DEPARTMENT OF ENVIRONMENTAL SERVICES
STAKEHOLDER REPORT

2024

Table of Contents

Department Message 3

Environmental Services: A Beacon of Resource Management and Innovation 3

Spotlight: Tenured Turnover 4

The Onset of Change 4

A Look Back 4

A Step Forward 4

Water Treatment System Overview 5

Wastewater Treatment System Overview 6

Environmental Services Highlights 8

Water Quality 8

Raw Water Pumping Station [RWPS] Commissioning 8

Operations Staff Development 8

Emergency Response 9

Utility Services Division 9

Septage Receiving Upgrade 9

Industrial Monitoring Program 9

Utility Master Plan Revitalization 10

Inflow & Infiltration Reduction 11

Wastewater Quality 11

Capital Projects 13

Highway 10 Pumping Station Upgrades | Phase: Construction 13

QSWTP Chemical Feeder System Upgrades | Phase: Design 13

WPCP Administration Building Improvements | Phase: Construction 13

Water Tower Inspection & Repair – Phase II | Phase: Construction 13

Septage Receiving Upgrade | Phase: Construction 13

Utility System Master Plan | Phase: Study 13

Park Street Pumping Station | Phase: Design 14

Water Pollution Control Plant Renewal | Phase: Study/Design 14

Employees of 2024 15

Top Left: New Distribution Pumps & Piping at the Hwy 10 Pumping Station

Right: the Queen Street Water Treatment Plant (QSWTP)

Bottom Left. Bio-solids excavation

Department Message

Environmental Services: A Beacon of Resource Management and Innovation

Clean water is one of Saskatchewan's most precious resources, underscoring our status as a groundwater-rich province. The health of our groundwater reserves is vital for sustaining quality of life throughout Saskatchewan. Each day, the necessity of a sustainable and integrated approach to managing this essential and limited resource becomes more apparent.

It is increasingly evident that all water resources—source water, potable water, wastewater, and stormwater—must be managed collaboratively to optimize benefits for our environment and growing population. This stewardship of resources is the cornerstone of our work at the Department of Environmental Services.

The innovative thinking of our staff and stakeholders is shaping the development of the Utility Master Plan, which aims to set the path for maintaining service standards, achieving our current goals and future aspirations. Since its initial development in 2005, we have continuously emphasized the importance of strengthening strategic partnerships as we engage more deeply in sustainable water planning, resource recovery, and stewardship efforts.

Over the past year, we have made significant strides toward realizing the department's vision of being a responsible leader, an innovative creator of clean water, and an excellent workplace. In collaboration with our colleagues and customers, the department remains dedicated to advancing this progress through the cooperative management of the community's long-term water supply needs.

Spotlight: Tenured Turnover

In the spring of 2023, the Environmental Services Department marked a significant milestone with the retirements of Waterworks Manager (Water Treatment) Glenda Holmes and Director Michael Buchholzer, signalling the end of an era. This transition, which began with the 2021 retirement of then Waterworks Manager (Wastewater Treatment) Russel Peesker, concluded the turnover of the most long-serving management team the department has had since its inception. Buchholzer's 39-year career with the city included three promotions, culminating in his appointment as Director in 2003.

In July 2023, Aron Hershmiller was appointed Director of Environmental Services, leading a newly forming management team with Waterworks Manager (Water Treatment) Jevon Karakochuk and Waterworks Manager (Wastewater Treatment) Connor Hunt.

The Onset of Change

December 2023 brought further senior leadership changes: Aron Hershmiller transitioned to Director of Public Works, Connor Hunt was promoted to Director of Environmental Services, and Jake Perpeluk assumed the role of Waterworks Manager (Wastewater Treatment) in March 2024. The current management group of the Environmental Services Department is dedicated to enhancing the city's aging water infrastructure. Esteemed as an industry leader, particularly with accolades like the Logan Green Water Management System, the department aims to continue shaping a sustainable future. The decision to rejuvenate the Water System Master Plan in 2024 set the course to ensure the advancement of growth and service potential, identifying crucial requirements for maintaining operability.

These new plans signify fresh beginnings, but it is essential to recognize that the development in our cultural and organizational direction was cultivated over many years and various leadership groups.

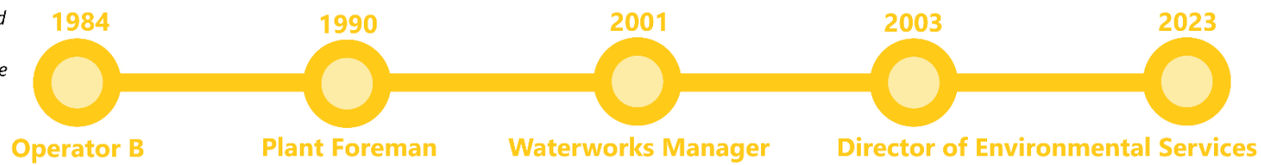
A Look Back

Environmental Services is currently on the brink of several large-scale projects that will significantly enhance our capabilities and service levels. This is not the first time the department has encountered such an opportunity. In the early 2000s, consolidating four treatment facilities into one was a similar visionary solution to a pressing problem. "With the four antiquated water treatment plants that we had, we could not expand them. They were in locations where they were closed in. If we could expand it, the raw water wasn't there. It just didn't give us the versatility. Here now we have the versatility of the raw water supply and room for expansion," Michael Buchholzer remarked during the QSWTP Grand opening in 2012. At the time this project was the department's largest capital endeavour since the construction of the H.M. Bailey Water Pollution Control Plant two decades earlier.

