

A full-page photograph serves as the background for the top half of the report. It depicts a person wearing a white hard hat, a yellow safety vest over a dark shirt, and dark pants. They are walking through a field of tall, dry grass, carrying a yellow coiled hose in their left hand and a black container in their right. The background is a dense forest of evergreen and deciduous trees, with some trees showing autumnal yellow and orange foliage. In the distance, a mountain range is visible under a clear sky.

2019 CANMORE PERFORMANCE REPORT



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EPCOR Canmore
102B Bow Valley Trail
Canmore, Alberta
T1W 3B7



EPCOR has been providing water and wastewater services to the Town of Canmore for 20 years.



ABOUT US

EPCOR has been providing quality drinking water and essential wastewater services for more than one hundred years. We serve more than one million people in over 85 communities and industrial sites across Western Canada and the United States.

Our full spectrum of services includes water and wastewater treatment, water distribution, wastewater collection, storm drainage, meter reading, customer billing and account management. We have a fixed-price, performance-based utility management agreement with the Town to continue providing services until 2030. The Town sets the utility rates and retains ownership of the water works related assets on behalf of the citizens of Canmore.

Committed to our Customers

We work in partnership with the Town to ensure our performance consistently meets the high standards that Canmore residents expect. In 2019, this meant **responding to a 25-fold increase in frozen services from the worst ground frost event in over 40 years.**

With more than 107 frozen services reported between January and March, the entire team—from Site Manager to Meter Reader—worked around the clock to arrange temporary water services, haul necessary equipment into residences and thaw pipes, coordinate plumbing modifications and install bleeder valves and manage customer bills to reflect the ongoing adjustments—all while ensuring that water service for each affected customer was restored within 24 hours.

We are accountable to deliver service that meets key measures for Environment, Customer Care, Safety, Quality Assurance, Operational Excellence and Capital Programs.

This report is part of our commitment to accountability and transparency.



EPCOR AND THE COMMUNITY

Our customers push us to achieve the highest customer standards possible. We understand the importance our customers place on reliable water and wastewater services. It’s why we work hard to provide our customers with great service.

Extensive Water Quality Testing

At EPCOR, our employees are proud to deliver safe, clean and great tasting drinking water to the Canmore community.

Throughout the water treatment process, drinking water takes 12 hours to be clarified, filtered and disinfected. We monitor 75 water quality parameters and conduct more than 5,000 tests each year so we can provide our customers with the best drinking water for safety, colour, smell and taste.

In March 2019, Health Canada reduced its maximum acceptable concentration (MAC) for lead in drinking water from 10 µg/L (micrograms per Litre) to 5 µg/L. Water in Canmore continues to be safe to drink. There are no measurable levels of lead in drinking water when it leaves the water treatment facility in Canmore and there is no lead piping in the publicly owned distribution system.

Lead in Drinking Water

In addition to reducing the MAC of lead, the new guideline shifted the point of compliance to the tap of a residence or building. Lead may be found in tap water in homes that have lead pipes on the residence’s side or have household plumbing components or fixtures that contain lead.

To ensure we meet the new Guideline and Alberta Environment & Parks’ requirements, EPCOR and the Town have a plan in place to determine lead levels at the tap of representative older buildings and will be undertaking this testing when pandemic-related social distancing measures have been lifted.

Responding to Outages

Our crews work quickly and safely to restore service when an outage occurs. **In 2019, EPCOR responded to 108 water outages and, in all cases, restored service within 24 hours.**

Community Engagement

We endeavor to be neighbours of choice wherever we operate by proudly supporting local non-profit and charitable organizations through donations, sponsorships and employee participation in community events.

In 2019, EPCOR continued to support and participate in the annual Canmore and Area Health Care Foundation Golf Tournament. Our operators participated in local elementary school classroom programs and conducted plant tours for post-secondary institutions, as well as for non-profit and industry organizations. We continue to educate customers through our participation at the annual Public Works Day, as well as at the local Mountain Market and Canmore Folk Festival.

EPCOR produced educational social media messaging throughout the year to inform customers about ways to conserve and use water more efficiently, as well as actions to protect the utility infrastructure and environment.

EPCOR AND THE COMMUNITY

Activity	Actual Values						Target Value
	2014	2015	2016	2017	2018	2019	
% Service Outages restored in <24 hours	94%	100%	100%	97%	96%	100%	90%
Customer Satisfaction Survey	94%	N/A	94%	N/A	N/A	In progress	85%
Community Events	8	13	9	13	14	16	9
Communication Reporting	100%	100%	100%	97%	100%	100%	100%

A close-up photograph of a man and a young boy. The man, on the right, has a beard and is wearing a dark plaid shirt. He is looking down with a focused expression. The boy, on the left, has curly hair and is wearing a mustard-colored puffer jacket. He is also looking down. They appear to be outdoors, with a blurred background of autumn leaves and trees. A rainbow-colored lens flare is visible near the man's ear.

