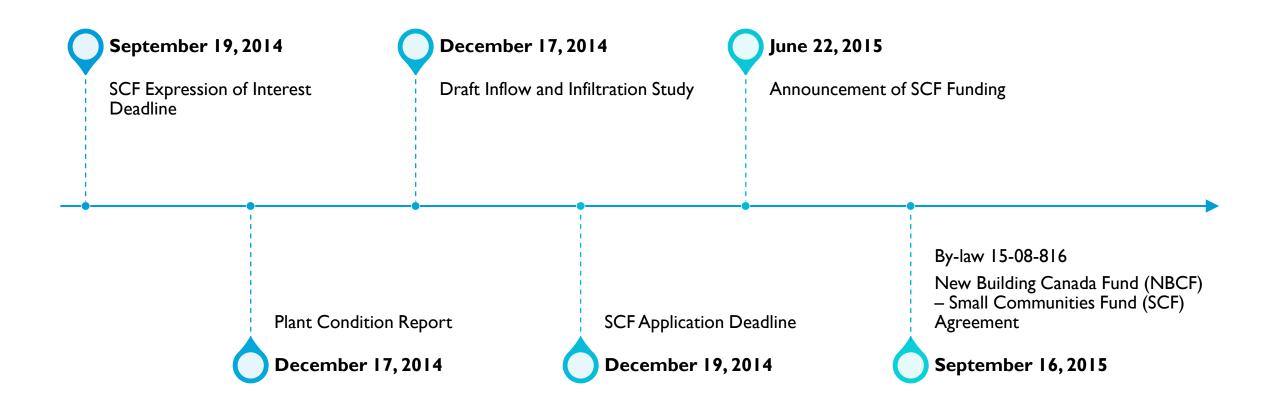
FUNDING

- New Building Canada Fund Small Communities Fund (SCF)
 - Expression of Interest submitted September 2014
 - Application submitted December 2014
 - Announcement of Funding June 22, 2015
 - I5-08-810 passed on August 19, 2015
 - New Building Canada Fund (NBCF) Small Communities Fund (SCF) Agreement with the Ministry of Agriculture, Food and Rural Affairs
 - Provincial Funding 3,136,477.00
 - Federal Funding 3,136,477.00
 - TOTAL \$ 6,272,954.00

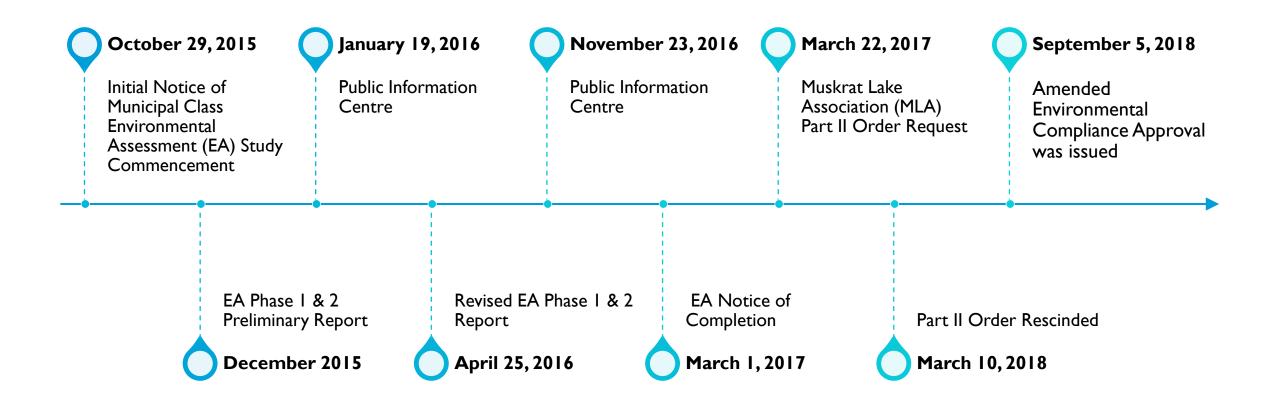
Detailed Project Cost Outlined in Funding Application

 Environmental Assessment 	\$226,000
 Engineering Design 	\$847,500
Project Management	\$203,400
 Construction 	\$8,475,000
 Miscellaneous 	\$696,857
Total Eligible Costs	\$10,448,757
Less Rebatable Taxes	-\$1,039,327
 Total Net Eligible Cost 	\$9,409,429

FUNDING TIMELINE



MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT TIMELINE



PART II ORDER REQUEST

- The Muskrat Lake Association (MLA) made Part II Order Request on March 22, 2017,
- Wednesday, September 6th, 2017, members of MLA and staff from Jp2g and the Township toured the Port Carling sewage plant
- Muskrat Lake Association rescind the Part II Order Request on March 10, 2018
 - "The Muskrat Lake Association believes from what the MOECC has confirmed that the proposed Cobden WPCP will be designed to greatly reduce the potential for bypasses of the plant."
- On March 14, 2018, the Township received a letter from the Ministry of the Environment and Climate Change indicating that the Township could proceed with the project.

