MERGED AGENDA
FINANCE AND AUDIT COMMITTEE MEETING

November 16, 2022, 9:00 AM - 12:00 PM
SHAW AUDITORIUM, VANCOUVER ISLAND CONFERENCE CENTRE
80 COMMERCIAL STREET, NANAIMO, BC

SCHEDULED RECESS 10:30 A.M.

Pages

1. CALL THE MEETING TO ORDER:

[Note: This meeting will be live streamed and video recorded for the public.]

2. INTRODUCTION OF LATE ITEMS:

3. ADOPTION OF AGENDA:

4. ADOPTION OF MINUTES:

a. Minutes 4 - 8

Minutes of the Finance and Audit Committee Meeting held in the Shaw Auditorium, Vancouver Island Conference Centre, 80 Commercial Street, Wednesday, 2022-JUL-20, at 9:00 a.m

5. DELEGATIONS:

6. REPORTS:

a. Update on City Property Acquisition from 2022 Tax Sale 9 - 13

To be introduced by Bill Corsan, Director, Corporate and Business Development.

Purpose: To provide information to Council on the properties acquired by the City through tax sale.

b. Holland Road Utility Project 14 - 15

To be introduced by Bill Sims, General Manager, Engineering & Public Works.

Purpose: To advise Council of a budget transfer in excess of $100,000 for the Holland Road Utility Project.

c. **Acceleration of the Community Safety Officers Vehicle Project from 2023 to 2022** 16 - 17

To be introduced by Bill Sims, General Manager, Engineering & Public Works.

Purpose: To provide the Committee with information relating to the deployment of a new vehicle for the Community Safety Officers (CSOs) program.

Recommendation: That the Finance and Audit Committee recommend that Council approve accelerating the CSOs Vehicle project from 2023 to 2022 in the 2022 – 2026 Financial Plan.

d. **Consideration of Other Grant Request for Water Use** 18 - 24

To be introduced by Laura Mercer, Director, Finance.

Purpose: To consider the 'Other Grant' request from Growing Opportunities and provide information about agricultural water rates.

Recommendation: That the Finance and Audit Committee recommend that Council deny an annual operating grant to Growing Opportunities to assist with operating costs of water usage for irrigation.

1. Add Delegation from Christopher Brown *25*

e. **BC Active Transportation Infrastructure Program** 26 - 28

To be introduced by Laura Mercer, Director, Finance.

Purpose: To revise the Council resolution approved at the 2022-SEPT-21 Special Council Meeting for the B.C. Active Transportation Infrastructure Grant program for the Albert and Fourth Complete Street Ph 2 to include additional project components.

Recommendation: That the Finance and Audit Committee recommend that Council direct staff to submit an application under the B.C. Active Transportation Infrastructure Grant as follows:

- Submit an application for the Albert and Fourth Complete Street Ph 2 project, and confirm the local share of $2,324,322 is available and supported, the project is a municipal priority, and project is "shovel ready" and intended to be complete within the required timeline.

7. PRESENTATIONS:

a. **Finance 101 Presentation** 29 - 78

To be introduced by Laura Mercer, Director, Finance.

b. **Utility Fund Overview and Utility Rate Review Introduction** 79 - 145

To be introduced by Laura Mercer, Director, Finance.

Presentation:

1. Bill Sims, General Manager, Engineering and Public Works & Laura Mercer, Director, Finance.

- PowerPoint - Water and Sewer Utility Rate Review Introduction
- Information Report - Utility Rate Review - Water and Sanitary Sewer Utilities

8. OTHER BUSINESS:

9. QUESTION PERIOD:

10. PROCEDURAL MOTION:

That the meeting be closed to the public in order to deal with agenda items under the *Community Charter:*

Section 90(1) A part of the Council meeting may be closed to the public if the subject matter being considered relates to or is one or more of the following:

(n) the consideration of whether a Council meeting should be closed under a provision of this subsection or subsection (2).

Section 90(2):

(b) the consideration of information received and held in confidence relating to negotiations between the municipality and a provincial government or the federal government or both, or between a provincial government or the federal government or both and a third party;

11. ADJOURNMENT:

MINUTES
FINANCE AND AUDIT COMMITTEE MEETING
SHAW AUDITORIUM, VANCOUVER ISLAND CONFERENC CENTRE,
80 COMMERCIAL STREET, NANAIMO, BC
WEDNESDAY, 2022-JUL-20, AT 9:00 A.M.

Present: Mayor L. Krog
Councillor S. D. Armstrong (joined electronically)
Councillor D. Bonner
Councillor T. Brown (joined electronically)
Councillor B. Geselbracht (arrived 9:03 a.m.)
Councillor E. Hemmens
Councillor Z. Maartman
Councillor I. W. Thorpe
Councillor J. Turley

Staff: D. Lindsay, General Manager, Development Services/Acting Chief Administrative Officer
R. Harding, General Manager, Parks, Recreation and Culture
B. Sims, General Manager, Engineering and Public Works
A. Groot, Director, Facilities and Parks Operations
L. Mercer, Director, Finance
P. Rosen, Director, Engineering
W. Fulla, Manager, Business, Asset and Financial Planning
T. Pan, Manager, Sustainability
A. Fipke, Project Engineer
K. Robertson, Deputy City Clerk
A. Mac Coll, Recording Secretary

1. CALL THE FINANCE AND AUDIT COMMITTEE MEETING TO ORDER:

The Finance and Audit Committee Meeting was called to order at 9:00 a.m.

2. APPROVAL OF THE AGENDA:

It was moved and seconded that the Agenda be adopted. The motion carried unanimously.

3. ADOPTION OF THE MINUTES:

It was moved and seconded that the Minutes of the Finance and Audit Committee Meeting held in the Shaw Auditorium, Vancouver Island Conference Centre, 80 Commercial Street, Nanaimo, BC, on Wednesday, 2022-JUN-15, at 9:01 a.m. be adopted as circulated. The motion carried unanimously.

4. REPORTS:

(a) Travel Assistance Grant - Nanaimo District Lacrosse Association U16 A2 Timbermen

Richard Harding, General Manager, Parks, Recreation and Culture advised the Finance and Audit Committee (the Committee) that the Nanaimo District Lacrosse Association met the requirements to receive the Travel Assistance Grant and was a good candidate.

It was moved and seconded that the Finance and Audit Committee recommend that Council approve a Travel Assistance Grant for the Nanaimo District Lacrosse Association (NDLA) U16 A2 Timbermen team in the amount of $750 for fifteen (15) Nanaimo players to attend the 2022 BCLA Minor Box Lacrosse Provincial Championships held from 2022-JUL-07 through 2022-JUL-10 in Coquitlam, BC. The motion carried unanimously.

(b) Quarterly Purchasing Report (Single and Sole Source, Purchases in Excess of $250,000 and Instances of Non-Compliance Purchases)

Laura Mercer, Director, Finance advised the Committee that there were two instances of non compliance from January 1st – March 31st 2022. One instance was a project taking longer than anticipated to complete and the second instance was transitional costs relating to Tourism Nanaimo for the interim director position.

Councillor Geselbracht entered the Shaw Auditorium at 9:03 a.m.

Committee discussion took place. Highlights included:

- To keep consistency in the Westwood Lake Park project, Lanarc 2015 Consultants Ltd. was used for landscape architect design
- Relocation of bleachers in the City and the compatibility of parts when modifications are needed during transition from one venue to another
- Tourism Nanaimo transition cost of $148,000 being related to the start of the transition period in 2021 until end of transition period in 2022
- Security firms are desperate for staff and their ability to keep contracts are limited by their staff levels
- Using an Request for Proposal (RFP) for $20,000 purchases could cost as much as the purchase itself
- There has been no significant increase or decrease in single source non compliances

Richard Harding, General Manager, Parks, Recreation and Culture, advised the Committee that consistency in the Westwood Lake Park project during the final detailed design is important, that the Blackbird security firm was needed to expedite the process due to no availability of other firms, and that the bleachers purchased in 2014 needed modifications and installation completed by the manufacturer to be compatible.

(c) Consideration of Security Check Grant

Laura Mercer, Director, Finance, advised the Committee that the Nanaimo District Senor Citizens Housing Development Society meets the eligibility criteria for the grant program and the amount requested is the maximum allowable.

It was moved and seconded that that the Finance and Audit Committee recommend that Council award a Security Check Grant for $500 to the Nanaimo District Senior Citizens Housing Development Society. The motion carried unanimously.

(d) Local Government Climate Action Program

Introduced by Dale Lindsay, General Manager, Development Services/Acting Chief Administrative Officer.

- The discontinuation of the Climate Action Revenue Incentive Program (CARIP) created by the Province in 2008 will result in no yearly payment of $148,000
- The replacement program for CARIP is named the Local Government Climate Action Program (LGCAP) which will provide the City with more funding than the previous program at $325,000 per year
- With the new program LGCAP, the City will have to match 20% of the funds given by the program which is currently already transferred into the reserve
- Funding received from LGCAP has to be spent by 2025, and projects will need to be advanced in their timeline based on suitability and feasibility

Ting Pan, Manager, Sustainability advised the Committee that Staff have identified a list of projects to support emission reduction and resiliency in the community for the 2023 – 2027 financial plan, and that Staff are looking closely at the timeline of all projects to expedite any that are able to meet the requirement of funds being spent by 2025.

(e) Metral Drive Complete Streets Phase 2

Introduced by Bill Sims, General Manager, Engineering and Public Works.

- The Metral Drive Complete Streets project has received provincial, federal, and international awards
- Staff have been requested to speak at three national conferences regarding the complete streets projects as well as aide in authoring a report regarding complete streets
- Metral Drive Complete Streets Phase 1 came in under budget at 1.1 million dollars

Laura Mercer, Director, Finance advised the Committee that monies unspent remained in the reserve and could be used to fund the shortfall for Metral Drive Complete Streets Phase 2 or any other project that would be appropriate.

Committee and Staff discussion continued. Highlights included:

- Transportation counts, speed counts, and auto turn in autoCAD were used when modelling intersections to determine radiuses and curbs
- The Enterprise Way intersection connected to Aulds Road was overbuilt using 5 lanes, which has led to unsafe behaviours by drivers
- The Enterprise Way intersection is currently operating on timers due to unfinished curbs, when the curbs are complete induction loops will be used to avoid queuing
- Completion of Metral Drive Phase 1 has increased development activity and is a result of public investment as private investment consistently follows
- Extensive public engagement was completed leading up to and throughout the construction, including contact with local businesses affected
- Recently the Fire Department attended a house fire in Metral Drive and were able to efficiently mobilize, but the road had to be closed to connect the fire hose across the roadway

It was moved and seconded that that the Finance and Audit Committee recommend that Council direct Staff to increase the budget for Metral Drive Complete Street Project Phase 2 by $1,400,000 funded by $875,000 from the Community Works Reserve Fund, $35,000 from the Sewer Reserve and $490,000 from the Water Reserve. The motion carried.
Opposed: *Councillor Thorpe*

(f) Mary Ellen Drive Intersection Improvement Funding

Introduced by Bill Sims, General Manager, Engineering and Public Works.

Annalisa Fipke, Project Manager, provided the following verbal update:

- Mary Ellen Drive was designed and constructed 20 years ago with an urban arterial standard and the excess of lanes and long crossing distances have created an unsafe intersection
- Speeding in the corridor between the two connecting highways is due to no traffic control at the intersection and overbuilt infrastructure
- $200,000 in community amenity contributions were received to complete this project with an additional $160,000 needed from a budget transfer to construct the roundabout
- Insurance Corporation of British Columbia (ICBC) has reviewed the designed at Mary Ellen Drive and has performed a road safety audit for this project

Staff and Committee discussion took place. Highlights included:

- Semi trailers have a tighter turning radius than perceived
- The roundabout is a low cost solution and will use existing curbs on all four sides as well as existing drainage
- The largest trucks to deliver in this area will have to have a right-turn-in and right-turn-out movements by re routing deliveries in the Plaza per discussions with the plaza owners
- Improvements for Mary Ellen Drive are long overdue with many requests being received by the public to make it safer

- Conversation should be had with the trucking association to make sure there is an understanding of the routes before construction
- Overbuilt infrastructure can produce unsafe environments for drivers

(g) Kite Way and Meadow Lane Water Project

Introduced by Bill Sims, General Manager, Engineering and Public Works.

- The project is a cost share with the Regional District of Nanaimo (RDN) using the City of Nanaimo's water infrastructure and the RDN's sewer infrastructure
- There were unsuitable conditions with infrastructure in poor shape that required additional funding

5. QUESTION PERIOD:

There were no members of the public in attendance to ask questions.

6. ADJOURNMENT:

It was moved and seconded at 9:47 a.m. that the meeting adjourn. The motion carried unanimously.

_____
C H A I R

CERTIFIED CORRECT:

_____
DEPUTY CITY CLERK

CITY OF NANAIMO
THE HARBOUR CITY

Information Report

File Number: CIL00339

DATE OF MEETING	November 16, 2022
AUTHORED BY	BILL CORSAN, DIRECTOR, CORPORATE AND BUSINESS DEVELOPMENT
SUBJECT	**UPDATE ON CITY PROPERTY ACQUISITION FROM TAX SALE**

OVERVIEW

Purpose of Report:

To provide information to Council on the properties acquired by the City through tax sale.

BACKGROUND

In 2022, the City acquired ownership of eleven properties (the Machleary lands and the St. George lands) that were not redeemed through tax sale. The cost of the properties were equal to the total unpaid amount of taxes and fees, called the upset price. The total cost to acquire the lands was $51,213.67.

The Machleary Lands

The Machleary Street lands consist of eight vacant lots (Attachment A). The lands were intended for development by the former owner but due to financial constraints and issues with the development potential, the project was abandoned and the former owner forfeited the lands.

These eight properties were sold to the City of Nanaimo for the upset price at the 2014 tax sale. Following the one-year redemption period, these properties were not redeemed and as such, title would have transferred to the City after that time. However, because the properties were owned by a Corporation that had Directors that could not be located, a very specific process through the *Escheat Act* needed to be followed. Provincial review of this process took multiple years and eventually title of the properties was transferred to the City in July 2022.

The St. George Lands

The St. George Street lands consist of three vacant lots which make up a portion of the Chinese Memorial Gardens at 105 St. George Street (Attachment B).

The lands have historical significance as a tribute to the Chinese pioneers and their contribution to the early development of Nanaimo. The site was once used as a burial ground for the Chinese pioneers but all interments have been removed.

Ownership of the lands was never formally transferred to the City as a result of historical land transfer errors. City Parks staff have maintained the lands at the request of the Chinese Memorial Society ever since the lands were designated as a memorial garden in 1976.

These three properties were sold to the City of Nanaimo for the upset price at the 2021 tax sale and following the one-year redemption period, were formally transferred to the City in September 2022.

There are two remaining portions of the Chinese Memorial Gardens that are not under the ownership of the City as shown on Attachment B. A small remnant strip is owned by the Province and one of the lots is owned by Mosaic Forest Management (successor to the E & N Railway Company). The City may wish to acquire these lands in the future to formalize ownership of the Chinese Memorial Gardens

DISCUSSION

The table below shows the breakdown of the individual costs for each of the acquired properties. Funding for the acquisition costs can be obtained from the annual property acquisition fund.

2022 Properties Acquired	Upset Price	LTSA Fees	Total Cost
547 Machleary Street	491.23	76.32	567.55
541 Machleary Street	491.23	76.32	567.55
535 Machleary Street	491.23	76.32	567.55
529 Machleary Street	491.23	76.32	567.55
523 Machleary Street	491.23	76.32	567.55
517 Machleary Street	491.23	76.32	567.55
511 Machleary Street	491.23	76.32	567.55
505 Machleary Street	525.96	76.32	602.28
105 St George Street	15,622.29	76.32	15,698.61
105 St George Street	15,361.99	76.32	15,438.31
105 St George Street	15,425.30	76.32	15,501.62
	50,374.15	839.52	51,213.67

FINANCIAL IMPLICATIONS

The subject properties were designated for transfer to City ownership through the tax sale process and were formally transferred to the City during 2022. Funding for these acquisitions is provided for through a budget transfer from the property acquisition reserve fund.

SUMMARY POINTS

- The City acquired eight vacant lots on Machleary Street through the 2014 tax sale process, and title transferred to the City in 2022
- The City acquired three parcels that make up the Chinese Memorial Gardens on St. George Street through the 2021 tax sale process, and title transferred to the City in 2022
- Funding for the property acquisitions is available through the completion of a budget transfer from the property acquisition reserve fund at a cost of $51,213.67.

ATTACHMENTS

ATTACHMENT A: Map of Machleary Street Lands
ATTACHMENT B: Map of St. George Street Lands

Submitted by:

Bill Corsan
Director, Corporate and Business Development

Concurrence by:

Laura Mercer
Director, Finance

ATTACHMENT A - THE MACHLEARY LANDS

Legend

CITY OF NANAIMO

N

ATTACHMENT B - THE ST.GEORGE LANDS

Legend

- CROWN OWNED
- CITY OF NANAIMO
- ISLAND TIMBERLANDS SUCCESSOR TO E&N RAILWAY CO.

N

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CITY OF NANAIMO
THE HARBOUR CITY

Information Report

File Number: C1226

DATE OF MEETING NOVEMBER 16, 2022

AUTHORED BY PHIL STEWART, MANAGER, ENGINEERING PROJECTS

SUBJECT HOLLAND ROAD UTILITY PROJECT

OVERVIEW

Purpose of Report:

To advise Council of a budget transfer in excess of $100,000 for the Holland Road Utility Project.

BACKGROUND

As is normal in a given year, some projects are under budget and some are over budget. The surplus from the under-budget projects is often used to fund shortfalls in those projects that are over budget. While this is considered best practice, the City's budget transfer policy states that for budget transfers over $100,000, disclosure is to be provided to the Finance and Audit Committee. In 2022, construction costs have been much higher than was expected when budgets were prepared. Items such as equipment, fuel, trucking, and asphalt have seen significant increases; as well as increased inflation having an impact on most construction materials. The result has been that many of the City's capital projects are exceeding the allocated budget, which results in more projects requiring specific disclosure.

DISCUSSION

The Holland Road Utility project involves replacing aging asbestos cement (AC) pipe new PVC pipe between Jingle Pot Road and Ashlee Road. It also replaced heavily corroded corrugated steel culverts with concrete culverts. The budget for the project was $281,150 and the final costs to complete the project were $408,150.

This project was completed by the City's internal construction crew and a review of the project expenses indicated that the cost for items such as pipe, gravels, and asphalt were significantly higher was anticipated when the project budget was prepared.

CONCLUSION

The funds required to cover the costs listed above were available within the 2022 – 2026 Financial Plan and will be allocated from contingency funds, a project that is under budget, and projects which had budget to start the design process in 2022 that were reprioritized to future years during the 2023 – 2027 Draft Financial Plan preparation. Given the magnitude of the budget transfers, specific disclosure to Council is warranted.

SUMMARY POINTS

- The Holland Road Utility Project required a budget transfer in excess of $100,000.
- In 2022, construction costs increased more than expected.
- Items such as asphalt, gravels, and pipe are much more expensive than in recent years and are the driving factor for much of the cost increases.

Submitted by:

Phil Stewart
Manager, Engineering Projects

Concurrence by:

Poul Rosen
Director, Engineering

Bill Sims
General Manager, Engineering & Public Works

Laura Mercer
Director, Finance

CITY OF NANAIMO
THE HARBOUR CITY

Staff Report for Decision

File Number: Unit 228

DATE OF MEETING NOVEMBER 16, 2022

AUTHORED BY BRANDON MILLER, MANAGER, FLEET OPERATIONS

SUBJECT **ACCELERATION OF THE COMMUNITY SAFETY OFFICERS VEHICLE PROJECT FROM 2023 TO 2022**

OVERVIEW

Purpose of Report

To provide the Committee with information relating to the deployment of a new vehicle for the Community Safety Officers (CSOs) program.

Recommendation

That the Finance and Audit Committee recommend that Council approve accelerating the CSOs Vehicle project from 2023 to 2022 in the 2022 – 2026 Financial Plan.

BACKGROUND

In 2022 as part of the Downtown Safety Action Plan, Council approved the implementation of 12 Community Safety Officers. Included in this project was a plan to purchase a new vehicle for the CSOs. The City ordered a new vehicle expecting it to arrive in early 2023; however, the vehicle arrived in October 2022 and is ready for deployment.

DISCUSSION

Currently the CSOs are renting a vehicle from an external agency and incurring a monthly rental fee. The vehicle purchase was budgeted for 2023 and was not expected to arrive until then. However, the new vehicle has arrived early and instead of incurring a monthly cost of $1407.05 plus fuel for the rental vehicle until January 2023, Staff is requesting that the project be accelerated in the Financial Plan from 2023 to 2022.

FINANCIAL IMPLICATIONS

The project budget of $58,200 is funded from the General Capital and Special Initiatives Reserves therefore funding is available to accelerate the project. The department will save on the monthly rental and fuel costs but will incur a monthly fleet rate change of approximately $1,300. The monthly fleet rate change covers repairs and maintenance, fuel, GPS and future replacement of the vehicle.

OPTIONS

1. That the Finance and Audit Committee recommend that Council approve accelerating the CSOs Vehicle project from 2023 to 2022 in the 2022 – 2026 Financial Plan.

   - The advantages of this option: It eliminates the monthly vehicle rental cost of $1,407.05 plus fuel and allows Staff to implement the new vehicle that has arrived.
   - The disadvantages of this option: None identified.
   - Financial Implications: The 2022 – 2026 Financial Plan will be amended at a future date to reflect the acceleration of the project. The 2023- 2027 Financial Plan will be amended for provisional budget to remove the project from the plan.

2. That the Finance and Audit Committee recommend that Council maintain current 2022 - 2026 Financial Plan and not accelerate the project from 2023 to 2022.
   - The advantages of this option: None identified.
   - The disadvantages of this option: The City will continue to rent a vehicle when it has the opportunity to replace a rental unit with a City owned unit at a lower monthly operating cost.
   - Financial Implications: Department will incur costs for a rental unit that exceed the cost of a City owned unit.

SUMMARY POINTS

- New vehicle arrived earlier than expected and is ready for deployment.
- Request to reallocate funding for the Community Safety Officers vehicle from 2023 to 2022 in the 2022 – 2026 Financial Plan.

Submitted by:

Brandon Miller
Manager, Fleet Operations

Concurrence by:

John Elliot
Director, Public Works

Laura Mercer,
Director, Finance

Bill Sims
General Manager, Engineering & Public Works

Staff Report for Decision

DATE OF MEETING NOVEMBER 16, 2022

AUTHORED BY JAMIE SLATER, MANAGER, REVENUE SERVICES

SUBJECT CONSIDERATION OF OTHER GRANT REQUEST FOR WATER USE

OVERVIEW

Purpose of Report

To consider the 'Other Grant' request from Growing Opportunities and provide information about agricultural water rates.

Recommendation

That the Finance and Audit Committee recommend that Council deny an annual operating grant to Growing Opportunities to assist with operating costs of water usage for irrigation.

BACKGROUND

A delegation attended the 2022-APR-20 Finance and Audit Committee meeting to request a grant in aid to assist with water costs associated with farming activities, and consideration of an agricultural water rate.

At the 2022-JUL-18 Regular Council meeting, it was moved and seconded that:

"The Finance and Audit Committee direct Staff to return to a future Finance and Audit Committee meeting with a Staff report regarding the request for a grant in aid for Growing Opportunities and include information pertaining to water rates in Agriculture Land Reserves."

Introduction

Growing Opportunities (Farm Community Cooperative) is a not-for-profit organization that works towards a community based food system that is equitable, empowering, and capable of regenerating the land through hands-on opportunities for people of all skills and abilities.
Growing Opportunities has involvement with two farm properties in Nanaimo:

1. **2090 Skaha Drive –** This property is privately owned. The owners lease eight acres to Growing Opportunities to grow food.

   The entire property is assessed at approximately $1.4M. Of the total assessed value, $35,414 is attributed to the Class 9 (Farm) classification, with the remainder attributed to Class 1 (Residential) land and improvements.

   The Cathers Lake reservoir exists to provide irrigation and is licensed to and owned by the property at 2090 Skaha Drive. The lake has been historically used as the water source for irrigation at the farm. There was narrative that City representatives damaged the irrigation line serving the property from the impounded reservoir, which is untrue. In fact, the irrigation line from the dam to the farm has fallen into disrepair by lack of use or maintenance by previous owners. City staff have been supporting the property owner in locating private infrastructure associated with irrigation.

   Consequently, the property has elected to use treated City water for farm operations. The prior year's water billing during the summer period was approximately $9,800. The current year water billing during the summer period was approximately $7,800.

2. **945 Park Avenue –** This five acre farm property is owned by the City of Nanaimo and is leased by Nanaimo FoodShare. Growing Opportunities does the planting, crop maintenance, harvesting, and farm gate sales for this property.

   This property has also been using City water for farm operations and last year the estimated water costs were approximately $900. The estimated costs for this year are similar.

DISCUSSION

This is a unique request and there are a number of factors to be considered. The first item considered is whether Growing Opportunities would qualify for a one-time 'Other Grant' or an annual operating grant.

1. **Other Grants**

   Growing Opportunities has requested an ongoing annual operating grant to assist with the cost of using City water for irrigation.

   Other Grant Criteria

   The general criteria for awarding Other Grants include:

   - Large number of volunteers
   - Registered non-profit society
   - Sound financial and administrative management
   - Demonstrated financial need
   - Accessible to a large portion of the community
   - Broad base of support
   - Other sources of financial support
   - Must be local in focus and comply with City of Nanaimo bylaws and policies

The Growing Opportunities non-profit organization appears to meet the general eligibility criteria for awarding other grants.

However, the kind of funding provided for other grants is outlined as follows:

- educational funding
- emergency funding
- capital grants on a matching basis up to a maximum of $5,000
- in-kind funding for facility rental

An ongoing operating grant request to assist with the cost of City water doesn't fit the general criteria for the kind of funding that was intended to be provided through the 'Other Grants' program.

Other Considerations

Ongoing annual operating grants or subsidies are generally not recommended, as there are a large number of non-profit organizations that operate in the City of Nanaimo, and the City doesn't have resources to be able to support them all, nor audit how the grants are used. This is the reason why the current 'Other Grants' policy does not have a category for regular ongoing funding.

The current year's budget for the 2022 'Other Grants' program has been fully expended.

If Council wishes to support the activities of the Growing Opportunities organization for 2022, an 'Other Grant' would need to be awarded and funded through Council's Strategic Infrastructure Reserve Fund.

For future years, Council could consider whether it wants to increase the budget amounts allocated to 'Other Grants' funding. A report will be coming forward to the 2022-DEC-01 Special Finance and Audit Committee meeting to determine if Council would like to increase 'Other Grant' funding as part of the 2023-2027 Financial Plan deliberations.

2. **Agricultural Water Rates**

The following provides information and considerations around agricultural water rates:

For the 2022 property taxation year, the City of Nanaimo had 37 properties meeting the criteria to be classified as Farm (Class 9) under BC Assessment guidelines. The total number of folios within the City of Nanaimo is 39,319.

Class 9 Farm properties represent less than 0.1% of the number of properties within the City of Nanaimo.

In 2021, water revenues from all of these farm classified properties (combined) totalled approximately $111,500, as follows:

	% of Revenue	2021 Revenue ($)
Commercial Nursery	71.3%	$79,500
Cline Property / Growing Opportunities	8.3%	$9,300
All Other Farm Properties	20.4%	$22,700
Total	**100.0%**	**$111,500**

For context, total water revenues for the entire City of Nanaimo were approximately $23.7M, so farming activities account for less than 0.5% of total water revenue.

There are development plans in progress that may eventually eliminate farming use by the Commercial Nursery property. This would further reduce the amount of farm properties and water revenue from farming activities.