A Step Forward

The Queen Street Water Treatment Plant stands as a recent example of significant advancement for the department. Despite recent leadership transitions, several Raw Water Pumping Stations have been rebuilt over the past five years, showcasing a commitment to continuing to maintain this pattern of service stability and forward momentum. Additionally, capital investments are underway to refurbish assets with remaining service life. In 2024, the Highway 10 Pumping Station will receive roof and fencing upgrades, and the design process to rehabilitate and reuse the Park Street Reservoir is in progress. The department has also established a new Utility Services Division, introducing a substantial increase in workload and responsibilities. This initiative provides staff with opportunities for professional development and growth within the organization.

Buchholzer recieved two promotions before assuming the role of Director of Environmental Services in 2003



Left: Director of Environmental Services; Buchholzer delivers Grand Opening tour of the QSWTP to external stakeholders including future successor Aron Hershmiller (2012)

Water Treatment System Overview

The City of Yorkton is the largest urban center in Saskatchewan that relies exclusively on groundwater. Drawing from five aquifers and 12 wells around the city and surrounding area. Raw water is transported to the Queen Street Water Treatment Plant through a sprawling Raw Water Supply Network, where it undergoes several treatment processes:

- Aeration for iron oxidation
- Detention for further iron oxidation
- Chemical oxidation, utilizing chlorine and potassium permanganate for manganese oxidation
- Flocculation to agglomerate oxidized iron and manganese
- Detention for further reaction between manganese and oxidation chemicals
- Up-flow roughing filtration to remove larger floc and reduce gravity filter loading
- Filtration with anthracite and manganese greensand
- Storage in an 18,000 cubic meter reservoir

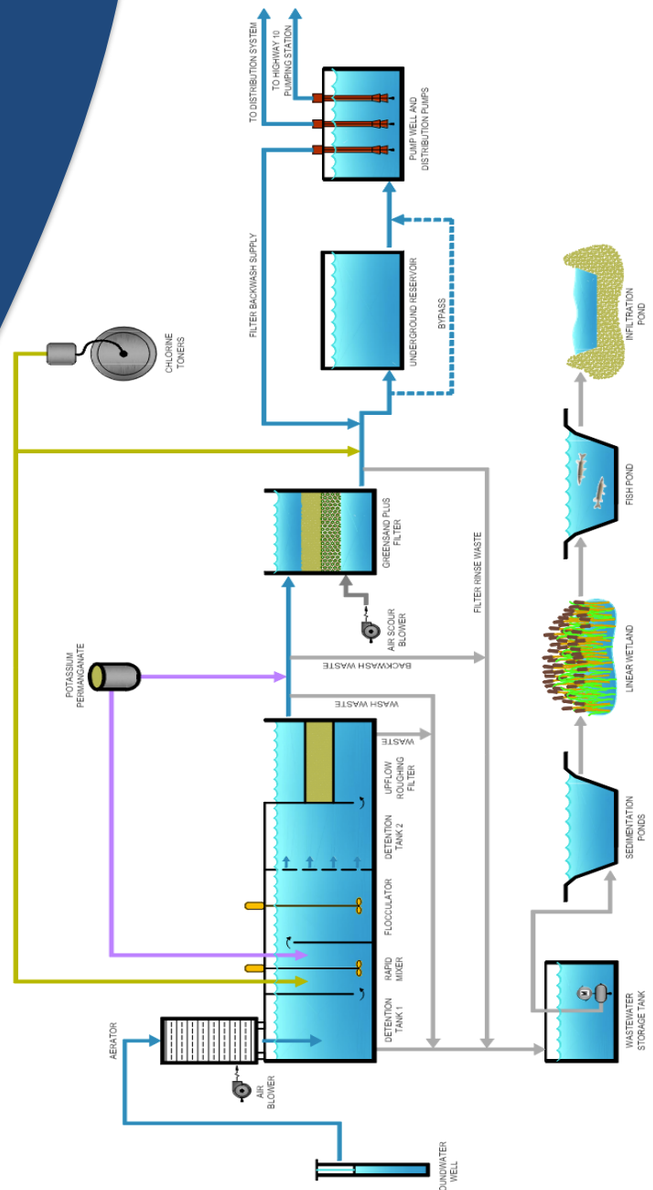
Distribution is achieved through four pumps supplying treated water from the reservoir to the system

As a Class III Facility the Queen Street Water Treatment Plant is distinctive for its incorporation of several “green” features, especially in the treatment of backwash water generated by regular filter cleaning. It is one of the first facilities in Canada to use settlement ponds and wetlands for treating and polishing process wastewater from the water treatment plant. Backwash water, high in suspended solids and process chemicals is directed to wetland retention ponds for treatment. Upon completion of the water polishing process, much of this treated water infiltrates back into the aquifer, contributing to groundwater recharge and wetland maintenance.

