

Quick Guide to Our Engineered & Natural Assets

SETTING THE PARAMETERS FOR SUSTAINABLE ASSET MANAGEMENT

- 1. What do we have?
- 2. What is it worth?
- 3. How do we take care of it?
- 4. How much does cost to take care of it?
- 5. How long will it last?
- 6. How do we plan to replace it and can we afford it?



Asset Management Framework



Quick Guide to Our Engineered & Natural Assets

WHAT IS ASSET MANAGEMENT?

The goal of asset management is to ensure cost-effective and environmentally responsible service provision for present and future citizens through the creation, acquisition, maintenance, operation, rehabilitation and disposal of each asset.

A key issue facing local governments across Canada is managing aging assets and resources effectively while maintaining acceptable levels of service.

To help achieve this goal, the Town of Gibsons employs a formalized asset management program.

Our asset management team has divided the Town's assets into eight classes: Sanitary, Water, Stormwater, Transportation, Gibsons District Energy Utility, Fleet and Equipment, Parks and Civic Lands, and Buildings and Structures.

Staff is currently developing an asset management plan for each of the eight asset classes, which will help decisionmakers address unique levels of services, future demands, lifecycle management, finances, improvements and monitoring.

COMMUNITY GOALS

Community goals for each asset primarily come from the Official Community Plan, which summarizes the Town's focuses, priorities and goals.

Stakeholder requirements and expectations also arise from conversations between staff, Council and the public.

Council considers staff recommendations as well as public concerns to make important "levels of service" decisions.

FINANCIAL SUSTAINABILITY

While funding requirements for operational and maintenance needs at **existing** levels of service are in place, establishing sufficient and reliable funding for asset **renewal and replacement** is a challenge many municipalities are grappling with.

In addition to looking for efficiencies in operations and renewal programs, mechanisms that support sustainable funding include: appropriate rate setting, suitable reserve levels, strategic use of debt and reduced reliance on grant funding.

LEVELS OF SERVICE

A common dilemma of local government is that the community wants increased services, with little or no rate increases.

Accordingly, a key challenge is to clearly define and articulate various "levels of service" and their associated costs, so that the community can make informed decisions on the levels of service they receive and are prepared to pay for.

Additionally, it is easy to focus on delivering new infrastructure (i.e. increasing levels of service) while overlooking the renewal requirements of existing infrastructure (i.e. maintaining existing levels of service.)

The challenge is to define meaningful levels of service that meet the community's expectations, and from which informed, sustainable budget decisions can be made.

SANITARY COLLECTION & TREATMENT



AT A GLANCE

Gibsons' Sanitary Collection & Treatment System is comprised of:

- Wastewater Treatment Plant (WWTP)
- Treated sewage ocean outfall
- Prowse Road Lift Station
- 35 km collection pipes, including gravity and force mains
- 500 manholes
- Approximately 1700 service connections

Inflow and Infiltration ("I&I")

Inflow & Infiltration is clean storm and/or groundwater that enters the sewer system through cracked pipes, leaky manholes, or improperly connected storm drains, down spouts and sump pumps. Most inflow comes from storm water and most infiltration comes from groundwater.

I&I puts additional pressure on Gibson's sanitary collection system, as we end up unnecessarily treating clean water.

To help alleviate costs associated with I&I, the Town employs a video monitoring program to identify where unwanted water is getting into our system.

COMMUNITY GOALS

- upgrade and expand the system for increased reliability and to meet growing demand
- upgrade the effluent outfall and outfall facility
- require existing development to connect to the system
- minimize "inflow and infiltration"
- divert flow away from Prowse Road Lift Station
- pursue funding options for Prowse Road Lift Station

RELIABILITY AND RISKS

Reliable service requires:

- regular monitoring and preventative maintenance
- communications to the public re) their role in caring for the system

- expensive reactive maintenance to fix leaks, breaks and blockages
- disruptions to service
- risk of sewage backups and resulting property damage
- increased treatment costs



Replacement Value \$49.0 million (or \$10,600 per person)

Operations & Maintenance

Ongoing videoing and flushing of critical mains, scheduled maintenance of wastewater treatment plant. Operating the treatment plant requires three full-time staff.