Our Environmental Performance Plan for the Canmore Wastewater Treatment Plant (WWTP) sets the desired environmental outcomes and strategies for watershed protection in the Bow Valley.

- failure to collect effluent sample from a kinked hose on the effluent sampler carboy lid;
- failure to collect influent sample from a kinked hose entering the influent sampler;
- missing monitoring components in the Civic Centre cooling system effluent; and
- surcharging manhole near Lift Station 7 due to blockage from illegal dumping of construction debris into downstream manhole.

Through our stringent monitoring process, EPCOR detected higher than anticipated Total Ammonia Nitrogen (TAN) levels within the wastewater treatment plant effluent. While these TAN levels were still within the approval limits, EPCOR brought in its Technical Services specialists to track down the source of the higher TAN loading.

Through the installation of additional TAN analyzers in strategic locations in the plant, our experts determined that TAN was being created by normal biological processes with the wastewater treatment plant. With the knowledge acquired from this investigation, operating procedures have been adjusted to maintain acceptable effluent quality to the Bow River.

EPCOR AND THE ENVIRONMENT

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EPCOR MAINTENANCE AND CAPITAL PROGRAM

Maintenance and capital programs are critical to delivering operational excellence for the water and wastewater systems in Canmore.

We proactively manage the water and wastewater infrastructure through regular maintenance, evaluations and improvement programs. Capital programs are also identified by EPCOR’s subject matter experts and executed to help ensure the utility can meet existing demand while growing to meet future demand in the valley.

EPCOR MAINTENANCE AND CAPITAL PROGRAM

Activity	Actual Values						Target Value
	2014	2015	2016	2017	2018	2019	
Preventative Maintenance	100%	99.5%	100%	100%	100%	100%	100%
Natural Gas Consumption	Below	Below	Below	Below	Below	Below	15,138 GJ
Power Consumption	Below	Below	Below	Below	Below	Below	6,203 MWh