This environmentally friendly process provides the community with a space rich in native plants, wildlife, and fish known as the Logan Green; the City’s largest park. The result is an attractive area with walking paths and naturally treated process wastewater.

An extension of the water treatment plant, the Highway 10 Pumping Station, includes a 6,800 cubic meter reservoir with two pumps supplying water to the distribution system. Treated water is pumped to this reservoir for storage.

The Highway 10 Pumping Station also features a bulk water filling station, offering 24-hour access to bulk water year-round. Located on Highway 10 East, this station provides customers with three payment options: coin operation, prepaid accounts, and monthly charge accounts.



Wastewater Treatment System Overview

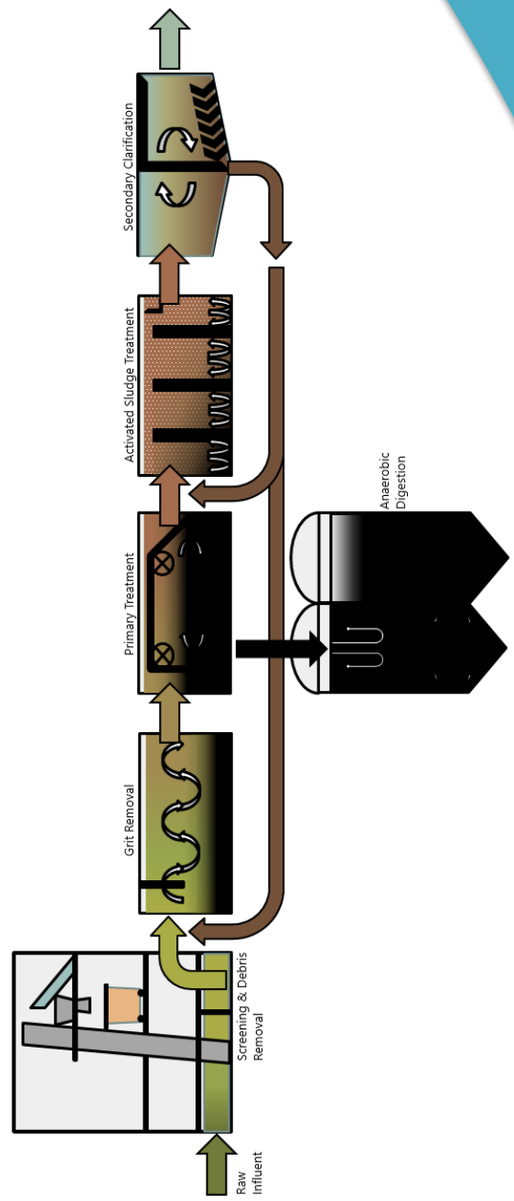
The City of Yorkton owns and operates the Class IV H. M. Bailey Water Pollution Control Plant, a mechanical wastewater treatment facility. This plant treats all domestic and industrial wastewater flows being discharged into the sanitary sewage network, ensuring compliance with Water Security Agency quality standards.

The primary objective of any sewage treatment plant is to remove solid matter from wastewater, purify the water, and reduce the oxygen demand on receiving waters, such as the Yorkton Creek. Untreated wastewater poses significant health risks and creates environmental concerns due to its high oxygen demand. As solid matter in wastewater decomposes, it consumes large amounts of dissolved oxygen, disrupting the natural balance in lakes or streams and harming aquatic life. The treatment process is closely monitored, with regular sampling and testing to ensure optimal performance. The treatment process utilizes the following technologies:

- Screening to remove coarse debris from influent wastewater
- Grit Removal to eliminate sand and silt
- Primary Treatment which removes almost half of the unwanted contaminants and suspended solids
- Activated Sludge Treatment designed to achieve total removal of 90+% of contaminants
- Secondary Clarification which settles out remaining suspended solids and maintains cultivated biomass
- Disposal; Treated effluent is released into Yorkton Creek

Solids removed during primary treatment undergoes the process of anaerobic digestion, where volatile compounds are destroyed creating a by-product called biogas which can be reused in environmentally friendly processes. The remaining product called bio-solids, are then dried in lagoons and incorporated with compost at the landfill.

In essence, the treatment process transforms wastewater into treated effluent, energy, and an agricultural supplement, protecting public health and water quality. The H. M. Bailey Water Pollution Control Plant accelerates natural treatment processes, significantly reducing the time and space required for quality wastewater treatment.



Environmental Services Highlights

Logan Green Water Management System

H.M. Bailey Water Pollution Control Plant

Environmental Services Highlights

Water Quality

The Water Security Agency and Ministry of Environment require annual notifications from waterworks owners to consumers, detailing water quality and adherence to sample submission protocols. Yorkton's 2023 report, completed on May 29, 2024, summarizes water quality and compliance.

