THE CITY OF Red Deer

2025 WATER AND WASTEWATER UTILITIES

ANNUAL REPORT

ABOUT THIS REPORT

This annual report outlines how The City of Red Deer's water and wastewater utilities performed in 2025. It describes the critical infrastructure maintained and how shared system risks and opportunities are managed.

For regional service providers that rely on Red Deer's utilities and share the Red Deer River watershed, the report serves as a record of performance and a reference to support planning and collaboration.

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How to Read This Report

This report is organized to help readers quickly understand system performance, risk management, and long-term confidence in Red Deer's water and wastewater utilities. Sections 1.0 and 2.0 describe how each utility operated in 2025, including system performance, environmental protection, risk management, and capital investment. Section 3.0 explains the shared services and governance frameworks that support both utilities, while Section 4.0 provides the detailed financial information that underpins long-term infrastructure stewardship, affordability, and regulatory compliance.

CITY MANAGER MESSAGE

On behalf of The City of Red Deer, I am pleased to share the 2025 Water and Wastewater Utilities Annual Report. This report supports a more modern and transparent approach to communicating performance both for residents and businesses in Red Deer and for the regional service providers that rely on our shared utilities within the Red Deer River watershed.

Our water and wastewater systems are essential public infrastructure. They protect public health, support emergency response, and help sustain Central Alberta's households, industry, and economic activity. Guided by The City's Environmental Master Plan and our utility guiding principles, we take a balanced approach that pairs proactive risk management with strong stewardship: protecting the Red Deer River, maintaining reliable service, and investing responsibly to renew aging assets and sustain capacity for the long term.

In 2025, this approach was advanced through practical innovation, including the use of artificial intelligence to improve hydrant condition assessments and the construction of a new Nutrient Management Facility building at the wastewater treatment plant to strengthen treatment performance and environmental protection.

This report highlights 2025 operational performance, key initiatives and capital investment, and the shared services, governance and financial stewardship that support them. It is also a practical reference for the commissions and communities we serve as we plan together, coordinate infrastructure decisions and manage shared system risks.

We look forward to continuing our commitment to delivering safe, reliable service and strengthening responsible watershed stewardship.

Tara Lodewyk
City Manager, The City of Red Deer

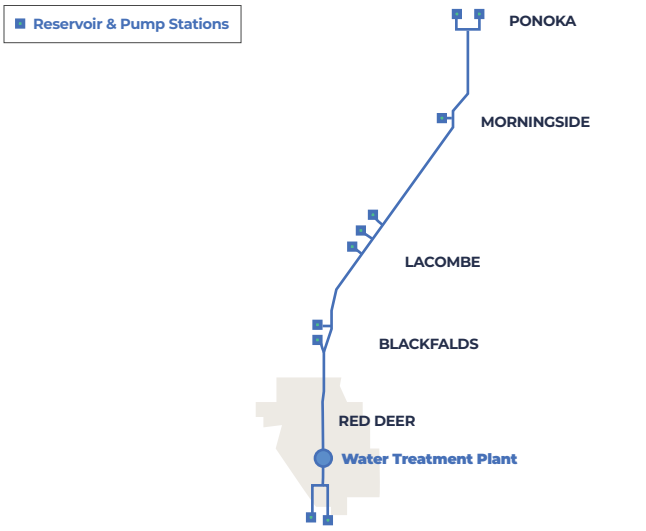
HOW OUR UTILITY SYSTEM WORKS

This section provides a high-level overview of how the system functions and sets the context for the operational performance, risk management, and capital investment information that follows.

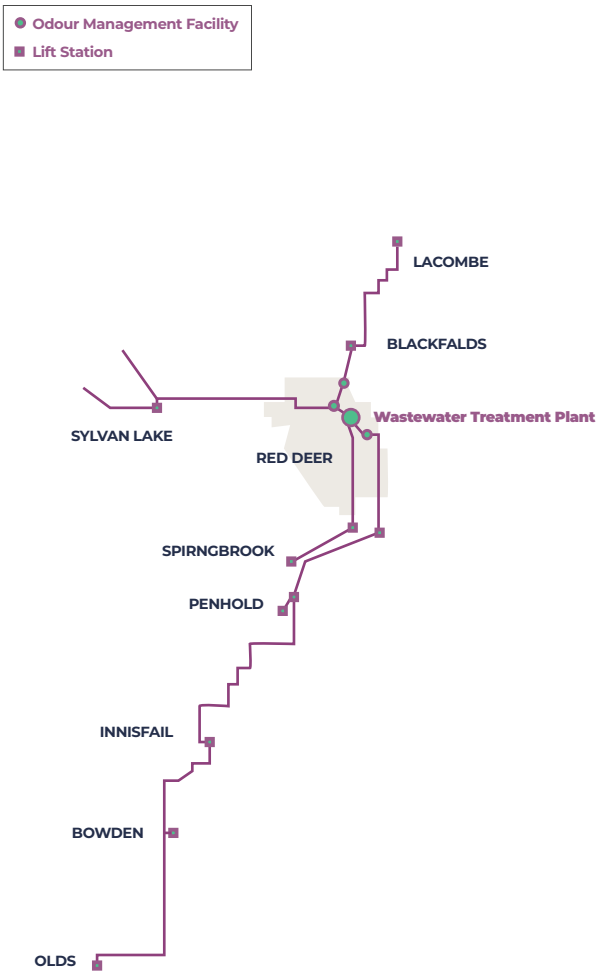
Red Deer's water and wastewater systems operate as an integrated cycle, from raw water intake and treatment to regional distribution and collection, and through to wastewater treatment and return to the Red Deer River.

Understanding how this integrated system works is essential for regional service providers that rely on shared infrastructure, shared source water, and coordinated operational planning across the watershed.

WATER



WASTEWATER



1/ WATER UTILITY

SUPPLYING SAFE DRINKING WATER

The Water Utility is responsible for delivering safe, reliable drinking water to The City of Red Deer and multiple regional service providers, including maintaining system capacity to support fire suppression and emergency response. In 2025, operations focused on regulatory compliance, system reliability, and environmental stewardship, while advancing long-term investments to ensure sufficient capacity, resiliency, and affordability for future regional growth.

Guided by The City's utility guiding principles, the Water Utility manages risk across the entire system — from source water protection and treatment to storage and regional distribution. This approach supports consistent water quality, protects public health, and provides long-term confidence for communities that rely on Red Deer's shared water infrastructure.

FAST FACTS

Did you know The City of Red Deer performed 20,000 water quality tests in 2025, monitoring water from river intake through treatment and distribution.