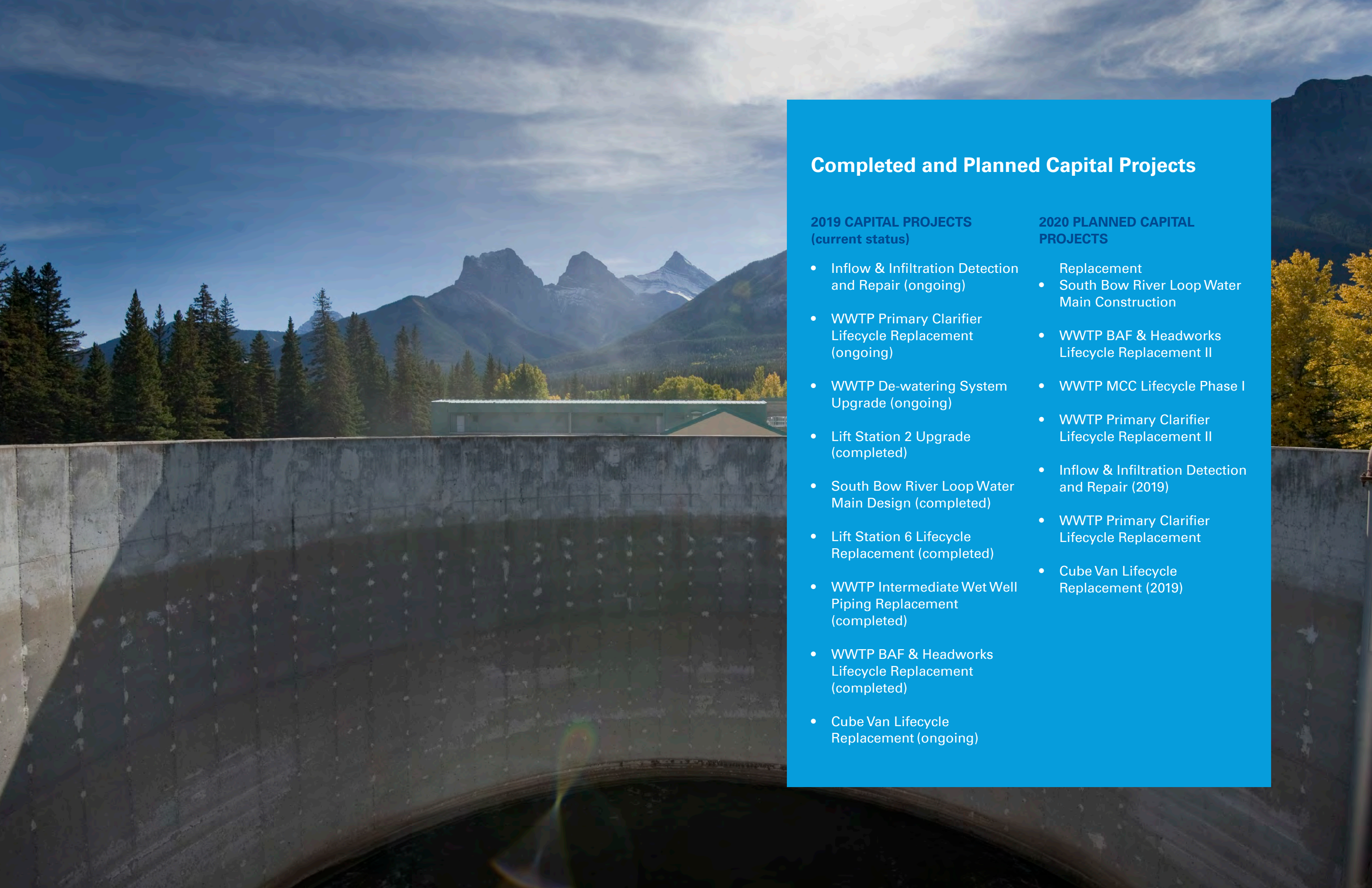
Improving Efficiencies

In 2019, EPCOR completed a De-watering System upgrade at the wastewater treatment plant. The project improved efficiencies by replacing the existing belt press with a centrifuge that removes a higher percentage of water from the biosolids. This has **resulted in a faster processing time at the Plant, an increase in effluent quality returning to the Bow River and savings to the Town** due to less weight being transported out of town for compost production.

In 2019, the biosolids load trucked from the wastewater treatment plant to Penhold was reduced by 668 tonnes, primarily due to the new centrifuge technology, which garnered a savings to the Town of approximately \$73,000.

Keeping Homes and Streets Clear

For the past two winters, EPCOR has implemented a preventative maintenance program that we estimate has thwarted approximately 12 sewer backups to residences and businesses each winter. This labour-intensive program involves chipping out and inspecting manholes and transporting a steam pressure trailer to trouble spots to thaw out manholes that are beginning to freeze.



Completed and Planned Capital Projects

2019 CAPITAL PROJECTS (current status)

- Inflow & Infiltration Detection and Repair (ongoing)
- WWTP Primary Clarifier Lifecycle Replacement (ongoing)
- WWTP De-watering System Upgrade (ongoing)
- Lift Station 2 Upgrade (completed)
- South Bow River Loop Water Main Design (completed)
- Lift Station 6 Lifecycle Replacement (completed)
- WWTP Intermediate Wet Well Piping Replacement (completed)
- WWTP BAF & Headworks Lifecycle Replacement (completed)
- Cube Van Lifecycle Replacement (ongoing)

2020 PLANNED CAPITAL PROJECTS

- Replacement
- South Bow River Loop Water Main Construction
- WWTP BAF & Headworks Lifecycle Replacement II
- WWTP MCC Lifecycle Phase I
- WWTP Primary Clarifier Lifecycle Replacement II
- Inflow & Infiltration Detection and Repair (2019)
- WWTP Primary Clarifier Lifecycle Replacement
- Cube Van Lifecycle Replacement (2019)

EPCOR AND OUR EMPLOYEES

Our employees are at the heart of our operations in Canmore. We are committed to ensuring their safety and providing them with opportunities for professional development.

Making sure our employees and contractors get home safely after work is a top priority for EPCOR.

Our operations staff and contractors in Canmore have not experienced a single lost time incident since the Safety Index was introduced in 2006.

These positive results stem from our continual emphasis on safety training for existing staff, new employees and contractors.

In 2019, operations employees received an average of 32.1 hours per employee of training on various topics, including Cannabis Awareness, Mental Health, Safe Work Planning, Emergency Response, WHMIS,* SCBA** and Confined Space Entry, just to name a few.

There were also 1,257 preventative activities carried out, including regular site safety inspections, safe work plans and hazardous energy isolation permits.

Developing Water Professionals

To ensure ongoing operational excellence, EPCOR works with our operators to maintain or expand upon their current level of certification. We continue to cross-train operators to provide them with the experience necessary to increase their certification levels in all four water disciplines.

Currently, 9 of 11 operators are certified by AEP and several operators have increased their certification levels in 2019. We anticipate that by the end of 2020, all operators in the Canmore operation will be certified.