Key Points from Yorkton's 2023 Consumer Report:

Sample Submission: Achieved a 100% submission rate.

Bacteriological Quality: All 156 samples tested negative for Total Coliform, E. coli, and Background Bacteria, indicating excellent quality.

Water Disinfection: Chlorine levels consistently met or exceeded requirements in all 156 tests.

Turbidity: Maximum turbidity measured was 0.650 NTU, well within the 1.0 NTU standard.

Chemical Safety: No samples exceeded Maximum Acceptable Concentrations (MAC) or Interim MACs for health parameters including arsenic, lead, and selenium.

Pesticides: All pesticide levels were within safety limits.

Trihalomethanes (THMs) and Haloacetic Acids (HAAs): THM levels averaged 0.052 mg/L, below the 0.100 mg/L limit.

Aesthetic Quality: General chemical analysis showed no exceedances of provincial aesthetic objectives.

These results demonstrate the rigorous efforts of Environmental Services staff to maintain exceptionally high water quality standards in Yorkton.

Raw Water Pumping Station [RWPS] Commissioning

The City of Yorkton manages well fields in five aquifers, many constructed between 1950 and 2000. Without significant upgrades, these wells are beginning to show structural issues, failing power distribution systems, and raw water supply components nearing failure, indicating severe deterioration that necessitates proactive action to prevent service interruptions.

Between 2020 and 2023, Environmental Services made significant advancements with its raw water infrastructure, focusing on enhancing the capacity and reliability of selected stations. Three Raw Water Pumping Stations (RWPS) from 1975 to 1981 were strategically modernized to meet contemporary standards and future demands. Two RWPS now feature new well-houses and updated internal infrastructure, positioning them as major production wells. The third RWPS received similar upgrades while rehabilitating the existing well-house.

These upgrades aim to secure a robust and reliable water supply for the city's growing population, ensuring alignment with environmental and public health objectives. By investing in these improvements, we aim to provide a dependable water service capable of adapting to future challenges and demands.

RWPS EP-13-A2020 New Well & Wellhouse

Operations Staff Development

In 2012, during the inauguration of the QSWTP, the Department of Environmental Services boasted an operations team with 110 years of combined experience and a management team with 36 years of expertise. Fast forward to 2024, the management team's experience stands at 21 years, while the operations team's expertise has decreased to 20 years. This decline can be attributed to a wave of retirements, coupled with a market shortage of skilled professionals, presenting staffing challenges. Currently, our municipality relies on a smaller-than-ideal team of certified operators. Seven hold Class III or higher certifications in water treatment. Of these, two also hold Class III certifications in both water distribution and wastewater collection, alongside two others with the same certifications. Additionally, these two individuals are the only operators holding Class IV certifications in wastewater treatment. Despite these challenges, Yorkton excels in certifying top-tier staff across all four disciplines. Notably, Yorkton has developed three of the four operators in Western Canada with Class IV certifications in each discipline. To sustain a high-quality team, we encourage staff to pursue certifications in all disciplines through various incentive programs. These initiatives, while not outpacing adequate compensation, have promoted professional growth. Since their implementation, our operations professionals have collectively earned 22 certifications in Water Treatment, Water Distribution, Wastewater Collection, and Wastewater Treatment, as recognized by the Saskatchewan Operator Certification Board.

Emergency Response

Recent water emergencies in North America highlight the critical need for comprehensive Emergency Response Plans (ERPs) in waterworks systems. In 2024, multiple major water main breaks in Canada and the United States necessitated community-wide water restrictions and boil water advisories, emphasizing the need for comprehensive ERPs to promptly manage infrastructure failures and safeguard public health. These events underscore the vital role of ERPs in preparedness, rapid response, and recovery during water-related emergencies. Recognizing this urgency, Environmental Services staff undertook the initiative of a top-down evaluation of the Utility Emergency Response Plan in December 2023. Significant progress has been made in consolidating three existing plans into a single, comprehensive document, scheduled for completion in 2024. This ERP will undergo annual review and approval by the Emergency Planning Group, including the Water Crisis Coordinator and City Manager, ensuring readiness to handle unforeseen circumstances effectively.

Utility Services Division

In 2023, following Yorkton's upgrade to the water metering system an efficiency review prompted the creation of the Utility Services Division within the Environmental Services Department. This new division now handles utility operations, field sampling, utility locating, and enforcement activity—tasks previously distributed among Environmental Services, Public Works, Engineering, and City Hall. It also acts to supplement the operations within the water and wastewater treatment systems as well as the utility at large. This restructuring centralizes responsibilities to improve service quality and operational efficiency. Moving forward, there is a focus on establishing a Cross Connection Control Program to further safeguard water services. This program will require significant oversight, time investment, and communal collaboration to achieve the division's goals.

Septage Receiving Upgrade

The H.M. Bailey Water Pollution Control Plant is upgrading its Septic and Hydro-vac Discharge Program to ensure improved client services, reliable revenue recovery, and clear record management.

