

# Department Business Plan Update

## Utilities

LLS.14482550

# Department overview

- Utilities has an integrated team of dedicated and skilled professionals that is focused on the management and operations of municipal utility infrastructure that supports and contributes to public health, environmental stewardship and economic prosperity
- Utilities provides a resilient and agile operation striving for seamless service while committing to quick action in response to emergent issues
- Utilities is financially self-sufficient and does not use municipal property taxes to support operational or capital requirements except for recycling stations and enviroservices

# Core business functions

- Waste Management Services
- Community Energy Services
- Water
- Wastewater
- Stormwater
- Utilities Engineering

# Progress on core function forecast

## Waste Management Services

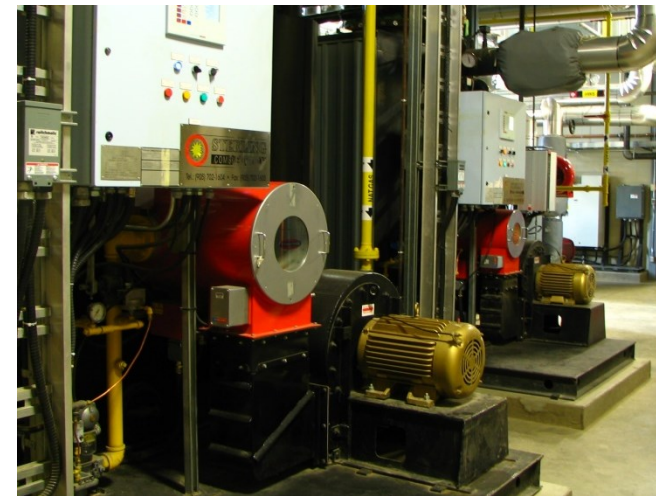
- Provide convenient, economical and effective waste diversion opportunities, while increasing community awareness about waste diversion and minimization
  - Residential collection services (Green Routine)
  - Community diversion services (recycle stations & enviroservice)
  - Education & outreach



# Progress continued

## Community Energy Services

- Optimize and efficiently run the heating system for the Centre in the Park development in order to reduce greenhouse gas emissions in the community
- Increase community's resilience and adaptive capacity by allowing for fuel switching to an alternate source
  - Boiler installation
  - Developer connections





# Progress continued

## Water Services

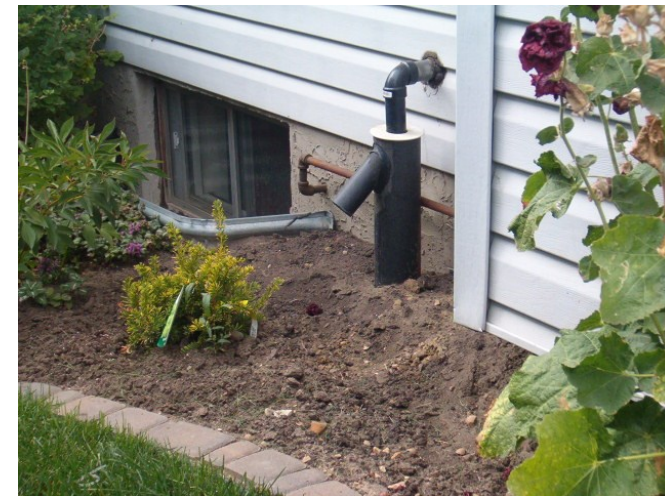
- Provide safe, cost effective potable water delivery that complies with municipal, provincial and federal standards and regulations
  - Water sampling
  - Annual infrastructure maintenance and inspections
  - Meter installation
  - Truck fill inspection and maintenance



# Progress continued

## Wastewater Services

- Operate a wastewater collection system that conveys flows to the treatment facility (Alberta Capital Region Wastewater Commission) safely, efficiently and in compliance with municipal, provincial and federal standards and regulations
  - Mainline flushing
  - Annual infrastructure maintenance and inspections
  - Sewer backup response





# Progress continued

## Stormwater Services

- Provide safe stormwater services that are efficient, effective solutions to mitigate flood risks; and are in compliance with municipal, provincial and federal standards and regulations
  - Catch basin cleaning
  - Stormwater infrastructure repairs and inspection
  - Stormwater management facility inspections





# Progress continued

## Utilities Engineering

- Update and maintain utility master plans and design and construction standards for department infrastructure that promote public health, support infrastructure planning for servicing future development and guide department capital investments
  - Asset management
  - Infrastructure planning
  - Capital projects