EA & DESIGN

September 2015

Environmental Assessment Commenced by Jp2g

February 2017 (Results from Environmental Assessment)

- Contract I New Micro Bioreactor (MBR) Plant (Design-Build-Contract)
 - Preliminary Design completed by Jp2g
 - Detailed Design completed by Contractor
- Contract 2 Alterations to Existing WWTP and Sanitary Sewermain Repairs (Design-Bid-Build)
 - Preliminary and Final Design completed by Jp2g

February 2018 (Result from Part II Order Delay)

- Contract I New Micro Bioreactor (MBR) Plant (Design-Bid-Build)
 - Detailed Design completed by Jp2g
 - The project can be tendered as soon as the Part II Order Request is removed; and
 - Jp2g could complete the final design documents and apply for the Environmental Certificate of Approval.

CONSTRUCTION AWARD

- Tender 2018-32 closed on June 22, 2018 and were publicly opened at the Township of Whitewater Region Municipal Office.
- Twelve (12) tender packages were picked up and the Township received five bids

Bidder	Amount	Corrected Amount
Baseline Constructors Inc.	\$10,980,000.00	
J.C. Sulpher Construction Ltd.	\$11,716,758.00	
M. Sullivan & Son Ltd.	\$11,905,000.00	\$11,904,830.00
ASCO Construction Ltd.	\$14,105,563.00	
Black & McDonald	\$15,492,860.00	\$15,196,860.00

 On July 4, 2018, Council That Physical Services Committee recommend Council of the Township of Whitewater Region enact a by-law to award the Cobden Wastewater Treatment Plant Upgrades to Baseline Constructors Inc. in the tendered amount of \$10,980,000.00 (not including HST); and, authorize the Mayor and CAO/Clerk-Treasurer to enter into the necessary agreement.

CONSTRUCTION TIMELINE



COBDEN WWTP UPGRADE FINANCIAL

- Original Construction Contract: \$10,980,000.00
- Change Orders: \$187,701.56
- Total Construction Contract: \$11,167,701.56
- EA, Design, Contract Administration, Post Construction: \$1,572,901.17
- Other (Hydro and Advertising): \$23,575.57
- Sub-total Project Cost: \$12,764,178.30
- Total Project inclusive of non-refundable H.S.T.: \$12,988,827.84

Session Six

Meeting Minutes



Thursday July 25, 2024 at 1:00 p.m. Council Chambers

Session # 6

Name	Resident / Organization/ Member of Council / WWR Staff	Present / Absent
Randi Keith	Resident	Х
Robyn Voisey	Resident	Х
Anne Guest	Resident	Х
Julie Hennessy	Resident	Х
Jim Labow	Resident	Х
Deanna Nicholson	WWR Staff	Х
Lane Cleroux	WWR Staff	Х
Ivan Burton	WWR Staff	Х
Mike Moore	Member of Council	Х
Chris Olmstead	Member of Council	Х
	Guests	1 Present

#	Item	Discussion
1	Review of Previous Meetings Minutes	Meeting begins at 1:03pm Edits to meeting minutes to add Ivan to list of attendees and time that members left.
2	Voting/editing of Recommendations	Task force voted on implementation timelines and priority for each recommendation that was developed and carried. Recommended implementation timelines and priority level was voted on, for a total of 44 recommendations.



Thursday July 25, 2024 at 1:00 p.m. Council Chambers

<		
3	Address by the Chair	Closing comments from the chair:
		Chris thanked the task force for their success shown through their practical and forward-thinking recommendations.
		The recommendations will greatly assist staff and council in the future.
		Chris discussed with Mayor Nicholson and they feel that the task force has successfully fulfilled the mandate discussed in the TOR.
		These recommendations offer a solid foundation for future Township decisions and other Townships that might reference the final report.
		Chris thanked staff for input / expertise / understanding that was provided to the public members.
		Thanked members for their time. Nothing can replace your time. Thanked them for their interest in the matters at hand and for investing in their community and future community members.
		Vows to continue to 'champion' the cause after the task force wraps up.
		All the information collected since March will be consolidated into a final report.



Thursday July 25, 2024 at 1:00 p.m. Council Chambers

		The task forces recommendations do hold weight. Chris stressed that each members presence at the time of the report presentation to Council (likely in September) will add to that weight significantly. The mandate has been fulfilled with this meeting
		Meeting adjourned at 2:40pm
4a	Next Steps	Township Staff will finalize recommendations and prepare a draft report, that will then be sent to task force members for review.

