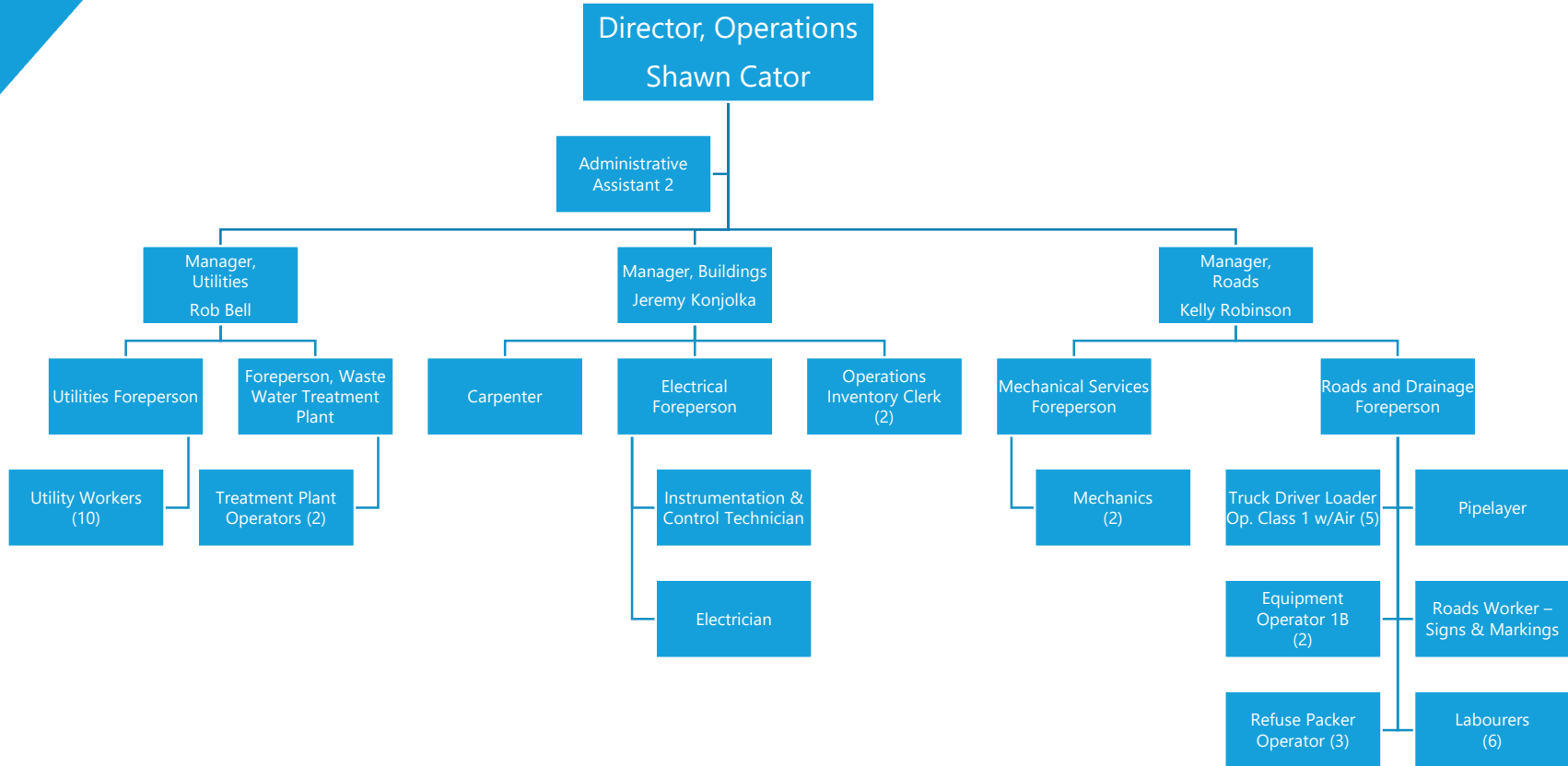


OPERATIONS DEPARTMENT 2023 BUSINESS PLAN

Committee of the Whole

ORGANIZATIONAL STRUCTURE



STAFFING LEVELS

47

Total positions
as of
September 6, 2022

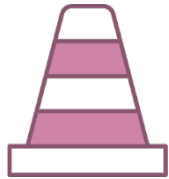
- 37 Full time, permanent
- 9 Full Time Temporary
- 1 Contractor

(Exempt 4; CUPE 42; 1 Contractor)