FROM RIVER TO TAP

Drinking water service begins with raw water drawn from the Red Deer River and moves through a multi-barrier treatment process, water storage, and a regional distribution network before reaching homes and businesses. Each stage of this system is designed to protect public health, meet regulatory requirements, and deliver safe, reliable service across both urban and rural service areas.

Risk is managed across the entire system — from source water protection through treatment, storage, and distribution. This integrated approach supports consistent water quality, minimizes service disruptions, and provides long-term confidence for communities, the North Red Deer District Water Commission, and regional partners that rely on Red Deer's shared water infrastructure.

This section explains how treatment, residuals management, storage and pumping systems work together to meet provincial standards and protect public health in urban and rural service areas.

The North Red Deer River Water Services Commission (NRDRWSC) services the Town of Blackfalds, The City of Lacombe, Lacombe County, the Town of Ponoka and Ponoka County. Red Deer County services areas south of the City of Red Deer, including Gasoline Alley.

FAST FACTS

The City of Red Deer treated over 14.9 billion litres of water in 2025 - that's just under 6,000 Olympic-sized swimming pools. To put that into perspective: It takes about 70 litres of water to grow one apple. That's enough water to grow over 213 million apples, or if you prefer oranges, that's 186 million oranges. Every drop of that water was treated, tested, and delivered safely to homes and businesses across the region.

WATER SYSTEM PERFORMANCE IN 2025

The Water Utility maintained strong system performance, delivering drinking water that met or exceeded all regulatory requirements. Overall reliability compared favourably with similar North American utilities, reflecting stable operations and effective system oversight.

Operations focused on proactive operations, preventive maintenance, and continuous monitoring across treatment, storage, and distribution assets. This approach supported consistent water quality, reduced the likelihood of service disruptions, and enabled timely response to emerging issues across more than 640 kilometres of distribution infrastructure.

As a result, the Water Utility provided dependable service to customers and regional service providers while maintaining confidence in the long-term reliability of Red Deer's shared water infrastructure.

FAST FACTS

3.99 per cent of treated water is not reaching customers. In comparison, many Canadian systems experience 13–17 per cent water loss. This means Red Deer's system is performing significantly better than national benchmarks, thanks to:

- → Proactive leak detection
- → Ongoing infrastructure renewal
- → Accurate metering systems
- → Quick responses to water loss emergencies (main breaks)

MANAGING WATER RESPONSIBLY

Environmental stewardship remains a core operational focus of the Water Utility. In 2025, water was managed efficiently across the system, with low water loss, responsible energy use, and effective residuals management supporting reliable service while minimizing environmental impact.

By managing water responsibly across treatment and distribution, the Water Utility reduced system risk, supported long-term sustainability, and maintained reliable service for customers and regional service providers. This performance reflects a sustained focus on proactive system management rather than reactive response.

CARING FOR WATER INFRASTRUCTURE

INNOVATION AND CONTINUOUS IMPROVEMENT

Innovation and continuous improvement support the water utility's ability to deliver safe, reliable and sustainable service within a shared watershed system. Guided by The City's Environmental Master Plan and seven guiding principles, the utility applies new tools and process improvements where they reduce risk, improve efficiency and strengthen long-term system reliability.

In 2025, improvement efforts focused on practical, scalable initiatives integrated into day-to-day operations and long-range planning. Key initiatives included:

- **Hydrant artificial intelligence**
  The use of artificial intelligence to improve hydrant condition assessments, better prioritize maintenance and reduce the risk of service disruptions.
- **Water treatment plant optimization**
  Ongoing optimization of treatment processes to enhance performance, reliability, and operational efficiency while maintaining regulatory compliance.
- **Selective adoption of emerging technologies**
  Evaluation and targeted implementation of new tools where they support risk reduction, operational reliability and improved decision-making across the water system.
- **Process improvements**
  Continuous refinement of operational practices to improve consistency, safety and efficiency in treatment and distribution activities.
- **A culture of continuous improvement**
  Integration of performance review, learning and adaptation into routine operations and long-term planning to support proactive system management.

HOW WE USE TREATMENT CHEMICALS SAFELY

The safe and reliable treatment of drinking water requires the careful use of specialized chemicals to meet regulatory standards and protect public health across the distribution system. Guided by The City's Environmental Master Plan and seven utility guiding principles, the water utility manages chemical use with a focus on safety, regulatory compliance, environmental protection and financial sustainability.

In 2025, the water utility faced continued cost escalation and supply pressures affecting key treatment chemicals. Despite these challenges, chemical use was managed efficiently and responsibly, ensuring consistent water quality while reducing operational and financial risk.

Key elements of chemical management included:

- **Chemical types and purpose**
  Use of aluminum sulfate for coagulation, sodium hypochlorite for disinfection and caustic soda for pH adjustment, each playing a key role in producing safe, high-quality drinking water and protecting distribution infrastructure.
- **Cost escalation management**
  Ongoing monitoring of market conditions and cost trends, including significant increases in chemical pricing in recent years, to support budgeting, forecasting and long-term financial planning.
- **Supply-chain risk management**
  Active management of supply availability through inventory controls, supplier coordination and contingency planning to reduce vulnerability to market disruptions or shortages.
- **Risk management and safe handling practices**
  Strict operational controls, storage standards and staff training to reduce health, safety and environmental risks associated with chemical handling and use.

INVESTING IN WATER INFRASTRUCTURE

Capital investment in the water utility is guided by seven core principles that reflect shared responsibilities as watershed partners. These include keeping people safe, delivering reliable service, maintaining infrastructure, protecting the environment, ensuring financial sustainability and affordability, and remaining adaptable as conditions evolve.

In 2025, water capital projects were prioritized based on risk reduction, regulatory compliance, lifecycle renewal and long-term system reliability. Together, these investments helped ensure the water treatment plant remains dependable while strengthening the system's ability to support regional growth, respond to emergencies and meet future regulatory and environmental requirements.

These capital investments also establish the foundation for sufficient treatment capacity to support continued regional growth.

WATER TREATMENT PLANT CAPACITY

The water treatment plant currently has sufficient capacity to meet projected short- and medium-term demand. Existing and planned capital investments maintain a buffer between peak-day demand and available treatment capacity, ensuring a reliable supply of drinking water for the community and regional service providers.

Planned upgrades and long-term capital projects over the next 30 years will continue to increase treatment capacity in stages. This approach allows the system to grow alongside the region while maintaining a buffer between supply and demand.

FAST FACTS

Operating at ~40 per cent capacity, the Water Treatment Plant has room to support future growth.

WATER TREATMENT CAPITAL PROJECTS

The section outlines the capital investments that ensure the water treatment plant remains reliable today while positioning the system to support continued regional growth.