Current & Planned Capital Projects

2018

- Prowse Road Lift Station Design: \$60,000
- WWTP Optimization & Upgrade Design and Tender: \$396,000

2019

- Prowse Road Lift Station Construction: \$995,500
- WWTP Optimization & Upgrade -Construction: \$1.7 million
- Annual Collection System Rehabilitation: \$55,100

2020

- Collection System Rehabilitation: \$57,900
- Wastewater Strategic Plan Update: \$55,100

2021

• Collection System Rehabilitation: \$60,800

2022

• Collection System Rehabilitation: \$63,800

REPLACEMENT SCHEDULE



A sustainable sanitary system is estimated to cost \$778k annually just to replace aging infrastructure.

WWTP Upgrade & Prowse Pump Station Retrofit

The contract to provide design, engineering and construction services for Gibson's Wastewater Treatment Plant was awarded in 2018.

Project work is to include construction of a buffer tank, a chemical addition building and a chemical delivery system, as well as an upgrade to the Prowse Road Lift Station.

Design of the upgrades began in 2018, with construction anticipated in 2019 and 2020.

Fats, Oils, Grease (FOG)



An annual flushing and monitoring program has revealed issues with preventable blockages, such as grease build up due to lack of grease interceptor control. In response, the Town has implemented a multi-pronged communications and inspection program aimed at both commercial and residential addresses.

THE GIBSONS AQUIFER



- The aquifer is considered a "natural asset" which provides a municipal service in the same way that engineered assets do
- 75% of the Town's water currently provided by the aquifer; 25% supplied by SCRD from Chapman Creek.
- The aquifer is gravel and sand that is saturated by water (not an underground lake or river).
- It takes about 10 years for a drop of water that falls on Mt Elphinstone to enter the aquifer and make its way to Town wells.

Connecting Zone 3 to the Gibsons Aquifer

Currently, residents who live in the Town's "Zone 3" area (i.e. most of Upper Gibsons) are served by the SCRD's Chapman Creek water supply.

To help reduce the water usage at Chapman Creek, the Town has proposed connecting Zone 3 to the Gibsons Aquifer. This would require an investment of approximately \$2 million and would reduce Gibsons' use of SCRD water by 95% - 98%.

On completion of this initiative, the Town would continue to be reliant on the SCRD for peak hour demand, emergency storage and fire flow. This initiative has been made possible by the reduced water use by metering.

COMMUNITY GOALS

- Maintain groundwater monitoring program
- Protect groundwater and aquifer
- Map significant recharge areas
- Watershed planning
- Ensure water sustainability
- Manage demand

RELIABILITY AND RISKS

Reliable service requires:

- annual monitoring
- maintaining "cross-connection control program" to prevent contamination
- consistent communications re) water's value and the importance of conserving and protecting it
- metering to track leaks and usage

- damage to/pollution of the aquifer
- more frequent water restrictions
- inability to respond to changing aquifer conditions





The cost to build, operate and maintain an equivalent engineered asset has not been determined, but any option would be prohibitively expensive.

Operations & Maintenance

Groundwater Monitoring Program \$28,000 annually

Gathers detailed information about the long-term effects of variables such as user demand, climate change, and sea level rise on the aquifer's total capacity. Current data helps us respond quickly to changing conditions and make well-informed decisions about the aquifer, our water usage and our future buildout.

Current & Planned Capital Projects

2018

- Well #3 Generator: \$65,000
- Well Inspection #2 & #3: \$63,700
- Additional Monitoring Wells: \$133,000
- Zone 3 Water Supply Design: \$175,000

2019

• Zone 3 Pump Station: \$787,500

2020

• Zone 3 Well: \$826,900

Other initiatives, such as the scheduled replacement of the Town's watermains, help reduce water consumption from the Aquifer.

PROTECTING THE AQUIFER



In Gibsons, we have been blessed with favorable access to the Gibsons Aquifer, a pure groundwater resource which currently provides potable water to almost 75% of the Town. It's a pristine, award-winning and irreplaceable natural asset and we take our stewardship of it very seriously. Some of the initiatives we have undertaken to protect our water resource include:

AQUIFER MAPPING STUDY

Commissioned in 2009, at a total cost of \$500,000, this four-year, comprehensive, science-based water-strategy document has become a key resource for any person contemplating projects that might impact the aquifer, from the Town's planners to the

province's environmental officers. Additionally, the Town has implemented several of the recommendations made in the Mapping Study, including:

CREATION OF DEVELOPMENT PERMIT AREA 9 IN TOWN'S OFFICIAL COMMUNITY PLAN

Strict regulations and a permitting process is required for excavation and drilling, as well as for development with the potential for contamination.