In summary, the amount of farming activities within the City of Nanaimo boundaries is very limited, and the benefit of an agricultural rate would be to a very small number of users, yet create administrative burden.

Comparison with Other Municipalities in BC

Staff researched a variety of municipalities and Regional Districts that are either similar in population, geographical size, or in close proximity to the City of Nanaimo.

The overall result was that there are some organizations that do offer a specialized agricultural rate - and the municipalities that did offer a specialized rate were generally located in areas where there is a distinct farming industry, or where the municipal water system grew out of an irrigation Improvement District.

A summary table is outlined below:

Separate Agricultural Rate	No Separate Agricultural Rate
City of Delta	City of Coquitlam
City of Kamloops	City of Duncan
City of Kelowna	City of Maple Ridge
City of Saanich	City of New Westminster
City of Richmond	City of North Vancouver
City of Vernon	City of Prince George
	City of Surrey
	City of Vancouver
	City of Victoria
	Comox Valley Regional District
	District of Lantzville
	Fraser Valley Regional District
	Regional District of Nanaimo
	Town of Ladysmith
	Town of North Cowichan

Each organization outlined above has a unique water rates structure that has been developed over time.

Conclusion

There are very few farm properties within the City of Nanaimo boundaries, and the benefits of including a specific agricultural rate class is limited. Staff propose to incorporate these property types under the "non-residential" water user rate class.

Other Considerations – Types of Water Used for Agriculture

There is a growing trend for municipalities to support local farming activities and sustainable food production. Depending on water supply systems in each municipality, the use of highly treated municipal water may not be the most appropriate water source for farming activities, especially in an uncertain climate.

For example, the City of Nanaimo's water is treated to a high degree of purification through the operations of the water treatment plant. This may not be the best water source to utilize for farming activities. Typically, farms use other sources for irrigation including rainwater harvesting or utilizing other water sources including wells, dams, or lakes.

User Rate Considerations

A Sewer and Water 'Utility Rate Review' will be brought forward to Council as part of the 2023-2027 Financial Plan deliberations. This review has been ongoing for a number of years.

The Utility Rates Review proposes a new water rates structure that will increase equity around water usage, and as such, there will be a new proposed water rate for **non-residential use**, and for multi-family residential buildings with 3 or more units.

Agricultural properties would fall into the non-residential use category, as these rate structures are designed for higher volumes than the residential use category.

Impact to Growing Opportunities

For the subject property on Skaha Drive, using the proposed non-residential use water rate, based on 2022 consumption, the annual water billing for Growing Opportunities for agricultural use would be reduced by approximately $1,200.

OPTIONS

1. That the Finance and Audit Committee recommend that Council deny an annual operating grant to Growing Opportunities to assist with operating costs of water usage for irrigation.

   Advantages:

   - The current year's 2022 budget for 'Other Grants' has been fully expended, so there would be no additional expense for 2022.
   - Growing Opportunities could apply for a 2023 'Other Grant' to assist with the cost of water usage for irrigation under the educational or emergency funding stream.

   Disadvantages:

   - There would be no financial support provided for the Growing Opportunities organization, which could be detrimental to the organization's activities including expansion of growing and food production activities.

   Financial Impact:

   - There is no financial impact to the City in 2022 or otherwise if no financial support is provided.
   - There could be an increase in the Other Grants budget included in the 2023-2027 Financial Plan if Council so chooses. Financial implications of this will be outlined in a separate decision report presented at the 2022-DEC-01 Special Finance and Audit Committee meeting.

2. That the Finance and Audit Committee Recommend that Council:

   - Award an Other Grant in the amount of $7,800 *(or any other suggested amount)* for the 2022 calendar year to Growing Opportunities, with funding to come from the Strategic Infrastructure Reserve Fund, and that the 2022-2027 Financial Plan be amended accordingly.

   Advantages:

   - There would be immediate financial support provided to the Growing Opportunities organization for the 2022 calendar year to assist with costs of irrigation.
   - Growing Opportunities could still apply for a 2023 'Other Grant' to assist with the cost of water usage for irrigation under the educational or emergency funding stream.

Disadvantages:

- Council's Strategic Infrastructure Reserve Fund would need to be drawn down by approximately $7,800 *(or any other suggested amount).*

- Awarding an 'Other Grant' for regular operational purposes doesn't meet the general criteria for awarding other grants. This could result in further operational grant requests in the future.

Financial Impact:

- Awarding an Other Grant for $7,800 would reduce the balance in Council's Strategic Infrastructure Reserve Fund by that amount. The current projected balance in this reserve fund at 2022-DEC-31 is approximately $3.1M.

- There could be an increase in the Other Grants budget included in the 2023-2027 Financial Plan if Council so chooses. Financial implications of this will be outlined in a separate decision report presented at the 2022-DEC-01 Special Finance and Audit Committee meeting.

3. That the Finance and Audit Committee provide alternate direction.

SUMMARY POINTS

- Consideration of an 'Other Grant' has been requested by a food farming non-profit organization.
- The request for ongoing annual funding through the 'Other Grant' program is not recommended.
- As requested, information has been provided pertaining to agricultural water rates.

Submitted by:

Jamie Slater
Manager, Revenue Services

Concurrence by:

Laura Mercer
Director, Finance

Bill Sims
General Manager, Engineering and Public Works

Delegation Request

Delegation's Information:

Christopher Brown has requested an appearance before the Finance and Audit Committee.

City: Nanaimo
Province: BC

Delegation Details:

The requested date is November 16, 2022.

The requested meeting is:
Finance and Audit

Bringing a presentation: No

Details of the Presentation: Consideration of Other Grant Request for Water Use Growing Opportunities Farm Community Cooperative, which is not-for-profit farming at the Cline AgroHealth Center within city limits, has worked to provide meaningful employment and nutritious food for low-income people and is requesting an exemption from their city water bill which was used to irrigate fields. This is a one-time ask as we are working towards having a water source from Cathers lake for the next growing season. Chris is a board member of G.O.

DATE OF MEETING NOVEMBER 16, 2022

AUTHORED BY MICHELLE MILLER, SENIOR FINANCIAL ANALYST

SUBJECT BC ACTIVE TRANSPORTATION INFRASTRUCTURE GRANT

OVERVIEW

Purpose of Report

To revise the Council resolution approved at the 2022-SEPT-21 Special Council Meeting for the B.C. Active Transportation Infrastructure Grant program for the Albert and Fourth Complete Street Ph 2 to include additional project components.

Recommendation

That the Finance and Audit Committee recommend that Council direct staff to submit an application under the B.C. Active Transportation Infrastructure Grant as follows:

- Submit an application for the Albert and Fourth Complete Street Ph 2 project, and confirm the local share of $2,324,322 is available and supported, the project is a municipal priority, and project is “shovel ready” and intended to be complete within the required timeline.

BACKGROUND

The Albert and Fourth Street Corridor is identified in the Nanaimo Transportation Plan and City Plan as a Primary Active Mobility route as it provides a critical walking and cycling link between Vancouver Island University and Downtown. The overall scope of work included in this project is road rehabilitation, drainage and water infrastructure, streetlights, and cycling and sidewalk amenities.

At the 2022-SEPT-21 Special Council Meeting, Council approved the submission of an application for this project under the B.C. Active Transportation Infrastructure Grant program. This program offers up to 50% of eligible projects costs to a maximum of $500,000 and Council confirmed by resolution the local share of funding of $847,793 for the cycling and sidewalk amenities.

DISCUSSION

Subsequent to direction from Council to submit an application for the Albert and Fourth Complete Street Ph 2, Staff noted that including safety features and environmental considerations that are part of the overall project would strengthen the City’s application. The original report to Council for the application was focused on the cycling and sidewalk components and the budget numbers in the resolution passed by Council reflected the budget

for these elements. Staff would like to revise the resolution to also include the streetlight and drainage components of the project which require Council to increase the local share of funding from $847,793 to $2,324,322 to capture these project costs.

FINANCIAL IMPLICATIONS

There is no change to the overall budget for the project. The inclusion of these project components will not increase the amount of funding for which the City is eligible, however it is anticipated it will provide characteristics to the project that could increase its attractiveness for funding approval.

OPTIONS

1. That the Finance and Audit Committee recommend that Council direct staff to submit an application under the B.C. Active Transportation Infrastructure Grant as follows:

    - Submit an application for the cycling, sidewalk, drainage, and streetlight portion of the Albert and Fourth Complete Street Ph 2 project, and confirm the local share of $2,324,322 is available and supported, the project is a municipal priority, and project is “shovel ready” and intended to be complete within the required timeline.

    - The advantages of this option: The streetlight and drainage project components provide characteristics to the project that increase attractiveness of the overall project and application for successful funding.

    - Financial Implications: There are no financial implications. The change to the resolution is for qualitative purposes.

2. That the Finance and Audit Committee recommend that Council keep the existing resolution from the 2022-SEPT-21 Special Council Meeting.

    - The disadvantages of this option: The City will have little contribution to the safety and environmental section of the application that may result in lower application scoring from the grantor.

SUMMARY POINTS

- The Active Transportation Infrastructure Grant program provides 50% funding up to $500,000 for eligible project costs.
- The current Council resolution does not include budget for the drainage and streetlight components of the project, which provides qualitative characteristics to the grant application.
- Staff recommend that the resolution be amended to include the budget for the drainage and streetlight components.

Submitted by:

Michelle Miller
Senior Financial Analyst

Concurrence by:

Laura Mercer
Director, Finance

Bill Sims,
General Manager, Engineering and Public Works

Finance 101

Finance & Audit Committee Meeting
November 16, 2022

Agenda

- Finance Department Overview
  - Who we are, what we do & the environment we operate in
- Reserve Policy Overview
  - Overview of why we have a reserves policy and what is included in it.
- Development Cost Charges (DCC) Reserves Overview
  - Overview of what they are and how we can spend them

Role of the Financial Officer

Statutory Role (*Community Charter section 149*)

- Receives money
- Ensures the keeping of all funds & securities
- Invests funds until required in authorized investments
- Spends money as authorized by Council
- Ensures that accurate & full accounts are kept
- Control & supervision over all financial affairs

Finance 101

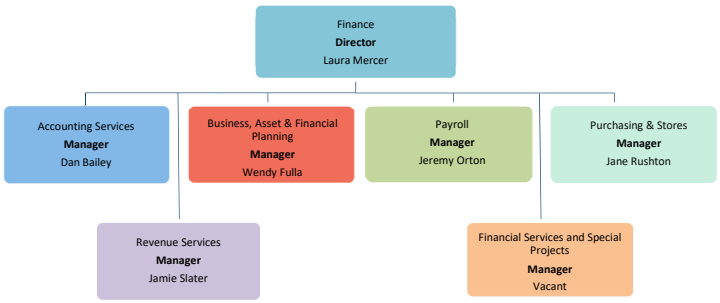
Role of the Financial Officer

Non-Statutory Role

- Provides financial support and advice to staff & Council
- Prepares financial plans
- Performs financial analysis
- Works with external auditor
- Attends Council & Committee meetings
- Provides information to the public and media on financial matters

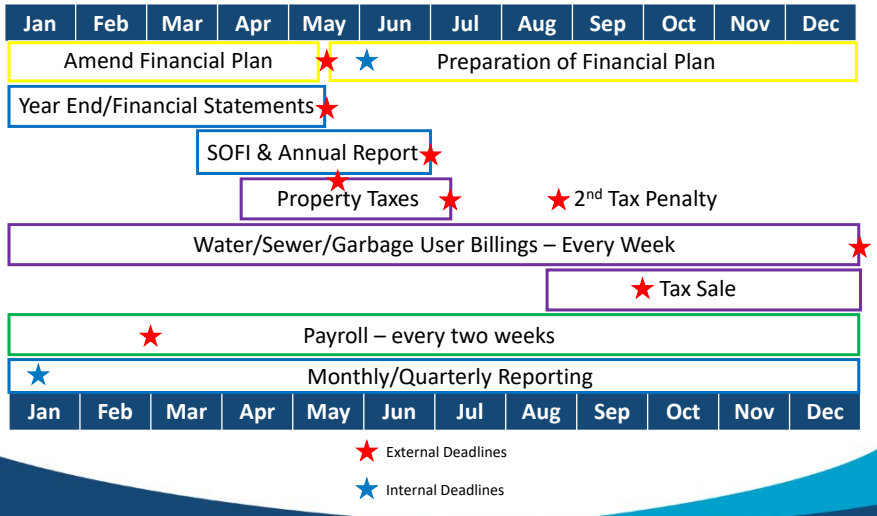
Finance 101

Department Overview



Finance

Finance Timeline



Finance 101

Regulatory Environment (External)

- Community Charter
- Local Government Act
- Assessment Act
- Financial Information Act
- Provincial Sales Tax Act
- Excise Tax Act
- PSAB
- GFOA Best Practices
- Trade Agreements:
  - Agreement on Internal Trade (AIT)
  - New West Partnership Trade Agreement (NWPTA)
  - Canadian Free Trade Agreement (CFTA)
  - Canadian European Union Comprehensive Economic and Trade Agreement (CETA)

Finance 101

Regulatory Environment (Internal)

Council Policies vs. Departmental Policies

- Significant policies with organization wide impact will normally be approved by Council, e.g., Procurement Policy
- Policies with a more narrow impact will usually be approved by the Director of Finance and be included in the Finance Department Policy Manual, e.g., Petty Cash Policy

Finance 101

Regulatory Environment (Internal)

Council Policies & Bylaws:

- Five Year Financial Plan Bylaw
- Tax & User Rates Bylaws
- Revenue Policy
- Procurement Policy
- Sustainable Procurement Policy
- Investment Policy
- Asset Management Policy
- Reserves Policy

Finance Department Policies:

- Travel & Expense Policy
- Budget Transfer Policy
- Fixed Asset Policy

Finance 101

Regulatory Environment (Internal)

Policies that are in the works:

- Debt Policy
- Hospitality Policy
- Long-Term Financial Planning Policy

Finance 101

Environment

- Collaboration with all departments
  - Director is part of senior management team
  - Financial analysts provide support during budget process
  - Participate in cross functional teams such as Asset Management
- Interact with public, media, auditors, other government agencies
- Maintain networks with other municipalities to stay on top of best practices

Finance 101

Financial Relationships

City is the Tax Collector for the following:

City Functions:

- Roads & drainage
- Water supply & distribution
- Sanitary sewer collection
- Garbage & recycling collection
- Planning & development
- Parks & Recreation
- Culture
- Fire, Police & Bylaw

RDN Functions*:

- Transit
- Watershed protection
- Wastewater treatment
- Solid waste (landfill)
- Regional planning
- Regional parks

*In which the City of Nanaimo Participates

Other:

- School Tax Levy
- BC Assessment Levy
- Municipal Finance Authority Levy
- Hospital Levy
- Business Improvement Levies (OCQ &DBIA)

Finance 101

Financial Relationships

External Agencies:

- Nanaimo Prosperity Corporation
- Tourism Nanaimo Society
- Nanaimo Systems Planning Organization Society

Other:

- Vancouver Island Conference Centre
- Snuneymuxw First Nation
- Nanaimo Port Authority
- Nanaimo Hospitality Association
- Vancouver Island Regional Library

Finance 101

Council's Role in Finance

Council is responsible to ensure that the municipality meets all financial requirements established in legislation.

Bylaws:

- Financial Plan Bylaw (budget)
- Property Tax Rates Bylaw
- Sewer Regulations and Charge Bylaw
- Waterworks Rate Bylaw
- South West Bulk Water Rate Bylaw
- Municipal Solid Waste Collection Bylaw
- User Fee Subsidies Bylaw
- Permissive Tax Exemption Bylaw
- Borrowing Bylaws (when required)

Policies:

- Council Policies relating to Finance

Reports:

- Financial Statements
  - External Audit Findings Report
- Statement of Financial Information
- Annual Municipal Report
- Annual Surplus Allocation Report
- Annual Carryforward Report
- Quarterly Financial and Procurement Reports
- Grant Reports
- Asset Management Plan and 20 Year Investment Plan Updates

Finance 101

Reserves Policy

Finance 101

Reserves Policy

Long Term Planning

- City owns and operates over $3 billion in assets to deliver services
- Council decision making:
  - Five Year Financial Plan
  - Master Plans – e.g. CityPlan
  - 20 Year Investment Plan
- Sustainable financial management includes:
  - Robust long-term planning processes
  - Prudent long-term funding strategies which include establishing and managing reserves

Finance 101

Reserves Policy

Why do we have Reserves?

- Reduce volatility in property tax and user fee increases
- Mitigate risk
- Fund equipment and infrastructure investment
- Fund strategic initiatives

There are two types of Reserves:

- Operating Reserves are usually created through allocations of surplus
- Statutory Reserves are created through a bylaw

Reserves Framework

- Groups reserves by common purposes
- Consistency, transparency and communication
- Conforms to GFOA best practices

Finance 101

Reserves Policy

Principle Statements and Objectives

Reserves shall be established, maintained and used in accordance with the following principles and objectives:

- Affordability
- Long-Term Financial Sustainability and Resiliency
- Transparency and Accountability
- Statutory and Legal Requirements
- Accounting Standards

Finance 101

Reserves Policy

Reserve Framework

- Reserve Framework groups reserves by common purposes and guidelines:
  - Financial Stability Reserves
  - Equipment Reserves
  - Infrastructure Reserves
  - Parking Reserves
  - Property Reserves
  - Strategic Reserves
  - Other Reserves
- Policy reviewed every four years

Finance 101

Reserves Policy

Target Reserve Balances

- Targets established according to GFOA best practices
- Minimum Target Balances established for:
  - Financial Stability Reserves
  - Equipment Reserves
  - Key Infrastructure Reserves
  - Strategic Infrastructure Reserve
- Minimum Target Recalculation Frequency
  - Annually
  - Every 3 Years
  - Every 5 – 10 Years/Update of 20 Year Investment Plan

Finance 101

Reserve Classifications

Reserves Policy

Financial Stability Reserves

Purpose:

- Mitigate risks from unexpected expenditures or lower revenues related to annual operations
- Provides working capital, avoids short-term borrowing

Details:

- Six (6) Operating Reserves
- Several have established target minimum balances

Reserves Policy

Financial Stability Reserves

Reserves	Primary Purpose	Reserve Type	Annual Contributions Source	2022 Estimated Closing Reserve Balance	Basis for Target Balance	2023 Minimum Target Balance	Target Recalculation Frequency
Financial Stability Reserves							
General Financial Stability	Risk mitigation for unplanned expenses or decrease in revenues	Operating	Allocation of prior year surplus if available or budget allocation	$ 15,891,688	Minimum - $15,000,000 Maximum - 60 days of prior year's budgeted general operating expenditures	$ 15,000,000	**Minimum** balance every 5 years (Next update 2025) **Maximum** annually
RCMP Contract Financial Stability	Risk mitigation for unplanned expenses	Operating	Allocation of prior year surplus if available or budget allocation	$ 26,558	% of prior year's budgeted contract expense not budgeted	$ 1,611,855	Annually
Sanitation Leveling	To smooth user rate increases and fund sanitation projects	Operating	Allocation of Sanitation Surplus or allocation from sanitation budget	$ 675,898			
Sewer Financial Stability	Risk mitigation for unplanned expenses or decrease in revenues	Operating	Allocation of net sewer revenues or sewer budget allocation	$ 500,000	Minimum - $500,000 Maximum - 60 days of prior year's budgeted operating expenditures	$ 500,000	**Minimum** balance every 5 years (Next update 2025) **Maximum** annually
Snow and Ice Control	Risk mitigation for actual costs higher than annual budget estimate.	Operating	Allocation of prior year surplus if available or budget allocation	$ 1,200,000	10 year average SNIC expense plus 50%	$ 1,330,000	Every 3 Years - (Next Update 2026)
Water Financial Stability	Risk mitigation for unplanned expenses or decrease in revenues	Operating	Allocation of net water revenues or water budget allocation	$ 1,701,055	Minimum - $1,700,000 Maximum - 60 days of prior year's budgeted operating expenditures	$ 1,700,000	**Minimum** balance every 5 years (Next update 2025) **Maximum** annually
			Total Financial Stability Reserves	**$ 19,995,199**		**$ 20,141,855**	

Operating Reserve
Statutory Reserve
Statutory Reserve (Legislated)

Reserves Policy

Equipment Reserves

Purpose:

- To Provide funding for:
  - Equipment Replacement
    - Fire apparatus, solid waste collection trucks, heavy-duty construction equipment and vehicles
  - IT Corporate Infrastructure
  - Copier Replacement
  - Cart Replacement

Details:

- Four (4) Statutory Reserves
- All have established target minimum balances
- All of these reserves are funded from the annual operating budgets based on use of the applicable equipment

Reserves Policy

Equipment Reserves

Reserves	Primary Purpose	Reserve Type	Annual Contributions Source	2022 Estimated Closing Reserve Balance	Basis for Target Balance	2023 Minimum Target Balance	Target Recalculation Frequency
Equipment Reserves							
Cart Replacement	Planned cart replacement program	Statutory	Annual budget allocation	$ -	minimum 1% of replacement cost plus funding for 10 year replacement plan	$ 42,000	Every 5 - 10 Years (Next Update 2025)
Copier Replacement	Planned copier replacement program	Statutory	Annual Internal Charges	$ 387,778	$50k (last 10 year average) plus 10 year replacement plan	$ 50,000	Every 5 - 10 Years (Next Update 2025)
Equipment Depreciation	Planned replacement of City fleet and fleet shop equipment	Statutory	Annual Internal Charges plus net fleet operations	$ 7,460,754	minimum 1% of replacement cost plus funding for 10 year replacement plan	$ 270,000	On update of 20 Year Investment Plan/ Every 5 - 10 Years
Information Technology	Planned IT infrastructure projects	Statutory	Annual Internal Charges	$ 1,027,871	$575,000 (last 10 year average) plus 10 year project plan	$ 575,000	Every 5 - 10 Years (Next Update 2025)
			Total Equipment Reserves	$ 8,876,403		$ 937,000	

Operating Reserve
Statutory Reserve
Statutory Reserve (Legislated)

Reserves Policy

Infrastructure Reserves

Purpose:

- To Provide funding for:
  - Infrastructure renewal/Upgrades
  - New Infrastructure required due to growth
    - City must provide a minimum 1% assist factor for DCC Projects

Details:

- Six (6) Operating Reserves
- Seven (7) Statuary Reserves
- Four (4) have established target minimum balances

Reserves Policy

Infrastructure Reserves

Operating Reserve
Statutory Reserve
Statutory Reserve (Legislated)

Reserves	Primary Purpose	Reserve Type	Annual Contributions Source	2022 Estimated Closing Reserve Balance	Basis for Target Balance	2023 Minimum Target Balance	Target Recalculation Frequency
Infrastructure Reserves							
Brechin Boat Ramp	Renewal or improvements to the Brechin Boat ramp facilities	Operating	Parking revenues	$ 49,909			
Cemetery Care	Income can be used for the upkeep of cemeteries and their attached grounds, fixtures and amenities.	Statutory	Revenues from plot sales and headstone installations	$ 632,968			
Community Works Fund	grounds, fixtures and amenities.	Statutory	UBCM grant	$ 4,618,919			
Facility Development	Planned projects for facility renewal/upgrade for contribution facilities or for new community recreational facilities that will contribute to reserve	Statutory	Allocation of recreation facility revenues	$ 3,086,649	$1 million (last 10 year average) plus 10 year project plan	$ 1,000,000	Every 5 - 10 Years (Next Update 2025)
General Asset Management	Planned renewal projects and assist factor for DCC projects	Statutory	Allocation of annual property taxes	$ 6,804,870	minimum 0.25% of replacement cost plus funding for 10 year capital program	$ 3,487,500	On update of 20 Year Investment Plan/ Every 5 - 10 Years
General Capital	Infrastructure investment	Operating	Allocation of prior year surplus if available or budget allocation	$ 1,274,288			
NDSS Community Field Maintenance	Planned projects for NDSS Community Field replacement/improvements	Statutory	Annual contributions from the City and SD68 plus any net rental revenues	$ 163,586			
Pipers Park	Planned projects for improvements to Pipers Park	Operating	Net rental revenues from Military Museum if available	$ 109,706			
Sewer Asset Management	Planned renewal projects and assist factor for DCC projects	Statutory	Allocation of annual user fees	$ 10,888,480	minimum 0.25% of replacement cost plus funding for 10 year capital program between AM and operating reserve	$ 1,492,500	On update of 20 Year Investment Plan/ Every 5 - 10 Years
Sewer Operating	Planned projects	Operating	Net sewer operating revenues	$ 5,036,853	Yes - see Sewer AM Reserve		
Water Asset Management	Planned renewal projects and assist factor for DCC projects	Statutory	Allocation of annual user fees	$ 13,025,533	minimum 0.25% of replacement cost plus funding for 10 year capital program between AM and operating reserve	$ 2,440,000	On update of 20 Year Investment Plan/ Every 5 - 10 Years
Water Operating	Planned projects	Operating	Allocation of net water operating revenues	$ 3,508,413	Yes - see Water AM Reserve		
Vancouver Island Conference Centre (VICC)	Planned projects for VICC renewal	Operating	Unspent portion of annual contingency budget	$ 517,519			
			Total Infrastructure Reserves	**$ 49,717,693**		**$ 8,420,000**	

Finance 101

Reserves Policy

Parking Reserves

Purpose:

- Provide funding for renewal/new parking infrastructure
- Provide funding for creation of new off-street parking

Details:

- One (1) Operating Reserve
- Three (3) Statutory Reserves
- No target minimum balances have been established

Finance 101

Reserves Policy

Parking Reserves

Reserves	Primary Purpose	Reserve Type	Annual Contributions Source	2022 Estimated Closing Reserve Balance	Basis for Target Balance	2023 Minimum Target Balance	Target Recalculation Frequency
Parking Reserves							
Fitzwilliam St Parking	Used for upgrading the Prideaux Street Parking facility	Operating	Paid in lieu of parking when former ARC building was purchased	$ 142,868			
Off Street Parking	Funding for transportation infrastructure that supports walking, bicycling, public transit or other alternative forms of transpiration	Statutory	Cash in Lieu payments from developers	$ 72,813			
Old City Neighbourhood Parking	Creation of new off-street parking spaces	Statutory	Cash in Lieu payments from developers	$ 97,794			
Parking Reserve	Planned capital projects	Statutory	Net parking revenues	$ 883,393			
			Total Parking Reserves	**$ 1,196,868**		$ -	

Operating Reserve
Statutory Reserve
Statutory Reserve (Legislated)

Reserves Policy

Property Reserves

Purpose:

- Provides funding purchase of parkland
- Provides funding for property acquisitions to expand City infrastructure, to implement strategic initiatives
- Provides funding for capital projects

Details:

- Three (3) Statutory Reserves
- No target minimum balances have been established

Reserves Policy

Property Reserves

Reserves	Primary Purpose	Reserve Type	Annual Contributions Source	2022 Estimated Closing Reserve Balance	Basis for Target Balance	2023 Minimum Target Balance	Target Recalculation Frequency
Property Reserves							
Parkland Dedication	Purchase of parkland only	Statutory	Cash in Lieu payments from developers	$ 846,263			
Property Acquisition	Property purchases	Statutory	Allocation of unspent annual budget for property acquisition plus allocation of prior year surplus	$ 2,782,262			
Property Sales	Planned capital projects	Statutory	Sale of civic land	$ 2,158,172			
			Total Property Reserves	$ 5,786,697		$ -	

Operating Reserve
Statutory Reserve
Statutory Reserve (Legislated)

Reserves Policy

Strategic Reserves

Purpose:

- Provide funding for specific strategic initiatives

Details:

- Two (2) Operating Reserves
- Three (3) Statutory Reserves
- One (1) target minimum balances has been established

Reserves Policy

Strategic Reserves

Reserves	Primary Purpose	Reserve Type	Annual Contributions Source	2022 Estimated Closing Reserve Balance	Basis for Target Balance	2023 Minimum Target Balance	Target Recalculation Frequency
Strategic Reserves							
Housing Legacy	Funding for development of strategies and partnerships with external agencies for low barrier housing	Statutory	Annual budget allocation plus cash in lieu from developers and MRDT for online accommodations	$ 3,303,338			
Special Initiatives	Provide funding for short-term initiatives	Operating	Allocation of prior year operating surplus	$ 2,275,350			
Strategic Infrastructure	Planned strategic and capital projects	Statutory	Annual Fortis revenues and 67% of annual Casino revenues	$ 3,107,097	15% of prior year's budgeted annual contributions	$ 320,250	Annually
Strategic Partnerships	Funding for joint initiatives	Operating	Allocation of prior year operating surplus	$ 43			
Climate Action	Provide funding for projects, plans and initiatives that reduce the City's community wide CO2 emissions to specified targets in 2030 and 2050	Statutory	Annual budget allocation plus annual contributions from the LGCAP Program	$ 713,679			
			Total Strategic Reserves	**$ 9,399,507**		**$ 320,250**	

Operating Reserve
Statutory Reserve
Statutory Reserve (Legislated)

Finance 101

Reserves Policy

Other Reserves

Purpose:

- Annual carry forwards
- Bequest

Details:

- Two (2) Operating Reserves
- Two (2) Statutory Reserves
- One (1) target minimum balances has been established

Finance 101

Reserves Policy

Other Reserves

Reserves	Primary Purpose	Reserve Type	Annual Contributions Source	2022 Estimated Closing Reserve Balance	Basis for Target Balance	2023 Minimum Target Balance	Target Recalculation Frequency
Other Reserves							
911	To offset the fire dispatch function	Statutory	Call/answer levy that exceeds the cost of Central Island 911 dispatch service	$ 264,048			
Casino	Eligible expenditures	Operating	None	$ -			
Knowles Estate	For parks and youth sport facility improvements in the South Nanaimo	Statutory	Required due to bequest	$ 422,909	Compliance with bequest	$ 385,952	Bequest
Prior Year Carry Forward	To facilitate budget carry forwards process	Operating	Specific project or operating budget allocations	$ 32,500			
			Total Other Reserves	**$ 719,457**		**$ 385,952**	

Operating Reserve
Statutory Reserve
Statutory Reserve (Legislated)

Finance 101

Development Cost Charges (DCC) Reserves

Finance 101

DCC Reserves

Purpose:

- Collected from developers to assist with cost of new infrastructure required due to growth

Details:

- Statutory Reserve Bylaw No. 7252
- The Bylaw needs Statutory Approval from the Provincial Government
- Only projects identified in this Bylaw can be funded by DCC's
- Every 5 Years the City does a DCC Bylaw Update
  - Last update was in 2017
  - Next update is scheduled in 2023

Finance 101

DCC Reserves

What can DCC's be Collected for?