COMPLETED

Lab equipment replacement (phase 1 of 2) - Completed replacement of the spectrophotometer to support ongoing water quality monitoring and laboratory accuracy.
Actual project cost: $30,955

Motor Control Centre (MCC) replacement - Replaced end-of-life MCC 101/106 and associated electrical equipment, improving system reliability and operational safety.
Actual project cost: $1,011,000

Liquid aluminum sulfate (LAS) upgrade - Completed equipment installation required to transition LAS as part of a process change from sodium bisulfite (SBS), enhancing treatment efficiency.
Actual project cost: $968,000

Environmental site assessment (phase 2) & risk assessment – Completed environmental site assessment and associated risk assessment for a WTP supporting site to inform future planning and regulatory compliance.
Actual project cost: $69,000

ONGOING

Queens Pumping Bypass - Connection point design and installation o allow an external pump to be integrated into the system during emergency situations, improving operational resilience.
Project budget: $166,000

Low lift pump replacement – Replacing the low lift pumps, motors, drives, and associated piping to improve system efficiency and reliability. Expected completion end of 2026.
Multi-year project budget: $4,362,000

Structural repairs (planning phase) - Project planning for water facility structural rehabilitation to extend building life by 50 years at each facility.
Project budget of $103,000

Large valve replacement – Replacing end-of-life original isolation valves and actuators, improving system control and reliability. Expected completion in 2028.
Multi-year project budget: 531,000

Travelling water screen replacement – Replacing end-of-life intake screens. Project coordinated with installation of two new fish return pumps to minimize operational disruption. Expected completion in 2026.
Multi-year project budget: $961,000

Plant security – Security enhancements at the Water Treatment Plant will include fencing upgrades and continued work to strengthen cyber security for critical operational systems.
Project budget: 218,000

WHY THIS MATTERS

These investments strengthen treatment reliability, emergency response capability, regulatory compliance, and long-term capacity for all customers connected to Red Deer's water system.

WATER DISTRIBUTION PROJECTS – LINEAR SYSTEMS

The following section outlines how this investment approach translates into treatment capacity confidence for the region.

Investment in the water distribution network focuses on renewing aging infrastructure, reducing service disruption risk, and coordinating utility work with roadway and neighbourhood upgrades.

While water treatment capital projects focus on producing safe drinking water, distribution (linear) projects ensure water can be delivered reliably across the system, particularly during peak demand and emergency conditions.

COMPLETED

Gaetz utility right-of-way – Replaced water infrastructure between Phelan Street and 76 Street. Installing approximately 1,018 metres of watermain, associated distribution components and new service connections to adjacent properties.
Total project cost: $1,693,800

Spruce Drive valve vault – Removed and replaced a deteriorated water distribution valve vault by constructing a new concrete vault, installing three 400 mm butterfly valves, approximately 56 metres of new water pipes and creek armouring to protect surrounding infrastructure.
Total Project cost: $612,200

51 Street Close - Replaced water pipes in the 51 Street Close area, including approximately 935 metres of new pipes, new property services, concrete repairs and lane regrading.
Total project Cost: $1,901,300

2025 cathodic protection – Replaced end-of-life cathodic anode beds to protect underground water infrastructure from corrosion and extend asset life.
Total project cost: $106,000

ONGOING

43 Avenue phase 2 – Replacing water infrastructure between 39 Street and 44 Street, including approximately 346 metres of water pipe, service replacements, the first lift of road pavement and concrete repairs. Anticipated completion 2026.
Project budget: $955,000

41 Avenue phase 1 (Grandview) - Replacing water infrastructure between 39 Street and 44 Street, including approximately 594 metres of water pipe, service replacements, the first lift of road pavement and concrete repairs. Anticipated completion 2026.
Project budget: $1,352,000

52 Avenue water valve vault - Replacing a non-functioning valve vault required to maintain the ability to isolate a 750 mm prestressed concrete cylinder pipe. The vault supports operational isolation and long-term condition assessment of this transmission main. Anticipated completion 2026.
Project budget: $645,000

Gaetz Avenue bridge - Replacing water infrastructure in coordination with bridge construction, including approximately 376 metres of water pipe. Anticipated completion 2026.
Project budget: $1,820,000

2026 cathodic protection - Replacing end-of-life cathodic anode beds on the water distribution system. Anticipated completion 2026.
Project budget: $130,000

WATER TREATMENT CAPACITY AND FUTURE GROWTH

The water treatment plant currently has sufficient capacity to meet projected short- and medium-term demand. Looking ahead, the upcoming Water Utility Infrastructure Development Strategy will help ensure treatment capacity keeps pace with regional growth over the coming decades, while maintaining regulatory compliance and preserving an operational buffer for peak demand and emergency conditions.

2/ WASTEWATER UTILITY

PROTECTING HEALTH AND THE ENVIRONMENT

The Wastewater Utility is responsible for safely collecting, treating, and returning wastewater to the Red Deer River for the City of Red Deer and multiple regional service providers.

In 2025, operations focused on regulatory compliance, treatment performance, and environmental protection, while advancing long-term investments to support system reliability, capacity, and sustainable regional growth.

Guided by the City's utility guiding principles, the Wastewater Utility manages risk across the collection and treatment system — from source control and conveyance to advanced treatment and monitoring. This approach protects public health, safeguards downstream water quality, and provides long-term confidence for communities connected to Red Deer's shared wastewater infrastructure.

Regional wastewater from surrounding communities is treated at Red Deer's wastewater treatment plant through three regional service commissions. These partnerships support consistent treatment standards, protect public health and ensure treated effluent returned to the Red Deer River meets regulatory and environmental requirements.

The North Red Deer Regional Wastewater Services Commission (NRDRWWSC) provides wastewater treatment for Lacombe, Blackfalds, and Lacombe County.

The Sylvan Lake Regional Wastewater Commission (SLRWWC) includes: the Town of Sylvan Lake; the summer villages of Birchcliff, Half Moon Bay, Jarvis Bay, Norglenwold, and Sunbreaker Cove; Poplar Pointe; Red Deer County; and Lacombe County.

The South Red Deer Regional Wastewater Commission (SRDRWC) serves Mountain View County, the towns of Bowden, Innisfail, and Penhold, and the community of Springbrook.

FAST FACTS

TREATING WASTEWATER FOR THE REGION

In 2025, the wastewater utility safely treated 55,550,000 litres of wastewater each day before returning treated effluent to the Red Deer River. To put this in perspective, the amount of water treated could fill the Red Deer's Recreation Centre pool nearly 140 times a day for an entire year!

FROM DRAIN TO RIVER

Wastewater service begins at the point of collection and moves through an interconnected system of gravity sewers, forcemains, lift stations, and treatment processes at the regional wastewater treatment plant (WWTP) before treated effluent is returned to the Red Deer River.