# Dashboard

Waste	Community Energy
1,237 missed collections <i>(of 1,693,475 total collections = 0.0007%)</i>	Two new connections came online in 2019
6,512 curbside audits	Added 3,200 kW to the system <i>(increase of 34%)</i>
20,070 tonnes diverted <i>(59% diversion rate)</i>	83% thermal efficiency
\$25.45 per household <i>(13% lower than regional average)</i>	0 operational downtime

\* 2019 Data



# Dashboard

Water, wastewater and stormwater	
10,294,674 m <sup>3</sup> of water distributed <i>(7% lower than 2018 due to rainfall)</i>	1,085 preventative maintenance appointments <i>(Strathcona County)</i>
2,400 (approximately) water samples taken	Seven water line breaks repaired
316 meter installs	2,387 hydrants inspected
One water demand management measure	91 inspections of stormwater management facilities

\* All numbers as of December 2019

# Customer service

Service Line	Calls	Average Duration
Water & Wastewater Services	8,627	2:00
Waste Management & Community Energy Services	12,015	1:35
Customer Billing	12,838	2:25

# Employee engagement

Engagement survey theme	Engagement initiative	People Plan focus area
Communication	Improved sharing of department and corporate information: <ul style="list-style-type: none"><li>- Installation of e-screens</li><li>- Development of comprehensive internal communications plan</li><li>- Gathering staff feedback</li></ul>	Trust and team
Alignment with Values	Focus on sharing values, leading by example	Clear purpose



# Initiatives

- Broadview Enviroservice operational enhancements
- Asset management program for utility infrastructure
- Wet weather flow management plan – development and implementation
- Collingwood Cove lift station – design and construction
- South Cooking Lake residential water fill station – design and construction

# Broadview Enviroservice operational enhancements - status

## Overall Initiative Status



Initiative status	Current status	Previous status
Time	Y	G
Scope	G	G
Budget	G	G

## Alignment to Strategic Goals

- Goal 4: Ensure effective stewardship of water, land, air and energy resources  
Result: County uses best practice approach to waste management
- Goal 2: Manage, invest and plan for sustainable municipal infrastructure  
Result: Safe, reliable utility infrastructure

## Key Deliverables

- Retrofit of existing ventilation system in the Enviroservice building to ensure air quality meets standards for both staff working with hazardous materials, but also for residents utilizing the service
- Installation of an asphalt pad for grinding operations for brush and yard waste services
- Installation of a gatehouse and expansion of reduction program with supporting staffing resources (2020)

## Opportunities/Challenges

- Balancing retrofit and installation projects with weather and contractors while limiting the impact on users of the site has and continues to be a challenge
- Continuous communication both internal and external assist with better preparing for the work and potential service impact

## Risks

Both ventilation system and asphalt pad were completed end of 2019. Installation of gatehouse and expansion of onsite reduction program is delayed due to current COVID-19 impacts.

## Mitigation

Planning continues for gatehouse and reduction program, however completion may be delayed until 2021.

# Asset management program for utility infrastructure - status

## Overall Initiative Status



Initiative status	Current status	Previous status
Time	Y	G
Scope	G	G
Budget	G	G

## Alignment to Strategic Goals

- Goal 9: Continuously improving the way we work, as one organization, in an agile and sustainable manner.  
Result:
  - Supports infrastructure management
  - Supports long term financial stability
  - Collaborates with departments
  - Support insight-driven / evidence-based decision making
  - Supports integrated planning

## Key Deliverables

- Utilities Level of Service Framework
- Utilities Risk Framework
- Utilities Maintenance Plan
- Utilities Financial Strategy
- Department overall Asset Management Plan

## Opportunities/Challenges

- Opportunities:
- To enhance ability to meet the required level of service customers in the most cost efficient manner through operations, maintenance, renewals and financial forecasting
- Challenges:
- Identify a department asset management (AM) champion, develop a change management plan and create engagement opportunities to ensure successful implementation with department staff

## Risks

Utilities' intent is to work on a department level in parallel with the Corporate Asset Management (CAM) initiative. A service definitions scope has been strategically added to the front-end of the CAM initiative which has pushed timelines slightly.

## Mitigation

Remain actively involved in the CAM and service definition initiatives. Use Utilities as a department pilot for upcoming corporate asset management initiatives.