Appendix 'B'

Residential Water & Wastewater Rates Spread Sheet

	RESIDENTIAL WATER & WASTEWATER RATES March 24, 2024. Donald .W. Deer / Anne Guest /Robyn Voisey										
Town	YEAR	METERED or FLAT	Water Monthly Consumptive Rate /m3	Water Monthly consumptive cost	Water monthly base charge	Water monthly total	Wastewater monthly consumptive rate/m3	Wastewater Monthly consumptive cost	Wastewater monthly base charge	Wastewater Monthly total	Water &Wastewater Annual Cost
ARNPRIOR	2023	Metered	\$1.78	\$23.73	\$30.49	\$54.22	\$1.22	\$16.26	\$21.95	\$38.21	\$1,109.16
BANCROFT	2024	Metered	\$3.24	\$43.19	\$17.29	\$60.48	\$6.49	\$86.51	\$28.28	\$114.79	\$2,103.25
BANCROFT	2024	Annual Flat				\$758.74				\$1,264.80	
BARRYS BAY	2023	Metered	\$4.86	\$64.78		\$64.78	\$5.21	\$69.45		\$69.45	\$1,610.80
BRACEBRIDGE	2024	Metered	\$1.99	\$26.53	\$24.81	\$51.34	\$2.78	\$37.12	\$7.32	\$44.44	\$1,149.34
CHALK RIVER	2024	Flat Bi- monthly				In waste water				\$211.10	\$1,266.60
COBDEN	2024	Flat Bi- monthly				\$195.56				\$316.96	\$3,075.12
DEEP RIVER	2023	Annual Flat				\$813.82				\$603.03	\$1,416.85
EGANVILLE	2024	Metered (tiered)	\$2.92/22.5 m3. Then \$3.49/m3	\$7.39	\$65.26	\$72.65	\$2.92/22.5 m3 then \$3.49/m3	\$7.39	\$65.26	\$72.65	\$1,743.54
GRAVENHURST	2024	Metered	\$1.99	\$26.53	\$24.81	\$51.34	\$2.78	\$37.12	\$7.32	\$44.44	\$1,149.34
HUNTSVILLE	2024	Metered	\$1.99	\$26.53	\$24.81	\$51.34	\$2.78	\$37.12	\$7.32	\$44.44	\$1,149.34
LAKE OF BAYS	2024	Metered	\$1.99	\$26.53	\$24.81	\$51.34	\$2.78	\$37.12	\$7.32	\$44.44	\$1,149.34
MUSKOKA LAKES	2024	Metered	\$1.99	\$26.53	\$24.81	\$51.34	\$2.78	\$37.12	\$7.32	\$44.44	\$1,149.34
Muskoka Region	2024	Flat Monthly				\$104.42				\$123.53	\$2,735.40
OTTAWA	2023	Metered	0 -6m3:\$0.9/m3. >6-25m3:\$1.79	\$28.49	\$15.28	\$43.77	0-6m3:\$.83.>6m3- 25m3:\$1.66	\$26.39	\$25.32	\$51.71	\$1,145.82
PEMBROKE	2024	Metered/ Quarter	\$1.99	\$76.90		\$76.90	\$3.82	\$147.89		\$147.89	\$899.15
PEMBROKE	2024	Flat /Quarter				\$143.93				\$229.26	\$1,492.76
PETAWAWA	2023	Flat Annual				\$400.41				\$489.12	\$889.53
PORT CARLING	2024	Metered	\$1.99	\$26.53	\$24.81	\$51.34	\$2.78	\$37.12	\$7.32	\$44.44	\$1,149.34
RENFREW out of Town	2023	Metered	\$2.75	\$36.66	\$44.84	\$81.50	\$2.44	\$32.53	\$49.42	\$81.95	\$1,961.31
RENFREW	2023	Metered	\$2.75	\$36.66	\$24.42	\$61.08	\$2.44	\$32.53	\$24.71	\$57.24	\$1,419.75
THUNDER BAY	2023	Metered	\$1.94	\$25.92	\$27.53	\$53.45	\$1.75	\$23.33	\$24.78	\$48.10	\$1,218.59

NOTE: In the metered column I've put in RED what the rate covers, i.e. annually, quarterly or monthly. All others are monthly. I've used 430 litres /day per household in Ontario as per Ottawa in order to compare equally. Also note that the Flat Rates for Bancroft only apply to a location that only uses either water or wastewater service not both. Muskoka Flat rates are Grandfathered and are for people that have only water or wastewater or both. In Muskoka all rates are the same. Ottawa has an annual base rate for water, wastewater, fire supply and stormwater which I converted to monthly included in the base charge. Metered monthly is based on a 31 day month except Ottawa is a 30 day month. Chalk River residents have to make a payment of \$834.64 in 2024 or a payment of \$443.31 in 2024 and 2025 for a capital purchase.