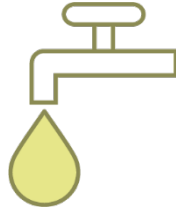
5 students (2 public works, 3 utilities)
(planned for May – August 2023)

CORE BUSINESS

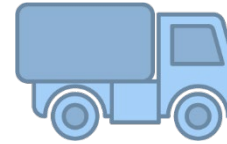
The Department is organized into five areas:



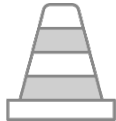
**ROADS/
DRAINAGE**



UTILITIES



**COMMUNITY
SERVICES**



**HARBOURS AND
WATER ACCESS**



BUILDING

DEPARTMENT FOCUS

The Operations department is responsible for maintaining the Municipality's infrastructure seven days per week, which includes:

- **Roads/Drainage** (road and sidewalk maintenance, drainage maintenance, fleet management)
- **Utilities** (water distribution, wastewater and storm-water collection and treatment plants)
- **Community Services** (solid, organic and recycling collections)
- **Building** (facilities and building maintenance, electrical, scada, storekeeper/timekeeper)
- **Harbours and Water Access** (Management & Oversight of Wharfs, Water Access Points)



ROADS / DRAINAGE

23.0 FTE (Manager, Roads; Mechanical Services Foreperson; Mechanics; Truck Driver/ Loader Operators (Class 1 w/Air); Pipelayer; Equipment Operator 1B; Road Worker; Labourers)

Road and Sidewalk Maintenance

- Roads and bridges
- Concrete infrastructure and sidewalks
- Drainage and flood control
- Sign & Road Markings
- Snow and ice and other severe weather response, including preventative measures
- Management of internal capital construction projects.

STATS:

- 280 kms of roads
- 237 kms of sidewalks
- 150 kms of ditching
- 1,000 culverts to maintain (infrastructure deficit being addressed)
- 160 kms of storm pipes

ROADS / DRAINAGE – CONT'D

Fleet Maintenance (3 FTE)

- 3 Mechanics maintain 140 units which include vehicles, heavy equipment and small equipment
- Fleet maintained to meet service level requirements
- Investigating electrification of fleet
- Fleet Management Software implemented in 2021

ROADS / DRAINAGE – CONT'D

Snow Fall Routes

- The Municipality is divided into nine snowplow routes for major snowfall response
- All roadways are included in the nine snowplow routes and are all plowed as required; routes normally take 12-14 hours to complete
- Residents are required to clean sidewalks in front of their property
- A brine application system was constructed in 2006; brine provides improved road surface conditions and allows for safer travel
- A one-day snow event occupies 14 pieces of equipment and 200 person hours
- Between November – March, the Municipality runs two-person crew night shifts seven days per week

BUILDING

7.0 FTE (Manager, Buildings; Electrical Foreperson; Instrumentation and Control Technician; Electrician; Carpenter; Operations Inventory Clerk)

Facilities and Building Maintenance:

- Maintenance of Municipally-owned facilities and buildings (including 2 RCMP, 4 Fire Halls, Municipal Hall, and Operations Building)
- Stores, Warehouse, Fuel Purchases
- Radio communications, security, alarm, E-alert, Emergency Plan
- Adaptation to green technology as part of corporate GHG management

BUILDING – CONT'D

Electrical & Scada (3 FTE)

- Maintaining electrical systems in the municipal building
- Developing and maintaining alarms and data for buildings, sewer and water facilities
- Maintaining electrical pumps, generator and systems for sewer and water
- Maintaining Municipal owned streetlights
- Reviewing electrical design drawings related to development

UTILITIES

15.0 FTE (Manager, Utilities; Utilities Foreperson; Utility Workers; Foreperson, Waste Water Treatment Plant; Treatment Plant Operators)

- Utility (sewer, drain & water) maintenance, repair, and rehabilitation programs to sustain life-cycle of the asset
- Planning towards a maintenance management program for preventative maintenance of all Municipal infrastructure
- Emergency alarm & electronic monitoring system for pump stations and water system (SCADA)
- There are 7 independent, self-sustaining Utilities:
 - ❑ South End, Crofton and Chemainus Water System (+ new South End to Crofton system)
 - ❑ Maple Bay, Crofton, and Chemainus Sewer System + JUB

UTILITIES – CONT'D

- All systems are in good condition, meeting provincial standards for drinking water and wastewater effluent
- Yearly rate review and projections undertaken
- Management of Holyoak Lake and Crofton Lake dams which provide fish flows for Chemainus River and Richards Creek

FACT: The potential for boil advisories in the Chemainus River Water System has been vastly reduced due to the year-round trial use operation of the Chemainus Wells.