# Wet weather flow management plan – development & implementation - status

Overall Initiative Status



Initiative status	Current status	Previous status
Time	G	G
Scope	G	G
Budget	G	G

Alignment to Strategic Goals
<ul style="list-style-type: none"><li>Goal 2: Manage, invest and plan for sustainable municipal infrastructure Result: Safe, reliable utility infrastructure</li><li>Goal 8: Foster an environment for safe communities Result: Utility infrastructure provides safe clean water; manages wastewater treatment and provides effective storm water management</li></ul>

Key Deliverables
<ul style="list-style-type: none"><li>Complete an Inflow / Infiltration Assessment Report</li><li>Complete a Wet Weather Flow Management Plan</li><li>Develop a potential implementation strategy</li><li>Develop annual Alberta Capital Region Wastewater Commission (ACRWC) compliance / verification report</li><li>Incorporate new inflow and infiltration management and testing criteria into the County’s Design and Construction Standards</li></ul>

Opportunities/Challenges
<p>Opportunities:</p> <ul style="list-style-type: none"><li>Work cooperatively with the ACRWC to reduce wet weather flow impacts on the regional system</li><li>Characterize wet weather flow sources and identify priorities for wet weather flow management</li></ul> <p>Challenges:</p> <ul style="list-style-type: none"><li>Increased wastewater infrastructure inspection and compliance reporting</li></ul>

Risks	Mitigation
The Wet Weather Flow Management Plan may lead to various capital projects of operational programs to remain in compliance with the ACRWC Wet Weather Discharge Permit.	Continue to work cooperatively with the ACRWC and the regional member municipalities.
The development community does not accept the new Design and Construction Standard wastewater inspection and testing requirements.	Ensure consistency with other municipalities in the region. Work cooperatively with the development community and the ACRWC to adopt standards.

# Collingwood Cove lift station design and construction - status

Overall Initiative Status



Initiative status	Current status	Previous status
Time	G	G
Scope	G	G
Budget	G	G

Alignment to Strategic Goals
<ul style="list-style-type: none"><li>Goal 2: Manage, invest and plan for sustainable municipal infrastructure Result: Safe, reliable utility infrastructure</li><li>Goal 8: Foster an environment for safe communities Result: Utility infrastructure provides safe clean water; manages wastewater treatment and provides effective stormwater management</li></ul>

Key Deliverables
<ul style="list-style-type: none"><li>Complete preliminary and detailed design for the lift station renewal</li><li>Construct the required lift station renewal</li></ul>

Opportunities/Challenges
<p>Opportunities:</p> <ul style="list-style-type: none"><li>Rectify existing facility safety concerns, obsolete infrastructure and operational performance failures</li></ul> <p>Challenges:</p> <ul style="list-style-type: none"><li>Maintain wastewater service to the community during construction</li><li>Minimize construction impact on adjacent home owners</li></ul>

Risks	Mitigation
Infrastructure failure prior or during construction.	Emergency operational plans have been developed.
Environmentally sensitive area within which construction activity may not be conducted from April 1 to August 31 without Alberta Environment and Parks (AEP) approval.	Avoid the non-construction window. Work with AEP, Canadian Wildlife services (CWS) and biologists to establish a method of approach (if required).

# South Cooking Lake residential water fill station - status

## Overall Initiative Status



Initiative status	Current status	Previous status
Time	G	G
Scope	G	G
Budget	G	G

## Alignment to Strategic Goals

- Goal 2: Manage, invest and plan for sustainable municipal infrastructure  
Result: Safe, reliable utility infrastructure
- Goal 8: Foster an environment for safe communities  
Result: Utility infrastructure provides safe clean water; manages wastewater treatment and provides effective stormwater management

## Key Deliverables

- Complete preliminary and detailed design for the residential water fill station
- Construct the new residential water fill station

## Opportunities/Challenges

- Opportunities:
- Provide increased water service level to Hamlet of South Cooking Lake and rural area customers.
  - Increased operational efficiency of the existing water system.
  - Potential synergies with Emergency Services for water at the South Cooking Lake Fire Hall.
- Challenges:
- Minimize construction impact on adjacent stakeholders

## Risks

Strathcona County received Alberta government cost-shared grant funding (provided under the Water for Life Strategy as part of the Alberta Municipal Water/Wastewater Partnership)

## Mitigation

Administration has received confirmation from the Alberta government that the grant is still open; however the current availability to use the grant for this project needs to be confirmed.







# Questions?