		RE	SIDENTIAL WAT	ER & WASTEW	ATER RATES	February 28, 2024. Donald .W. Deer / Anne Guest					
Town	YEAR	METERED or FLAT	Water Monthly Consumptive Rate /m3	Water Monthly consumptive cost	Water monthly base charge	Water monthly total	Wastewater monthly consumptive rate/m3	Wastewater Monthly consumptive cost	Wastewater monthly base charge	Wastewater Monthly total	Water &Wastewater Annual Cost
ARNPRIOR	2023	Metered	\$1.78	\$34.76	\$30.49	\$65.25	\$1.22	\$23.83	\$21.95	\$45.78	\$1,332.36
BANCROFT	2024	Metered	\$3.24	\$63.28	\$17.29	\$80.57	\$6.49	\$126.75	\$28.28	\$155.03	\$2,827.16
BANCROFT	2024	Annual Flat				\$758.74				\$1,264.80	\$2,023.54
BARRYS BAY	2023	Metered	\$4.86	\$94.92		\$94.92	\$5.21	\$101.75		\$101.75	\$2,360.01
BRACEBRIDGE	2024	Metered	\$1.99	\$38.87	\$24.81	\$63.68	\$2.78	\$54.38	\$7.32	\$61.70	\$1,504.58
CHALK RIVER	2024	Flat Bi- monthly				In waste water				\$211.10	\$1,266.60
COBDEN	2024	Flat Bi- monthly				\$195.56				\$316.96	\$3,075.12
DEEP RIVER	2023	Annual Flat				\$813.82				\$603.03	\$1,416.85
EGANVILLE	2024	Metered (tiered)	\$2.92/22.5 m3. Then \$3.49/m3	\$7.39	\$65.26	\$72.65	\$2.92/22.5 m3 then \$3.49/m3	\$7.39	\$65.26	\$72.65	\$1,743.54
GRAVENHURST	2024	Metered	\$1.99	\$38.87	\$24.81	\$63.68	\$2.78	\$54.38	\$7.32	\$61.70	\$1,504.58
HUNTSVILLE	2024	Metered	\$1.99	\$38.87	\$24.81	\$63.68	\$2.78	\$54.38	\$7.32	\$61.70	\$1,504.58
LAKE OF BAYS	2024	Metered	\$1.99	\$38.87	\$24.81	\$63.68	\$2.78	\$54.38	\$7.32	\$61.70	\$1,504.58
MUSKOKA LAKES	2024	Metered	\$1.99	\$38.87	\$24.81	\$63.68	\$2.78	\$54.38	\$7.32	\$61.70	\$1,504.58
Muskoka Region	2024	Flat Monthly				\$104.42				\$123.53	\$2,735.40
OTTAWA	2023	Metered	0 -6m3:\$0.9/m3. >6-25m3:\$1.79	\$28.49	\$15.28	\$43.77	0-6m3:\$.83.>6m3- 25m3:\$1.66	\$26.39	\$25.32	\$51.71	\$1,145.82
PEMBROKE	2024	Metered/ Quarter	\$1.99	\$112.66		\$112.66	\$3.82	\$216.68		\$216.68	\$1,317.35
PEMBROKE	2024	Flat /Quarter				\$143.93				\$229.26	\$1,492.76
PETAWAWA	2023	Flat Annual				\$400.41				\$489.12	\$889.53
PORT CARLING	2024	Metered	\$1.99	\$38.87	\$24.81	\$63.68	\$2.78	\$54.38	\$7.32	\$61.70	\$1,504.58
RENFREW out of Town	2023	Metered	\$2.75	\$53.71	\$44.84	\$98.55	\$2.44	\$47.65	\$49.42	\$97.07	\$2,347.45
RENFREW	2023	Metered	\$2.75	\$53.71	\$24.42	\$78.13	\$2.44	\$47.65	\$24.71	\$72.36	\$1,805.89
THUNDER BAY	2023	Metered	\$1.94	\$37.97	\$27.53	\$65.50	\$1.75	\$34.18	\$24.78	\$58.95	\$1,493.45

NOTE: In the metered column I've put in RED what the rate covers, i.e. annually, quarterly or monthly. All others are monthly. I've used 630 litres /day per household in Ontario as per Toronto in order to compare equally. Also note that the Flat Rates for Bancroft only apply to a location that only uses either water or wastewater service not both. Muskoka Flat rates are Grandfathered and are for people that have only water or wastewater or both. In Muskoka all rates are the same. Ottawa has an annual base rate for water, wastewater, fire supply and stormwater which I converted to monthly included in the base charge. Metered monthly is based on a 31 day month except Ottawa is a 30 day month. Chalk River residents have to make a payment of \$834.64 in 2024 or a payment of \$443.31 in 2024 and 2025 for a capital purchase.