The Local Government Act (LGA) Section 559(2) states:

(2) Development cost charges may be imposed under subsection (1) for the purpose of providing funds to assist the local government to pay the capital costs of

(a) providing, constructing, altering or expanding sewage, water, drainage and highway facilities, other than off-street parking facilities, and

(b) providing and improving park land

Sanitary Collection	Drainage (Storm)	Water Distribution	Roads	Water Supply	Parks	Sanitary RDN

Finance 101

DCC Reserves

DCC Reserves – Assist Factor

". . . . provide funds to assist the local government . . . ."

- 100% of cost cannot be allocated to new growth
- As such, minimum of 1% assist factor is required
- Under existing bylaw, 1% for all infrastructure types, with the exception of water supply ,which is 25%
- Assist factor could be increased, but would result in further pressure on taxation and/or user rates

Finance 101

DCC Reserves

Reserves	Primary Purpose	Reserve Type	Annual Contributions Source	2022 Estimated Closing Reserve Balance	Basis for Target Balance	2023 Minimum Target Balance	Target Recalculation Frequency
DCC Reserves							
Drainage (Storm)	Fund specific drainage projects	Statutory	Developer Contributions	$ 13,949,604			
Parks	Fund specific parks projects	Statutory	Developer Contributions	$ 1,635,882			
Roads	Fund specific roads projects	Statutory	Developer Contributions	$ 13,470,357			
Sanitary Collection	Fund specific sanitary collection projects	Statutory	Developer Contributions	$ 3,835,962			
Water Distribution	Fund specific water distribution projects	Statutory	Developer Contributions	$ 5,826,352			
Water Supply	Fund specific water supply projects	Statutory	Developer Contributions	$ 13,251,664			
			Total DCC Reserves	$ 51,969,821		$ -	

Operating Reserve
Statutory Reserve
Statutory Reserve (Legislated)

Finance 101

Upcoming Timeline

Finance 101

Timeline - 2022

- Budget Presentations: November 23, 24, 30 and December 1
- E-Town Hall and Utility Rate Bylaws : December 5
- Budget Discussion, If needed: Dec 7
- Finance and Audit Meeting: December 14
- Financial Plan Bylaw, 1st 3 Readings: Dec 19
- Utility Rate Bylaws, Adoption: Dec 19
- Financial Plan Bylaw, Adoption: January 2023

Finance 101

Timeline - 2023

Finance and Audit Meetings	• Meetings every 3rd Wednesday of the Month
Financial Plan (Budget)	• March: 2022 Carryforward Report • April - May: Final Budget Presentations • Before May 15th: Adoption Financial Plan Bylaw • June: Council direction on 2024-2028 Financial Plan
Financial Statements	• March: Approval of Surplus Allocation • Before May 15th: Approval of Financial Statements • Before June 30th: Approval of the SOFI and Annual Municipal Report
Property Taxes	• Before May 15th: Adoption of the Property Tax Rates Byalw

Finance 101

Questions

Finance 101

Council Policy

Policy Name:	Reserves Policy
Department Name:	Financial Services
Policy No.:	COU-204
Effective Date:	2019-JUL-22
Review Date:	2023-JUN-30

POLICY

The purpose of this Policy is to:

I. Establish responsible governance for the development, maintenance and use of the City's Reserves;
II. Establish governance roles and responsibilities that ensure appropriate establishment and management of Reserves;
III. Define principles and objectives for Reserves management that are appropriate for the City's financial position, and are reasonable, logical and necessary for delivery of sustainable, affordable services; and
IV. Ensure the City's Reserves management is compliant with the statutory and legal requirements of the *Local Government Act* and the *Community Charter*, and in accordance with Canadian public sector accounting standards.

REASON FOR POLICY

The City of Nanaimo (the City) is committed to sustainable, prudent and transparent management of financial resources used to provide valued community services.

Reserves will be established and expended to:

I. Provide for contingencies;
II. Fund strategic initiatives and capital investment identified in strategic and master plans adopted by Council;
III. Fund equipment and vehicle replacement;
IV. Fund infrastructure renewal;
V. Fund new/upgraded infrastructure required due to growth.

AUTHORITY TO ACT

Delegated to Staff.

PROCEDURE

1. Definitions

I. Five Year Financial Plan: The City's annual budget required under the *Community Charter*

II. Funds: The resources and operations of the City are segregated into General, Sanitary Sewer Utility, Waterworks Utility and Reserve Funds for accounting and budgeting purposes. The General and Utility Funds also have corresponding Capital Funds.

III. Operating Reserves: Specific reserves in the City's operating funds (General, Sewer and Water) established for specified purposes.

IV. Public Sector Accounting Board (PSAB): Canadian public sector accounting standards as prescribed by the Public Sector Accounting Board of Canada (PSAB) and the Chartered Professional Accountants of Canada.

V. Reserves: All the City's Operating Reserves and Reserve Funds.

VI. Reserve Funds: Specific reserve funds for specified purposes as required by and pursuant to specific legislation and City bylaws. Also referred to as Statutory Reserves.

VII. Sustainability: The pillars of sustainability include ensuring that current socio-cultural, economic and environmental commitments are considered in investment decisions and do not compromise the ability of future generations to meet their own needs.

2. Acronyms and Abbreviations

I. CAO: Chief Administrative Officer
II. The City: The City of Nanaimo

3. Responsibilities

To implement the Reserve Policy the appropriate level of governance must be in place throughout the organization for decision-making.

3.1 Council is responsible for adoption, periodic review and updating the Reserves Policy.

3.2 The CAO is responsible for implementing the Reserves Policy.

3.3 The Director of Finance is responsible for:

3.3.1 Implementing internal processes and systems in compliance with this Policy;

3.3.2 Ensuring Reserves and Reserve Funds are established and maintained in compliance with this Policy;

3.3.3 Recommending target minimum and maximum reserve balances where appropriate;

3.3.4 Ensuring utilization of reserve funding is clearly disclosed in the City's Five Year Financial Plan and other long-term financial plans;

3.3.5 Recommending revisions or amendments to this Policy due to changes in applicable statutes, accounting standards or to support the City's long-term financial management.

4. Scope and Applicability

4.1 Scope

Reserves are either classified as Reserves in each of the City's operating funds or separate Reserve Funds. Reserve Funds are statutory reserves required by Provincial legislation or established by Council and receive specific contributions that can only be used in compliance with the appropriate City bylaw.

The City maintains reserves that provide funding to:

I. mitigate risk;
II. replace equipment;
III. renew existing infrastructure;
IV. construct new/upgraded infrastructure required due to growth;
V. purchase land;
VI. implement strategic initiatives and capital investment;
VII. comply with special bequests; and
VIII. facilitate specific functions or commitments.

4.2 Unique Corporate Purpose

Each Reserve must have a unique and specific corporate purpose.

4.3 Corporate Context

The management of the City's reserves is an integral part of the City's long-term planning, asset management, the City's Five Year Plan, the 10 Year Project Plan and the 20 Year Investment Plan.

4.4 Implementation, Review and Reporting

The implementation, review and reporting associated with this policy will be integrated within City business processes. Due to the importance of this policy, the management of the City's reserves will be reported to Council, and implementation of this policy reviewed periodically by Council.

5. Benefits of Compliance

Implementing this policy will improve the City's governance through enhanced accountability, performance, sustainability and resiliency.

6. Principle Statements and Objectives

Reserves shall be established, maintained and used in accordance with following principles and objectives.

6.1 Affordability

6.1.1 The City will consider impact on property taxes, utility and other user fees when implementing and managing reserves.

6.2 Long-Term Financial Sustainability and Resiliency

6.2.1 The City will implement and manage reserves that support mitigation of risks arising from operating emergencies, unforeseen expenditures or decreases in revenues.

6.2.2 The City shall strive to implement and manage reserves to meet future financial obligations with respect to the City's strategic initiatives, investment in equipment and infrastructure, and fiscal needs.

6.2.3 The City will make informed decisions to implement and manage reserves that best support the long-term financial needs for City services and strategic priorities.

6.2.4 The City will develop and maintain financial plans that adequately identify the long-term funding needs and sources to sustain City services.

6.3 Transparency and Accountability

6.3.1 All Reserves must be established, maintained and used for a specified purpose mandated by this policy, statute, or City Bylaw.

6.3.2 A Council Resolution or an Adopted Budget Bylaw is required for all appropriations from Operating Reserves and Reserve Funds.

6.3.3 The City will conduct an annual review of all reserves and report the results to Council.

6.3.4 The City's Five Year Financial Plan will provide a summary of projected reserve balance, contributions and withdrawals.

6.4 Statutory and Legal Requirements

6.4.1 Reserves will be established to meet Provincial and Federal government legislation, City Bylaws or required by contractual agreement.

6.5 Accounting Standards

6.5.1 Administration of Reserves must meet the accounting standards applicable to local governments (PSAB).

7. Administration

The following key administrative processes will support implementation of the Reserve Policy. Additional information is provided in the City's Reserves Processes document.

7.1 Interest and Calculation Method

All Reserve Funds will earn interest each year. Interest will be calculated based on the audited fund balance at the end of the prior year. The interest rate used will be determined on an annual basis.

7.2 Minimum and Maximum Balances

A minimum and maximum balance may be established for a Reserve. A minimum balance will ensure that each fund is not depleted to the degree that it is no longer able to service its intended purpose. A maximum balance ensures that it does not grow beyond its intended purpose.

The annual allocation of General Operating Fund, Sewer Operating Fund and Water Operating Fund surplus will prioritize replenishment of reserves to minimum target balances.

The City's financial planning processes will strive to maintain the recommended target minimum reserve balances for the Five Year Financial Plan.

7.3 Repayment Period for Target Minimum Balances

A time period will be specified for the repayment or replenishment of a Reserve with a specified minimum balance.

7.4 Reporting

The City will develop and maintain annual reporting processes that provide decision makers with all relevant reserves information.

8. Reserves Framework

The Reserves Framework groups reserves by common purposes and guidelines in compliance with this Policy. Reserve Funds are utilized to comply with Provincial legislation or contractual requirements and where specific annual contributions support long-term organizational purposes.

A description of each reserve is outlined below within the Reserves Framework.

8.1 Financial Stability Reserves

Description
Financial Stability Reserves are required to ensure the ongoing financial stability and fiscal health of City operations. Each reserve is funded from an allocation of operating year-end surplus from the appropriate fund. The Financial Stability Reserves include:

- General Financial Stability Reserve
- RCMP Contract Financial Stability Reserve

- Sanitation Levelling Reserve
- Sewer Financial Stability Reserve
- Snow and Ice Control Financial Stability Reserve
- Water Financial Stability Reserve

Guidelines for Using Funds

A Council resolution or an Adopted Budget Bylaw is required for all appropriations from the Financial Stability Reserve Funds.

All appropriations from the Financial Stability Reserves are to be considered in accordance with the following priorities:

1. Operating and Environmental Emergencies
    a. These appropriations are the highest priority and are based on public safety and maintenance of current levels of service.
2. Revenue and Operating Expenditures Contingency
    a. These appropriations are intended to stabilize the impacts of cyclical revenue downturns and cost increases that are largely temporary and not within the City's ability to adjust in the short-term.

8.2 Equipment Reserves

Description
Equipment Reserves are established to provide funding for equipment replacement. Currently, the City has established equipment reserves for the following:

8.2.1 Cart Replacement Reserve Fund – This reserve is to fund the replacement of residential carts used in solid waste collection. Internal charges to the Residential Solid Waste department provide annual contributions to this reserve.

8.2.2 Copier Replacement Reserve Fund – This reserve is to fund copier replacement. Internal charges to user departments provide annual contributions to this reserve.

8.2.3 Equipment Depreciation Reserve Fund – This reserve is to fund the replacement of the City's fleet including fire apparatus, solid waste collection trucks, heavy-duty construction equipment and vehicles. Internal charges to user departments provide annual contributions to this reserve.

8.2.4 Information Technology (IT) Reserve Fund – This reserve is to fund IT corporate infrastructure replacement and improvements. Internal charges to user departments provide annual contributions to this reserve.

8.3 Infrastructure Reserves

Description
Infrastructure Reserves are established to provide funding for infrastructure replacement and for new/upgraded infrastructure required due to growth. Currently, the City has established infrastructure reserves for the following:

8.3.1 Brechin Boat Ramp Reserve – This reserve is to fund improvements to the Brechin boat ramp. Annual contributions are from net parking revenues.

8.3.2 Cemetery Care Reserve Fund – This reserve is to fund ongoing care of the cemetery. Revenues from plot sales provide contributions to this reserve.

8.3.3 Community Works Reserve Fund – This reserve was established in 2005 in compliance with an agreement between the Union of BC Municipalities (UBCM) and the City. Annual grant funding from UBCM provides contributions to this reserve and funding from this reserve must meet the eligibility criteria in the agreement.

8.3.4 Facility Development Reserve Fund – This reserve is to fund renewal of the City's recreation facilities and for construction of new recreation facilities. Annual contributions are provided by an allocation of recreation facility revenues.

8.3.5 General Asset Management Reserve Fund – This reserve is to fund upgrading or replacement of infrastructure relating to transportation, storm drainage, facilities, parks amenities and major technology. Annual contributions are provided from an allocation of property taxes.

8.3.6 General Capital Reserve – This reserve is to fund capital projects. Contributions may be from an allocation of General Operating Fund surplus.

8.3.7 NDSS Community Field Reserve Fund – This reserve is to fund capital improvements to the field. Annual net revenues from the NDSS field operations are contributed to this reserve.

8.3.8 Pipers Park Reserve – This reserve provides funding for improvements to Pipers Park. Annual net revenues from the facilities in the park provides contributions to this reserve.

8.3.9 Sewer Reserve – This reserve provides funding for sewer infrastructure assessment programs and renewal. Annual contributions are from sewer user fees in excess of annual operating expenditures, debt repayment and transfer to the Sewer Asset Management Reserve.

8.3.10 Sewer Asset Management Reserve Fund – This reserve is to fund upgrading or replacement of sewer infrastructure. Annual contributions are provided from an allocation of sewer user fees.

8.3.11 Vancouver Island Conference Centre (VICC) Reserve – This reserve provides funding for improvement to VICC. Contributions to this reserve are from a budget allocation.

8.3.12 Water Reserve – This reserve provides funding for water infrastructure assessment programs and renewal. Annual contributions are from water user fees in excess of annual operating expenditures, debt repayment and transfer to the Water Asset Management Reserve.

8.3.13 Water Asset Management Reserve Fund – This reserve is to fund upgrading or replacement of water infrastructure. Annual contributions are provided from an allocation of water user fees.

8.4 Parking Reserves

Description

Parking Reserves are established to provide funding for renewal of parking infrastructure and new parking infrastructure. Currently, the City has established parking reserves for the following:

8.4.1 Fitzwiliam St Parking Reserve – This reserve is to fund parking amenities at the City owned Prideaux Street parking lot.

8.4.2 Parking Reserve Fund – This reserve is to fund renewal of parking infrastructure or new parking infrastructure. Annual contributions are provided from net parking revenues.

8.4.3 Old City Parking Reserve Fund – This reserve is to fund the creation of new off-street parking spaces.

8.5 Property Reserves

Description
Property Reserves are established to provide funding for property acquisitions. Currently, the City has established property acquisition reserves for the following:

8.5.1 Parkland Dedication Reserve Fund – This reserve provides funding for the purchase of parkland pursuant to the *Community Charter*, Section 188. Contributions are provided from cash-in-lieu payments from developers.

8.5.2 Property Acquisition Reserve Fund – This reserve provides funding for property acquisitions. Property acquisitions include property needed to expand City infrastructure, to implement strategic initiatives and for parkland. Contributions to this reserve are either by allocation of budget or operating surplus.

8.5.3 Property Sales Reserve Fund – This reserve provides funding for capital project pursuant to the *Community Charter*, Section 188. Contributions are provided from the sale of civic land.

8.6 Strategic Reserves

Description
Strategic Reserves are established to provide funding for strategic initiatives identified by Council. Currently, the City has established strategic reserves for the following:

8.6.1 Emission Reduction Reserve Fund – This reserve provides funding for projects, plans and initiatives that reduce the City's CO2 emissions to specified targets.

8.6.2 Housing Legacy Reserve Fund – This reserve provides funding to support affordable housing in the community including but not limited to property acquisition and capital investment. Annual budget allocations provide contributions to this reserve.

8.6.3 Special Initiatives Reserves – This reserve will provide funding for short-term initiatives. Contributions to this reserve is from allocation of prior year general operating surplus.

8.6.4 Strategic Infrastructure Reserve Fund - This reserve provides funding for strategic initiatives and capital infrastructure. Annual contributions to this reserve are from casino and Fortis revenues.

8.6.5 Strategic Partnerships Reserve – This reserve provides funding to support consultation with Snuneymuxw First Nation regarding joint projects.

8.6.6 Sustainability Reserve Fund – This reserve provides funding for project expenditures that reduces the City's energy consumption or lowers GHG emissions. Annual budget allocations provide contributions to this reserve.

8.7 Other Reserves

8.7.1 911 Reserve Fund – This reserve provides funding for operating and equipment for 911 operations. Annual contributions are through an annual internal charge to the 911 department.

8.7.2 Casino Reserve – This reserve is available to provide funding for eligible operating or capital expenditures. There are no further contributions to this reserve. This reserve will be eliminated when funding is fully allocated.

8.7.3 Knowles Estate Reserve Fund – This reserve is required due to a bequest. Only accumulated interest may be spent for parks and sport facility improvements in the south end of the City.

8.7.4 Prior Year Carry-Forward Reserve – This reserve is required to allow for unspent budgets to be carried forward to the following year. Where projects are not completed or delayed, budget may be carried forward to the following year. Under specific circumstances, operating budgets may also be carried forward from one fiscal year to the next.

9. Summary of City Reserves

A summary of Reserves and Reserve Funds is provided in Schedule A.

10. Review Date

This Policy should be reviewed every 4 years.

MANAGEMENT, REFERENCES AND APPROVAL:

This policy shall be reviewed in 3 years from its effective date to determine its effectiveness and appropriateness. This policy may be assessed before that time as necessary to reflect organizational change.

Approving Authority:	Council
Approval Date:	Insert Approval Date
Revision Approval Dates:	Insert Date if applicable
Review Due:	Insert Date
Policy Manager:	Director of Financial Services
Department Contact:	Director of Financial Services
Legal References:	Insert if applicable
Cross References:	Insert if applicable

Appendix A

The City has established a framework for Reserves. A Reserve Fund is established for each Statutory Reserve under the authority of the *Community Charter*. In addition to this policy, Statutory Reserves are supported by a bylaw that outlines the purpose and use of each fund.

A summary of reserves is provided below within a framework that supports the primary objectives of this Policy:

I. Financial Stability Reserves
II. Equipment Reserves
III. Infrastructure Reserves
IV. Parking Reserves
V. Property Acquisition Reserves
VI. Strategic Reserves
VII. Special Reserves

1. Financial Stability Reserves

Description

Financial Stability Reserves are required to protect the City's financial stability and resiliency. The primary intent of these reserves is to mitigate risk by providing funding for unknown expenditures arising from operating emergencies or necessity.

Guidelines for Using Reserves

An Adopted Budget Bylaw is required for all appropriations from the Financial Stability Reserves.

1. General Financial Stability Reserve

Contributions to this reserve are through an allocation of General Operating Fund surplus or budget allocation

This reserve can be provide a source of funds where:

I. Expenditures exceed planned due to emergency or necessity
II. Revenues are below planned due to emergency or necessity

2. RCMP Contract Financial Stability Reserve

Contributions to this reserve are through an allocation of RCMP contract surplus, General Operating Fund surplus or budget allocation.

This reserve can provide a source of funds where the actual annual RCMP contract costs exceed the budget estimate.

3. Sanitation Levelling Reserve

Contributions to this reserve are through an allocation of annual Residential Solid-Waste Collection surplus.

This reserve can provide a source of funds where:

I. Expenditures exceed planned due to emergency or necessity
II. Revenues are below planned due to emergency or necessity

4. Sewer Financial Stability Reserve

Contributions to this reserve are through an allocation of Sewer Operating Fund surplus or budget allocation.

This reserve can provide a source of funds where:

I. Expenditures exceed planned due to emergency or necessity
II. Revenues are below planned due to emergency or necessity

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5. Snow and Ice Control Reserve

Contributions to this reserve are through an allocation of annual SNIC surplus, General Operating Fund surplus or budget allocation.

This reserve can provide a source of funds where the actual annual costs for snow and ice control exceed the budget estimate.

6. Water Financial Stability Reserve

Contributions to this reserve are through an allocation of Water Operating Fund surplus or budget allocation.

This reserve can provide a source of funds where:

I. Expenditures exceed planned due to emergency or necessity
II. Revenues are below planned due to emergency or necessity

2. Equipment Reserves

Description

Equipment Reserves provide a funding source for equipment and fleet replacement.

Guidelines for Using Reserves

An Adopted Budget Bylaw is required for all appropriations from the Equipment Reserves.

I. Cart Replacement Reserve Fund

Contributions to this reserve is through annual internal charge to the Residential Solid Waste Collection operating budget.

This reserve provides funding for replacement of residential automated solid waste collection carts.

II. Copier Replacement Reserve Fund

Contributions to this reserve is through annual internal charges to user departments that are included in the department's annual operating budgets.

This reserve provides funding for replacement of the City's copiers.

III. Equipment Replacement Reserve Fund

Contributions to this reserve is through annual internal charges to user departments that are included in the department's annual operating budgets.

This reserve provides funding for replacement of the City's fleet including vehicles, trucks, heavy equipment, fire apparatus and Zambonis.

IV. Information Technology Reserve Fund

Contributions to this reserve is through annual internal charges to user departments that are included in the department's annual operating budgets.

This reserve provides funding for replacement of the City's technology assets including data lines, server hardware and enterprise software.

3. Infrastructure Reserves

Description

Infrastructure Reserves provide a funding source for renewal of current infrastructure and new/upgraded infrastructure required due to growth, new regulatory requirements or service level changes. Contributions to these reserves are through annual budget allocations.

Guidelines for Using Reserves

An Adopted Budget Bylaw is required for all appropriations from the Infrastructure Reserves.

3.1 Brechin Boat Ramp Reserve

Contributions to the reserve are through an allocation of annual net parking revenues at the Brechin Boat Ramp facility.

This reserve provides funding for renewal or improvements to the Brechin Boat Ramp facilities.

3.2 Cemetery Care Reserve Fund

Contributions to the reserve are through annual plot and head stone installation revenues. The City operates the cemetery and maintains a cemetery perpetual care fund in accordance with the Cremation, Interment and Funeral Services Act.

Interest revenues earned by monies in this reserve are available to provide funding for annual cemetery care operating and maintenance expenditures.

3.3 Community Works Reserve Fund

Contributions to the reserve are through annual funding received from the Gas Tax Agreement (GTA) administered by the Union of British Columbia Municipalities (UBCM).

This reserve provides funding for specific types of infrastructure projects as allowed under the terms of the GTA.

3.4 Facility Development Reserve Fund

Contributions to the reserve are through a 20% allocation of contributing recreation facility and program revenues.

This reserve provides funding for renewal of contributing recreation facilities and can provide funding for new recreation facilities.

3.5 General Asset Management Reserve Fund

Contributions to the reserve are through budget allocations from annual property tax revenues.

This reserve provides funding for City infrastructure renewal excluding sewer and water infrastructure.

3.6 General Capital Reserve

Contributions to the reserve are through allocations of General Operating Fund surplus.

This reserve provides funding for capital investment.

3.7 NDSS Community Field Maintenance Fund

Contributions to the reserve are through budget allocation, contribution from School District 68 and net annual operating revenues from user fees for the field.

This reserve provides funding for major capital improvements or field replacement for NDSS Community Field.

3.8 Piper's Park Reserve

Contributions to the reserve are through allocation of net annual operating revenues from rental of building located at Piper's Park.

This reserve provides funding for improvements to Pipers Park.

3.9 Sewer Asset Management Reserve Fund

Contributions to the reserve are through budget allocations from annual sewer user fees.

This reserve provides funding for renewal of the City's sewer infrastructure.

3.10 Sewer Operating Reserve

Contributions to the reserve are through annual net operating allocations from the Sewer Operating Fund.

The Sewer Operating Reserve provides funding for renewal or new/upgraded infrastructure required to maintain levels of service.

3.11 Vancouver Island Convention Centre Reserve

Contributions to the reserve are through unspent annual budget allocation.

This reserve provides funding for renewal of the Port of Nanaimo Centre facility.

3.12 Water Asset Management Reserve Fund

Contributions to the reserve are through budget allocations from annual water user fees.

This reserve provides funding for renewal of the City's water infrastructure.

3.13 Water Operating Reserve

Contributions to the reserve are through annual net operating allocations from the Water Operating Fund.

The Water Operating Reserve provides funding for renewal or new/upgraded infrastructure required to maintain levels of service.

4. Parking Reserves

Description

Parking reserves provide a funding source for renewal and new/upgraded parking infrastructure including parkades and meters.

Guidelines for Using Reserves

An Adopted Budget Bylaw is required for all appropriations from the Infrastructure Reserves.