BYLAW UPDATES

Revision of Town's Water Regulation Bylaw, with a section dedicated to the protection of the Gibsons Aquifer; Zoning bylaw (no drilling for water permitted); DCC Bylaw (includes cost of using natural assets, recommended inclusion of monitoring wells).

WELL INSPECTION PROGRAM

Commenced in 2016, includes regular inspection of all Town supply wells.

ADOPTION OF WATER USE AND CONSERVATION POLICY

This Council-adopted policy provides Council's objectives around appropriate water use, goals for water use reduction and ensuring continued excellent water quality.

ANNUAL GROUNDWATER MONITORING PROGRAM

Commenced in 2009, the Town has a network of monitoring wells that are sampled in an annual program which monitors chemistry and minerals in the Aquifer, as well as water levels and pressure. This info is compared to the predictions in the Mapping Study, to ensure the health of the Aquifer.

ANNUAL WATERMAIN REPLACEMENT PROGRAM

Risk-based annual watermain replacement program reduces system leakage and impact to the aquifer.

CROSS CONNECTION CONTROL PROGRAM

Protects the Town's drinking water from contaminants.

UNIVERSAL WATER METERING

Used to track water usage and locate leaks. (Refer to Engineered Water Assets Fact Sheet for more details.)

ENGINEERED WATER



AT A GLANCE

Engineered water assets are infrastructure assets that are designed, built, operated and maintained to reliably provide clean water to our homes.

Assets include:

- 2 reservoirs
- 4 water supply wells
- 38 km of pipe
- 1 pump station
- 170 hydrants
- 1700 metered service connections

Residential water meter installation commenced in 2009 to help distribute the total costs associated with our water infrastructure more fairly.

Meters also help identify leaks, which has had a positive impact on overall consumption. In 2014, the Town commenced an annual rate review to ensure adequate finances were in place to operate and maintain the water system, as well as replace aging infrastructure.

Since implementing these measures, daily water consumption has fallen from an average of 800 litres per person to 350 litres per person (including business use, operations, and system losses.)

Typical residential use is approximately 200 litres per day.

COMMUNITY GOALS

- Be proactive by maintaining and monitoring water quality and system capacity
- Plan for future growth by pursuing upgrades and expansion
- Preserve and conserve water supply through:
 - Education
 - Water restrictions
 - Incentive programs
 - Water metering
- Continue relationship with SCRD regarding water management
- Meet or exceed legislative requirements from Vancouver Coastal Health

RELIABILITY AND RISKS

Reliable service requires:

- Regular water main replacements
- Water conservation & protection
- Adequate staffing for regular ongoing maintenance

- Costly water main breaks and service disruptions
- Poor water quality



ASSET MANAGEMENT Replacement Value \$35.0 million or \$7600 per person Water rates are reviewed annually to reflect ongoing operations, maintenance and future replacement and capital costs. Operations & Maintenance Unidirectional flushing, valve exercising, blow-off valve rehabilitation, consultant flushing program update, hydrant inspec- tions, and chlorination	Long-term Financial Plan Goal: to achieve a self-sustaining water fund with sufficient reserves to address short and long-term operational and capital requirements. Reserves Targets: Operational Reserve with contingency: 30% of annual O&M expenses Rate Stabilization: 10% of sale of annual parcel taxes and user fees Capital Reserve: 3% of total asset replacement value	Current & Planned Capital Projects2018• Watermain replacement Gibsons Way: \$669,0002019• Watermain replacement: \$455,4002020• Watermain replacement: \$303,9002021• Watermain replacement: \$319,1002022• Watermain replacement: \$335,000
Annual Replacement Costs The 2017 Water Rates Review recommended that the Town budget \$602,000 annually for water infrastructure replacements in order to be sustainable for the next 100 years.		
PipesValvesSupplyScada	Meter Equipment Structures Pumping	Service Hydrant Storage •• Annual Cost of Sustainable Ownership

DRAINAGE



AT A GLANCE

Stormwater can pose a large risk to all infrastructure if it is not properly managed. To help protect life and property, the Town owns and operates engineered and natural assets, including:

- 20 km of drainage pipe
- 300 manholes
- 600 catch basins
- Culverts
- Ditches

Natural Assets for stormwater management include:

- 3 ponds (White Tower (2), Parkland)
- 6 km of creeks (Goosebird, Charman and Chaster)

Our Drainage Infrastructure Policy and Integrated Storm Management Plan (ISMP) helps to outline priorities and guide staff decision-making.