Risk is managed across the collection and treatment system to protect public health and safeguard downstream water quality for communities across the watershed.

In addition to wastewater collected through the sanitary sewer network, the wastewater treatment plant operates two automated septage receiving stations that accept hauled wastewater from Red Deer and surrounding communities, including acreages and industrial sites. These controlled-access stations monitor wastewater quality at the point of discharge, with continuous pH monitoring linked to the plant's Supervisory Control and Data Acquisition (SCADA) system that can automatically shut down the station if conditions fall outside acceptable ranges.

2025 effluent flow was 20,76,623 m^3 - almost 90 per cent of the plant's capacity. This has necessitated the next upgrade to phase 5.

WASTEWATER SYSTEM PERFORMANCE IN 2025

In 2025, the Wastewater Utility maintained strong treatment performance, safely treating and returning wastewater to the Red Deer River in accordance with all regulatory requirements. System performance remained stable, reflecting consistent operations and effective oversight across the collection and treatment system.

Performance optimization focused on proactive operations, preventive maintenance, and continuous monitoring across collection, treatment, and discharge processes. This approach supported reliable treatment outcomes, reduced environmental and operational risk, and enabled timely response to emerging issues across the wastewater system.

As a result, the Wastewater Utility protected public health and downstream water quality while providing long-term confidence for communities and regional partners connected to Red Deer's wastewater system.

Testing, monitoring, and quality assurance

Wastewater treatment performance and regulatory confidence are supported by an International Organization for Standardization (ISO) -accredited laboratory located at the WWTP. Continuous analytical testing, quality assurance programs and process monitoring inform operational decisions and compliance reporting.

FAST FACTS

Accurate laboratory data is essential to effective wastewater treatment. In 2025, the wastewater laboratory provided accredited, high-volume testing to support operations, source control, and regulatory oversight.

- → 9 accredited test methods
- → 16 unaccredited test methods
- → 9,239 samples received
- → 23,540 tests performed internally, including:
  - → 15,154 accredited tests
  - → 8,386 unaccredited tests

Collecting and managing wastewater

The wastewater collection system operates and maintains sanitary and stormwater infrastructure to ensure reliable wastewater conveyance and reduce the risk of overflows.

The system includes:

- → Approximately 515 kilometres of sanitary sewer pipe
- → A combination of gravity sanitary sewers and forcemains
- → Two City-owned sanitary lift stations
- → Contract maintenance for seven additional sanitary lift stations

Preventing pollution at the source

Preventing harmful discharges from entering the wastewater system is a core risk management function. Source Control programs reduce environmental and operational risk by working directly with industrial, commercial and institutional customers under the Utility Bylaw.

Key practices include:

- → inspection and sampling industrial, commercial, and institutional establishments
- → spill response and overstrength surcharge programs
- → cross-connection identification
- → education and enforcement

Through Source Control programs, regulated waste acceptance and sample monitoring, the wastewater utility manages higher risk discharges before they enter the collection and treatment system.

Managing systems risk and sanitary blockages

Preventing sanitary sewer overflows is critical to protecting public health, property and the environment.

In 2025, sanitary sewer blockages were addressed through a structured response including immediate clearance, inspection and follow-up monitoring. These measures reduced the likelihood of blockages progressing to sanitary sewer overflows.

Risk mitigation outcomes in 2025 included:

- → Comprehensive visual inspections to confirm asset condition and inform maintenance planning
- → Continued acoustic monitoring to support early detection potential issues
- → Targeted neighbourhood inspections in Edgar Industrial, Clearview, and Normandeau
- → Customer service line issue identification and cross connections
- → Implemented structured blockage response protocol, including:
  - → immediate clearance and flushing
  - → initial CCTV inspection
  - → follow-up monitoring at two and six weeks
- → Data driven maintenance planning

In 2024 to 2025, blockages increased from 10 to 16. Monitoring these trends allows The City to proactively manage future blockages which risk the environment, private property, and public health.

WHY THIS MATTERS

PROTECTING DOWNSTREAM WATER QUALITY

Through advanced treatment, monitoring and source control programs, the wastewater utility protects downstream water quality and the health of the Red Deer River.

Innovation, adaptability, and resource recovery

Innovation and adaptability support the wastewater utility's ability to manage increasing flows, aging infrastructure, and evolving regulatory requirements. Guided by the Environmental Master Plan and the Wastewater Treatment Plant Master Plan, improvement efforts focus on strengthening system reliability while enhancing environmental outcomes.

A key initiative supporting these objectives is the biosolids land application program, which operates annually from May to October. Biosolids are hauled from the WWTP and applied to approved agricultural lands in accordance with regulatory requirements.

Biosolids contain valuable nutrients, including organic carbon, nitrogen, and phosphorus, making them suitable for soil conditioning

and crop fertilization. Land application allows beneficial material reuse rather than disposal

or incineration, reducing hauling demands and overall disposal costs.

Over the past four years, approximately 13,480 tonnes of dry biosolids have been applied to agricultural land through the program. In 2025 alone, a total of 2,773 tonnes of biosolids were land applied an amount equivalent to approximately 293 Canadian Football League football fields.

Annual biosolids application demonstrates the wastewater utility's continued commitment to land application as a sustainable, regulated approach to biosolids management. This practice supports nutrient recovery, reduces disposal requirements, and aligns with long-term environmental stewardship and resource recovery objectives.

Adaptability in action: biosolids reuse

Adaptability and continuous improvement support the wastewater utility's ability to manage changing conditions and strengthen system performance. In 2025, efforts focused on practical initiatives integrated into day-to-day operations and long-range planning.

These efforts improved treatment reliability, supported regulatory compliance, and advanced sustainable resource management across the wastewater system.

Key focus areas included:

→ Treatment process optimization

→ Improved corrosive environment maintenance

→ Sustainable biosolids management and land application

→ Exploring resource recovery opportunities

Maintaining reliable wastewater treatment operations

Ongoing electrical, instrumentation and mechanical support is required to maintain reliable wastewater treatment operations in this biologically hazardous environment. In 2025, maintenance activity included preventive and scheduled work to support treatment reliability and reduce the need for emergency response.

WHY THIS MATTERS

PROACTIVE MAINTENANCE IN ACTION

In 2025, most wastewater maintenance work was preventative or scheduled, with only limited emergency response required in a biologically hazardous operating environment.

Source Control and operation risk management

Protecting the wastewater infrastructure and treatment process, the public, and the receiving environment requires proactive system management. Source Control programs are a core risk management function, reducing potential operational disruptions, regulatory non-compliance, public risk, and environmental harm. These programs support safe, reliable treatment while protecting shared infrastructure capacity serving regional service providers.