4.1 Fitzwilliam St Parking Reserve

There are no specified future contributions to this reserve.

This reserve provides funding for improvements to parking amenities at the Prideaux Street Parking lot.

4.2 Old City Parking Reserve Fund

Contributions to this reserve are from cash-in-lieu payments from developers.

This reserve provides funding for the creation of new off-street parking spaces

4.3 Parking Reserve Fund

Contributions to this reserve are through annual net operating allocations from parking operations.

This reserve provides funding for renewal of current parking infrastructure and new parking infrastructure.

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5 Property Acquisition Reserves

Description

Property Acquisition Reserves provide funding sources to purchase land needed for new infrastructure projects and for new parkland. Contributions to these reserves are through sale of City owned property and through annual budget allocations subject to Council approval.

Guidelines for Using Reserves

An Adopted Budget Bylaw is required for all appropriations from the Infrastructure Reserves.

5.1 Parkland Dedication Reserve Fund

Contributions for this reserve are received from development in lieu of parkland and from the sale of City parkland. This reserve is required by the *Community Charter*.

This reserve provides funding for purchase of City parkland.

5.2 Property Acquisition Reserve Fund

Contributions to this reserve are through unspent annual budget allocation.

This reserve provides funding for the purchase of new land.

5.3 Property Sales Reserve Fund

Contributions for this reserve are received from the sale of City land and improvements. This reserve is required by the *Community Charter*.

This reserve provides funding for purchase of City land and improvements.

6 Strategic Reserves

Description

Strategic Reserves provide funding sources to advance and implement priorities identified in strategic and master plans adopted by Council.

Guidelines for Using Reserves

An Adopted Budget Bylaw is required for all appropriations from the Infrastructure Reserves.

6.1 Emission Reduction Reserve Fund

Contributions to the reserve are through annual budget allocation.

This reserve provides funding for projects, plans and initiatives that reduce the City's community wide CO2 emissions to between 50% and 58% below 2010 levels by 2030, and between 94% and 107% below 2010 levels by 2050.

6.2 Housing Legacy Reserve Fund

Contributions to this reserve are through annual budget allocation.

This reserve provides funding to support affordable housing in the community including but not limited to property acquisition and capital investment.

6.3 Special Initiatives Reserve

Contributions to this reserve are through an allocation of General Operating Fund surplus.

This reserve provides funding to implement specific initiatives in the subsequent year.

6.4 Strategic Infrastructure Reserve Fund

Contributions to this reserve are through annual budget allocation.

This reserve provides funding to implement Council's strategic initiatives and capital investment.

6.5 Strategic Partnerships Reserve

Contributions to this reserve are through an allocation of General Operating Fund surplus or budget allocation.

This reserve provides funding for consultation with Snuneymuxw First Nation regarding joint projects.

6.6 Sustainability Reserve Fund

Contributions to the reserve are through annual budget allocation.

This reserve provide funding for investigation and implementation of new equipment or infrastructure improvements that reduce the City's energy consumptions or will lead to lower GHG emissions and meet payback criteria.

7 Other Reserves

Description

Reserves can be established as a result of a bequest or for a one-time expenditure. The City currently has the following special reserves.

Guidelines for Using Funds

An Adopted Budget Bylaw is required for all appropriations from the Infrastructure Reserves.

7.1 911 Reserve Fund

Contributions to this reserve is through annual internal charges that are included in the 911 operating budget.

This reserve provides funding for replacement of the City's 911 call answering equipment and furniture.

7.2 Casino Reserve

This reserve will be eliminated once all current funds have been allocated.

This reserve provides funding for eligible expenditures in compliance with Provincial agreement.

7.3 Knowles Estate Reserve Fund

This reserve was established as a bequest, with the accumulated interest to be used for park and youth sports facility improvements in the south end of Nanaimo.

7.4 Prior Year Carry Forward Reserve

Contributions to this reserve are budget allocations for specific projects or operating initiatives that were delayed or not completed in the current year.

This reserve provides funding for delayed or incomplete projects or operating initiatives to be completed in a subsequent year.

Reserve Summary

Operating Reserve
Statutory Reserve
Statutory Reserve (Legislated)

Reserves	Primary Purpose	Reserve Type	Annual Contributions Source	2022 Estimated Closing Reserve Balance	Basis for Target Balance	2023 Minimum Target Balance	Target Recalculation Frequency
Financial Stability Reserves							
General Financial Stability	Risk mitigation for unplanned expenses or decrease in revenues	Operating	Allocation of prior year surplus if available or budget allocation	$ 15,891,688	Minimum - $15,000,000 Maximum - 60 days of prior year's budgeted general operating expenditures	$ 15,000,000	**Minimum** balance every 5 years (Next update 2025) **Maximum** annually
RCMP Contract Financial Stability	Risk mitigation for unplanned expenses	Operating	Allocation of prior year surplus if available or budget allocation	$ 26,558	% of prior year's budgeted contract expense not budgeted	$ 1,611,855	Annually
Sanitation Leveling	To smooth user rate increases and fund sanitation projects	Operating	Allocation of Sanitation Surplus or allocation from sanitation budget	$ 675,898			
Sewer Financial Stability	Risk mitigation for unplanned expenses or decrease in revenues	Operating	Allocation of net sewer revenues or sewer budget allocation	$ 500,000	Minimum - $500,000 Maximum - 60 days of prior year's budgeted operating expenditures	$ 500,000	**Minimum** balance every 5 years (Next update 2025) **Maximum** annually
Snow and Ice Control	Risk mitigation for actual costs higher than annual budget estimate.	Operating	Allocation of prior year surplus if available or budget allocation	$ 1,200,000	10 year average SNIC expense plus 50%	$ 1,330,000	Every 3 Years - (Next Update 2026)
Water Financial Stability	Risk mitigation for unplanned expenses or decrease in revenues	Operating	Allocation of net water revenues or water budget allocation	$ 1,701,055	Minimum - $1,700,000 Maximum - 60 days of prior year's budgeted operating expenditures	$ 1,700,000	**Minimum** balance every 5 years (Next update 2025) **Maximum** annually
			Total Financial Stability Reserves	**$ 19,995,199**		**$ 20,141,855**	

Reserve Summary

Operating Reserve
Statutory Reserve
Statutory Reserve (Legislated)

Reserves	Primary Purpose	Reserve Type	Annual Contributions Source	2022 Estimated Closing Reserve Balance	Basis for Target Balance	2023 Minimum Target Balance	Target Recalculation Frequency
Equipment Reserves							
Cart Replacement	Planned cart replacement program	Statutory	Annual budget allocation	$ -	minimum 1% of replacement cost plus funding for 10 year replacement plan	$ 42,000	Every 5 - 10 Years (Next Update 2025)
Copier Replacement	Planned copier replacement program	Statutory	Annual Internal Charges	$ 387,778	$50k (last 10 year average) plus 10 year replacement plan	$ 50,000	Every 5 - 10 Years (Next Update 2025)
Equipment Depreciation	Planned replacement of City fleet and fleet shop equipment	Statutory	Annual Internal Charges plus net fleet operations	$ 7,460,754	minimum 1% of replacement cost plus funding for 10 year replacement plan	$ 270,000	On update of 20 Year Investment Plan/ Every 5 - 10 Years
Information Technology	Planned IT infrastructure projects	Statutory	Annual Internal Charges	$ 1,027,871	$575,000 (last 10 year average) plus 10 year project plan	$ 575,000	Every 5 - 10 Years (Next Update 2025)
			Total Equipment Reserves	**$ 8,876,403**		**$ 937,000**	

Reserve Summary

Operating Reserve
Statutory Reserve
Statutory Reserve (Legislated)

Reserves	Primary Purpose	Reserve Type	Annual Contributions Source	2022 Estimated Closing Reserve Balance	Basis for Target Balance	2023 Minimum Target Balance	Target Recalculation Frequency
Infrastructure Reserves							
Brechin Boat Ramp	Renewal or improvements to the Brechin Boat ramp facilities	Operating	Parking revenues	$ 49,909			
Cemetery Care	Income can be used for the upkeep of cemeteries and their attached grounds, fixtures and amenities.	Statutory	Revenues from plot sales and headstone installations	$ 632,968			
Community Works Fund	grounds, fixtures and amenities.	Statutory	UBCM grant	$ 4,618,919			
Facility Development	Planned projects for facility renewal/upgrade for contribution facilities or for new community recreational facilities that will contribute to reserve	Statutory	Allocation of recreation facility revenues	$ 3,086,649	$1 million (last 10 year average) plus 10 year project plan	$ 1,000,000	Every 5 - 10 Years (Next Update 2025)
General Asset Management	Planned renewal projects and assist factor for DCC projects	Statutory	Allocation of annual property taxes	$ 6,804,870	minimum 0.25% of replacement cost plus funding for 10 year capital program	$ 3,487,500	On update of 20 Year Investment Plan/ Every 5 - 10 Years
General Capital	Infrastructure investment	Operating	Allocation of prior year surplus if available or budget allocation	$ 1,274,288			
NDSS Community Field Maintenance	Planned projects for NDSS Community Field replacement/improvements	Statutory	Annual contributions from the City and SD68 plus any net rental revenues	$ 163,586			
Pipers Park	Planned projects for improvements to Pipers Park	Operating	Net rental revenues from Military Museum if available	$ 109,706			
Sewer Asset Management	Planned renewal projects and assist factor for DCC projects	Statutory	Allocation of annual user fees	$ 10,888,480	minimum 0.25% of replacement cost plus funding for 10 year capital program between AM and operating reserve	$ 1,492,500	On update of 20 Year Investment Plan/ Every 5 - 10 Years
Sewer Operating	Planned projects	Operating	Net sewer operating revenues	$ 5,036,853	Yes - see Sewer AM Reserve		
Water Asset Management	Planned renewal projects and assist factor for DCC projects	Statutory	Allocation of annual user fees	$ 13,025,533	minimum 0.25% of replacement cost plus funding for 10 year capital program between AM and operating reserve	$ 2,440,000	On update of 20 Year Investment Plan/ Every 5 - 10 Years
Water Operating	Planned projects	Operating	Allocation of net water operating revenues	$ 3,508,413	Yes - see Water AM Reserve		
Vancouver Island Conference Centre (VICC)	Planned projects for VICC renewal	Operating	Unspent portion of annual contingency budget	$ 517,519			
			Total Infrastructure Reserves	**$ 49,717,693**		**$ 8,420,000**	

Reserve Summary

Operating Reserve
Statutory Reserve
Statutory Reserve (Legislated)

Reserves	Primary Purpose	Reserve Type	Annual Contributions Source	2022 Estimated Closing Reserve Balance	Basis for Target Balance	2023 Minimum Target Balance	Target Recalculation Frequency
Parking Reserves							
Fitzwilliam St Parking	Used for upgrading the Prideaux Street Parking facility	Operating	Paid in lieu of parking when former ARC building was purchased	$ 142,868			
Off Street Parking	Funding for transportation infrastructure that supports walking, bicycling, public transit or other alternative forms of transpiration	Statutory	Cash in Lieu payments from developers	$ 72,813			
Old City Neighbourhood Parking	Creation of new off-street parking spaces	Statutory	Cash in Lieu payments from developers	$ 97,794			
Parking Reserve	Planned capital projects	Statutory	Net parking revenues	$ 883,393			
			Total Parking Reserves	**$ 1,196,868**		**$ -**	

Reserve Summary

Operating Reserve
Statutory Reserve
Statutory Reserve (Legislated)

Reserves	Primary Purpose	Reserve Type	Annual Contributions Source	2022 Estimated Closing Reserve Balance	Basis for Target Balance	2023 Minimum Target Balance	Target Recalculation Frequency
Property Reserves							
Parkland Dedication	Purchase of parkland only	Statutory	Cash in Lieu payments from developers	$ 846,263			
Property Acquisition	Property purchases	Statutory	Allocation of unspent annual budget for property acquisition plus allocation of prior year surplus	$ 2,782,262			
Property Sales	Planned capital projects	Statutory	Sale of civic land	$ 2,158,172			
			Total Property Reserves	**$ 5,786,697**		**$ -**	

Reserve Summary

Operating Reserve
Statutory Reserve
Statutory Reserve (Legislated)

Reserves	Primary Purpose	Reserve Type	Annual Contributions Source	2022 Estimated Closing Reserve Balance	Basis for Target Balance	2023 Minimum Target Balance	Target Recalculation Frequency
Strategic Reserves							
Housing Legacy	Funding for development of strategies and partnerships with external agencies for low barrier housing	Statutory	Annual budget allocation plus cash in lieu from developers and MRDT for online accommodations	$ 3,303,338			
Special Initiatives	Provide funding for short-term initiatives	Operating	Allocation of prior year operating surplus	$ 2,275,350			
Strategic Infrastructure	Planned strategic and capital projects	Statutory	Annual Fortis revenues and 67% of annual Casino revenues	$ 3,107,097	15% of prior year's budgeted annual contributions	$ 320,250	Annually
Strategic Partnerships	Funding for joint initiatives	Operating	Allocation of prior year operating surplus	$ 43			
Climate Action	Provide funding for projects, plans and initiatives that reduce the City's community wide CO2 emissions to specified targets in 2030 and 2050	Statutory	Annual budget allocation plus annual contributions from the LGCAP Program	$ 713,679			
			Total Strategic Reserves	**$ 9,399,507**		**$ 320,250**	

Reserve Summary

Operating Reserve
Statutory Reserve
Statutory Reserve (Legislated)

Reserves	Primary Purpose	Reserve Type	Annual Contributions Source	2022 Estimated Closing Reserve Balance	Basis for Target Balance	2023 Minimum Target Balance	Target Recalculation Frequency
Other Reserves							
911	To offset the fire dispatch function	Statutory	Call/answer levy that exceeds the cost of Central Island 911 dispatch service	$ 264,048			
Casino	Eligible expenditures	Operating	None	$ -			
Knowles Estate	For parks and youth sport facility improvements in the South Nanaimo	Statutory	Required due to bequest	$ 422,909	Compliance with bequest	$ 385,952	Bequest
Prior Year Carry Forward	To facilitate budget carry forwards process	Operating	Specific project or operating budget allocations	$ 32,500			
			Total Other Reserves	**$ 719,457**		**$ 385,952**	

Reserve Summary

Operating Reserve
Statutory Reserve
Statutory Reserve (Legislated)

Reserves	Primary Purpose	Reserve Type	Annual Contributions Source	2022 Estimated Closing Reserve Balance	Basis for Target Balance	2023 Minimum Target Balance	Target Recalculation Frequency
DCC Reserves							
Drainage (Storm)	Fund specific drainage projects	Statutory	Developer Contributions	$ 13,949,604			
Parks	Fund specific parks projects	Statutory	Developer Contributions	$ 1,635,882			
Roads	Fund specific roads projects	Statutory	Developer Contributions	$ 13,470,357			
Sanitary Collection	Fund specific sanitary collection projects	Statutory	Developer Contributions	$ 3,835,962			
Water Distribution	Fund specific water distribution projects	Statutory	Developer Contributions	$ 5,826,352			
Water Supply	Fund specific water supply projects	Statutory	Developer Contributions	$ 13,251,664			
			Total DCC Reserves	**$ 51,969,821**		**$ -**	
			Total All Reserves	**$ 147,661,645**		**$ 30,205,057**	

Water & Sewer Utility Rate Review Introduction

November 16, 2022

Water & Sewer – An Overview

City of Nanaimo owns and operates two self-funded utilities:

- Drinking water (supply, treatment, distribution)
- Sanitary sewer collection

Cornerstones of Service

Level of service:

- Public health – clean drinking water, removal of sewage
- Fire protection
- Environmental health
- Water is a shared resource
- Near zero failure

How is this service provided?

Infrastructure:

- Water supply & distribution: ~$1 Billion
- Sewer collection system: ~$600 Million

Utility Rate Review

Leadership in Best Practice

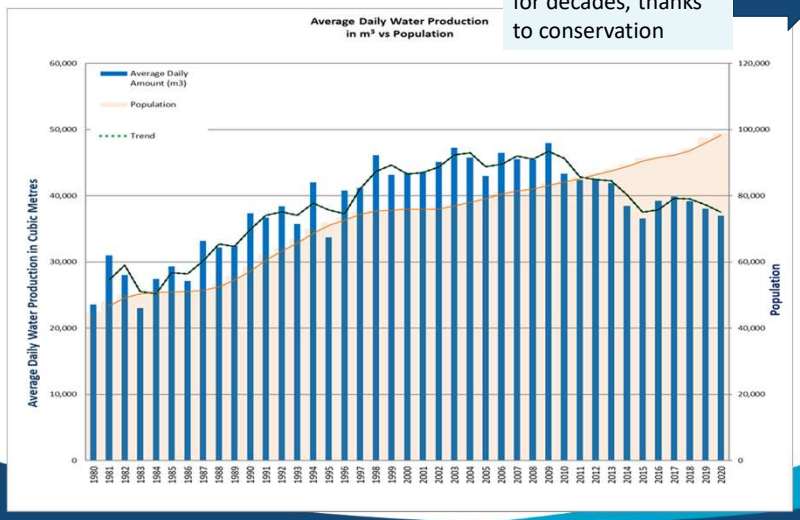
The City of Nanaimo is a leader in adopting utilities management best practices:

- Implemented Universal water metering (1983)
- Implemented Full cost recovery (1992)
  - Annual fee increases to address infrastructure renewal and annual operating expenditures
- Implemented rate structures to promote user equity and conservation (1992)
  - Expanded block rate
- Developed robust long-term planning processes (2007)
- Conservation strategies

Utility Rate Review

Water Production

Defer dam expansion for decades, thanks to conservation



Utility Rate Review

Utility Rate Review

Utility Rate Review

Utility Rate Review Purpose

Financial sustainability

Does the City have adequate utility revenues to provide sustainable water and sanitary sewer services?

Utility Rate Structures

Do the current rate structures for the water and sanitary sewer utilities effectively and efficiently support user equity, conservation and administrative efficiency?

Utility Rate Setting

Guiding Principles

The Utility User Rate review followed best practice guiding principles:

- Conservation
- Economic Efficiency
- Equity
- Full Cost Recovery
- User Pay
- Transparency

Methodology

The Utility Rate Review established a framework and tools and included the following key steps:

- Review of best practices
- Review the City's current rate structure, billing and water consumption data
- Technical analysis including revenue requirements, cost of service and rate structure design analysis

Utility Rate Review

Methodology

- Development of financial models using the 5 year draft financial plan and 10 year draft project plan
- Utilization of dedicated utility rate setting software WATERWORTH
- Survey of other municipalities' utility rate structures
- Consultation with City departments and staff responsible for utility management

Utility Rate Review

Incremental Improvements

Focus was on incremental improvements that were:

- Achievable
- Effective
- Easily understood

Future Reviews

Will focus on further improvements to user equity, transparency and efficiency

Utility Rate Review

Financial Review

Does the City have adequate utility revenues to provide sustainable water and sanitary sewer services?

Utility Rate Review

Financial Analysis and Modeling

- 2023 – 2027 Draft Financial Plan
- Water and Sanitary Sewer departmental 10 Year project plans
- Current debt repayment
- Contributions and withdrawals to reserves and projected year end balances
- Key assumptions for growth, water conservation and inflation

Utility Rate Review

Water Utility

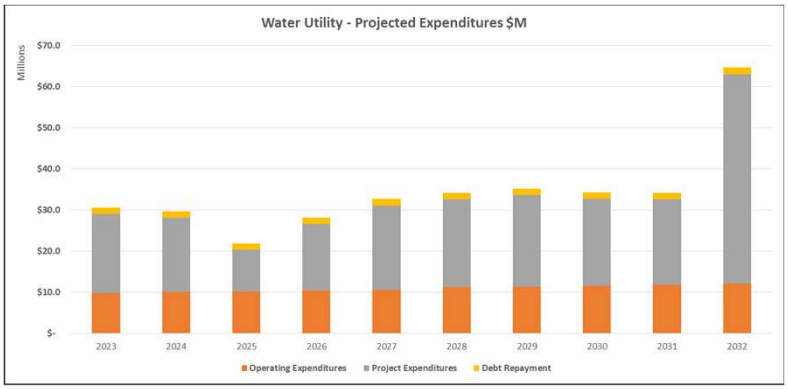
A number of significant projects currently planned in the later years of the project plan are still subject to cost estimate and timing changes including:

- City wide meter replacement project
- Seismic upgrades for the South Fork Dam project
- Secondary intake to the Control Building project

Borrowing may be required where reserve balances are not adequate to fund infrastructure investment.

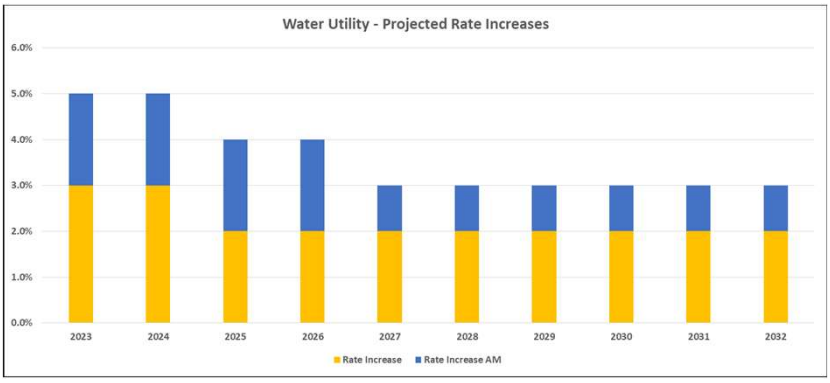
Utility Rate Review

Water Utility



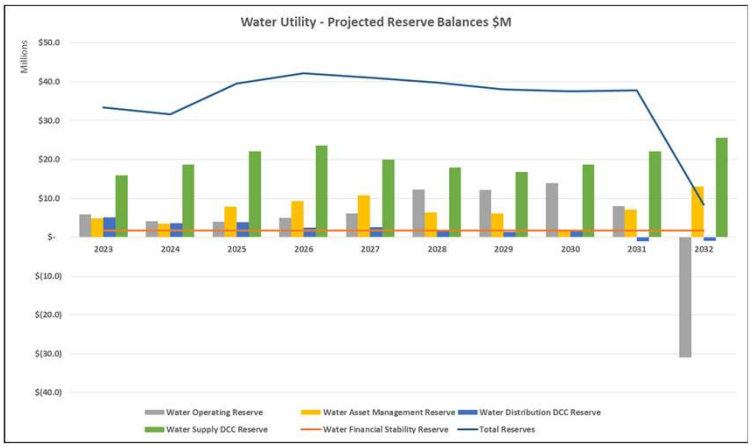
Utility Rate Review

Water Utility



Utility Rate Review

Water Utility



Utility Rate Review

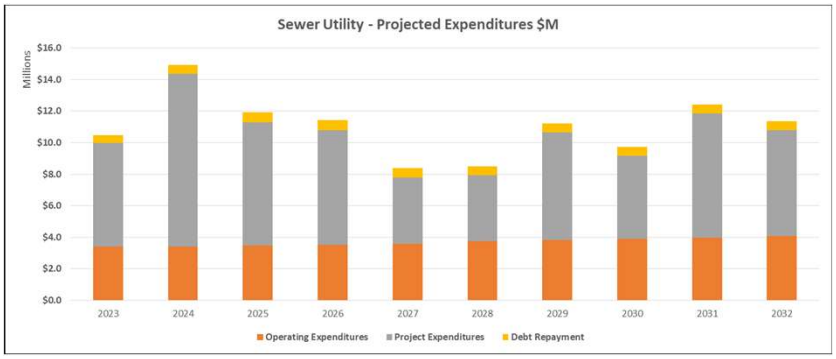
Sewer Utility

Ongoing infrastructure assessment and planning is expected to require the inclusion of additional projects in the next 10 year plan.

These projects will require additional funding from reserves.

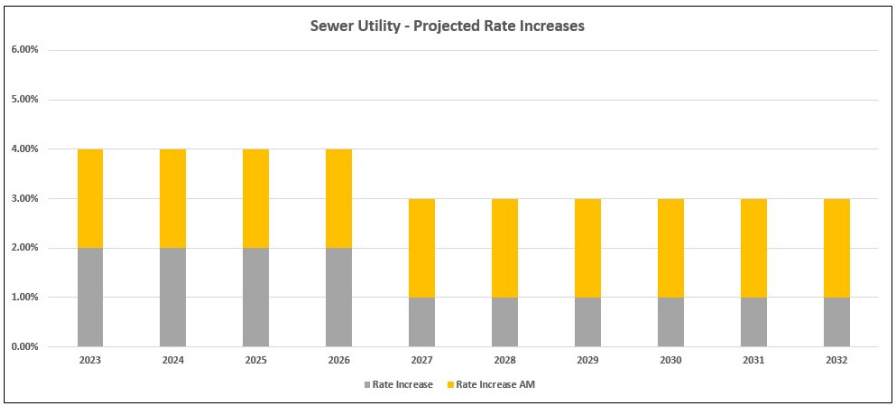
Utility Rate Review

Sewer Utility



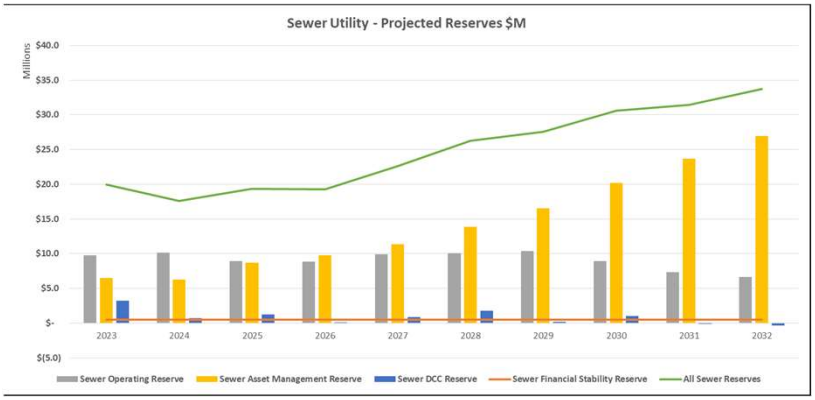
Utility Rate Review

Sewer Utility



Utility Rate Review

Sewer Utility



Utility Rate Review

Overhead Allocation

Resources budgeted in the General Fund also support water and sanitary sewer services:

- Corporate (e.g. Legislative Services, HR, Finance)
- Engineering
- Public Works

New Overhead Allocation utilizes an appropriate allocation base:

- # of FTEs
- % of annual expenditures
- % of project expenditures

Utility Rate Review

Utility Rate Structure Review

Does the current rate structures for the Water and Sanitary Sewer utilities effectively and efficiently support user equity, conservation and administrative efficiency?

Utility Rate Structure Review

The review included evaluation of:

- Best Practices
- Survey of other Municipalities
- Review of City's current rate structures

Rate structures should support:

- User Equity
- Collection of adequate Revenues
- Understandability

Rate Structure Key Elements

- Customer Classifications
  - Single Family Residential
  - Multi-Family Residential
  - Non-Residential – Commercial, institutional, etc.
- Billing Frequency
- Schedule of Charges

Utility Rate Review

Recommendations Water Utility

Key Rate Structure Review Recommendations

- Residential
  - New Multi-Family Residential Classifications
  - Reduce volumetric blocks from 6 to 4
- Multi-Family Residential 3+ units and Non-Residential
  - Implement base rate charge by meter connection size
  - Implement single volumetric rate

Utility Rate Review

Recommendations
Sewer Utility

Key Rate Structure Review Recommendations

- Single Family and Multi-Family Residential
  - No Change
- Non-Residential
  - Implement a base rate by property
  - Implement a single volumetric rate

Utility Rate Review

Next steps

November 24 - Further Discussion of the Utility Rate Structure Recomendations

↓

December 1- Council concideration of recommendations

↓

December 5 - First 3 readings of All Utility Rate Bylaws*

↓

December 19 - Adoption of all*

*Ideally, Bylaws are effective Jan 1 for administrative efficiency

Utility Rate Review

Questions

CITY OF NANAIMO
THE HARBOUR CITY

Information Report

DATE OF MEETING NOVEMBER 16, 2022

AUTHORED BY LAURA MERCER, DIRECTOR, FINANCE

SUBJECT **UTILITY RATE REVIEW – WATER AND SANITARY SEWER UTILITIES**

OVERVIEW

Purpose of Report:

To provide Council with the results of the Utility Rate Review done for the water and sanitary sewer utilities.