Valuation of Whitetower Park

In 2017, the David Suzuki Foundation measured the hydrological and ecological functions performed by Gibsons' creeks and woodlands. They determined that the Whitetower Park ponds have a value of \$3.5 to \$4.0 million in terms of the stormwater management services they deliver. Accordingly, the Town's Development Cost Charges (DCC) Bylaw was expanded to include this pond system. Gibsons' DCC Bylaw requires developers to contribute to the improvement of, and in some cases, the rehabilitation of, the Town's natural assets, as well as upgrades to engineered infrastructure.

COMMUNITY GOALS

- Developers must provide overall drainage plan which:
 - 1. ensures there is no increase in runoff due to their development
 - 2. manages and reduces runoff
 - 3. limits impervious areas
- Consider long-term viability of privately owned stormwater management structures
- Support greening of existing paved surfaces to promote permeability
- Be mindful of downslope effects of infiltration

RELIABILITY AND RISKS

The Town is currently monitoring the engineered stormwater assets through an annual video program to capture data, identify repairs, evaluate risks and make informed replacement decisions.

Reliable service requires:

- Regular monitoring
- Preventative maintenance

- Costly reactive maintenance
- Property damage from blockages



Operations & Maintenance

Annual videoing, flushing and monitoring program; manhole inspections; catch basin cleaning; creek cleaning

Current & Planned Capital Projects 2018

- Gibsons Way culverts & ditch (North Road to Bals): \$132,000
- ISMP completion: \$181,000
- Annual drainage improvements: \$10,000

2019

- Annual drainage improvements: \$45,000
- Whitetower Pond upgrade: \$662,000

2020

- Annual drainage improvements: \$47,000
- Charman Creek Naturalization: \$70,000

2021

- Annual drainage improvements: \$49,000
- Foreshore Improvements: \$569,000

2022

- Annual drainage improvements: \$52,000
- Charman Creek Naturalization: \$430,000

Integrated Stormwater Management Plan (ISMP)



In essence, an Integrated Stormwater Management Plan is a document that sets out how to manage rainwater runoff in order to protect people, natural and built assets.

Gibsons' first ISMP was developed in 2010, with a new update just completed. The new document draws heavily on the Town's natural asset management philosophy, and relies on a chain of both natural assets and constructed assets that mimic natural features to address the Town's stormwater needs.

In 2017, the Town successfully applied for and was awarded a \$249,000 grant from the Clean Water and Wastewater Fund, under which the Canadian and BC governments are investing up to

\$373.6 million to support infrastructure projects in communities across the province. The grant amount covered about 85% of the \$300,000 in ISMP project costs.

The ISMP Update and Implementation Project comprises seven elements:

- the ISMP update;
- Whitetower pond design;
- Brothers Park stormwater retention design;
- Charman Creek plan;
- improvements to Goosebird Creek within Labonte Park to reduce flooding and improve natural habitat;
- permitting updates; and
- bylaw updates.

Bylaw changes recommended in the updated ISMP will be considered by Council in 2019.

TRANSPORTATION



AT A GLANCE

The Town owns and operates:

- 27.2 km of paved road
- 1.1 km of chip sealed road
- 2 km unpaved road
- 17 km sidewalk
- Multi-use paths (Gibsons Way + seawalk)
- Trails
- Bike lanes
- Street lighting, signage

In 2015, the Town of Gibsons conducted an analysis of the surface conditions of its roads.

At the time of its analysis, Gibsons' road network had a condition of 11.3% All Fatigue Cracked Area (AFCA), which is considered poor when compared to other networks in BC.

It was also determined that an annual budget level of \$425,000 was required to maintain the road network in its existing condition, while increasing the annual budget to \$550,000 would improve the network condition.

The Town's annual road maintenance budget is currently approximately \$300,000.