Key improvements will include

Automated Monitoring System: Replacing an outdated user-reported system with a package Septage Receiving Station for accurate monitoring, invoicing, and Automatic Gates for efficient entry and exit records.

Enhanced Security Measures: Upgraded cameras and controllable access technology for better security control and facility monitoring.

These upgrades will enhance operational efficiency, ensure accurate revenue collection, and are projected to achieve a return on investment within five years. This strategic investment will also provide seamless customer service and maintain the integrity of wastewater treatment processes, preparing the septic receiving program for future demands.

Industrial Monitoring Program

The Industrial Monitoring Program in Yorkton, established in 2017, ensures industrial facilities comply with limits for Biochemical Oxygen Demand (BOD) and Total Suspended Solids (TSS). Governed by Bylaw 2125, the program outlines the City's role in managing the sewer system and enforcing compliance. Its primary objective is to protect the sewage works from high-strength wastewater that can damage infrastructure, disrupt treatment, and harm the environment. Without monitoring, high-risk waste generators could discharge high strength wastewaters, leading to system deterioration, costly repairs, additional treatments, and potential environmental degradation.

Since its inception, the program has led to dramatic improvements in wastewater quality from local industries, some of which have invested in pre-treatment systems. The collection of surcharge payments for limit exceedances provides a financial incentive for industry compliance and has enhanced collaboration and transparency between the City and local industry.

Overall, the Industrial Monitoring Program is essential for maintaining the sewer system's integrity, protecting the environment, and ensuring accountability of industry users.

Three samples from the industrial monitoring program identify varying degrees of contamination

Utility Master Plan Revitalization

Between 1998 and 2005, Yorkton developed a master plan for water infrastructure to ensure sustainable management up to 2030. This plan assessed current infrastructure, reviewed water quality, and evaluated expansion options, resulting in enhancement of treatment facilities, upgraded reservoirs and pumping stations, expanded pipelines, and improved distribution networks. The master plan was last reviewed in the 2017 Water System Assessment.

From 2005 to 2017, Yorkton's water infrastructure plan achieved:

Master Plan Development (2005): Addressed infrastructure challenges with improved facilities and networks.

Visionary 15-Year Plan (1998-2013): Enhanced water supply, treatment, storage, and distribution, leading to the Queen Street Water Treatment Plant (QSWTP) in 2011.

Groundwater Supply: Ensured water security through licensing and aquifer allocation strategies, managing wells and pump stations for future needs.

Raw Water Distribution: Identified and replaced aging pipes within the raw water network.

Queen Street Water Treatment Plant (QSWTP): Used advanced treatment processes and SCADA automation to meet demands and ensure quality.

Potable Water Storage: Planned and provided increased capacity of 26,000 cubic meters for future growth.

Distribution System: Continuously maintained and upgraded the distribution network based on hydraulic analysis.

Water Quality: Up-kept commitments to meet provincial standards through effective contaminant removal.

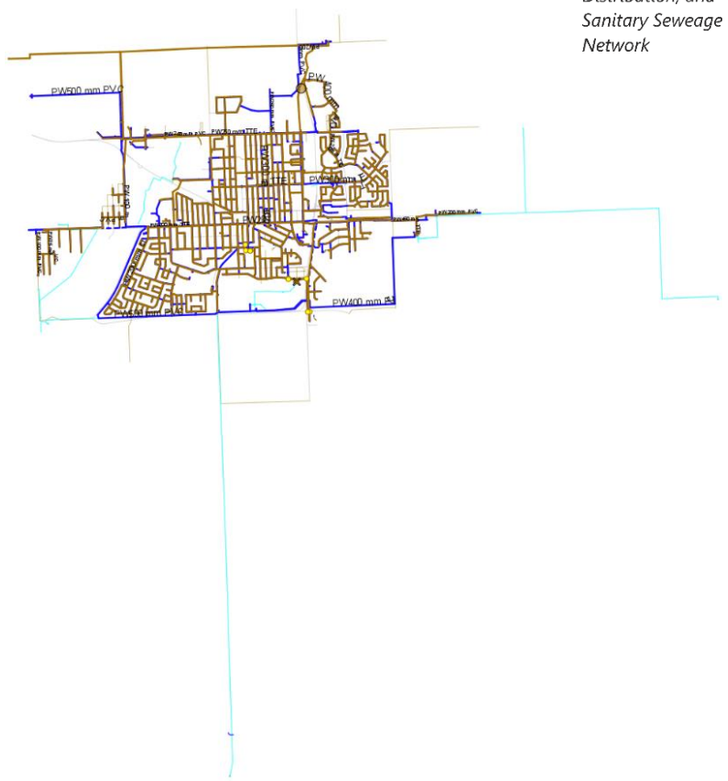
Maintenance and Financial Planning: Emphasized asset maintenance requirements and sourced required funding for improvements.

With local industry expansion increasing utility demand, the plan will be revitalized in 2024 with a 20-year horizon to assess, prioritize, and cost system requirements.