In 2025, Source Control activities focused on education, monitoring, and Utility Bylaw enforcement for industrial, commercial, and institutional (ICI) customers. The City mitigated harmful discharges, reduced fats, oils, and grease (FOG), and protected wastewater treatment performance and environmental outcomes through inspections, sampling, spill response, and overstrength monitoring. This work included field testing at 133 ICI locations and inspections of 250 food service establishments.

The Overstrength Program monitored nine regulated locations and 14 potential overstrength dischargers, with sampling conducted every four weeks. Declining overstrength trends since 2023 reflect improved source control practices and reduced risk to wastewater treatment operations.

Wastewater treatment capacity and growth

The WWTP is undergoing staged upgrades to ensure capacity remains aligned with current demand, regulatory requirements, and long-term growth. Current and planned investments provide confidence that the system can accommodate increasing flows while maintaining treatment performance, regulatory compliance, modernization, and environmental protection.

In 2025, our wastewater treatment capacity was 90 per cent. This level of utilization is the primary driver for proceeding with the Phase 5 upgrade, currently in development.

INVESTING IN WASTEWATER TREATMENT

Capital investment in the wastewater utility supports reliable service delivery, regulatory standards, and the long-term performance and stewardship of critical wastewater infrastructure. Together, these principles prioritize public health, regulatory compliance, long-term capacity, and responsible management of wastewater infrastructure.

Why these projects matter

These investments reduce environmental and operational risk, strengthen treatment reliability, and ensure wastewater can be safely and reliably conveyed and treated for all communities connected to Red Deer's wastewater system.

Treatment performance and environmental protection

Wastewater treatment processes are designed to remove contaminants and protect downstream water quality before treated effluent is returned to the Red Deer River. In 2025, treatment performance remained strong, with consistently high removal of solids, nutrients, organic matter and bacteria in accordance with provincial standards. These outcomes reflect effective process control, monitoring and optimization across the treatment system. This supports environmental protection and compliance while accommodating regional wastewater flows.

Overall, more than 95 per cent of regulated parameters met or exceeded requirements, demonstrating continued environmental protection and strong system performance.

WASTEWATER TREATMENT CAPITAL PROJECTS

COMPLETED

Roof replacement - Replaced aging roofing membranes, masonry, and drains at Return Sludge Pumphouse 1 and 2, and the UV building. *Total budget: $711,000*

Digester 1 roof repair - Removed corroded access manways from Digester 1 roof and sealed digester roof structure to restore the capacity of the digester to hold pressure during operation. *Total budget: $139,000*

ONGOING

WWTP master plan update – Updating the existing WWTP Master Plan to confirm scope for phase 5 upgrades. This includes plant upgrades to meet growing populations, flows, and wastewater loadings, and new regulatory requirements for plant effluent quality. Expected completion in 2026.
Project budget: $345,000

Nutrient Management Facility (NMF) –Design and construction of this new facility that will remove phosphorus from digested sludge lagoon supernatant, improve effluent quality, and reduce mineral buildup in plant piping and equipment. Expected completion in 2026.
Project budget: $20,000,000

HVAC replacement - Design and construction of HVAC improvements in grit bay, digester building, plant 3 blower building, and UV building. These upgrades will help improve indoor air quality. Expected completion in 2026.
Project budget: $550,000

Influent flow measurement - Design and construction of this new instrument will improve data accuracy and regulatory reporting. Expected Completion in 2026.
Project budget: $412,000

Blower optimization - Programming upgrades to optimize Plant 2 bioreactor aeration blower efficiency. Expected completion in 2026.
Project budget: $371,000

Effluent flow measurement - Design and construction of this new effluent flow measurement device supports operational decision-making and compliance reporting. Expected completion in 2026.
Project budget: $300,000

Plant security – Construction of 1,085 metres of Omega II architectural fencing on the northeast side of the WWTP will improve security and protect assets. Expected completion in 2026.
Project budget: $630,000

WASTEWATER COLLECTION PROJECTS - LINEAR SYSTEMS

Investment in the wastewater collection network focuses on renewing aging infrastructure, reducing the risk of blockages and overflows, correcting cross-connections, assessing asset condition, and coordinating utility work with roadway and neighbourhood upgrades. These projects support system reliability, protect public health and the environment, and reduce the likelihood of emergency response while extending the service life of assets.

WHY THIS MATTERS

These investments reduce the risk of sanitary sewer overflows, support regulatory compliance, and ensure wastewater can be reliably conveyed to the treatment plant for all communities connected to Red Deer's wastewater system.

COMPLETED

Gaetz utility right-of-way - Replaced of wastewater infrastructure between Phelan Street and 76 Street, installing 780 metres of sanitary pipe, associated collection system components, and new service connections to adjacent properties.
Total project cost: $1,198,000

Allsop Avenue – Replaced wastewater infrastructure at Allsop Avenue and Allan Street, installing 289 metres of sanitary pipe, concrete repairs, and lane regrading.
Total project cost: $780,000

51 Street Close - Replaced wastewater infrastructure in the 51 Street Close area, installing 267 metres of sanitary pipe, new property services, concrete repairs, and lane regrading.
Total project cost: $825,000

ONGOING

43 Avenue phase 2 - Replacing wastewater infrastructure between 39 Street and 44 Street, including 345 metres of sanitary pipe, service replacements to properties, first lift of road pavement, and concrete repairs. Anticipated completion in 2026.
Project budget: $1,020,000

42 Avenue phase 1 (Grandview) - Replacing wastewater infrastructure between 39 Street and 44 Street, including 443 metres of sanitary pipe, service replacements to properties, first lift of road pavement, and concrete repairs. Anticipated completion in 2026.
Project budget: $992,000

Gaetz Avenue bridge - Replacing wastewater in coordination with bridge construction, including 135 metres of sanitary pipe. Anticipated completion in 2026.
Project budget: $558,000