COMMUNITY GOALS

- Improve traffic flow
- Consider streetscape improvements
- Upgrade certain roads for traffic and pedestrian safety
- Ensure road designs:
 - 1. are easily maintained
 - 2. are cost-effective to build
 - 3. minimize environmental impact
 - 4. incorporate natural systems
 - 5. prioritize non-vehicular transportation
- Laning, speed, signage and pavement marking projects for particular streets and areas
- Review traffic-calming measures



Transportation service levels can vary by:

- Road surface type
- Accessories including curbing, sidewalks, parking or streetlights
- Level to which the roads are operated and maintained

Reliable service requires:

- Well designed and constructed roads
- Regular pavement patching
- Regular crack sealing
- Regular line painting

Risks of cutting costs are:

- Expensive fixes/eventual road re-construction
- Rough road surface conditions

Gibsons Way Multi-Use Path

Built to accommodate both pedestrians and cyclists, this new pathway creates a safer, more gently sloping link between Upper and Lower Gibsons.

The Gibsons Way connector is a critical component of Gibson's expanding network of walking and biking trails that was first envisioned in 2001.



Before: Gibsons Way (2013)



After: Gibsons Way (2018)

Operations & Maintenance

Roads: crack-sealing, line painting, pothole repair, annual paving program, monthly trails inspection, annual sidewalk inspection (in accordance with Town policy).

Planned Capital Projects (Roads)

2018

- Gibsons Way Multi-Use Path/Paving: \$1.6 million
- Pavement Rehabilitation: \$75,000
- Pedestrian Connectivity Improvements: \$5,000

2019

- Kiwanis Crosswalk: \$24,000
- McCall Lane Grading/Drainage: \$79,000
- Pavement Patching/Cracksealing: \$42,000
- Pavement Rehabilitation: \$290,000
- Pedestrian Connectivity Improvements: \$11,000
- Sidewalk Rehabilitation: \$11,000

2020

- Gibsons Way Eastbound Bike Lane (School Rd. to N. Fletcher): \$604,000
- Pavement Patching/Cracksealing: \$45,000
- Pavement Rehabilitation: \$304,000
- Pedestrian Connectivity Improvements (Inglis -Charman Creek Crossing: \$93,000

2021

- Pavement Patching/Cracksealing: \$47,000
- Pavement Rehabilitation: \$320,000

2022

- Pavement Patching/Cracksealing: \$49,000
- Pavement Rehabilitation: \$336,000

Pavement Life Cycle Cost and Condition Over Time



If a road isn't maintained through patching or crack sealing, it will start to deteriorate more quickly over time and eventual fixes will cost more. Regular maintenance enables road to be kept in good condition for less overall cost. This requires ongoing investment. Paved asphalt roads are estimated to last about 20 years, on average.

GIBSONS DISTRICT ENERGY UTILITY (GDEU)



AT A GLANCE

The GDEU is a geothermal utility system that harnesses heat from the earth to supply energy to Gibsons' RCMP station and to 58 homes in the Parkland subdivision in Upper Gibsons.

The Town built the GDEU in order to reduce Gibsons' carbon footprint, reduce energy costs for residents and businesses, and provide a stable source of revenue for the Town.

In connection with this system, the Town owns and operates:

- 1 pumphouse
- 3 energy fields (geo fields)
- 3.7 km of distribution piping and service connections

The Town's segment of the utility links to the private (resident-owned) segment of the system, which includes individual service lines and heat pumps.

GDEU rates are based on calculated heat loss for each home, with calculations provided to the Town by the builder.

COMMUNITY GOALS

- Business plan update
- Ongoing evaluation of options for future expansion

RELIABILITY AND RISKS

Reliable service requires:

- regular monitoring
- preventative maintenance
- adequate staffing

Risks of cutting costs are:

- interruptions to service due to leaks or breakages
- costly reactive maintenance
- delayed response time



The RCMP Station (bottom right) is serviced by a smaller field. It was constructed in 2012.

Historical costs* = \$1,251,000 (Infrastructure installed from 2011 - 2017) *total \$ spent on infrastructure to date

Operations & Maintenance

Currently, the GDEU is monitored and maintained by Town staff.

Current & Planned Capital Projects 2017

 Installation of 2 gas backup boilers, pump control refinements, system programming: \$133,000

2018

• Strata service connection repairs: \$12,000

While initial plans called for more homes to be connected to the GDEU, the requirement for costly additional infrastructure, has made that plan undesirable in the short term.

Operations & Maintenance Overview

Improvements were made by the Town during 2017 and 2018 to ensure the GDEU will run as efficiently as possible; ongoing monitoring will provide the Town with the information to determine to what degree the efficiencies will steer future expansion of the system.