BACKGROUND

The City of Nanaimo owns and operates a water utility and a sanitary sewer utility with a service area of 91 square kilometers, serving over 100,000 residents and 6,000 businesses. These utilities require significant annual operating resources and have over $1.6 billion invested in infrastructure. Each utility must generate adequate revenues to pay for annual operating expenditures, investment in new and renewed infrastructure and for debt repayment.

The City's water system is made up of dams, reservoirs, facilities (pump/pressure reducing control stations), a water treatment plant and over 600 kilometers of supply and distribution mains. In compliance with Provincial regulations, the City constructed a new water treatment plant which began operations in 2015. The plant cost $75 million to construct and was partially funded from $19 million in senior government grants. The City also borrowed $22.5 million with annual repayments funded from water user fees.

In 1983, the City implemented universal water metering. Properties are connected to the City's water distribution system through a metered service connection. The City has undertaken many water conservation initiatives over the last 20+ years that have had a positive impact on reducing water consumption per capita. The City's daily residential water production per capita has decreased 28% since 2009, 299 litres per capita in 2009 to 216 litres per capita in 2021.

The City's sanitary sewer system is made up of collection mains and lift station facilities. There are over 550 kilometers of sanitary sewer mains. Sanitary sewer treatment is provided by the Regional District of Nanaimo (RDN). Property taxes collected by the City on behalf of the RDN include a levy to cover the costs of sanitary sewer treatment.

In 1992, the City implemented full-cost recovery. Full-cost recovery requires generating adequate revenues to fund all costs to provide sustainable, acceptable and the mandated level of service for utility customers. User fees fund annual operating and maintenance expenditures. Infrastructure investment is funded through user fees, Development Cost Charges and when appropriate Debt. The City actively pursues senior government grant programs to help offset infrastructure costs.

The City has many robust long-term planning processes. These integrated planning processes use lifecycle, current infrastructure condition and capacity information to identify long-term infrastructure investment needs. The City's 10 Year and Five Year Plans prioritize and identify the cost, timing and scope of work for each project.

DISCUSSION

Like other municipalities, the City is challenged to deliver these critical services in an affordable, effective and efficient manner for the community.

Best practices for utilities management include: full-cost recovery, equitable rate structures, long-term planning processes, and demand management (water conservation). The City is a leader in utilizing best practices through implementing universal water metering in 1983, full-cost recovery in 1992 and Development Cost Charges (DCC). DCCs are paid by developers and contribute to the cost of new utility infrastructure required due to growth. As well, the City has undertaken many initiatives to support robust long term planning including the implementation of Water and Sewer Asset Management Reserve Funds in 2013.

While the City has undertaken many funding reviews on these utilities, the rate structure has not changed in many years. The decision was made to do a Utility Rate Review that focused on two key question for each utility. See Attachment A.

- Does the City have adequate utility revenues to provide sustainable Water and Sanitary Sewer services?
- Do the current rate structures for the Water and Sanitary Sewer utilities effectively and efficiently support user equity, conservation and administrative efficiency?

Financial Review

The financial review answered the question:

Does the City have adequate utility revenues to provide sustainable Water and Sanitary Sewer services?

The review included financial analysis and modelling using the draft five year financial plan, the draft ten year project plan, utility reserves data and customer billing data to provide guidance on future rate increase recommendations. The draft financial and project plans reflect recent inflationary pressures.

The review also included evaluation and recommended changes to the City's current overhead allocation for corporate, engineering and public works services that are budgeted in the General Fund and provide support for the Water and Sanitary Sewer utilities.

Utility Rate Recommendation

The 2022 – 2026 Financial Plan includes annual rate increases of 5% for water fees with rate increases for sewer fees ending in 2022. Based on financial modelling the following changes are recommended and have been incorporated into the 2023 – 2027 Draft Financial Plan, for Council consideration, to support funding needed to maintain delivery of both utilities.

Water Utility

Year(s)	Asset Management Increase	Operating Increase	Total Increase
2023 - 2024	2%	3%	5%
2025 – 2026	2%	2%	4%
2027	2%	1%	3%

Sanitary Sewer Utility

Year(s)	Asset Management Increase	Operating Increase	Total Increase
2023 - 2026	2%	2%	4%
2027	2%	1%	3%

Overhead Allocation Recommendation:

The current overhead calculation methodology has not been updated in many years. The review identified improvement to this calculation. This change reduces the burden on property taxes and appropriately allocates costs to each utility.

The recommended change relating to the overhead allocation is:

- Change overhead allocation methodology to better reflect the relative demand each utility places on shared resources

The recommended change in overhead allocation has been incorporated in the 2023 – 2027 Draft Financial Plan, for Council consideration.

Utility Rate Structure Review

The rate structure review answered the question:

> *Do the current rate structures for the Water and Sanitary Sewer utilities effectively and efficiently support user equity, conservation and administrative efficiency?*

The rate structure review included evaluation of utility rate setting best practices, a survey of other municipalities' utility rate structures and assessment of the City's current rate structures and customer billing data. Utility rate structures include three key elements: customer classifications, billing frequency and a schedule of charges. Rate structures should support user equity, collection of adequate revenues and be understandable. In consultation with City departments and staff responsible for management of each utility, recommendations were developed for incremental improvements to each utility's current rate structures.

Water Utility

All users currently pay both a base rate and a volumetric rate for their water service.

Water Base Rate:

Currently the same base rate is used for all customer types. However, best practices recommend considering a base rate that increases with meter connection size. The rationale is based on the understanding that the cost of service is higher for larger capacity meter connections due to the

upsized infrastructure and higher cost replacement components required to maintain adequate water pressure.

The City's Engineering department developed ratios based on meter and related service connection costs. This approach was used as it was most readily available and recognizes cost differences for larger meter connections. Customers with larger service connections, including combination meter connections, will pay a higher base rate or fixed charge to better reflect their higher demand on shared infrastructure and increased water capacity and availability.

The following are the water base rate recommendations;

- Maintain the current base rate by service connection for Single-Family Residential and Multi- Family Residential with 2 units;
- Maintain the current base rate by service connection for dedicated firelines;
- Implement a base rate by meter size service connection for Multi-Family Residential 3+ units and Non-Residential customers; and
- Eliminate additional base rate for combination meters

Water Volumetric Rate:

The City's current volumetric rate includes six (6) increasing blocks for all customers. Best practices recommend implementing a volumetric rate with two or more blocks. The first, or the first and second blocks, are generally tied to a residential customer's indoor and outdoor use. Additional blocks can be tied to the cost of water resources required to provide services in excess of Levels 1 and 2. The last block is infinite so as not to limit the amount of water than can be purchased.

The following are the water volumetric rate recommendations

- Reduce increasing volumetric rate blocks from six to four blocks to improve clarity and administrative efficiency;
- Reallocate the current total water consumption in levels 1 and 2 (220 gallons). Level 1 to apply to the first 110 gallons/day and level 2 to apply to the next 110 gallons/day. This reallocation better aligns with average single family residential demand for indoor and outdoor purposes;
- Reduce the % block increase from level 1 to level 2 from the current 462% to 250%;
- Increase the % block increase to 175% for levels 3 and for level 4 to better recognize the increased costs for higher levels of demand, improve user equity and further incent conservation;
- Continue to utilize the increasing volumetric rate for Single-Family Residential and Multi-Family Residential with 2 units customers only;
- Implement a single volumetric rate for Multi-Family Residential 3+ units and for all Non-Residential customers to recognize their reduced ability to manage water consumption; and
- Consider other strategies to support water conservation for Multi-Family Residential 3+ units and Non-Residential customers.

Sanitary Sewer Utility

Residential users currently pay only a base rate for sewer use while non-residential users pay a base rate and/or a volumetric rate depending on a variety of factors.

Sanitary Sewer Base Rate

Currently, all residential properties are charged a base rate only per residential unit. While all non-residential customers (excluding hotels, motels and campgrounds) are charged a base rate only based on specific features of each premise and includes a maximum daily water allocation.

As well, the base rate for all non-residential customers (excluding hotels, motels and campgrounds) includes a significant water consumption allocation. The allocation is the same for each customer and if it is exceeded, the customer is charged the decreasing volumetric rate only. Hotels, motels and campgrounds are currently charged a decreasing volumetric rate only. These customers are not charged a base rate.

Best practices recommends using a multi-part rate that includes a base rate and a volumetric rate for all customers.

Based on the review of sanitary sewer base rates, the key recommendations are:

- Maintain the current base rate structure for single Family Residential (by property) and all Multi-Family Residential (by residential unit) properties;
- Implement a base rate by property for Non-Residential customers; and
- Eliminate the base rate by specific features of a property and maximum daily water allocation for Non-Residential customers.

A volumetric rate for residential customers based on water consumption is not recommended at this time. This may considered as future improvement once the planned meter replacement program has been completed and meter readings can be increased to a minimum of four times a year to better align with annual seasons

Sanitary Sewer Volumetric Rate

The current Schedule of Charges for the Sanitary Sewer Utility does not include a volumetric rate for customers (excluding hotels, motels and campgrounds). Decreasing volumetric rates are charged for hotels, motels and campgrounds and for Non-Residential customers who exceed their base rate water allocation.

Based on the utility review, the recommendations for a sanitary sewer volumetric rate are:

- Implement a single volumetric rate for Non-Residential customers based on metered water consumption to improve user equity; and
- Implement a policy and process where a customer may apply for an adjustment to water consumption volumes for calculating sanitary sewer volumetric charges. There may be Non-Residential properties that consume significant amounts of water that is not collected by the sanitary sewer system (e.g. irrigation). This adjustment may require the installation of a separate meter.

The proposed single volumetric rate is higher than the current decreasing volumetric rate levels. There will be a shift from base rate charges only to a combination of base rate and volumetric charges for Non-Residential customers.

FINANCIAL IMPLICATIONS

The proposed rate structures must still collect adequate annual revenues for each utility; however, the proposed changes may impact charges for individual customers.

Some Non-Residential customers may see a decrease in Water Utility charges due to the single volumetric rate and an increase in Sewer Utility charges due to the proposed single volumetric rate based on water consumption.

It can be acknowledged that currently some customers may not be paying an equitable share of the utility's costs and some customers may be paying more than their equitable share. Implementation of the recommended rate structure changes will have impacts for some customers – some customers may pay more and some may pay less. The purpose and rationale of the proposed rate structure changes is to provide a rate structure that equitable for the largest number of users.

NEXT STEPS

The intention of this report was to introduce the Utility Rate Review to Council with further discussion during the budget presentations. The timeline of events is as follows:

2022-NOV-24	Further discussion on the recommendations outlined in the Utility Rate Review Report (Attachment A).
2022-DEC-01	Decision Slides relating to the Utility Rate Review will be presented for Councils consideration
2022-DEC-05	Water, Sanitary Sewer and Garbage Bylaws are updated with Council decisions and are presented for 1st 3 readings
2022-DEC-19	Adoption of Water, Sanitary Sewer and Garbage Bylaws
2023-JAN-01	Utility Billings will start based on the recommendations made by Council

SUMMARY POINTS

- The City has undertaken a comprehensive Utility Rate Review of its Sanity Sewer and Water utilities.
- The Utility Rate Review looked at financial sustainability as well as rate structures that will improve user equity, conservation and administrative efficiency.
- Both Financial and Rate Structure changes have been identified and the recommendations are outlined in detail in the Utility Rate Review Report (Attachment A).

ATTACHMENTS

Attachment A: Utility Rate Review – Water and Sanitary Sewer Utilities Report.

Submitted by:

Laura Mercer
Director, Finance

Concurrence by:

Bill Sims
General Manager,
Engineering and Public Works

CITY OF NANAIMO
THE HARBOUR CITY

Utility Rate Review

WATER AND SANITARY SEWER UTILITIES

Presented to Council fall 2022

The City of Nanaimo is situated on the Traditional Territory of the Snuneymuxw First Nation.

CONTENTS

EXECUTIVE SUMMARY

Overview

The City of Nanaimo owns and operates a water utility and a sanitary sewer utility with a service area of 91 square kilometers, serving over 100,000 residents and 6,000 businesses. These utilities require significant annual operating resources and have over $1.6 billion invested in infrastructure. Each utility must generate adequate revenues to pay for annual operating expenditures, investment in new and renewed infrastructure and for debt repayment. Like other municipalities, the City is challenged to deliver these critical services in an affordable, effective and efficient manner for the community.

The City of Nanaimo has undertaken a comprehensive Utility Rate Review to:

- Evaluate the financial sustainability of the Water and Sanitary Sewer utilities; and
- Evaluate and recommend changes to utility rate structures that will improve user equity, clarity and administrative efficiency.

Best Practices

The City of Nanaimo is a leader in adopting utilities management best practices through:

- Developing robust long-term planning processes;
- Implementing full-cost recovery for each utility;
- Implementing rate structures to promote user equity and conservation; and
- Implementing universal metering.

Guiding Principles

Best practice guiding principles provided a framework for the review process and can be clearly linked to the recommendations. These principles include promoting conservation and improving economic efficiency, user equity, full cost recovery and transparency.

Methodology

The Utility Rate Review process included the following key steps:

- Evaluation of current utility rate management best practices;
- Analysis of the City's current rate structures, customer water consumption and billing data;
- Financial analysis and modelling; and
- Consultation with City departments and staff responsible for each utility's operations and planning, financial management and revenue collection.

Utility Financial Review

The review included financial analysis and modelling using the current five year financial plan, ten year project plan, utility reserves data and customer billing data to provide guidance on future rate increase recommendations. The current financial and project plans reflect recent inflationary pressures.

The review also included evaluation and recommended changes to the City's current overhead allocation for corporate, engineering and public works services that are budgeted in the General Fund and provide support for the Water and Sanitary Sewer utilities.

Key Recommendations

The financial modelling recommends the following rate increases:

- Water Utility – 5% in 2023 and 2024, 4% for years 2025 to 2026, then 3% per annum;
- Sanitary Sewer Utility – 4% for years 2023 to 2026, then 3% per annum; and
- Changing overhead allocation methodology to better reflect the relative demand each utility places on shared resources.

Utility Rate Structure Review

The review included evaluation of utility rate setting best practices, a survey of other municipalities' utility rate structures and assessment of the City's current rate structures and customer billing data. Utility rate structures include three key elements: customer classifications, billing frequency and a schedule of charges. Rate structures should support user equity, collection of adequate revenues and be understandable. In consultation with City departments and staff responsible for management of each utility, recommendations were developed for incremental improvements to each utility's current rate structures.

Key Recommendations

The review's recommendations focus on incremental improvements to the utility rate structures that are achievable, effective and easily understood. Additional improvements may be considered in future utility rate reviews.

Recommendations for the Water Utility:

- Implement new Multi-Family Residential classifications to include Multi-Family Residential 2 units and Multi-Family Residential 3+ units;
- Reduce the current increasing Volumetric Rate from six to four levels, reduce the rate increase between level 1 and level 2, increase the rate increases for levels 3 and 4 for Single-Family Residential and Multi-Family Residential 2 units customers;
- Implement a Base Rate by meter connection size for Multi-Family Residential 3+ units and for Non-Residential customers; and
- Implement a single Volumetric Rate for Multi-Family Residential 3+ units and Non-Residential customers.

Recommendations for the Sanitary Sewer Utility:

- Implement a Base Rate by property for Non-Residential customers; and
- Implement a single Volumetric Rate for Non-Residential customers.

Next Steps

This report has been presented as technical background for Council's consideration and to seek Council's direction on proposed recommendations.

INTRODUCTION

The City has undertaken a comprehensive Utility Rate Review for the Water and Sanitary Sewer utilities. Each utility delivers critical public health and safety services through safe and reliable water supply and distribution and sanitary sewer collection. While much of the infrastructure required by these utilities have long useful service lives, the cost to replace, upgrade or expand each utility's infrastructure is significant and requires careful long term planning.

The Utility Rate Review focused on two key questions for each utility:

- **Does the City have adequate utility revenues to provide sustainable Water and Sanitary Sewer services?**
- **Do the current rate structures for the Water and Sanitary Sewer utilities effectively and efficiently support user equity, conservation and administrative efficiency?**

Best practices for utilities management include: full-cost recovery, equitable rate structures, long term planning processes, and demand management (water conservation). The City is a leader in utilizing best practices through implementing universal water metering in 1983, full-cost recovery in 1992 and Development Cost Charges (DCC). DCCs are paid by developers and contribute to the cost of new utility infrastructure required due to growth. The City has undertaken many initiatives to support robust long term planning including:

- Water Supply Strategic Plan (2007)
- Water Conservation Strategy (2008, 2014)
- Development Cost Charges Reviews (2008, 2017)
- Asset Management Update (2012)
- 20 Year Investment Plan and Asset Management Update (2017)
- City of Nanaimo Water Audit (2018)

These initiatives provided Council with important information for decision making regarding future demand, growth and infrastructure investment needs. Council approved:

- Annual 5% increases to Water utility user fees beginning in 2008;
- Annual 5% increases to Sanitary Sewer utility user fees beginning in 2013 for five years, then annual increases of 4% to 2022;
- Additional annual 2.5% increase to Water utility user fees beginning in 2013 and extended to 2021; and
- Increases to Development Cost Charges in 2008 and in 2017.

The City's 20 Year Investment Plan and Asset Management Update (2017) included annual operating and investment requirements and identified significant funding gaps for both the Water and Sanitary Sewer utilities. Projected revenues were not adequate to fund planned infrastructure investment. The City's financial planning processes will provide Council with information to address projected funding gaps. These processes include: Asset Management updates, Development Cost Charges updates, the Utility Rate Review, the ten year project plans and five year financial plans.

Infrastructure Overview

The City's water system is made up of dams, reservoirs, facilities (pump/pressure reducing control stations), a water treatment plant and over 600 kilometers of supply and distribution mains. In compliance with Provincial regulations, the City constructed a new water treatment plant which began operations in 2015. The plant cost $75 million to construct and was partially funded from $19 million in senior government grants. The City also borrowed $22.5 million with annual repayments funded from water user fees.

The City's sanitary sewer system is made up of collection mains and lift station facilities. There are over 550 kilometers of sanitary sewer mains. Sanitary sewer treatment is provided by the Regional District of Nanaimo (RDN). The RDN's annual requisition includes a levy to cover the costs of sanitary sewer treatment.

The City's Engineering and Public Works departments are responsible for operating and maintaining both the water and the sanitary sewer systems with support from the City's IT, Finance and Development Services departments. The Engineering department is responsible for maintaining appropriate information on each utility's infrastructure and developing long term infrastructure investment plans that support maintaining current service levels and addressing the needs of growth.

Below is each utility's investment in infrastructure as shown in the City's 20 Year Investment Plan and Asset Management Update (2017).

The Utility Rate Review used financial planning information for the next ten years. Several issues may impact future utility operations and investment needs. These issues include, but are not limited to: climate change, new regulatory requirements for seismic/other infrastructure upgrades and certainty regarding the cost of a new water supply dam. At this point, reasonable and reliable estimates of these impacts are not available and have not been included in this Utility Rate Review. Future Utility Rate Reviews may consider these and other issues when better information is available or as they arise.

Infrastructure	Description	Current Asset Value - $M
Water Utility	Water supply dams, water treatment plant, reservoirs, mains, control stations	$976
Sewer Utility	Mains, lift stations and forcemains	$597

BEST PRACTICES

The Utility Rate Review found recommended best practices to be common among North American authorities including: the National Guide to Sustainable Municipal Infrastructure's report which can be found at InfraGuide Water and Sewer Rates: Full Cost Recovery, the BC Water & Waste Association (BCWWA) and the American Water Works Association (AWWA).

Established North American best practices for utility rate setting include:

- **Long term planning** processes that provide reasonable estimates of future infrastructure investment and annual operating and maintenance expenditures;
- **Full-cost recovery** where adequate revenues are collected to support annual operating and maintenance and long-term infrastructure investment;
- **Rate structures** that include both a Base (or fixed) Rate and a Volumetric Rate, that equitably recover costs among different customers; and
- **Universal metering** to enable customers to manage their demand and to support rate equity.

Long Term Planning

The City's robust long-term planning processes include:

- Lifecycle asset management planning for utility infrastructure, facilities and equipment;
- Infrastructure condition and capacity assessment programs;
- Asset Management Updates;
- 10 Year Project Plan updated annually; and
- Five Year Financial Plan updated annually.

These integrated planning processes use lifecycle, current infrastructure condition and capacity information to identify long-term infrastructure investment needs. The City's 10 Year and Five Year Plans prioritize and identify the cost, timing and scope of work for each project.

The City's 20 Year Investment Plan and Asset Management Update (2017) indicated a $120.7 million funding gap for the Water utility and a $12.5 million funding gap for the Sanitary Sewer utility. Recommended strategies to close the gaps included increases to utility user charges and DCCs. Borrowing may also be utilized for larger projects with repayment from the appropriate utility's operating fund or reserves.

Full Cost Recovery

Full-cost recovery requires generating adequate revenues to fund all costs to provide sustainable, acceptable and the mandated level of service for utility customers. Revenues include utility user fees and Development Cost Charges. Costs include annual operating and maintenance, infrastructure investment and debt repayment.

The City implemented full-cost recovery in 1992. User fees fund annual operating and maintenance expenditures. User fees and Development Cost Charges fund infrastructure investment and debt repayment. The City actively pursues senior government grant programs.

For planning, budgeting and accounting purposes, each utility maintains:

- Separate operating funds where annual revenues and operating and maintenance expenditures are budgeted and allocated;
- Separate capital funds where project expenditures for infrastructure renewal, upgrades and expansion are budgeted and allocated; and
- Separate reserves that provide funding for infrastructure investment projects.

Each year, utility rate revenues in excess of operating and maintenance expenditures are transferred to the appropriate utility reserves to provide funding for infrastructure investment. The City's prudent planning and 'savings' approach minimizes the need for large user fee increases and for borrowing.

At times, it may be practical to use debt financing in addition to annual revenues and reserves to provide funding for infrastructure investment. Annual debt repayment is funded from the appropriate utility's annual revenues or reserves.

The City's utility accounting processes are outlined in Appendix 3.

Utility Rate Structures

Utility rate structures include three key elements: customer classification, billing frequency and a Schedule of Charges. A multi-part utility user rate is considered best practice and typically includes:

- A Base or Fixed Rate; and a
- Volumetric Rate based on metered water consumption.

The Base Rate, charged to each user, recovers a portion of the utility's costs and provides stable and reliable annual revenues. The Volumetric Rate is based on each user's metered water consumption and supports user equity and provides a signal to customers to incent conservation. The Volumetric Rate can be a single rate or a series of increasing or decreasing block rates for specific levels of metered water consumption.

Municipalities can implement rate structures for different customer classes based on metered consumption, required infrastructure and any other factors that reflect the differences a type of user class places on the utility. Finding a balance between the Base Rate and the Volumetric Rate to ensure predictable revenues, and support user equity and conservation is a challenge for municipalities.

The City's current utility rate structures include a:

- Base Rate and increasing Volumetric Block Rates for all water users;
- Base Rate only for residential sanitary sewer users;
- Base Rate by property feature only for non-residential sanitary sewer users (excluding hotel, motel and campgrounds) which includes a maximum daily water consumption allocation; and
- Decreasing Volumetric Block Rates only for hotel, motel and campground sanitary sewer users and for other non-residential sanitary sewer users that exceed the maximum daily water consumption allocation included in the above-noted Base Rate.

The City's Base Rate for non-residential sanitary sewer users uses specific property features (e.g. the number of plumbing groups, number of beds, number classrooms or number of washers) for each property.

Universal Metering

The City implemented universal water metering in 1983. Properties are connected to the City's water distribution system through a metered service connection. Some properties have more than one service connection.

Water consumption directly impacts the demand on sanitary sewer services, as water consumed by customers for inside purposes will be collected by the sanitary sewer system.

The City has undertaken many water conservation initiatives to reduce water consumption levels including: community-wide education and outreach programs, water restrictions, increasing Volumetric block rates, toilet and washer rebate programs and water audits. Reducing water consumption levels delays the need to expand both water and sanitary sewer infrastructures and contributes to efficient service delivery.

The City's water conservation initiatives have had a positive impact on reducing water consumption per capita. The City's daily residential water production per capita has decreased 28% since 2009, 299 litres per capita in 2009 to 216 litres per capita in 2021.

GUIDING PRINCIPLES

The User Rate Review is informed by best practice guiding principles including:

- **Conservation** – Rates are linked to demand management so that rates provide an effective signal to users to manage their demand on services;
- **Economic Efficiency** – Long term planning and infrastructure investment identify an optimum combination of maintenance, replacement and expansion programs;
- **Equity** – Rates should reflect customer's proportionate share of cost of services;
- **Full Cost Recovery** – Revenues must be adequate to fund all costs required to operate, maintain, replace and expand infrastructure required to provide each utility's services;
- **User Pay** – Rates are based on metered usage; and
- **Transparency** – Rates must be understandable.

The Utility Rate Review's recommendations can be clearly linked to these principles.

UTILITY RATE REVIEW METHODOLOGY

This Utility Rate Review establishes a framework, processes and tools for future reviews. To date, this review has included the following steps:

1. Review of utility rate setting best practices including utilizing the American Water Works Association 'Principles of Water Rates, Fees, and Charges' Seventh Edition (2017) manual and the National Guide to Sustainable Municipal Infrastructure ' Water and Sewer Rates: Full Cost Recovery' (2006);
2. Review of the City's current rate structures for each utility;
3. Review of financial information including historical and planned operating, maintenance and infrastructure investment expenditures for each utility;
4. Technical analysis including revenue requirements analysis, cost of service analysis and rate structure design analysis;
5. Development of financial models that identify projected future expenditures, available reserves, borrowing needs and revenues for each utility;
6. Utilization of WATERWORTH, a dedicated utility rate setting software;
7. Review of the City's water consumption trends;
8. Review of historical customer billing data;
9. Survey of other municipalities' water and sanitary sewer utility rate structures;
10. Consultation with City departments and staff responsible for each utility's operations and planning, financial management and revenue collection;
11. Draft report and recommendations.

UTILITY RATE REVIEW ANALYSIS

The American Water Works Association's 'Principles of Water Rates, Fees, and Charges' (2017) manual outlined three categories of technical analysis as a framework for utility rate structures and is shown below.

The City's Utility Rate Review utilized this approach and the results of that analysis is provided for each utility in this report.

Revenue Requirement Analysis

Compares the revenues of the utility to its operating and capital costs to determine the adequacy of the existing rates to recover the utility's costs

Cost of Service Analysis

Allocates the revenue requirements to the various customer classes of service in a fair and equitable manner

Rate-Design Analysis

Considers both the level and structure of the rate design to collect the distributed revenue requirements from each class of service

FINANCIAL REVIEW

Does the City have adequate utility revenues to provide sustainable Water and Sanitary Sewer services?

The Utility Rate Review included financial analysis and modeling using the Draft 2023 – 2027 Financial Plan and current departmental 10 year project plans. Financial modelling, for the period 2023 to 2032 included:

- Annual operating and maintenance expenditures;
- Infrastructure investment for renewal and growth;
- Current debt repayment; and
- Contributions and withdrawals to reserves and projected year end balances.

The financial modeling included key assumptions regarding:

- Annual growth estimates that will increase each utility's revenue base each year;
- Water conservation estimates that will decrease each utility's revenue base each year; and
- Inflation that will increase annual operating and maintenance expenditures and infrastructure investment estimates.