3/ SHARED SERVICES & FINANCIAL STEWARDSHIP

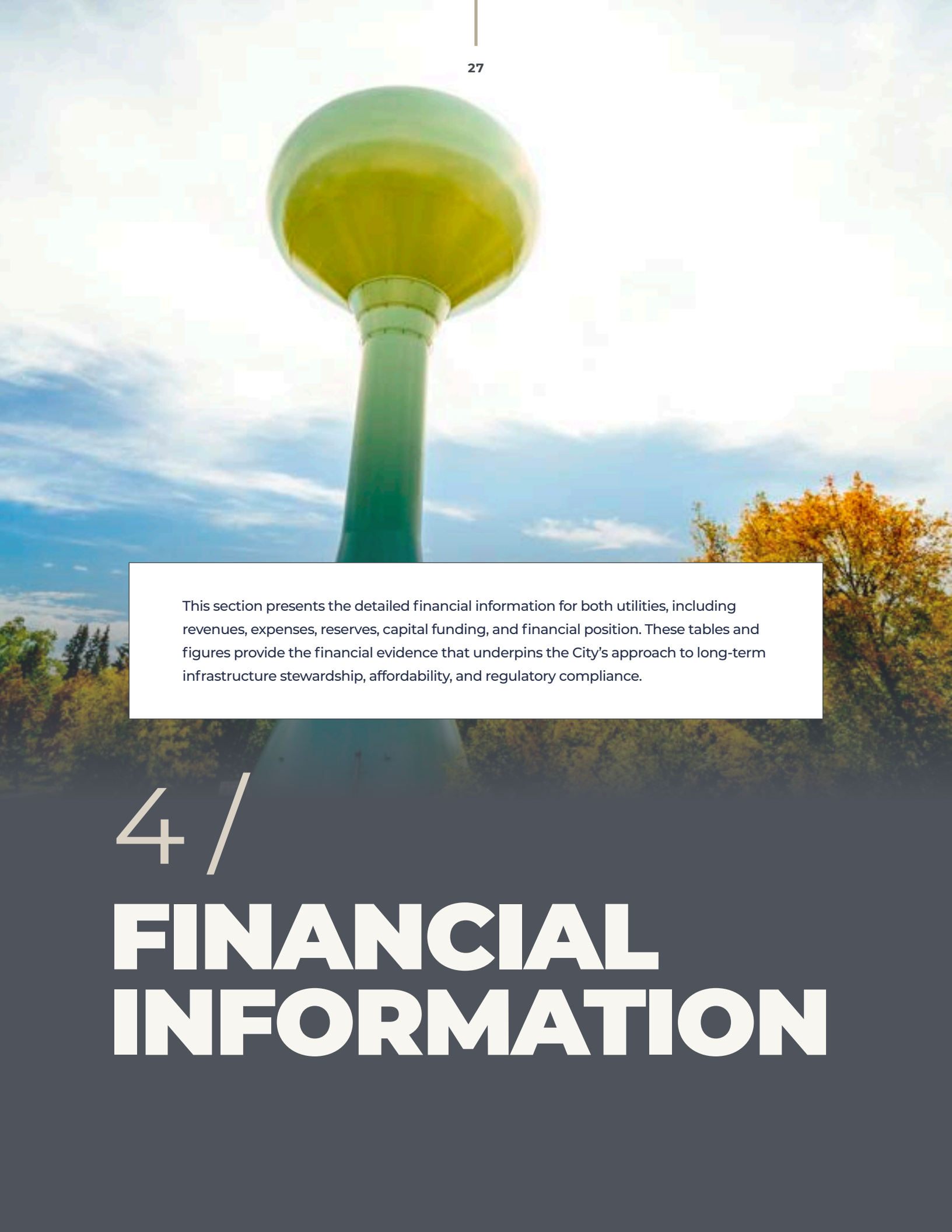
This section outlines the shared services and financial governance frameworks that support those outcomes. These functions enable coordinated capital delivery, effective asset management and long-term financial sustainability across both utilities and the broader municipal infrastructure system.

Shared utility services

Shared services, including Construction and Maintenance and Environmental Planning, provide integrated support across water and wastewater utilities. These functions play a key role in delivering capital projects, coordinating maintenance activities and aligning infrastructure investment with long-term system planning.

By leveraging shared resources and coordinated delivery, The City improves efficiency, minimizes service disruptions and aligns infrastructure renewal across water, wastewater and storm systems. This integrated approach supports timely project delivery, effective risk management and consistent service for customers and regional service providers.

While services are delivered through shared teams, all costs are fully itemized and allocated to the appropriate utility and system. Expenses are not shared or subsidized, and each utility funds only the work performed on its behalf.



This section presents the detailed financial information for both utilities, including revenues, expenses, reserves, capital funding, and financial position. These tables and figures provide the financial evidence that underpins the City's approach to long-term infrastructure stewardship, affordability, and regulatory compliance.

4 / FINANCIAL INFORMATION

FINANCIAL INFORMATION

WATER UTILITY

Water Utility Rates

The Water Utility serves two rate bases: In-City customers and regional service providers. Water Utility variable rates for the past five years are shown in Figure 1 (Appendix A).

In-City Water Rates:

In-City customers are subject to a fixed (non-variable) charge based on water meter size. These rates reflect the combined costs of water treatment and water distribution.

Water Regional Service Providers Rates:

Each unique RSP is charged their corresponding variable rate, which may differ between providers. Costs are allocated based on water volume delivered. The regional rates include both water treatment and distribution costs (mains, valves, and pump stations). Each RSP will levy its own rate to fund the operation and maintenance of their local water infrastructure.

As shown in Figure 1 (Appendix A), water rates remained relatively stable between 2021 and 2022, with only modest increases. The upward trend observed in subsequent years reflects an increase in water costs which are influenced by inflation, system improvements, and enhancements to the water treatment process and evolving City policies.

WATER UTILITY FINANCIAL OVERVIEW

Water Utility financial results (Tables 1 and 2) show total unaudited revenues of $34.4 million in 2025, primarily from tariff revenue of $33.4 million, and total expenses of $25.6 million, resulting in an $8.9 million year end transfer to capital reservice. Funding the capital received from net income and using the reserve to finance capital additions is a key part of The City's strategy to ensure its utilities are self-supporting, while maintaining long term financial sustainability. Financing activities (Table 3) reflect a year-end reserve balance of $9.6 million, new debentures of $9.1 million, and total long-term debt of $48.7 million, alongside $10.7 million in net capital additions.

The statement of financial position (Table 4) reports tangible capital assets of $467.5 million, supported by $48.7 million in long-term debt and $9.6 million in reserves. Table 5 shows these assets are primarily concentrated in core water infrastructure, with Water Utility owned assets totaling $298.4 million, including $279.2 million in the water system; total water system assets reach $283.2 million when including other City departments. Table 6 highlights differences between Water Utility financials and the City's consolidated reporting, mainly related to MCAF revenues, internal revenues, interdepartmental charges, cost allocations, and amortization of contributed assets.

FINANCIAL INFORMATION

WASTEWATER UTILITY

Wastewater Utility Rates

The Wastewater Utility serves two rate bases: In-City customers and regional service providers. Wastewater Utility variable rates for the past five years are shown in Figure 1 (Appendix B).

In-City Wastewater Rates:

In-City customers are subject to a fixed (non-variable) wastewater charge based on water meter size. Variable wastewater volumes are calculated at 90 per cent capacity of metered water consumption. In-City wastewater rates reflect both the cost of wastewater treatment and wastewater collection.