Ensuring Continuous Improvement

In 2019, EPCOR's Canmore operations was selected for an Integrated Site Assurance Team (ISAT) review. This is an internal audit that the site undergoes approximately every five years.

The audit helps to provide reasonable assurance to EPCOR management, key operating stakeholders, the audit committee and the Environment, Health and Safety Committee that Canmore operations are in compliance with applicable regulations and operating permits, and in conformance with EPCOR policies and standards including EPCOR's Health, Safety and Environment Management System.

Some examples where the Canmore operations demonstrated strong operational practices:

- Housekeeping at all facilities was impressive;
- Spill kits were available at all lift stations; and
- Safety records and key log system were organized and auditable.

EPCOR AND OUR EMPLOYEES

Activity	Actual Values						Target Value
	2014	2015	2016	2017	2018	2019	
Training (hours)	23.5	31.7	34	33	32.5	32.1	32
Prevention	515	412	665	552	645	1257	435
Meetings	12	12	12	12	12	12	12
Lost Time Incidents	0	0	0	0	0	0	0

*Workplace Hazardous Materials Information System. ** Self Contained Breathing Apparatus

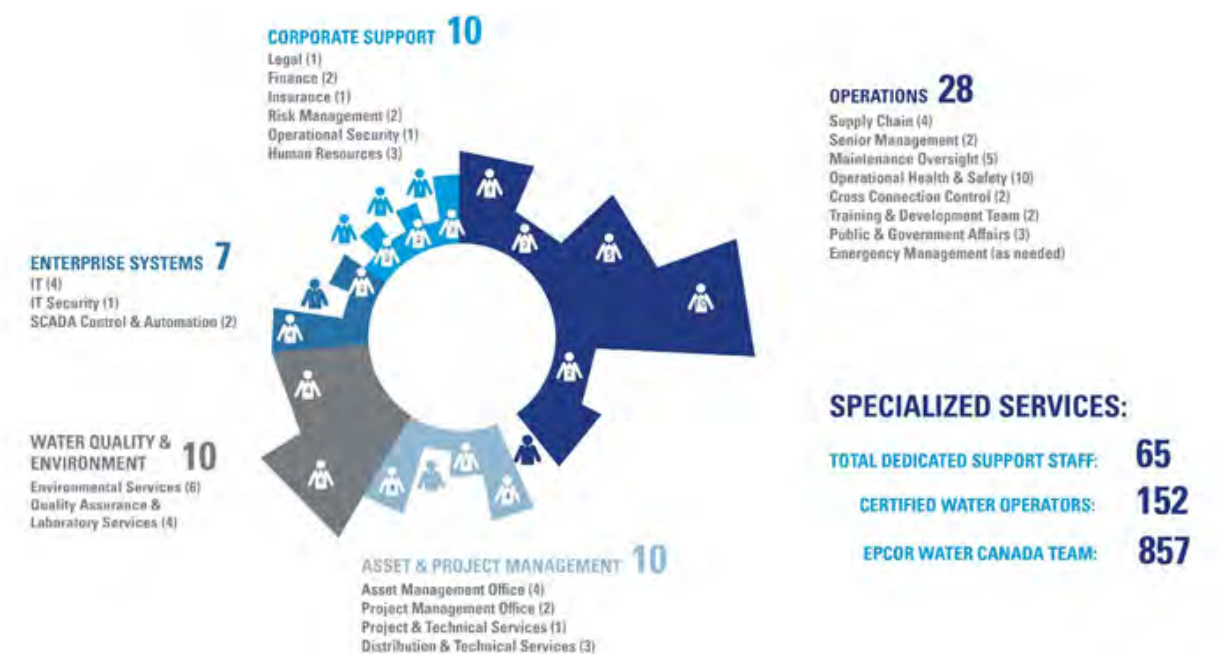
EPCOR ADVANTAGE

EPCOR provides the Town with support above and beyond the services performed by our qualified water and wastewater staff in Canmore. As the largest private utility operator in Alberta, the depth of our expertise stretches beyond basic services.

We understand the environmental sensitivity of the Bow Valley and watershed, which is crucial to navigating changes in regulatory approvals. We also have an established emergency response approach with the ability to access additional regional resources for operations, communications and quality assurance.

EPCOR supports the community with value-added programs including stakeholder engagement, community investment, integrated health & safety and supply chain management, among others.

As partners in delivery of essential services to the community, we utilize the critical resources required to ensure that customers in Canmore are satisfied with their water and wastewater services. A complete look at our specialized resources in Western Canada is shown in the adjacent image.





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T1W 3B7