Conservative water conservation estimates were used, as user's efforts to reduce their water consumption may be offset by the effects of climate change.

The financial review also included development of a new overhead allocation for the water and sanitary sewer utilities. Many resources budgeted in the General Fund, and largely funded by property taxes, are also needed to provide water and sanitary sewer services. The overhead allocation is used to apportion these costs to the Water and Sanitary Sewer Funds where they are funded by utility revenues.

The following sections provide the review findings for the City's Water Utility and Sanitary Sewer Utility.

Water Utility – Financial Review

In compliance with Provincial regulatory requirements the City completed the construction of a water treatment plant in 2015. The plant significantly increased the utility's annual operating costs and long term infrastructure renewal plans. The City's current 10 year project plan includes a city wide meter replacement program, seismic upgrades for the South Fork Dam, new supply mains and significant renewal and upgrades to existing water supply infrastructure. Currently, a new water supply dam is not anticipated for the foreseeable future. A revenue requirements analysis used the following methodology:

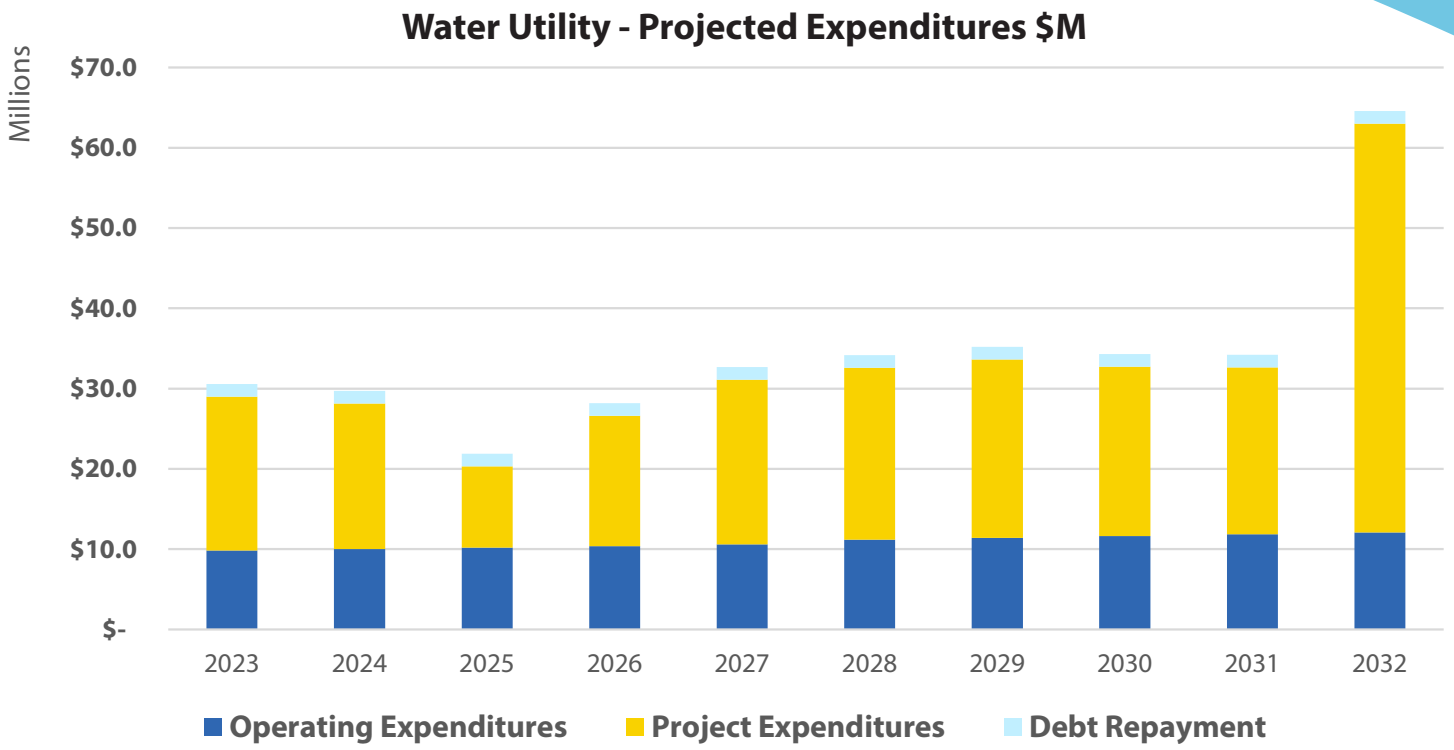
- Draft 2023 – 2027 Financial Plan operating and maintenance costs;
- 2% inflationary increase for projected operating and maintenance costs for years 2028 to 2032;
- Additional 5% increase for 2028 operating costs to allow for additional operating resources required due to growth;
- Draft 2023 – 2032 Project Plan costs; and
- New overhead allocation.

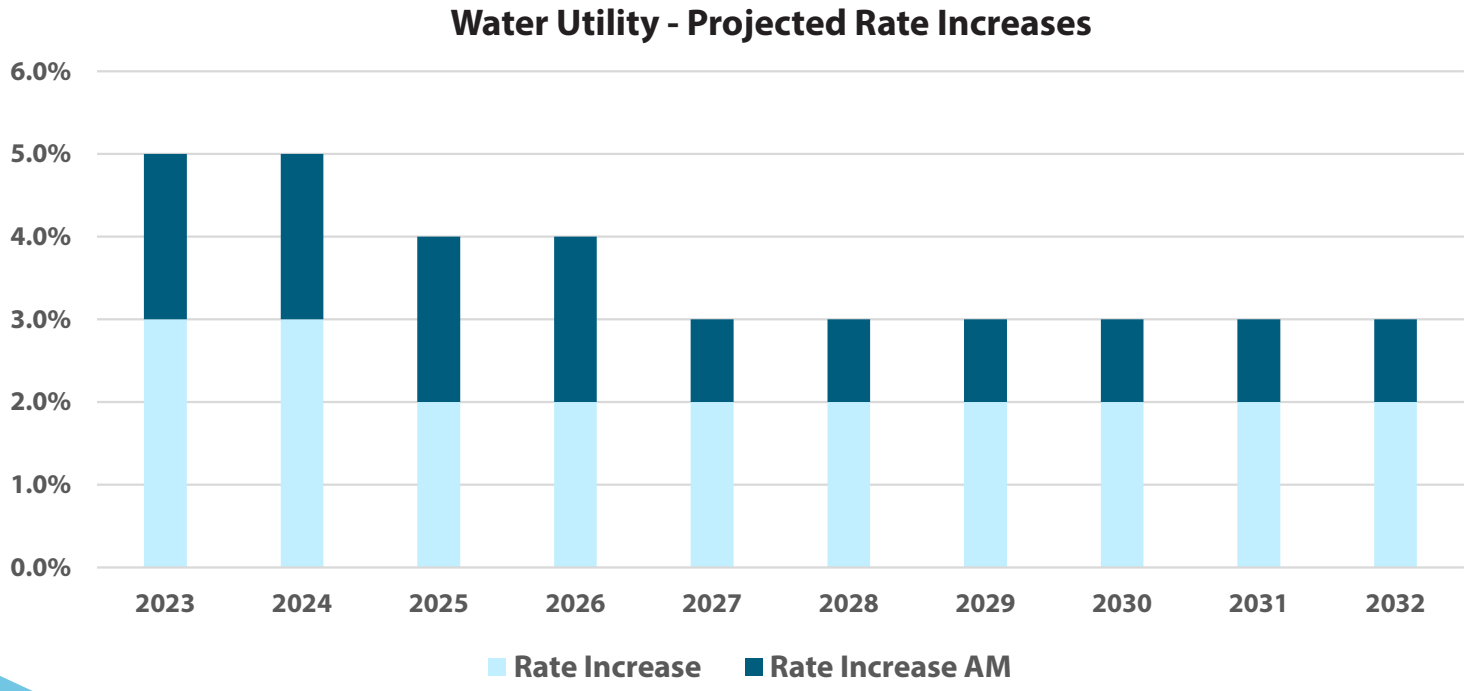
The Utility Rate Review developed detailed financial models that included projected annual operating and maintenance expenditures, infrastructure investment and debt repayment expenditures. Projected expenditures for the water utility are shown on the graph on page 13 titled, "Water Utility - Projected Expenditures $M."

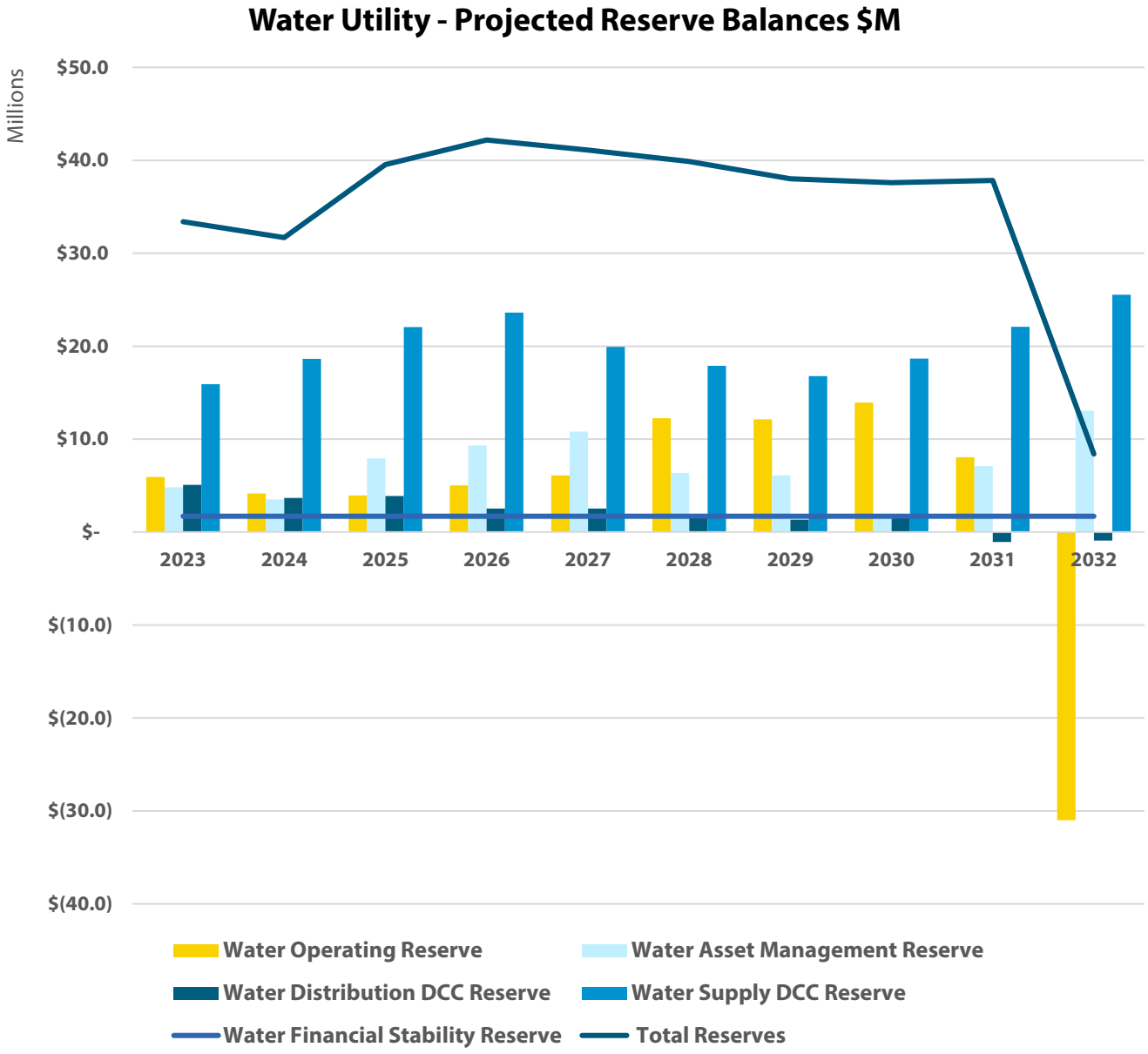
The Utility Rate Review recommends continuing the annual water user rate increases of 5% until 2024, then annual increases may be reduced as shown in the graph on page 13 titled, "Water Utility Projected Rate Increases."

The City's Water Utility reserve balances support the sustainment of services and reduces the need for external borrowing. A projection of reserves balances for the water utility is shown in the graph on page 14 titled, "Water Utility - Projected Reserve Balances $M".

A number of significant projects currently planned in the later years of the project plan are still subject to cost estimate and timing changes. These projects include the city wide water meter replacement project, seismic upgrades for the South Fork Dam and a secondary intake to the Control Building. Borrowing may be required where reserve balances are not adequate to fund infrastructure investment.


Water Utility - Projected Expenditures $M
Millions
$70.0
$60.0
$50.0
$40.0
$30.0
$20.0
$10.0
$-
2023
2024
2025
2026
2027
2028
2029
2030
2031
2032
Operating Expenditures
Project Expenditures
Debt Repayment


Water Utility - Projected Rate Increases
6.0%
5.0%
4.0%
3.0%
2.0%
1.0%
0.0%
2023
2024
2025
2026
2027
2028
2029
2030
2031
2032
Rate Increase
Rate Increase AM


Water Utility - Projected Reserve Balances $M
Millions
$50.0
$40.0
$30.0
$20.0
$10.0
$-
$(10.0)
$(20.0)
$(30.0)
$(40.0)
2023
2024
2025
2026
2027
2028
2029
2030
2031
2032
Water Operating Reserve
Water Asset Management Reserve
Water Distribution DCC Reserve
Water Supply DCC Reserve
Water Financial Stability Reserve
Total Reserves

Sanitary Sewer Utility - Financial Review

The City's Sanitary Sewer Utility requires significant investment for infrastructure renewal and for new or upsized mains to support growth.

The revenue requirements analysis included the following information and assumptions:

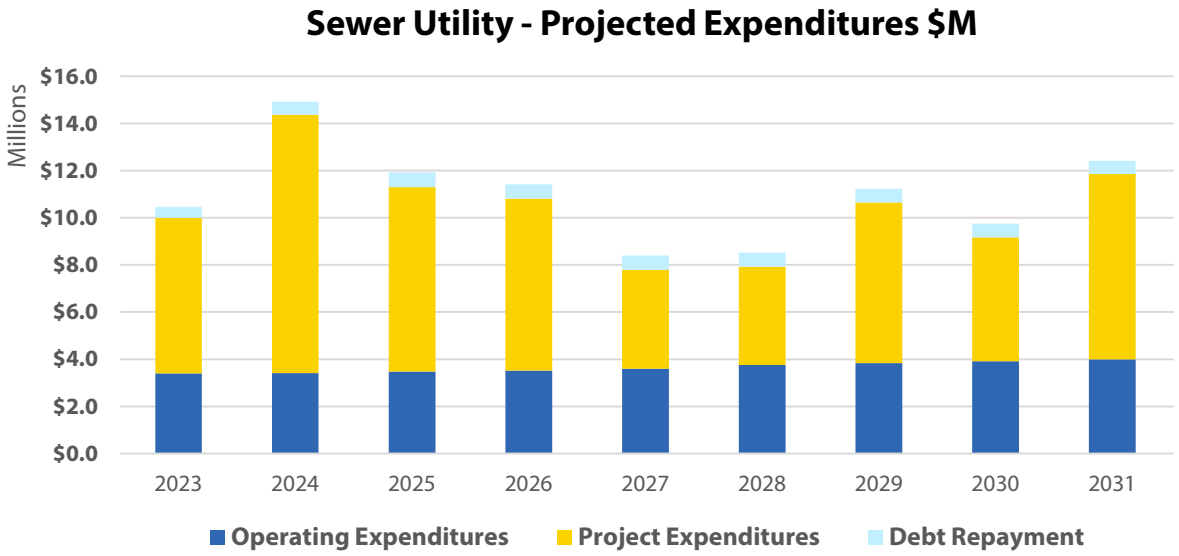
- Draft 2023 – 2027 Financial Plan operating and maintenance costs;
- 2% inflationary increase for projected operating and maintenance costs for years 2028 to 2032;
- Additional 5% increase for 2028 operating costs to allow for additional operating resources required due to growth;
- Draft 2023 – 2032 Project Plan costs; and
- New overhead allocation.

The Utility Review developed detailed financial models that included projected operating and maintenance expenditures, infrastructure investment and debt repayment expenditures. Projected expenditures for the sanitary sewer utility are shown in the graph titled, "Sewer Utility - Projected Expenditures $M" below.

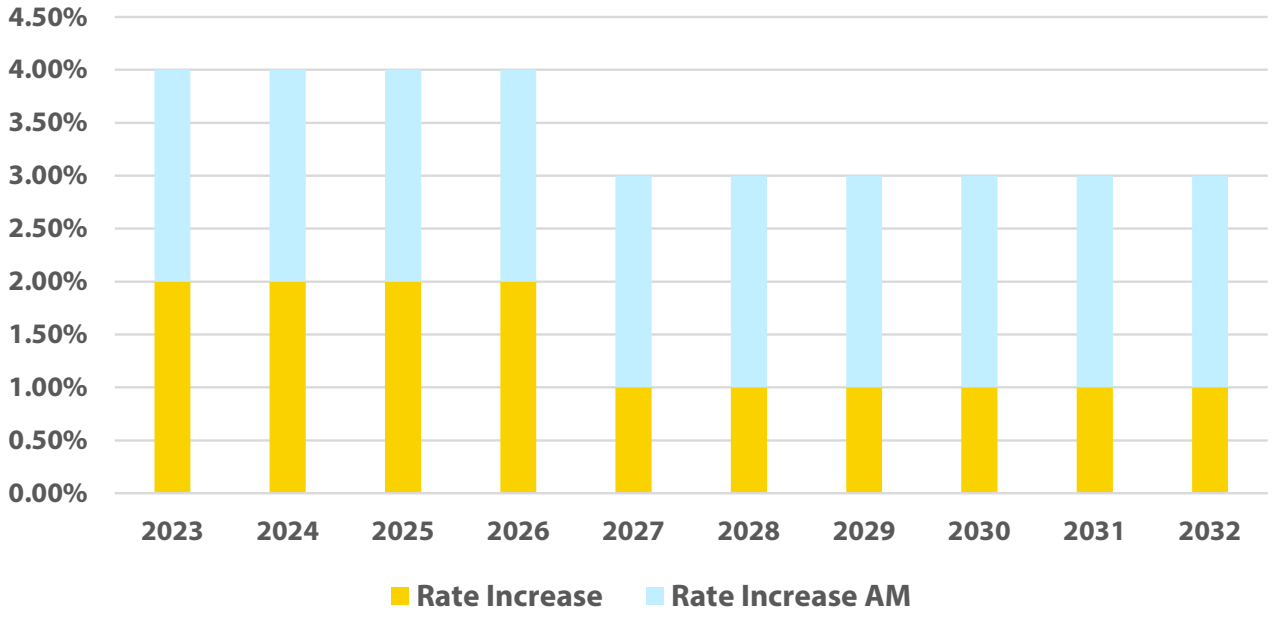
The Utility Rate Review revenue requirements analysis recommends continuing the annual sewer user rate increases of 4% until 2026, then annual increases may be reduced as shown in the graph titled, "Sewer Utility - Projected Rate Increases" on page 16.

The City's Sanitary Sewer Utility reserve balances support the sustainment of services and reduce the need for external borrowing. A projection of reserves balances for the sanitary sewer utility is shown in the graph titled, "Sewer Utility - Projected Reserves $M" on page 16.

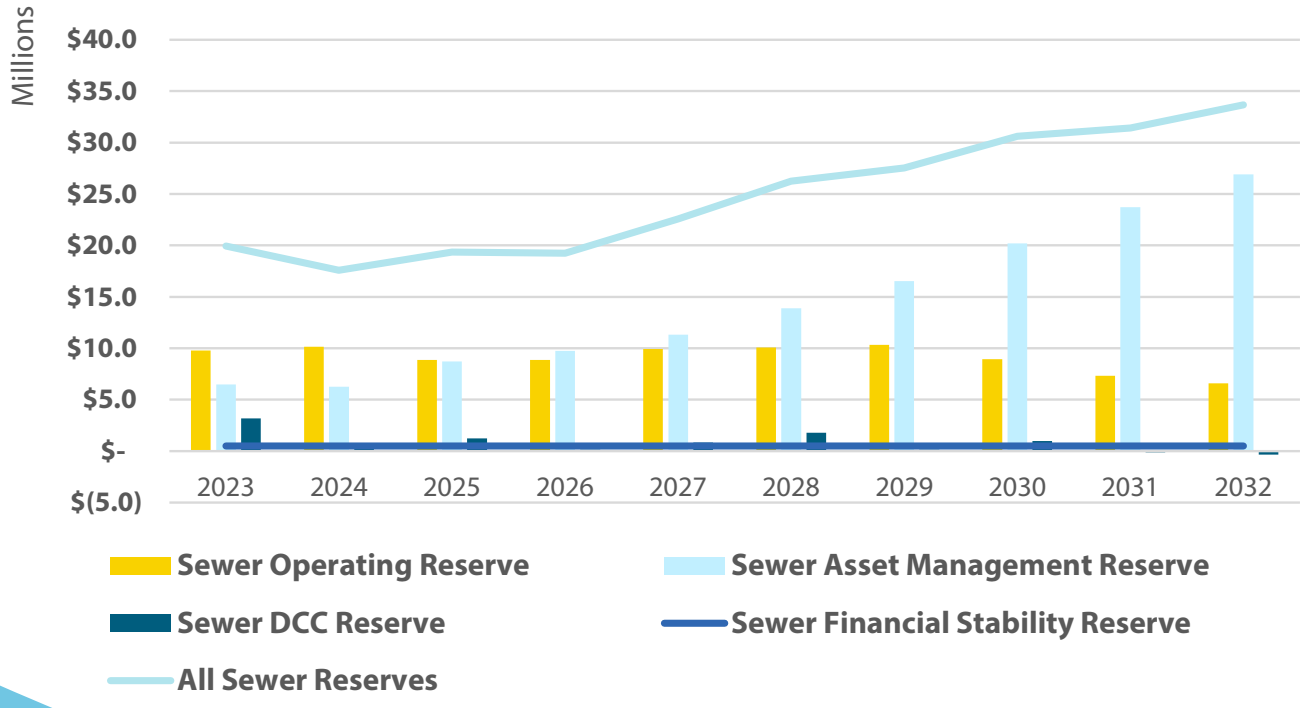
Ongoing infrastructure assessment and planning is expected to require the inclusion of additional projects in the next 10 year plan. These projects will require additional funding from reserves.



Sewer Utility - Projected Rate Increases



Sewer Utility - Projected Reserves $M



Overhead Allocation

Many resources budgeted in the General Fund also support water and sanitary sewer services. These resources include Corporate (e.g. Legislative Services, Human Resources, Finance), Engineering and Public Works operations. The annual overhead allocation recognizes the shared costs for these resources. This allocation reduces the General Fund budget and funding required from property taxes and increases the Water and Sanitary Sewer Fund budgets and revenues required from utility customers.

The current overhead allocation consists of a corporate allocation which uses historical amounts that are increased by 2% each year and an allocation of specific Engineering and Public Works budgets based on a historical percentage. The rationale for the historical amounts is not known.

The new overhead allocation looks at each operating area budgeted in the General Fund that also supports water and sanitary sewer services, and utilizes an appropriate allocation base to calculate the portion of their annual budget to be allocated to each utility.

Allocation bases include:

- # of FTEs
- % of annual operating expenditures
- % of project expenditures

The new overhead allocation will be updated annually based on the prior year's budget and new allocation bases.

A calculation to show the impact of the proposed change for the Draft 2023 – 2027 Financial Plan is shown below.

The new allocation to the Sanitary Sewer Fund will be lower and the new allocation to the Water Fund will be higher. This change recognizes the significant differences in the numbers of FTEs and the relative size of annual operating and project budgets for each utility.

2022 2026 Financial Plan			
	Sewer	Water	Total
Corporate Allocation	1,001,951	962,753	1,964,704
Public Works and Eng Allocation	574,931	804,904	1,379,835
	1,576,882	**1,767,657**	**3,344,539**

New OH Allocation: 2023-2027 Draft Financial Plan			
	Sewer	Water	Total
Corporate Allocation	503,865	1,407,887	1,911,752
PW Allocation	130,723	365,008	495,731
Engineering Services Allocation	782,967	989,344	1,772,311
	1,417,555	**2,762,239**	**4,179,794**

Overhead Allocation Change			
	(159,327)	**994,582**	**835,255**

Cost of Service Analysis

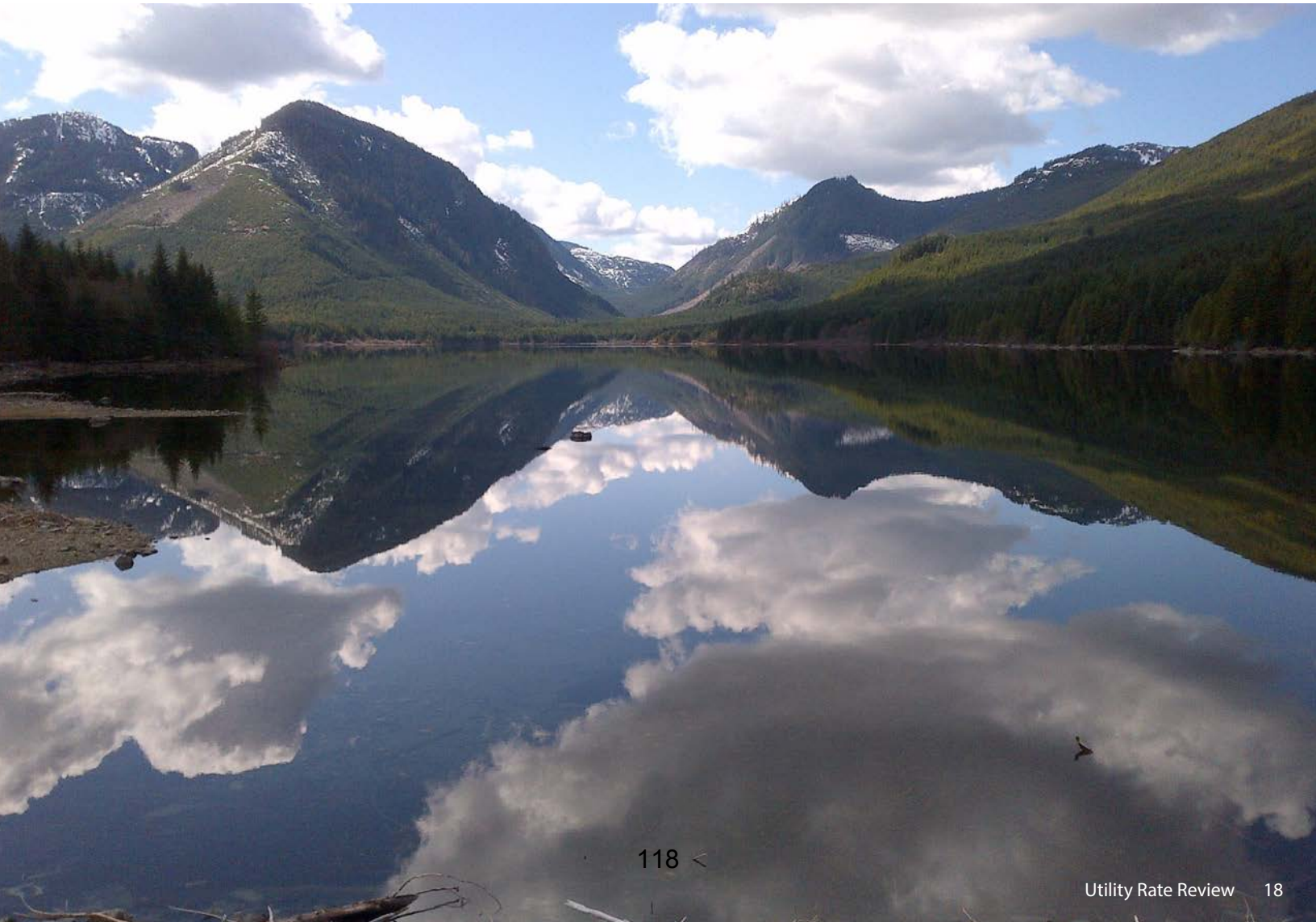
A Cost of Service analysis looks at service and demand characteristics by customer classification or by specific customers. Recommended by AWWA, this analysis is used in development of utility rate structures that support user equity.