The Utility Master Plan will include

Utility Vulnerability Assessment: Evaluate the current state and potential weaknesses of the utility, identifying areas susceptible to future challenges. By pinpointing these concerns, Yorkton can prioritize necessary upgrades and maintenance, ensuring a system comprised of robust and reliable infrastructure.

Utility Master Plan: Sets goals for source water management, water treatment, distribution systems, wastewater collection and treatment, and resource management. Informed by the vulnerability assessment, it will aim to implement strategies that adapt to growth and environmental changes, supporting Yorkton's development as a community. The plan will ensure a reliable supply of clean water, efficient treatment and distribution, and sustainable resource management, enhancing the city's potential and maintaining the local environment.



Yorkton Raw Water, Water Distribution, and Sanitary Seweage Network

Inflow & Infiltration Reduction

The Inflow and Infiltration (I&I) Reduction Program targets stormwater infiltration into the sanitary sewage system, which can overwhelm the Water Pollution Control Plant (WPCP) during rain and snow events. Significant I&I issues were identified in late 2021 following increased flows at the WPCP post-rain events. A major source was traced to an abandoned sewer trunk main, temporarily addressed with an inflatable plug.

Subsequent monitoring involved installing In-Manhole Meters to track sanitary system flows. Data revealed that community sump pump operations contribute significantly—20%-30%—to increased volumes, necessitating a need to develop collaborative public education strategies to address this issue. Specific infrastructure-related I&I issues were identified at certain manholes, with one recording a flow rate of 253 litres per second during a single rain event in 2022. Current efforts focus on investigating upstream points of identified I&I manholes, leveraging metering data to pinpoint infiltration sources, and ultimately addressing these challenging increases in Raw Influent Volume. Continuous monitoring and analysis is crucial to manage the impact of I&I on the WPCP and maintain treatment quality.

Metering equipment installation

Final Effluent placed next to Bottled Water shows wastewater treatment efficiency (2023)

Wastewater Quality

Over the past year, Yorkton effectively managed overall wastewater quality despite challenges. The city transitioned smoothly to the Community Respiratory Illness Surveillance Program (CRISP) for respiratory illness monitoring in wastewater, replacing the University of Regina study. Flow rates normalized to near the 33-year average, although the quality of raw influent deteriorated slightly.

The Industrial Monitoring Program successfully reduced pollutant discharge, in one instance seeing a 63% improvement in compliance after the commissioning of a new pre-treatment system at a major industry. Treatment processes remained consistently effective, meeting design expectations for both primary and secondary treatment. Creek sample quality remained stable across 36 samples taken upstream and downstream throughout the year.

Efficiency in solids processing improved with optimized sludge retention in primary treatment, yielding an 8% increase in process efficiency over the 33-year average. Despite staff turnover, laboratory performance was stable, with testing procedures maintained and refined, enhancing performance management.

Despite these successes, challenges persisted with aging infrastructure, leading to several flow diversions during heavy rainfall events and an increase in critical failures and operational costs. Looking forward, significant upgrades are necessary as critical equipment has surpassed its useful life. Despite these obstacles, Yorkton's wastewater treatment processes continue to operate efficiently and effectively; the Environmental Services Department remains dedicated to maintaining high effluent quality, ensuring environmental management is top of mind.

Capital Projects

H.M. Bailey Water Pollution Control Plant Construction (1989)

Queen Street Water Treatment Plant Construction (2008)

Capital Projects

Highway 10 Pumping Station Upgrades | Phase: Construction

The Highway 10 pumping station operates a greater than 6,000 cubic meter water storage reservoir providing water supply capabilities from the east side of the city. This station requires upgrades to maintain its efficiency and longevity. The current flat roofs are prone to leaks, posing risks to electrical equipment and accelerating structural decay. Replacement has been deemed the best path forward. The project scope includes:

- Repair/replacement of two flat top roofs for facility longevity
- Installation of Variable Frequency Drives (VFDs) for efficient pump operation
- Enhanced security measures to prevent unauthorized access including fencing of a lay-down area around the reservoir and existing storage facility
- Modernization of equipment and facilities, including lighting and bulk water payment systems

These improvements will assist to advance water pressure monitoring, reduce system stress events, and achieve energy savings during peak demand. All aiding in ensuring the continued safe and efficient operation of the city's water supply network.

QSWTP Chemical Feeder System Upgrades | Phase: Design

Potassium Permanganate (KMnO4) is integral to our water treatment process, facilitating necessary functions such as oxidizing iron and manganese and continuously regenerating greensand filter media. Effective dosing is essential to optimize these processes and maintain water quality standards, which is why this project scope includes:

- Repair of the existing KMN04 Feeder Equipment
- Replacement of outdated chemical dosing pumps
- Replacement of existing mechanical equipment including motors and screw augers
- Sourcing and storage of critical spare components

During the transition, manual dosing will occur to maintain continuity until the system is deemed fully operational. This investment underscores our dedication to operational integrity and regulatory compliance in water management.