Wastewater Regional Service Providers Rates:

Regional rates, which my differ between RSPs, include the costs of wastewater treatment and incorporate an overstrength credit. In addition, each RSP levies its own rates to fund the operation and maintenance of their local wastewater infrastructure. These rates allow independent communities to maintain and operate their own infrastructure, connecting to Red Deer's wastewater utility infrastructure.

As illustrated in Figure 1 (Appendix B), wastewater rates were relatively stable in the earlier portion of the five-year period. Increases in more recent years reflect rising treatment costs, inflationary pressures, regulatory requirements, and ongoing investments in wastewater treatment.

WASTEWATER UTILITY FINANCIAL OVERVIEW

The Wastewater Utility reported unaudited revenues of $35.8 million (Table 7) and expenses of $23.3 million (Table 8) in 2025, generating a $12.5 million transfer to capital reserves. This supports the City's strategy of maintaining self-supporting utilities while funding infrastructure through reserve contributions.

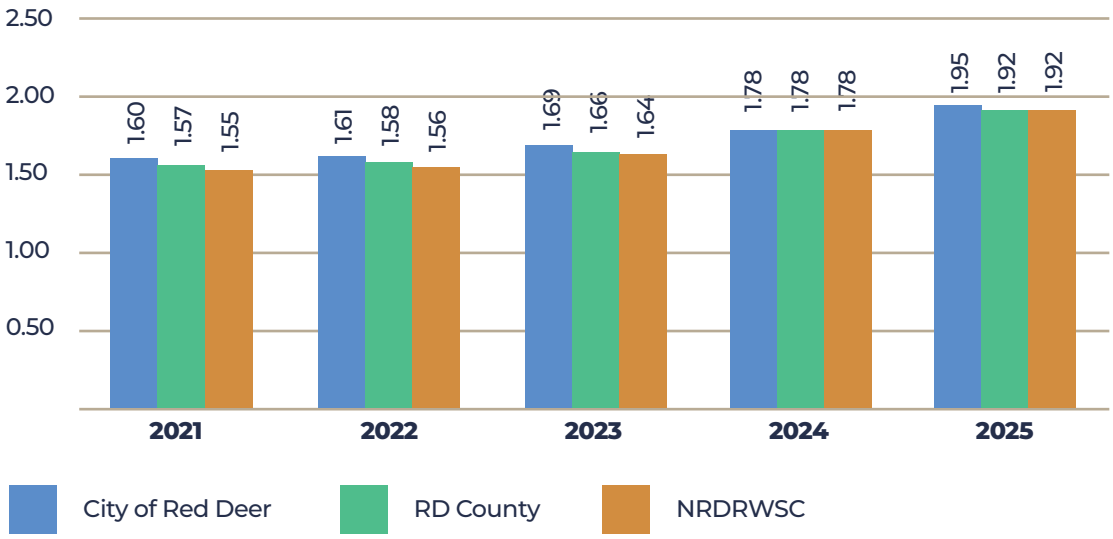
Financing activities (Table 9) show strong reserves of $29.8 million, $2.7 million in new debentures, $9.4 million in long-term debt, and $9.0 million in capital additions supporting key projects such as wastewater treatment upgrades.

The financial position (Table 10) includes $455.1 million in tangible capital assets, supported by relatively low debt and strong reserves. Table 11 shows assets concentrated in core infrastructure, with $271.9 million owned by the utility (including $253.6 million in the wastewater system) and $255.9 million total when including other City departments.

Table 12 compares Utility and City financial reporting, with differences mainly related to MCAF revenues, internal revenues, interdepartmental charges, cost allocations, and amortization of contributed assets.

APPENDIX A
WATER RATES & FINANCIALS

FIGURE 1 – **WATER VARIABLE PER M3**



City of Red Deer Water Rates for City of Red Deer In-City and Regional Service Providers (2021 – 2025)

TABLE 1 - **STATEMENT OF OPERATIONS (REVENUE)**

Revenue - Water Utility	**2025**
In-City	27,001
Regional	6,433
Total Tariff Revenue	33,434
Miscellaneous Revenue	995
Total Revenue	34,429

TABLE 2 - **STATEMENT OF OPERATIONS (EXPENSES AND EXCESS OF REVENUES OVER EXPENSES)**

Expenses - Water Utility	**2025**
Personnel	5,580
General and Contracted Services	1,435
Materials, Supplies & Utilities	3,931
Inter-department Charges	5,825
Amortization	7,458
Financing Costs	1,337
Total Expenses	25,566
Excess of Revenue over Expenses	8,863

TABLE 3 - **FINANCING ACTIVITIES**

	2025
Reserves Balance Year End	9,570
Dividend Paid to City of Red Deer	4,045
New Debentures	9,112
Long-Term Debt @ YE	48,653
Capital Additions (net)	10,709

TABLE 4 - **STATEMENT OF FINANCIAL POSITION**

	2025
Tangible Capital Assets (TCA)	467,516
Long-Term Debt	48,653
Reserves Balance Year End	9,570

TABLE 5 - **TANGIBLE CAPITAL ASSETS**

Net Book Value	**2025**
Land	
Land Improvements	707
Buildings	9,117
Machinery, equipment, and furnishings	8,003
Vehicles	
Engineered Structures	
Roadway System	983
Water System	279,203
Wastewater System	
Storm System	297
Electrical System	58
Fibre Optics System	
Assets owned by Water Utility	298,367

NBV of Water System Assets by Owners	**2025**
Water Utility	279,203
Other Departments within The City of Red Deer	4,029
Total Water System Assets	283,232

TABLE 6 - **UTILITY FINANCIALS VS CITY ANNUAL REPORT**

		2025	
	Water Utility	City of Red Deer Consolidated Financial Statements (Schedule 3 - Consolidated Schedule of Segmented Disclosure)	**Difference**
Revenue			
Total Tariff Revenue	33,434	37,152	-3,718
Misc Revenue	995	261	734
Total Revenue	34,429	37,413	-2,984
Expenses			
Personnel	5,580	6,648	-1,068
General and Contracted Services	1,435	1,765	-330
Materials, Supplies & Utilities	3,931	4,156	-225
Interdepartmental Charges	5,825	-	5,825
Amortization	7,458	9,756	-2,298
Financing Costs	1,337	1,442	-105
Other expenses	-	248	-248
Total Expenses	25,566	24,015	1,551
Excess of Revenue over Expenses	8,863	13,398	-4,535

1 - MCAF is not included in Utility financials (because it is not kept by the Utility and transferred to tax supported operations) but is included in The City consolidated report. City internal revenue is not included in The City consolidated report.