This Utility Rate Review utilized a simplified approach to determine the cost of service by:

- Utilizing customer classifications where users in each classification share common service and demand characteristics;
- Recognizing that larger customer water service connections put additional cost burden on each utility's infrastructure; and
- Utilizing metered water consumption data by customer, by meter, by billing period.

This simplified approach relied on using each customer's water capacity or service as measured through their meter connection and through each customer's water consumption or demand to determine an equitable cost of service. This approach was used to evaluate each utility's current rate structures and recommendations for improvement.

A more robust cost of service analysis requires customer demand data (by day, by hour), engineering and financial analysis to determine required operating and infrastructure investment by customer or customer type and complex allocations and assumptions to determine cost of service by customer or customer classification. This approach would require detailed consumption data not currently available and significant additional engineering and financial resources.



UTILITY RATE STRUCTURE REVIEW

Do the current rate structures for the Water and Sanitary Sewer utilities effectively and efficiently support user equity, conservation and administrative efficiency?

The Utility Rate Review included review and assessment of each utility's current rate structures. Utility rate structures include three key elements:

- Customer classifications
- Billing frequency
- Schedule of Charges

Customer Classifications
The City currently uses the following primary customer classification for both utilities:

- Single-Family Residential
- Multi-Family Residential
- Commercial
- Government
- Municipal
- Other

Single-family residential customers are the largest group and are considered the most homogenous classification for service and demand characteristics.

The service and demand characteristics of multi-family residential properties can vary widely due to the number of units, the proportion of outside space per unit and the number of persons per unit. Multi-family residential properties with 2 units are considered most similar to single-family residential in that they may have larger outdoor space per unit and the ability to cooperate and manage water consumption.

The service and demand characteristics of Commercial, Government, Municipal and Other properties varies widely. These classifications represent a wide range of business, institutional and industrial and manufacturing types as well as properties that are a mix of commercial and residential areas. Commercial, Government, Municipal and Other classifications are grouped together and referred to as Non-Residential for this review.

Billing Frequency
The City currently has three billing cycles each year, or approximately every four months, and utilizes a meter reading schedule with 16 specific routes and reading dates for all customers. The billing cycles or meter readings do not align with the calendar year or seasons. For example, the 2018 'billing year' started with meter readings in August 2017 and ended with meter readings in July 2018.

A summary of the City's billing periods is provided below.

Billing	Months
1	August to November
2	December to March
3	April to July

Schedule of Charges
The current Schedule of Charges for the Water and Sanitary Sewer utilities have significant differences.

The following sections provide more detailed information and assessment of each utility's Schedule of Charges and recommendations for changes.

Water Utility Rate Structure Review and Recommendations

Following is an overview of the utility's current rate structure, observations of strengths and weaknesses and recommendations for changes.

Schedule of Charges

The City's current Schedule of Charges for the water utility include:

- A Base Rate for each customer service connection;
- An Increasing Volumetric Rate (six blocks) for each customer service connection;
- A Multi-Family Option (MFO); and
- Fireline Rates for customer service connections required for fire flow.

The Base Rate – or Minimum Service Rate – is a fixed amount per day for each water service connection. The Base Rate is the same for all customers.

The Volumetric Rate is an increasing block rate and is based on metered water consumption for each service connection. This is also known as an expanding block rate and is intended to incent conservation by charging higher rates for higher levels of consumption. Total water consumption for a billing period is prorated to an average daily amount and the Volumetric Rates are then applied and charges calculated. The Volumetric Rates are the same for all customer classifications.

The Multi-Family Option (MFO) calculates charges using two methods for multi-family residential service connections with the lower charge billed. The two methods are outlined below:

- The first method calculates one Base Rate and the Volumetric Rates by service connection;
- The second method calculates charges per residential unit for a multi-family service connection. The Base Rate is charged per residential unit. Metered water consumption is divided by the number of residential units and the Volumetric Rate levels are then applied and charged. This method can produce a higher total Base Rate charge and lower total Volumetric Rate charges for a multi-family residential property.

Analysis of historical billing data indicates that the second option for Multi-Family Residential properties usually produces a higher total charge for a service connection and is therefore infrequently used for actual billing.

Firelines

City regulations require specific multi-family and non-residential buildings to have automatic sprinkler systems. These buildings may require separate water meter connections, referred to as firelines, to ensure fire flow needs. In some situations an upsized water meter connection, referred to as a combination meter, may be used to meet fire flow requirements. A combination meter provides both domestic water consumption and fire flow needs.

Fireline Rates are a separate Base Rate charged for dedicated fireline meter connections and for combination meter connections.

The City's 2022 Water Utility Schedule of Charges is shown below:

2022 Base Rate				
	$/Day - Domestic	$/Day - Firelines	Total $/Day	$/ Year
All Customers	$ 0.90398	$ -	$ 0.90398	$ 330
Fireline - Single Meter < 100 mm	$ -	$ 0.89413	$ 0.89413	$ 326
Fireline - Single Meter 100 mm and larger	$ -	$ 1.50636	$ 1.50636	$ 550
Fireline - Combination Meter < 100 mm	$ 0.90398	$ 0.44708	$ 1.35106	$ 493
Fireline - Combination Meter 100 mm and larger	$ 0.90398	$ 0.75319	$ 1.65717	$ 605

2022 Volumetric Rates - Increasing				
All Customers				
Level	Consumption/ Day - Imperial Gallons (IG)	$/ IG	$/ 1,000 IG	Rate Change %
1	first 145 gallons	$ 0.00190	$ 1.90	
2	next 75 gallons	$ 0.00876	$ 8.76	461%
3	next 109 gallons	$ 0.00921	$ 9.21	105%
4	next 219 gallons	$ 0.00958	$ 9.58	104%
5	next 548 gallons	$ 0.00991	$ 9.91	103%
6	over 1,096 gallons	$ 0.01022	$ 10.22	103%

1 imperial gallon = 4.54609litres

Review Observations and Recommendations:

Recommendations for changes to the Water utility's rate structure are provided in the following framework:

- Customer Classifications
- Base Rate
- Volumetric Rate
- Multi-Family Option

Water Utility - Customer Classifications
Best practices creates classifications for customers that share service characteristics and demand patterns. Commonly used classifications are:

- Residential for one and two family properties;
- Commercial for multi-family apartment buildings and for business properties; and
- Industrial for manufacturing and processing establishments.

The number of units for multi-family residential properties ranges from 2 units to over 200 units. Multi-family residential properties with 2 units may be considered more like single-family residential properties in demand patterns and ability to manage water consumption.

Customer Classification - Recommendations:
Implement two new customer classifications for multi-family residential properties to:

- Recognize the difference in service characteristics/ demand patterns; and
- Enable different charges for Multi-Family Residential 2 units and Multi-Family Residential 3+ units.

These new classifications for multi-family residential properties are required to support recommended changes to the current Base Rate and Volumetric Rates as outlined further in this report. A comparison is provided below:

Current Customer Classifications	Proposed Customer Classifications
SF Residential	SF Residential
MF Residential	MF Residential 2 units
	MF Residential 3+ units
Commercial	Commercial
Government	Government
Municipal	Municipal
Other	Other

Water Utility - Base Rate

Best practices recommend considering a Base Rate that increases with meter connection size. The rationale is based on the understanding that the cost of service is higher for larger capacity meter connections due to the upsized infrastructure and higher cost replacement components required to maintain adequate water pressure.

Currently, the Base Rate is:

- a daily rate for each meter connection for all customer classifications;
- a daily rate for each fireline meter connection; and
- an additional daily rate for combination meter connections.

Meter connection sizes range from 19mm to 250mm. Customers with larger service connections have proportionately larger water capacity on demand but do not currently incur higher costs for that service.

Currently, 35% of total water revenues is collected through the Base Rate charges, which supports a stable source of revenues for the utility. However, currently the proportion of Base Rate charges is significantly different for each customer classification. Approximately 61% of Single-Family Residential revenues are collected as Base Rate charges, while only 4% of Multi-Family Residential and 8% of Non-Residential revenues are collected as Base Rate charges.

Firelines

The City of Nanaimo's current approach is to consider fireline meter connections primarily a fire protection benefit for the private property owner. This approach is consistent with the majority of other municipalities surveyed.

Meter Connection

The Base Rates by meter connection size can be determined by using equivalent meter capacity ratios. Ratios can be determined using different methodologies including; cost analysis of shared infrastructure, water capacity on demand, or by cost analysis of meter and related service connection costs.

The City's Engineering department has developed ratios based on meter and related service connection costs. This approach was used as it was most readily available and recognizes cost differences for larger meter connections. The table below shows the meter connection ratios that are used in proposed rate structure changes.

Meter Size	Ratio
19mm	1.00
25mm	1.20
38mm	2.10
50mm	2.70
75mm	3.20
100mm	4.00
150mm	9.10
200mm	11.80
250mm	15.20

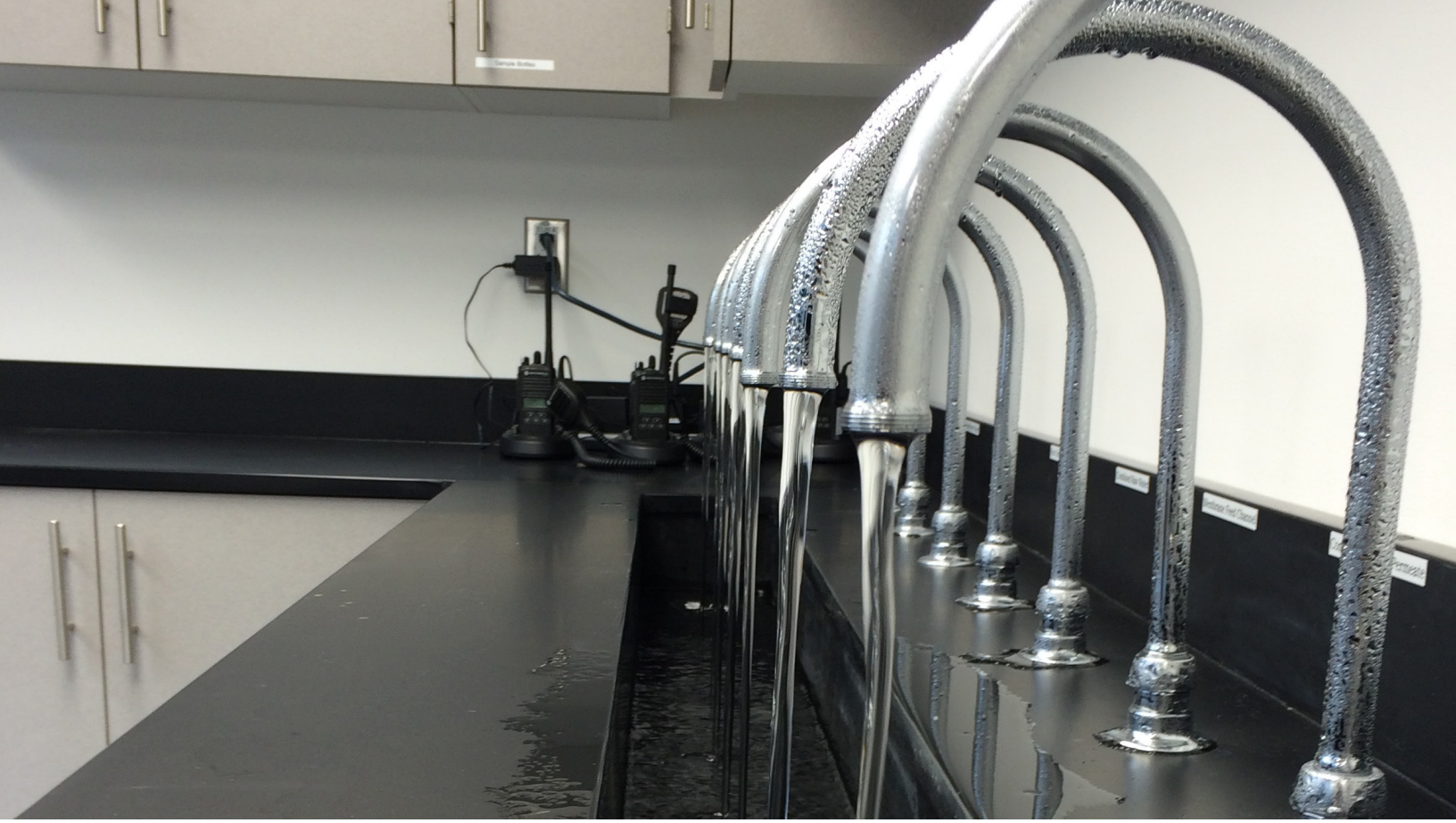
Single-Family Residential and Multi-Family Residential 2 units are typically a single 19mm meter size connection. Multi-Family Residential 3+ units and Non-Residential users may have more than one water service connection and meter sizes can vary from 19mm to 250mm.

Base Rate - Recommendations:

- Maintain the current Base Rate by service connection for Single-Family Residential and Multi-Family Residential with 2 units;
- Maintain the current Base Rate by service connection for dedicated firelines;
- Implement a Base Rate by meter size service connection for Multi-Family Residential 3+ units and Non-Residential customers; and
- Eliminate additional Base Rate for combination meters

Customers with larger service connections, including combination meter connections, will pay a higher Base Rate or fixed charge to better reflect their higher demand on shared infrastructure and increased water capacity and availability.

A comparison of the current Base Rate charges and the proposed Base Rate charges is provided on page 23.



2022 Base Rate								
	$/Day - Domestic		$/Day - Firelines		Total $/Day		$/ Year	
All Customers	$	0.90398	$	-	$	0.90398	$	330
Fireline - Single Meter < 100 mm	$	-	$	0.89413	$	0.89413	$	326
Fireline - Single Meter 100 mm and larger	$	-	$	1.50636	$	1.50636	$	550
Fireline - Combination Meter < 100 mm	$	0.90398	$	0.44708	$	1.35106	$	493
Fireline - Combination Meter 100 mm and larger	$	0.90398	$	0.75319	$	1.65717	$	605

Proposed Base Rate *				
	$/Day		$/Year	
Single- Family Residential, Multi-Family Residential 2 units	$	0.90398	$	330
Fireline - Single Meter < 100 mm	$	0.89413	$	326
Fireline - Single Meter 100 mm and larger	$	1.50636	$	550

Multi-Family Residential 3+ units, Non Residential				
Meter Size	$/Day		$/Year	
19mm	$	1.12998	$	412
25mm	$	1.35597	$	495
38mm	$	2.37295	$	866
50mm	$	3.05093	$	1,114
75mm	$	3.61592	$	1,320
100mm	$	4.51990	$	1,650
150mm	$	10.28277	$	3,753
200mm	$	13.33371	$	4,867
250mm	$	17.17562	$	6,269

** Proposed rates do not include annual rate increase for 2023.*

Water Utility - Volumetric Rate

Best practices recommend implementing a Volumetric Rate with two or more blocks. The first, or the first and second blocks, are generally tied to a residential customer's indoor and outdoor use. Additional blocks can be tied to the cost of water resources required to provide services in excess of levels 1 and 2. The last block is infinite so as not to limit the amount of water than can be purchased.

Generally held assumptions regarding customer demand are:

- Single-Family Residential customers have the greatest ability to manage their water consumption;
- Multi-Family Residential customers have less ability to manage their individual water consumption as the meter is shared between multiple units;
- Multi-Family Residential customers consume less water for outside purposes per capita than Single-Family Residential users due to proportionately less area for outside landscaping and irrigation;
- Non-residential customer's water consumption is used for business or institutional purposes. There is a wider range of consumption among individual customers and less discretion to reduce or manage consumption; and
- Water conservation can be better addressed for Non-Residential customers through other strategies developed for specific businesses or institutions than through the utility rate structure.

The City's current Volumetric Rate includes six increasing blocks for all customers. Level 1 is considered to provide an average Single-Family Residential customer with inside and some outside water consumption, level 2 provides additional consumption for outside purposes. The rationale for levels 4 to 6 are not available.

The current rate increase from level 1 to 2 is 461% with minimal increases for levels 3 to 6 as shown below.

2022 Volumetric Rates - Increasing
All Customers

Level	Consumption/ Day - Imperial Gallons (IG)	$/ IG	$/ 1,000 IG	Rate Change %
1	first 145 gallons	$ 0.00190	$ 1.90	
2	next 75 gallons	$ 0.00876	$ 8.76	461%
3	next 109 gallons	$ 0.00921	$ 9.21	105%
4	next 219 gallons	$ 0.00958	$ 9.58	104%
5	next 548 gallons	$ 0.00991	$ 9.91	103%
6	over 1,096 gallons	$ 0.01022	$ 10.22	103%

Water Revenue Analysis

A revenue analysis by customer classification indicates that 84% of volumetric charges for Single-Family Residential customers and 81% of volumetric charges for Multi- Family Residential 2 units are at levels 1 and 2. These customers pay small increases for consumption in levels 3 to 6.

Volumetric charges for Multi-Family Residential 3+ units and all Non-Residential customers are largely at levels 5 and 6. Customers with less ability to manage water consumption are paying for most of their water consumption at the highest levels.

See below for the table titled, "Consumption Levels by Customer Classifcation" and graph titled, "Water Revenue Analysis by Customer Classification".

Further analysis of Single-Family Residential customers indicates that their average daily water consumption is well within the current volumetric rate for levels 1 and 2, as shown in the table below titled, "Single-Family Average Water Consumption by Billing Period".

Single-Family Average Water Consumption by Billing Period

Billing Periods	Months	Average Daily Water Consumption IG
1	August to November	174
2	December to March	97
3	April to July	152

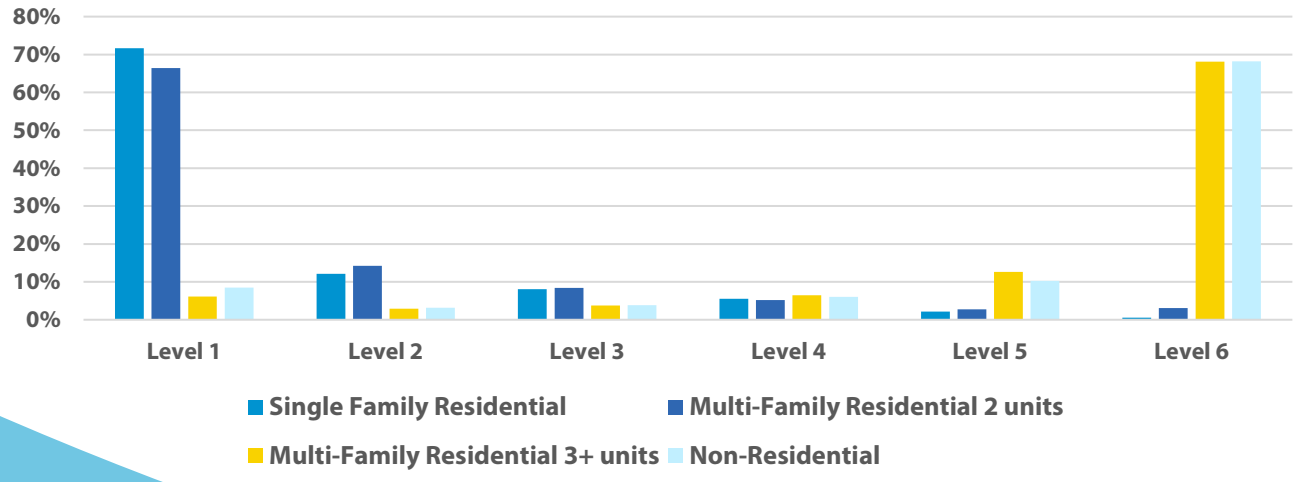
Billing period 2 average daily consumption would best represent a Single-Family Residential customer's consumption for indoor purposes only. This analysis indicates that the current allocation for level 1 water consumption (up to 145 gallons/day) is significantly higher than the current demand for indoor purposes.

Consumption Levels by Customer Classification

	Consumption					
Classification	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Single Family Residential	71.7%	12.1%	8.0%	5.5%	2.2%	0.5%
Multi-Family Residential 2 units	66.4%	14.2%	8.4%	5.2%	2.7%	3.1%
Multi-Family Residential 3+ units	6.1%	2.9%	3.8%	6.5%	12.6%	68.1%
Non-Residential	8.5%	3.2%	3.8%	6.0%	10.3%	68.2%

Assume no Multi-Family Option

Water Revenue Analysis by Customer Classification



Volumetric Rate Recommendations:

- Reduce increasing Volumetric Rate blocks from six to four blocks to improve clarity and administrative efficiency;
- Reallocate the current total water consumption in levels 1 and 2 (220 gallons). Level 1 to apply to the first 110 gallons/day and level 2 to apply to the next 110 gallons/day. This reallocation better aligns with average single family residential demand for indoor and outdoor purposes;
- Reduce % increase from level 1 to level 2 from 462% to a more reasonable 250%;
- Increase % increase to 175% for levels 3 and for level 4 to better recognize the increased costs for higher levels of demand, improve user equity and further incent conservation;
- Continue to utilize the increasing Volumetric Rate for Single-Family Residential and Multi- Family Residential with 2 units customers only;
- Implement a single Volumetric Rate for Multi-Family Residential 3+ units and for all Non- Residential customers to recognize their reduced ability to manage water consumption; and
- Consider other strategies to support water conservation for Multi-Family Residential 3+ units and Non-Residential customers.

A comparison is provided in the tables labelled, "2022 Volumetric Rates - Increasing", "Proposed Volumetric Rates - Increasing" and "Proposed Volumetric Rate - Single" on page 27.

The proposed single Volumetric Rate is higher than the 2022 Level 1 volumetric rate, however, lower than the 2022 Levels 2 to 6 volumetric rates.

2022 Volumetric Rates - Increasing

All Customers					
Level	Consumption/ Day - Imperial Gallons (IG)	$/ IG		$/ 1,000 IG	Rate Change %
1	first 145 gallons	$	0.00190	$ 1.90	
2	next 75 gallons	$	0.00876	$ 8.76	461%
3	next 109 gallons	$	0.00921	$ 9.21	105%
4	next 219 gallons	$	0.00958	$ 9.58	104%
5	next 548 gallons	$	0.00991	$ 9.91	103%
6	over 1,096 gallons	$	0.01022	$ 10.22	103%

Proposed Volumetric Rates - Increasing *

Single Family and Multi-Family 2 units Residential Customers					
Level	Consumption/ Day - Imperial Gallons (IG)	$/ IG		$/ 1,000 IG	Rate Change %
1	first 110 gallons	$	0.00190	$ 1.90	
2	next 110 gallons	$	0.00475	$ 4.75	250%
3	next 110 gallons	$	0.00831	$ 8.31	175%
4	over 330 gallons	$	0.01455	$ 14.55	175%

Proposed Volumetric Rate - Single *

Multi-Family 3+ units Residential and Non-Residential Customers			
Consumption/ Day - Imperial Gallons (IG)	$/ IG		$/ 1,000 IG
all	$	0.00750	$ 7.50

** Proposed rates do not include annual rate increase for 2023.*

Multi-Family Option:
The City's current Multi-Family Option for calculating multi-family residential charges is not a best practice, may be difficult for users to understand and is not administratively efficient.

Multi-Family Option Recommendation:

- Eliminate the Multi-Family Option.

The proposed new customer classifications and Base and Volumetric Rate structure changes will improve equity for Multi-Family Residential customers. Multi-Family Residential 2 units will share the same Base Rate charges by connection and increasing Volumetric Rate charges as a Single-Family Residential customer to reflect their common demand characteristics and ability to manage water consumption. Multi-Family Residential with 3+ units will incur Base Rate charges depending on service connection size to better reflect their proportionate share of system costs and a single Volumetric Rate charge to reflect their reduced ability to manage water consumption.

Impact of Proposed Rate Structure on Water Utility Customers

The proposed rate structure must still collect adequate annual revenues; however, the proposed changes may impact charges for individual customers.

It can be acknowledged that currently some customers may not be paying an equitable share of the utility's costs and some customers may be paying more than their equitable share. Implementation of the recommended rate structure changes will have impacts for some customers – some customers may pay more and some may pay less. The purpose and rationale of the proposed rate structure changes must reasonably and adequately explain these impacts.

An analysis was completed comparing charges under the City's current Water Utility rate structure with the projected charges under the proposed rate structure. The most significant impacts are noted in the table below.

Some Non-Residential customers may see a decrease in Water Utility charges due to the single volumetric rate and an increase in Sewer Utility charges due to the proposed single volumetric rate based on water consumption.

Customer Type	Service Demand	Impact
Single Family Residential and Multi-Family Residential 2 units	Does not exceed level 2	Will vary depending on seasonal usage.
	Exceeds level 2	Higher Volumetric charge due to higher rate increase for level 3 and 4
Multi-Family Residential 3+ units	Higher consumption	Lower Volumetric charges due to single volumetric rate.
	Larger meter connection	Higher Base Rate charge due to Base Rate by meter size
Non Residential	Lower consumption	Higher Volumetric charge due to single volumetric rate
	Higher consumption	Lower Volumetric charge due to single volumetric rate
	Larger meter connection	Higher Base Rate charge due to Base Rate by meter size

Sanitary Sewer Utility Rate Structure Review and Recommendations

Following is an overview of the key component of the utility's rate structure, observations of strengths and weaknesses and recommendations for changes.

Schedule of Charges

The City's current Schedule of Charges for the sanitary sewer utility include:

- A Base Rate per unit only for residential customers;
- A Base Rate only per property feature, including maximum daily water consumption (currently 11,000 gallons or 50m3 per day) for all non-residential users excluding hotels, motels and campgrounds; and
- A decreasing Volumetric Rate (four blocks) only for hotels, motels and campgrounds and for non-residential users that exceed the daily maximum water consumption noted above.

The Base Rate is the same for all residential premises and is the only charge for sanitary sewer services.

The Base Rate for Non-Residential customers, excluding hotels, motels and campgrounds, is charged on a specific type and number of features or amenities for each property. The Base Rate charge is by group of plumbing fixtures, or by washer, or by classroom or by bed depending on the property type. If a customer's water consumption exceeds 11,000 gallons, or 50 m3, per day the customer is then charged the decreasing Volumetric Rate instead of a Base Rate.

Hotels, motels and campgrounds are charged a decreasing Volumetric Rate based on metered water consumption each billing period.

The City's 2022 Sanitary Sewer Utility Schedule of Charges is shown on page 30.