WPCP Administration Building Improvements | Phase: Construction

The flat roofs at the H.M. Bailey Water Pollution Control Plant have surpassed their expected lifespan and are failing despite multiple repair attempts over the past five years. Immediate action is required to replace the Control Building Roof (Area 600).

Area 600 houses vital hardware, including communication and process control equipment, offices, and meeting spaces. Its roof failure has caused significant leaks in critical areas like the Facility Main Office and Process Control Room. Temporary measures have slowed damages, but delaying replacement risks operational integrity. The project scope includes:

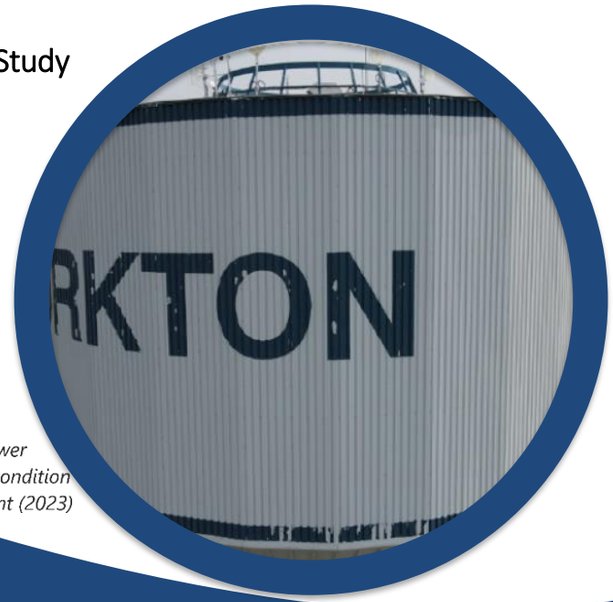
- Replacement of the flat roof with an engineered sloped roof to protect interior infrastructure, including communication and process control equipment.
- Relocating and modifying rooftop HVAC units to enhance efficiency and reliability. This includes replacing a main unit that stopped cooling in March 2023 and upgrading other aging units for improved exhaust control.

This project aims to ensure ongoing operation and a conducive work environment for staff at the Water Pollution Control Plant.

Water Tower Inspection & Repair – Phase II | Phase: Construction

Septage Receiving Upgrade | Phase: Construction

Utility System Master Plan | Phase: Study



Water Tower external condition assessment (2023)

Park Street Pumping Station Phase I | Phase: Design

With increasing water demands from a growing population and local industry, alternative storage solutions must be explored to support future growth and meet the needs of residents, businesses, and industries. Revitalizing the Park Street reservoir, situated underground south of the water tower with a capacity of 4550 m3, presents the optimal solution. Despite being dormant for nearly two decades, the reservoir was never demolished, always seen as a cost-effective storage option for anticipated demand increases. Regulatory standards stipulate municipalities maintain at least 2.0 days of storage in their distribution systems, and this reservoir would serve the purpose of increasing water storage to adequate volumes for the city's current needs.

Current Water Storage Capacities:

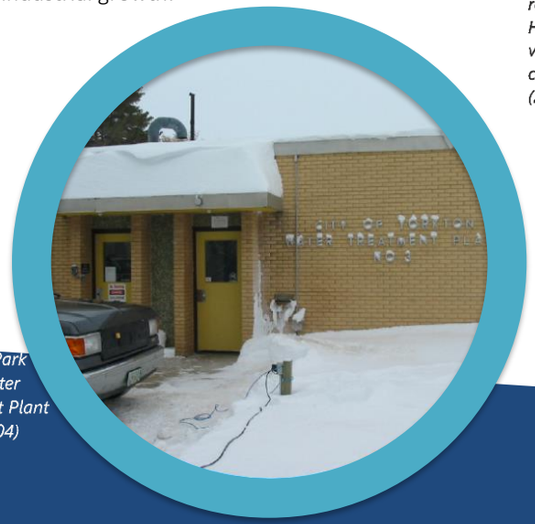
- Queen Street Water Treatment Plant - 18,000 m3
- Hwy 10 Pumping Station - 6,800 m3
- Water tower - 1,364 m3
- *Total current capacity - 26,164 m3*

Currently the city maintains a 2.9 Day Storage Capacity based on the city's total consumption at approximately 9,000 m3/day. Given the announced expansions at several major industries, it can be assumed that total consumption will increase to approximately 11,500 m3/day (2.27 days of storage)

**These figures exclude reservoir maintenance periods where storage volumes are reduced.*

Reintegrating the Park Street reservoir would add 4550 m3, increasing storage capacity to approximately 2.67 days. This additional capacity will alleviate pressure on water treatment infrastructure, managing demand fluctuations like dry weather events and maintenance activities, while accommodating expected population and industrial growth.

Since its deactivation, the Park Street reservoir has undergone structural integrity inspections to ensure its condition is adequate. Refurbishing the reservoir and installing a pumping station, alongside necessary piping adjustments at the water tower, has proved to be the most cost-effective water storage solution for the city. With the project currently under design, construction is slated for 2025.