- Gas boilers were installed to provide a back up heat source for the system
- New pumps were installed which are able to pump fluid at a higher rate. This will translate to more efficient use of the heat around the fields.
- New pump controls allow better control of when pumps turn on and how many pumps are running at any given time. This should provide a savings on electricity use.
- A new monitoring program enables remote monitoring of the system and will enable better response to provide any changes to the system necessary to improve ongoing efficiencies.







Interior shot of GDEU Pumphouse

FLEET AND EQUIPMENT



AT A GLANCE

The Town of Gibsons owns a fleet of vehicles and equipment used for transportation, infrastructure operations, maintenance and installations.

Fleet and Equipment is the first Town of Gibsons Asset Class to have a completed Asset Management plan, which includes an overview of levels of service, future demand, lifecycle management, risk management and financials.



One of the Town's most versatile vehicles is the vactor/flush truck, which helps our crews locate services, flush our sewers, excavate holes in tight spots and clean our drains.

COMMUNITY GOALS

• To be determined

RELIABILITY AND RISKS

Reliable service requires:

- well-planned purchasing
- good preventative maintenance

- unsafe equipment
- unreliable equipment
- longer response times
- limited functionality of Town crew



Operations & Maintenance

- Vehicles are maintained and inspected based on best practices for safety.
- \$240,000 (annual cost to operate/maintain and replace fleet.)

Capital Projects

Planned Replacement of:

2018

- Electric Vehicle: \$40,000 (Planning)
- Electric Vehicle: \$40,000 (Infrastructure Services)

2019

- Ford F450 4x4 dumptruck: \$87,000
- Two (2) snowblades: \$28,000

2020

- Bobcat skid loader: \$45,000
- Sterling Bullet dumptruck replace: \$71,000
- Kubota tractor/mower: \$28,000
- Angle broom 68": \$10,000
- Flail cutter/mower: \$16,000
- Grader 7': \$10,000

2021

• Ford Escape Hybrid SUV: \$50,000

2022

- Sterling Vactor/Flush Truck: \$334,000
- John Deere 410TJ Backhoe: \$194,000
- Ford F150 Supercab pickup: \$35,000





With many vehicles purchased in 2008 (see graph above) and a policy to keep vehicles for 10 years, we are anticipating a spike in Fleet and Equipment costs in the next few years (see graph at left).

PARKS AND CIVIC LANDS



AT A GLANCE

With 7.47 hectares of parkland per thousand residents, Gibsons has well over the national average number of parks per capita.

Park assets include:

- 3 Community Parks
- 15 Neighbourhood Parks
- 2 Greenbelts
- Seawalk
- Tennis Courts
- Skate Park
- Benches
- Garbage Cans

Total parkland = 34.94 hectares

Civic lands include:

- Aquatic Centre/Curling Rink
- Charman Creek Lands
- Holland Lands & Civic Precinct*
- Public Works Yard

Total civic lands = 11.34 hectares

All residents live within a 10-minute walk of park space and most live within a 5-minute walk.

* Civic Precinct includes: Town Hall, Library, School District Building, Arts Building and Sunshine Coast Museum & Archives

COMMUNITY GOALS

- Ensure that residents and visitors of all ages and abilities have access to a variety of parklands and open spaces, including forested lands
- Designate sufficient park and open space areas to meet the long-term requirements of the community as it grows and changes
- Create a system of linked parks and trails to provide opportunities for both active and passive outdoor uses

RELIABILITY AND RISKS

As the Town grows from the 2016 level of 4,605 residents, increased demand for services will mean heightened pressure for the effective management of the Town's green spaces.

It is critical to plan the parks system in concert with growth and development, in order to ensure that the high quality of life experienced in Gibsons today remains for generations to come.



View of Armours Beach, following 2018 rehabilitation

Operations & Maintenance

- 5 full-time staff and 3 part-time Parks staff work to maintain the Town's 28 parks and civic properties, beach accesses, trails, playing fields, playgrounds, tennis courts and natural areas
- Est. Annual Maintenance Costs: \$770,000

Planned Capital Projects

2018

 Armours Beach - improved park's accessibility and usability via terracing, landscaping, washroom upgrades and the addition of new park furnishings, trees and other plantings: \$186,000

2019

- Armours Beach improve swimming area: \$100,000
- Parks Master Plan/Feasibility Study: \$29,000