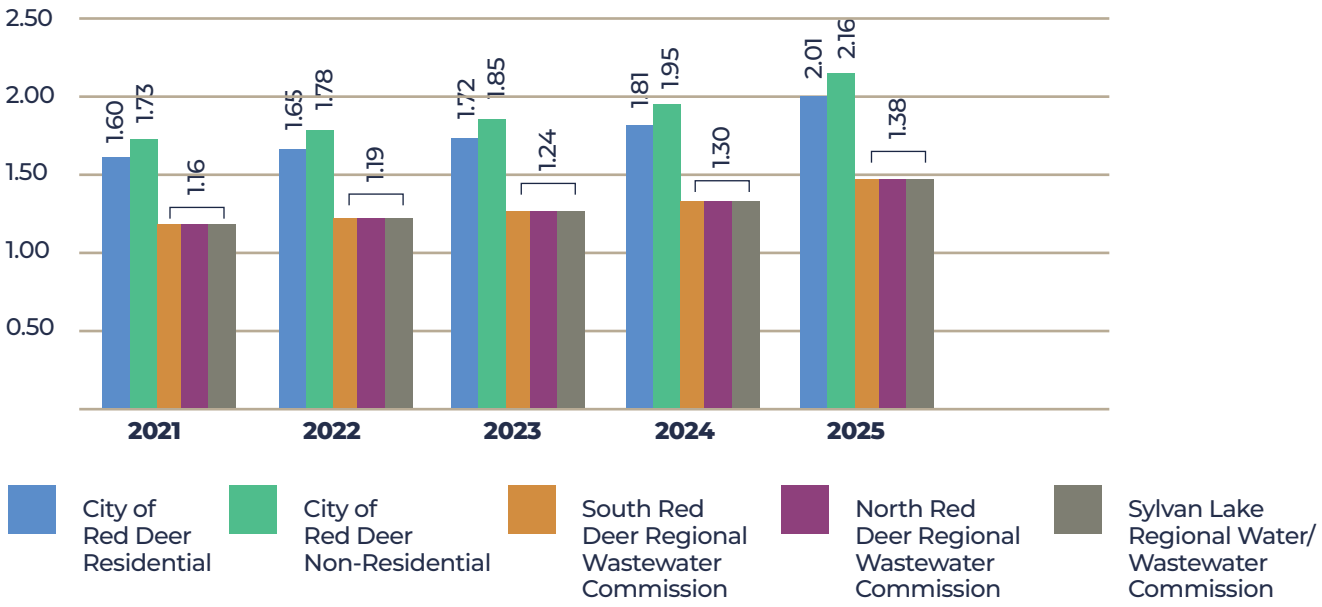
2 - Differences related to Construction & Maintenance expenses included in city amounts but are included as an interdepart-mental charge in the utility financials as well as minor cost recovery from capital entries included in city amounts.

3 - No interdepartmental charges shown in The City consolidated report.

4 - City amortization is higher as it includes amortization on contributed assets which aren't funded in the utility and are thus excluded.

APPENDIX B
WASTEWATER RATES & FINANCIALS

FIGURE 2 – **WASTEWATER VARIABLE PER M3**



City of Red Deer Wastewater Rates for City of Red Deer In-City and Regional Service Providers (2021 – 2025)

1 - City of Red Deer rates include Wastewater Collections and Wastewater Treatment.

2 - Regional Service Providers rates include only Wastewater Treatment.

TABLE 7 - **STATEMENT OF OPERATIONS (REVENUE)**

Revenue - Wastewater Utility	**2025**
Total Tariff Revenue	35,542
In-City	26,336
Regional	9,206
Miscellaneous Revenue	258
Total Revenue	35,800

TABLE 8 - **STATEMENT OF OPERATIONS (EXPENSES AND EXCESS OF REVENUES OVER EXPENSES)**

Expenses - Wastewater Utility	**2025**
Personnel	5,883
General and Contracted Services	2,901
Materials, Supplies & Utilities	3,306
Inter-department Charges	4,982
Amortization	5,819
Financing Costs	412
Total Expenses	23,303
Excess of Revenue over Expenses	12,497

TABLE 9 - **FINANCING ACTIVITIES**

	2025
Reserves Balance Year End	29,819
Dividend Paid to City of Red Deer	4,397
New Debentures	2,700
Long-Term Debt @ YE	9,410
Capital Additions (net)	8,987

TABLE 10 - **STATEMENT OF FINANCIAL POSITION**

	2025
Tangible Capital Assets (TCA)	455,129
Long-Term Debt	9,410
Reserves Balance Year End	29,819

TABLE 11 - **TANGIBLE CAPITAL ASSETS**

Net Book Value	**2025**
Land	
Land Improvements	269
Buildings	11,455
Machinery, equipment, and furnishings	439
Vehicles	
Engineered Structures	
Roadway System	148
Water System	
Wastewater System	253,550
Storm System	5,480
Electrical System	517
Fibre Optics System	
Assets owned by Water Utility	271,858

NBV of Wastewater System Assets by Owners	**2025**
Wastewater Utility	253,550
Other Departments within The City of Red Deer	2,396
Total Wastewater System Assets	255,946

TABLE 12 - **UTILITY FINANCIALS VS CITY ANNUAL REPORT**

		2025	
	Wastewater Utility	City of Red Deer Consolidated Financial Statements (Schedule 3 - Consolidated Schedule of Segmented Disclosure)	**Difference**
Revenue			
Total Tariff Revenue	35,542	39,133	-3,591
Misc Revenue	258	200	58
Total Revenue	35,800	39,333	-3,533
Expenses			
Personnel	5,883	6,327	-444
General and Contracted Services	2,901	3,042	-141
Materials, Supplies & Utilities	3,306	3,345	-39
Interdepartmental Charges	4,982	-	4,982
Amortization	5,819	9,472	-3,653
Financing Costs	412	429	-17
Other expenses	-	34	-34
Total Expenses	23,303	22,649	654
Excess of Revenue over Expenses	12,497	16,684	-4,187

1 - MCAF is not included in Utility financials (because it is not kept by the Utility and transferred to tax supported operations) but is included in The City consolidated report. City internal revenue is not included in The City consolidated report.

2 - Differences related to Construction & Maintenance expenses included in city amounts but are included as an interdepartmental charge in the utility financials as well as minor cost recovery from capital entries included in city amounts.

3 - No interdepartmental charges shown in The City consolidated report.

4 - City amortization is higher as it includes amortization on contributed assets which aren't funded in the utility and are thus excluded.

2025 WATER AND WASTEWATER UTILITIES

ANNUAL REPORT

THE CITY OF Red Deer