COMMUNITY SERVICES

3 FTE Refuse Packer Operators

Solid, Organic and Recycling Collections

- Provide residential solid waste collection, including a weekly collection of food waste, and bi-weekly garbage and recyclables
- Working with Recycle BC to reduce contamination of residential curbside recycling and promoting waste reduction.
- Reducing GHG emissions through curbside organics program

COMMUNITY SERVICES – CONT'D

- Beginning May 2014, the Municipality entered into an agreement with Recycle BC, where the Municipality receives a fee per household for providing recycling services
- For 2022, the revenue from Recycle BC is \$272,483 for the year
- Garbage user fees in 2022 were \$125.00 per household, covering garbage collection and food waste collection
- Recycling Curbside collection completed by contractor

COMMUNITY SERVICES – CONT'D

KEY RESPONSIBILITIES:

- Provide service to over 10,160 homes
- Average of 1,470 tonnes of organics (438.3 tonnes GHG emissions reduction)
- Average of 1,671 tonnes of garbage in 2021
- The contract service for curbside recycling collection with Waste Connections in 2022 is \$278,000 per year
- Recollect tool and MNC Curbside collection app

HARBOURS AND WATER ACCESS

Chemainus Wharf | Crofton Wharf | Maple Bay Wharf | Water Access Points

Focus

- Management & Oversight of Wharfs
 - Day-to-day operation
 - Public access management
 - Contract operation
 - Lifecycle maintenance
- Water Access Points
 - Sustain/increase lake, river and ocean accesses
 - Wayfinding

OPS-17



CLIMATE EMERGENCY PRIORITIES

CLIMATE EMERGENCY PRIORITIES

Operations



PRIORITY 1:

Investigate energy efficiency improvements to existing Municipal Buildings to meet CAEP objectives



PRIORITY 2:

Implement Electric Fleet Strategy by earmarking part of the 2023 Equipment Replacement Capital Budget.



PRIORITY 3:

Reducing the contaminants in curbside recycling by implementing the Contamination Remediation Plan.

2023 BUSINESS PLAN

MODERNIZATION ACTIVITIES

- Implemented RTA digital fleet maintenance software to assist with scheduling of routine fleet maintenance and repairs
- Automation of the BC One Call service for locating underground infrastructure, reducing staff time
- Promoting garbage collection phone app and elimination of the garbage calendars sent to each home

NEXT STEPS/ADDITIONAL IMPROVEMENTS

- Research and implement wharf management software to assist with booking reservations and collection of moorage dues at the three harbours
- Investigate options to automate the collection of water usage for residential and commercial properties. Staff currently spend over 900 hours per year for the manual collection of this data

SERVICE REDUCTIONS/PROJECTS ON HOLD

Project	Rationale for Deferral	Implications of Deferment
Maintenance Management Software	Limited resources to research software options	Difficult to quantify the amount and interval of maintenance activities
Operations building replacement or upgrades	Considerable capital cost for the project needs to be built into the 5 year plan	Structural deficiencies with the 1953 building could be an issue in a seismic event

PROJECTED BUSINESS PLAN DELIVERABLES

Actions / Projects	Start Date	Strategic Alignment
Crofton Fire Building Upgrade. Coordinate the design and construction of a new building to replace the existing south facility building.	2023	Council Direction
Building Asset Management Plan With approved grant funding, develop a long term strategy for managing building assets owned by North Cowichan (Municipal Hall, Operations, Fire Halls, Community Halls)	2023	Strategic Plan
Wharf Management Software Investigate and implement a software program to track and invoice vessels in the Chemainus, Crofton and Maple Bay wharves.	2023	Operational Strategic Plan

PROJECTED BUSINESS PLAN DELIVERABLES

Actions / Projects	Start Date	Strategic Alignment
Automated Water Meter Reading Determine whether the capital cost to purchase automated reading equipment and associated savings in time/labour is a cost benefit to the department.	2023	Strategic Plan - Service
Snow and Ice Removal Policy Update the priority snow and ice clearing routes and the sidewalks, walkways, and buildings owned by the municipality that require snow and ice removal.	2023	Strategic Plan - Service
Transition to Electric Tools and Small Equipment Update existing gas powered tools and small equipment with electric as they come up for replacement.	2023	Strategic Plan/CAEP