Original Park Street Water Treatment Plant No. 3 (2004)

Water Pollution Control Plant Renewal | Phase: Study/Design

The Yorkton Wastewater Treatment Plant Renewal Project is an initiative aimed at modernizing the city's wastewater treatment technologies to meet the needs of a growing municipality and evolving environmental regulations. The H.M. Bailey Water Pollution Control Plant, originally built in the 1950's with subsequent upgrades in 1979 and 1991, is nearing the end of its operational life. This project seeks to revitalize outdated components and introduce advanced treatment processes to ensure compliance with regulatory standards and support residential, commercial, and industrial growth. By investing in this renewal, Environmental Services is demonstrating a commitment to environmental stewardship, economic prosperity, and long-term water sustainability for future generations. Community involvement and support are essential as we progress to enhance Yorkton's water management system and secure a clean, safe water supply.

- Background: The existing H.M. Bailey Water Pollution Control Plant, employs processes like activated sludge treatment, and anaerobic digestion, discharging treated water into Yorkton Creek.
- Project Drivers: The renewal project is motivated by the need to replace aging infrastructure, meet new regulatory requirements, and foster community growth through a forward looking, sustainable wastewater management system.
- Work Completed: Since 2019, studies and assessments have been undertaken, including geotechnical and hydrogeology reviews, environmental screenings, and the development of a downstream use and Impact study to determine needs and opportunities for better water resource management strategies. The project is currently in the pre-design phase where best processes are being determined, configuration is being visualized, and condition assessments are being completed to identify reusable facilities and equipment.

Screen drive being removed from the H.M. Bailey WPCP via crane after critical failure (2023)

Given the success of the Logan Green Water Management System, where water treatment waste streams are refined and re-established with the Logan West Aquifer; similar concepts are currently being researched with other local aquifers alongside the Water Pollution Control Plant Renewal project to determine the feasibility of water reclamation integration. This project aims to modernize the wastewater treatment facility to align with future needs and regulatory expectations, safeguarding the local environment and facilitating economic development in a sustainably responsible city.

Employees of 2024

Connor Hunt	Director of Environmental Services	Water Treatment Class IV	Water Distribution Class IV	Wastewater Collection Class IV	Wastewater Treatment Class IV
Val Fatteicher	Environmental Services Coordinator				
Jevon Karakochuk	Waterworks Manager (Water Treatment)	Water Treatment Class III	Water Distribution Class IV	Wastewater Collection Class IV	Wastewater Treatment Class IV
Jake Perpeluk	Waterworks Manager (Wastewater Treatment)	Water Treatment Class III	Water Distribution Class I	Wastewater Collection Class II	Wastewater Treatment Class III
Jason Baluk	Environmental Services Operator (Charge-hand)	Water Treatment Class III	Water Distribution Class II	Wastewater Collection Class I	Wastewater Treatment Class III
Wyatt Duncan	Environmental Services Operator (Charge-hand)	Water Treatment Class II	Water Distribution Class II	Wastewater Collection Class II	Wastewater Treatment Class II
Luke Konkel	Environmental Services Operator	Water Treatment Class III			Wastewater Treatment Class III
Roy Wang	Environmental Services Operator	Water Treatment Class II	Water Distribution Class II		Wastewater Treatment Class II
Deryk Whyatt	Environmental Services Operator				
Walter Neumann	Environmental Services Operator		Water Distribution Class III	Wastewater Collection Class III	
Justin Chrobot	Environmental Services Operator	Water Treatment Class I	Water Distribution Class I	Wastewater Collection Class I	Wastewater Treatment Class I
Jeff Carr	Environmental Services Operator in Training				
Logan Coutts	Environmental Services Operator in Training				
Devan Kurup	Environmental Services Operator in Training				
Ievgen Lavrentiev	Technical Assistant				
Kristyn Prybylski	Technical Assistant				
Orion Long	Technical Assistant				
		City of Yorkton Requires a Water Treatment Class III for Operations Staff working in the Water Treatment System	*City of Yorkton Requires a Water Distribution Class III for Operations Staff working in the Distribution System*	*City of Yorkton Requires a Wastewater Collection Class III for Operations Staff working in the Collection System*	*City of Yorkton Requires a Wastewater Treatment Class IV for Operations Staff working in the Wastewater Treatment System*

WE Collaborate as a cohesive team, valuing all development and contributions toward comprehensive water and wastewater management.

WE Innovate by embracing advancing technologies and responsible practices, reinforcing our commitment to environmental sustainability.

WE Operate by aligning the interests of public health, workforce safety, and fiscal responsibility to maintain exceptional service standards.

Ensuring accountable and transparent management of Yorkton's water resources is our guiding principle, a testament to our unwavering commitment to Environmental Stewardship.

Environmental Services

Queen Street Water Treatment Plant

9 Queen Street West, Yorkton

H.M. Bailey Water Pollution Control Plant

Hwy 9 North, Landfill Road East

Yorkton Saskatchewan, Canada

T. 306-828-2470

E. enviro@yorkton.ca