PROJECTED BUSINESS PLAN DELIVERABLES

Actions / Projects	Start Date	Strategic Alignment
Electric Vehicle Strategy Investigate and implement a plan to replace the gas and diesel fleet with electric. Determine the cost benefits based on the total cost of ownership and establish a replacement schedule.	2023	Strategic Plan/CAEP
Maple Bay Wharf Work with Council on approval of a conceptual design. Complete a detailed design and tender document in 2023 with remaining budget from 2022. Construction proposed for 2024	2022	Council Direction

CAPITAL BUDGET – SUPPLEMENTAL BUDGET REQUESTS

Actions / Projects	Budget	Rationale
Crofton Boat Launch Floats	\$65,000	The floats are in poor condition and require ongoing repairs. The floats were installed in 1988
Maple Bay Gangway Replacement	\$60,000	A 2018 condition report identified the replacement of the gangway. Repairs we conducted in 2019.

CAPITAL BUDGET – 2023 PROJECTS

CHILDCARE

LOCATION	DESCRIPT.	2023 COST	FUNDING
South End	Parkside childcare facility – all ages	\$18.0 million	Grant Funding Pending
North End	Crofton childcare facility – targeted for infant / toddler primary	\$1.75 million	Grant Funding Approved
TOTALS		\$19.75 million	

OPERATING BUDGET -SUPPLEMENTAL BUDGET REQUESTS

NET NEW STAFFING REQUEST

Position	Rationale	Implications of Deferment	Projects Deferred	Budget Impact
Utility Worker	<p>16 years since the last staffing addition to the utility operator's crew.</p> <p>The unprecedented growth of the systems in size and complexity in the form of linear pipe, residential and commercial services, valves, fire hydrants, pressure reducing stations, pumping stations, treatment processes and reservoirs. In addition-sewer mains, manholes and lift stations.</p> <p>Increased regulatory requirements for safety and environmental compliance require considerable resources to remain compliant.</p>	<p>It is becoming increasingly difficult to fulfill the required preventive and corrective maintenance required to run the systems in a safe, responsible and efficient manner.</p> <p>Un-completed preventive maintenance results in untimely corrective maintenance and reduced life cycle of equipment, compounding system life cycle costs.</p> <p>Increased use of outside forces to do what was traditionally staff work in order to better ensure system user safety and quality control.</p>	<ul style="list-style-type: none"> • Water main flushing • Hydrant maintenance • Sewer system repairs • Meter reading • Pressure regulating valve maintenance • Station pump maintenance • Reservoir cleaning • Capital projects • Development tie-ins 	<p>\$68K + benefits</p> <p>The impact on the budgets from insufficient maintenance is hard to calculate, but it has been proven that though it is deferred, it is compounded exponentially.</p> <p>Source of funding: Utility fees</p>

OPERATING BUDGET – PUBLIC WORKS

	2022 Budget	2023 Budget	\$ Change	% Change	2022 YTD
REVENUE					
Garbage and Recycling	\$ 1,708,465	\$ 1,756,830	\$ 48,365	3%	\$ 1,634,802
Sales of Service	226,700	286,797	60,097	27%	197,577
Wharves	208,510	212,680	4,170	2%	177,235
TOTAL REVENUES	\$ 2,143,675	\$ 2,256,307	\$ 112,632	5%	\$ 2,009,614
EXPENSES					
Administration	\$ 715,525	\$ 737,607	\$ 22,082	3%	\$ 705,305
Garbage and Recycling	1,596,365	1,640,819	44,454	3%	1,164,509
Roads and Drainage	3,724,923	3,863,872	138,949	4%	3,142,876
Wharves	176,715	180,813	4,098	2%	129,754
TOTAL EXPENSES	\$ 6,213,528	\$ 6,423,111	\$ 209,583	3%	\$ 5,142,444

KEY PERFORMANCE INDICATORS

Customer Satisfaction

	2019	2022
Customer satisfaction with drinking water	89%	94%
Customer satisfaction with curbside collection	88%	91%
Customer satisfaction with snow clearing	83%	92%
Customer satisfaction with road maintenance	79%	79%

KEY PERFORMANCE INDICATORS

Annual Tracking

	2018	2019	2020	2021	2022 YTD*
Curbside collection issues	107	268	267	97	58
Potholes complaints	17	54	34	44	48
Snow and ice complaints	3	46	12	24	48
Water quality	23	36	42	45	17
Building maintenance issues	60	56	38	210	173
Total # of calls for service	2,486	3,246	2,722	3,834	2,941

* as of October 18, 2022