2022 Sanitary Sewer Utility Schedule of Charges

Base Rate Only - Residential					
			$/ Day		$/ Annum
Single Family Residence		$	0.41658	$	152
Apartments, Suites or Duplex	each unit	$	0.41658	$	152
Rooming Houses	first unit	$	0.41658	$	152
Rooming Houses	each additional group of plumbing fixtures	$	0.27860	$	102
Trailer or Mobile Home Park	per occupied space	$	0.41658	$	152
Secondary Suite		$	0.41658	$	152
Base Rate only - Non Residential (includes 11,000 gallons per day water					
Cafes, Restaurant, Licensed Premises	for each group of plumbing fixtures	$	0.41658	$	152
Garage or Service Station		$	0.41658	$	152
Store or Business Premises	for each group of plumbing fixtures	$	0.41658	$	152
Cleaners	per washer	$	0.19526	$	71
Schools and Colleges	per classroom	$	0.27860	$	102
Hospitals	per bed	$	0.27860	$	102
Office Building	for each group of plumbing fixtures	$	0.41658	$	152
Churches and Halls	for each group of plumbing fixtures	$	0.27860	$	102
Other Premises	for each group of plumbing fixtures	$	0.41658	$	152
Current Volumteric Rates					
Hotels, Motels and Campgrounds and Non-Residential customers that exceed 11,000 gallons per day water consumption included in Base Rate					
Level	**Consumption/ Day - Imperial Gallons (IG)**		**$/IG**		**$/1000 IG**
Level 1	per 1,000 gallons up to 11,000 gallons/day	$	0.00138	$	1.38033
Level 2	per 1,000 gallons for next 11,000 gallons/day	$	0.00111	$	1.10732
Level 3	per 1,000 gallons for next 55,000 gallons/day	$	0.00083	$	0.83430
Level 4	per 1,000 gallons for over 77,000 gallons/day	$	0.00055	$	0.54605

Metric equivalents: 11,000 gallons = 50 m3, 55,000 gallons = 250 m3 and 77,000 = 352 m3

Review Observations and Recommendations

Recommendations for changes to the Sanitary Sewer Utility's rate structure are provided in the following framework:

- Customer Classifications
- Base Rate
- Volumetric Rate

Sanitary Sewer Utility - Customer Classifications
As noted in the Water Utility section, best practices creates classifications for customers that share service characteristics and demand patterns. Commonly used classifications are:

- Residential for one and two family properties;
- Commercial for multi-family apartment buildings and for business properties; and
- Industrial for manufacturing and processing establishments.

The number of units for multi-family residential properties ranges from 2 to over 200 units. Multi-family residential properties with 2 units may be considered more like single-family residential properties in demand patterns and ability to manage water consumption.

Customer Classification Recommendations:
Consistent with the Water Utility, implement two new customer classifications for multi-family residential properties to:

- Recognize the difference in service characteristics/ demand patterns; and
- Enable different charges for Multi-Family Residential 2 units and Multi-Family Residential 3+ units.

These new classifications for multi-family residential properties are required to support recommended changes to the current Base Rate and Volumetric Rates as outlined further in this report. A comparison is provided below:

Current Customer Classifications	Proposed Customer Classifications
SF Residential	SF Residential
MF Residential	MF Residential 2 units
	MF Residential 3+ units
Commercial	Commercial
Government	Government
Municipal	Municipal
Other	Other

Sanitary Sewer Utility - Base Rate
Best practices recommends using a multi-part rate that includes a Base Rate and a Volumetric Rate.

Currently, all residential properties are charged a Base Rate only per residential unit. The City's customer billing for mobile home parks and strata properties requires individual statements. The administration of individual billings for these properties are typically the responsibility of the owners of these properties consistent with the water utility.

Currently, all non-residential customers (excluding hotels, motels and campgrounds) are charged a Base Rate only based on specific features of each premise and includes a maximum daily water allocation. This approach is not common with other municipalities surveyed and requires significant administrative resources to maintain specific and accurate property information for billing. While there may be a link between each customer's number of plumbing fixtures, washers, beds or classrooms and the demand they make on the City's sanitary sewer system, this approach is not a best practice.

Currently, the Base Rate for all non-residential customers (excluding hotels, motels and campgrounds) includes a significant water consumption allocation. The allocation is the same for each customer. If the allocation is exceeded, the customer is charged the decreasing Volumetric Rate only. The City has been advised by some non-residential customers that they may use water in excess of their needs so that they are charged using the decreasing Volumetric Rate instead of the Base Rate by number of features or amenities as that may produce a lower charge. This approach does not support conservation.

Currently, hotels, motels and campgrounds are charged a decreasing Volumetric Rate only. These customers are not charged a Base Rate.

Base Rate Recommendations:

- Maintain the Base Rate by property for Single-Family Residential and a base rate by residential unit for all Multi-Family Residential properties;
- Implement a Base Rate by property for Non-Residential customers; and
- Eliminate the Base Rate by specific features of a property and maximum daily water allocation for Non-Residential customers.

A comparison is provided in the tables on page 32.

Current Base Rates					
			$/ Day		$/ Annum
Single Family Residence		$	0.41658	$	152
Apartments, Suites or Duplex	each unit	$	0.41658	$	152
Rooming Houses	first unit	$	0.41658	$	152
Rooming Houses	each additional group of plumbing fixtures	$	0.27860	$	102
Trailer or Mobile Home Park	per occupied space	$	0.41658	$	152
Secondary Suite		$	0.41658	$	152
Base Rate only - Non Residential (includes 11,000 gallons per day water consumption)					
Cafes, Restaurant, Licensed Premises	for each group of plumbing fixtures	$	0.41658	$	152
Garage or Service Station		$	0.41658	$	152
Store or Business Premises	for each group of plumbing fixtures	$	0.41658	$	152
Laundry, Laundromat or Dry Cleaners	per washer	$	0.19526	$	71
Schools and Colleges	per classroom	$	0.27860	$	102
Hospitals	per bed	$	0.27860	$	102
Office Building	for each group of plumbing fixtures	$	0.41658	$	152
Churches and Halls	for each group of plumbing fixtures	$	0.27860	$	102
Other Premises	for each group of plumbing fixtures	$	0.41658	$	152

Metric equivalent: 11,000 gallons = 50 m3

Proposed Base Rates *				
	$/ Day/ Unit		$/ Annum	
Residential and MF Residential	$	0.41658	$	152
	$/ Day/ Property		**$/ Annum**	
Non Residential	$	0.41658	$	152

** Proposed rates do not include annual rate increase for 2023.*

Sanitary Sewer Utility - Volumetric Rate

The current Schedule of Charges for the Sanitary Sewer Utility does not include a Volumetric Rate for customers (excluding hotels, motels and campgrounds). Decreasing Volumetric Rates are charged for hotels, motels and campgrounds and for Non-Residential customers who exceed their Base Rate water allocation. The current Volumetric Rates are shown in the table below.

A survey of other municipalities found that most used a single Volumetric Rate based on metered water consumption for sanitary sewer services; and adjusted either the rate or the volume to recognize that some water is consumed for outside purposes and is not collected by the sanitary sewer system. Municipalities used one of the following approaches for calculating volumetric sewer charges:

- A % of metered water consumption (e.g. 90%), or
- Reduce sewer Volumetric Rates during the spring and summer months, or
- Use fall and winter water consumption to estimate spring and summer water consumption.

These municipalities also used more frequent meter readings and had reading schedules that more closely aligned with annual seasons.

Volumetric Rate Recommendations:

- Implement a single Volumetric Rate for Non-Residential customers based on metered water consumption to improve user equity; and
- There may be Non-Residential properties that consume significant amounts of water that is not collected by the sanitary sewer system (e.g. irrigation). Implement a policy and process where a customer may apply for an adjustment to water consumption volumes for calculating sanitary sewer volumetric charges. This adjustment may require the installation of a separate meter.

The City may consider implementing a volumetric rate based on water consumption for residential customers when the planned meter replacement program has been completed and meter readings can be increased to a minimum of four times a year to better align with annual seasons. A comparison is provided in the tables below.

The proposed single Volumetric Rate is higher than the current decreasing Volumetric Rate levels. There will be a shift from Base Rate charges only to a combination of Base Rate and Volumetric charges for Non-Residential customers.

Current Volumteric Rates Hotels, Motels and Campgrounds and Non-Residential customers that exceed 11,000 gallons per day water consumption included in Base Rate Consumption/ Day - Imperial Gallons					
Level	**(IG)**		**$/IG**		**$/1000 IG**
Level 1	per 1,000 gallons up to 11,000 gallons	$	0.00138	$	1.38033
Level 2	per 1,000 gallons for next 11,000 gallons	$	0.00111	$	1.10732
Level 3	per 1,000 gallons for next 55,000 gallons	$	0.00083	$	0.83430
Level 4	per 1,000 gallons for over 77,000 gallons	$	0.00055	$	0.54605

Metric equivalents: 11,000 gallons = 50 m3, 55,000 gallons = 250 m3 and 77,000 = 352 m3

Proposed Volumetric Rate * Single Volumetric Rate Non Residential Customers Only Consumption/ Day - Imperial Gallons					
	(IG)		**$/IG**		**$/1000 IG**
All	All	$	0.00350	$	3.50

** Proposed rates do not include annual rate increase for 2023.*

Impact of proposed Rate Structure on Sanitary Sewer Utility Customers

Consistent with the Water Utility, the proposed Sanitary Sewer rate structure must still collect adequate annual revenues; however, the proposed changes may impact charges for individual customers.

It can be acknowledged that currently some customers may not be paying an equitable share of the utility's costs and some customers may be paying more than their equitable share. Implementation of the recommended rate structure changes will have impacts for some customers – some customers may pay more and some may pay less. The purpose and rationale of the proposed rate structure changes must reasonably and adequately explain these impacts.

An analysis was completed comparing charges under the City's current rate structure with the projected charges under the proposed rate structure.

Residential customers will not see any change as the current Base Rate by connection (Single-Family Residential) and by unit (all Multi-Family Residential) will remain.

It is difficult to make any broad assumption regarding the impact for Non-Residential customers due to a wide range of amenity units used for the current charges and a wide range of water consumption.

The most significant impacts for noted are shown in the table below.

As previously noted, some Non-Residential customers may see a decrease in Water Utility charges due to the single volumetric rate and an increase in Sewer Utility charges due to the single volumetric rate based on water consumption.

Customer Type	Service Demand	Impact
Single Family Residential	All	No change
Multi-Family Residential 2 units	All	No change
Multi-Family Residential 3+ units	All	No change
Non-Residential	All	Difficult to make broad assumptions due to significant rate structure change from Base Rate per feature or amenity unit to Base Rate by property and Volumetric Rate based on water consumption
		Customers with a higher unit count and lower water consumption may have lower total charges due to new Volumetric Rate based on water consumption
		Customers with higher water consumption may have increased total charges due to new Volumetric Rate based on water consumption

ADDITIONAL INFORMATION

The City also provides water and sanitary sewer services as required by provincial legislation or through contractual agreements. A brief overview of these services for information purposes only are provided below. These services were not included in this review.

Southwest Extension Waterworks District

Under provincial legislation, the City provides water to Southwest Extension Waterworks District. An annual calculation charges a rate per 1,000 gallons for Southwest Extension's consumption. This rate is calculated each year based on the City's annual water supply administration, operating and average infrastructure investment costs. The City's 2021 billing indicated total consumption by the District of 5.8 million gallons or approximately 0.24% of the City's total water consumption.

Water Hauler Fill Stations

The City owns and operates two Water Hauler Fill Stations. One is located on Labieux Road and one at Chartwell Road and MacMillan Road in Cedar. Typical users are water truck haulers. Haulers must apply for a SMART card from the City and prepay to access the Bulk Water Filling Station. The annual water hauler charge is calculated to recover annual operating, maintenance and investment for the fill stations plus cost of water at the highest volumetric level.

Bulk Water Agreements

The City's bulk water rate is equal to the highest volumetric rate.

The City has the following agreements to provide water:

- Lantzville Water Agreement
- Snuneymuxw First Nation Water Servicing Agreements

These agreements provide water at the current City of Nanaimo bulk water rates.

The agreement with Lantzville was entered into in 2014 and has a 20 year term.

The two agreements with Snuneymuxw First Nation were entered into in 2012 and have a 40 year term.

The City has the following agreements to provide an emergency water connection:

- North Cedar Improvement District
- Nanaimo Forest Products (Harmac)

The North Cedar Improvement District contract provides water at current City of Nanaimo bulk water rates. This agreement was entered into in 2015 and renewed in 2020 for an additional 5 year term.

The agreement with Nanaimo Forest Products also provides the City with an emergency water supply. Water is provided by either party at specified rates. This agreement was entered into in 2011 and has a 30 year term.

Sanitary Sewer Agreement

The City has a tripartite agreement with the Regional District of Nanaimo and Snuneymuxw First Nation. The City provides sanitary sewer collection and the Regional District of Nanaimo provides sanitary sewer treatment for Snuneymuxw First Nation. This agreement was entered into in 2015 and has a 40 year term.

OTHER CONSIDERATIONS

Income Subsidy

The City offers a Water and Sewer User Fee Subsidy to qualifying residents. The resident must be over 65 years of age and meet specific income requirements. The subsidy provides for a 50% reduction in the minimum charges for water and sewer rates. Council may wish to review and provide further direction on the City's current income subsidy program.

Early Payment Discount

The City offers a payment discount for water and sewer users. User rate payments are due three weeks after the utility billing is issued. If the payment is received on or before the due date the account holder receives a 5% discount. Payments received after the due date do not qualify for the discount. Council may wish to review and provide further direction on the City's current early payment discount program.

Agricultural Properties

The City's current water rate structure does not include either a separate customer classification or specific rates for agricultural properties. The City currently has 30 Class 9 farm properties for property tax purposes. The majority of these properties are classified as residential and are currently charged the same as all other water utility customers.

MEASUREMENT UNITS

The City's current utility billing system uses imperial measurement for recording water consumption data and for customer billing. The Utility Review process and this report uses imperial gallons for all analysis and reporting to minimize risk of conversion errors. City staff have indicated a desire to change the current utility billing system to metric.

At this time, changing the current billing system to collect, calculate and present data using metric measurement is not considered practical and would require considerable resources to verify and monitor the system input and output. The City may consider the change to metric measurement at the time that a new billing software is required.

MUNICIPAL SURVEY

The City sent a questionnaire to several similar sized municipalities regarding their water and sewer utility rate structures. The City received responses from the following municipalities which all used full cost recovery:

- City of Abbotsford
- City of Chilliwack
- City of Kamloops
- City of Kelowna
- City of Victoria

The rate structures utilized by these municipalities included some key differences from the City of Nanaimo's current utility rate structures:

- Most municipalities used fewer customer classifications or only one classification, and customer classifications were usually the same for both the water and sewer utilities;
- Most municipalities had more frequent meter reading schedules or reading schedules that appeared to align with seasons;
- Most municipalities used a Base Rate by meter size which is a best practice;
- Most municipalities used either a single Volumetric Rate or an increasing Volumetric Rate with less block levels; and
- No municipalities had a sewer rate structure based on specific attributes of a property (e.g. number of plumbing fixtures, beds, classrooms). All used either a combination of a Base Rate and Volumetric Rate or Volumetric Rate only for the sewer utility.

A summary of the municipal survey findings can be found in Appendix 2.

SUMMARY OF UTILITY RATE REVIEW RECOMMENDATIONS

The Utility Rate Review evaluated the financial sustainability of the City's Water Utility and Sanitary Sewer Utility and the effectiveness and efficiency of each utilities' current Rate Structures. Each utility's rate structures were examined to identify opportunities to improve user equity, clarity and administrative efficiency.

A summary of the Utility Rate Review recommendations:

Water Utility

- Maintain annual rate increases;
- Implement two new customer classifications for multi-family residential customers: Multi-Family Residential 2 units and Multi-Family Residential 3+ units;
- Implement Schedule of Charges:
  - Maintain current daily Base Rate by property for Single Family Residential
  - Maintain current daily Base Rate by property for Multi-Family Residential 2 units
  - Implement daily Base Rate by meter size for each service connection for Multi-Family Residential 3+ units and Non-Residential customers,
  - Eliminate additional Base Rate for combination meters,
  - Reduce increasing Volumetric Rate to 4 levels for Single-Family Residential and Multi-Family Residential 2 units only including new consumption levels, decreasing the rate increase between level 1 and level 2 and increasing rate increase for level 3 and level 4
  - Implement a single Volumetric Rate for Multi-Family Residential 3+ units and Non-Residential; and
- Eliminate the Multi-Family Option.

Sanitary Sewer Utility

- Maintain annual rate increases;
- Implement new customer classifications for multi-family residential customers: Multi-Family Residential 2 units and Multi- Family Residential 3+ units;
- Implement Schedule of Charges:
  - Maintain current daily Base Rate by property for Single-Family Residential;
  - Maintain current daily Base Rate by residential unit for Multi-Family Residential 2 units
  - Maintain current daily Base Rate by residential unit for Multi-Family 3+ units;
  - Implement base rate by property for Non-Residential Customers;
  - Implement single Volumetric rate for Non-Residential Customer;
- Implement a policy and process for customers to apply for an adjustment to water consumption where significant water consumption is not collected by the sanitary sewer system – e.g. for irrigation;
- Eliminate the Base Rate by property feature for non-residential customers including the maximum daily water allocation; and
- Eliminate the decreasing Volumetric Rate for hotels, motels and campgrounds and for Non-Residential customers that exceed a specific daily water consumption.

FUTURE UTILITY RATE REVIEWS

The current Utility Rate Review is focused on incremental and achievable changes to improve customer equity, clarity and administrative efficiency. This Utility Rate Review has developed a framework and tools for future reviews.

Future improvement may include:

- Utility Customer Statements - improve disclosure of water consumption to support continued conservation and affordability of services.
- Sanitary Sewer - implement volumetric rate for residential customers once planned meter replacement program is completed
- Water Reading Schedule – implement a bi-monthly or quarterly meter reading schedule that better aligns with the seasons/calendar year. More frequent meter readings would improve feedback to customers, better align with seasonal demand for analysis, and improve quality of data for utility operators, planners and decision makers. This change is dependent on the planned meter replacement program.

NEXT STEPS

This report has been presented for Council's consideration and to seek Council's direction on proposed recommendations.

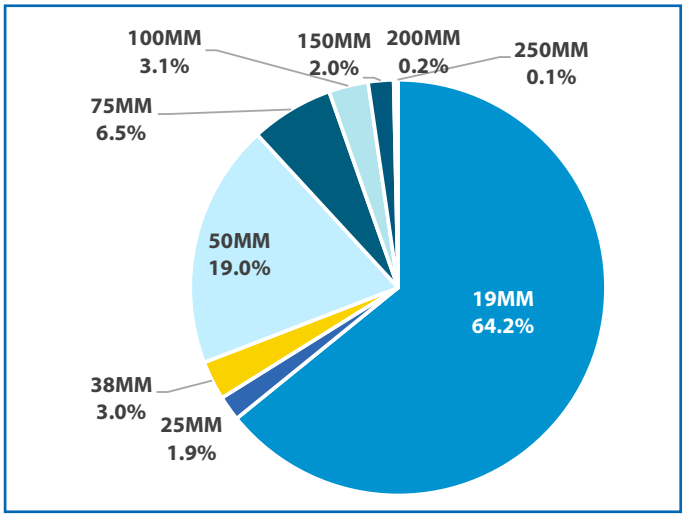
Implementation of new rate structures will require significant resources to update software and test appropriately.

APPENDIX 1: ADDITIONAL UTILITY INFORMATION

Water Service Connection

Each customer's access to water requires connection to the City's water distribution system. The size of the service connection can vary between customers with a larger service connection - or meter size – allowing greater water capacity on demand for a customer. Larger service connections may require upsizing of infrastructure and a related increase in operating and investment costs. Single-family residential users are typically a single 19mm meter size connection. Multi-family and non-residential users may have more than one water service connection and meter sizes can vary from 19mm to 250mm. Additional service connections may be required for fire protection to ensure adequate water flow in case of fire.

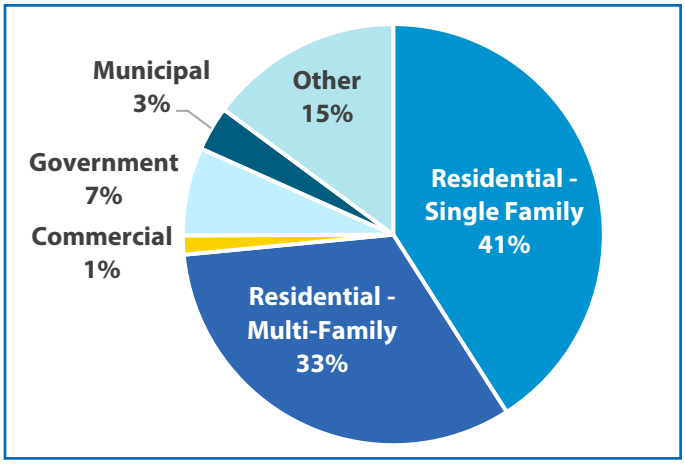
A breakdown of service connection sizes in the City is shown below:



Water Consumption

Water consumption for customers is for indoor and outdoor purposes. Water consumption can vary somewhat year to year mainly due to seasonal irrigation demand. Analysis of historical water consumption data indicates residential customer's water consumption is approximately 74% of total water consumed. The remaining water was consumed by non-residential customers. The Utility Rate Review used 2018 water consumption data for analysis and modelling.

The City's water consumption by customer type is shown below.



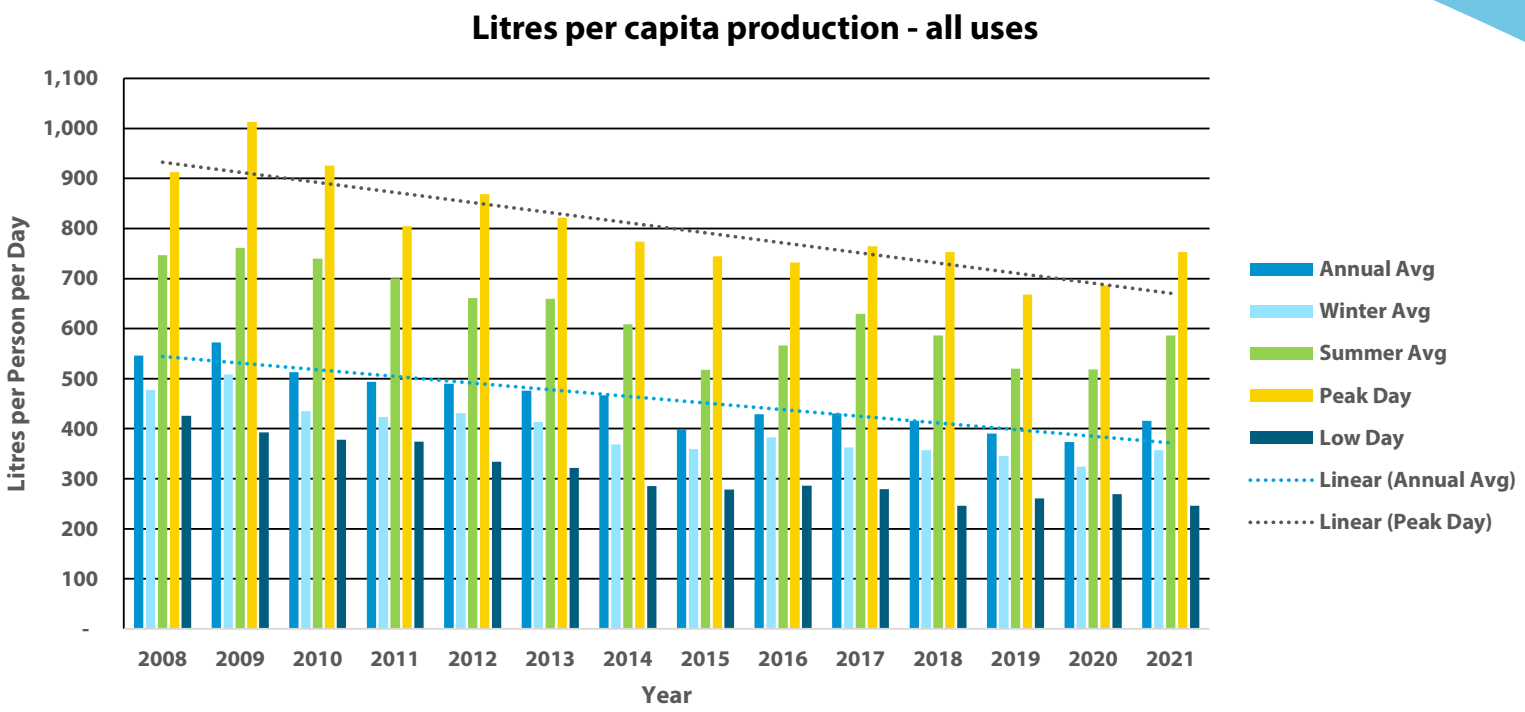
Water Consumption and Sanitary Sewer Demand

Water consumption by customers for indoor purposes will require collection by the sanitary sewer system. Historical water consumption data was used to analyze and develop recommendations for both the water and sanitary sewer utilities.

Peak Demands

The City's water and sanitary sewer systems are constructed and maintained to meet peak period service demands. These peak periods are primarily caused by each customer's daily water consumption patterns, by seasonal irrigation, by fire protection and by system maintenance requirements. Where data is available, analysis of peak demands can be used when developing or evaluating utility rate structures.

The City maintains daily peak demand water consumption data for the entire system only. The City currently does not have peak demand data by customer class or individual users. Enhanced water meters would need to be implemented to provide more detailed customer peak demand data.



A significant increase in 2021 water consumption was largely due to the extended 'heat dome' during June.

Data

Access to accurate and reliable data is a critical requirement for a Utility Rate Review.

The Utility Rate Review financial analysis relied on the City's robust financial planning processes and information, and used conservative assumptions for user growth, water conservation and inflation.

The Utility Rate Review used data provided by the City's Water Resources and Revenue Services departments and by the City's utility billing software. The data included:

- Historical water production and consumption data;
- Historical utility customer account billing data; and
- Water consumption by billing period, by customer, by meter.

Historical billing data by meter was not available. Each billing period, calculations for charges and customer statements are generated, however, these detailed calculations are not currently retained by the billing system. Review analysis included using historical water consumption data and the City's current utility rate bylaws to generate current customer billing charges for comparison to charges under proposed rate structures.

APPENDIX 2: MUNICIPAL SURVEY

Water Utility Rate Structure

City of Nanaimo	All Users • Base Rate by service connection • Volumetric Rate (six increasing blocks)
City of Abbotsford	Volumetric Rate (single level) only • By user type (Residential, Commercial/Institutional and Industrial/Agriculture)
City of Chilliwack	All Users • Base Rate by meter size • Volumetric Rate (single level)
City of Kamloops	Residential Users • Base Rate by meter size • Base Rate (water allotment by season) • Volumetric Rate (four increasing blocks in excess of allotment) Commercial Users • Base Rate by meter size • Volumetric Rate (five increasing blocks)
City of Kelowna	All Users • Base Rate by meter size Single Family Residential Users • Volumetric Rate (four increasing block rates) Multi-Family Residential and Other Users • Volumetric Rate (single level)
City of Victoria	All Users • Base Rate by meter size, plus • Volumetric Rate (single level)

Sewer Utility Rate Structure

City of Nanaimo	Residential Users • Base Rate by residential unit Non-Residential Users (excluding hotels, motels and campgrounds) • Base Rate by specific property amenities, includes maximum daily water allocation • If maximum daily water allocation exceeded, decreasing Volumetric Rate is charged instead Hotel, Motels and Campgrounds • Decreasing Volumetric Rate only
City of Abbotsford	Base Rate only • By user type – Residential, Commercial/institutional and Industrial/Agricultural • Lower rate for Industrial and Agricultural
City of Chilliwack	Residential Users • Base Rate per SF property or MF dwelling unit All Customers • Volumetric Rate only (90% of metered water consumption)
City of Kamloops	Residential Users • Base Rate by meter size, plus • Base Rate by family unit Commercial Users • Base Rate by meter size, plus • Volumetric Rate
City of Kelowna	Residential Users • Base Rate per residential unit only Commercial Users • Base Rate, plus • Volumetric Rate (single level)
City of Victoria	All Users • Volumetric Rate only (lower rate June to September)

APPENDIX 3: UTILITY ACCOUNTING PROCESSES

The City's operations and activities are organized and reported by Fund. The City maintains a Sewer Fund and a Water Fund with separate accounting and budgeting structures. The fund tracks and reports all revenues, expenditures and reserves for each utility.

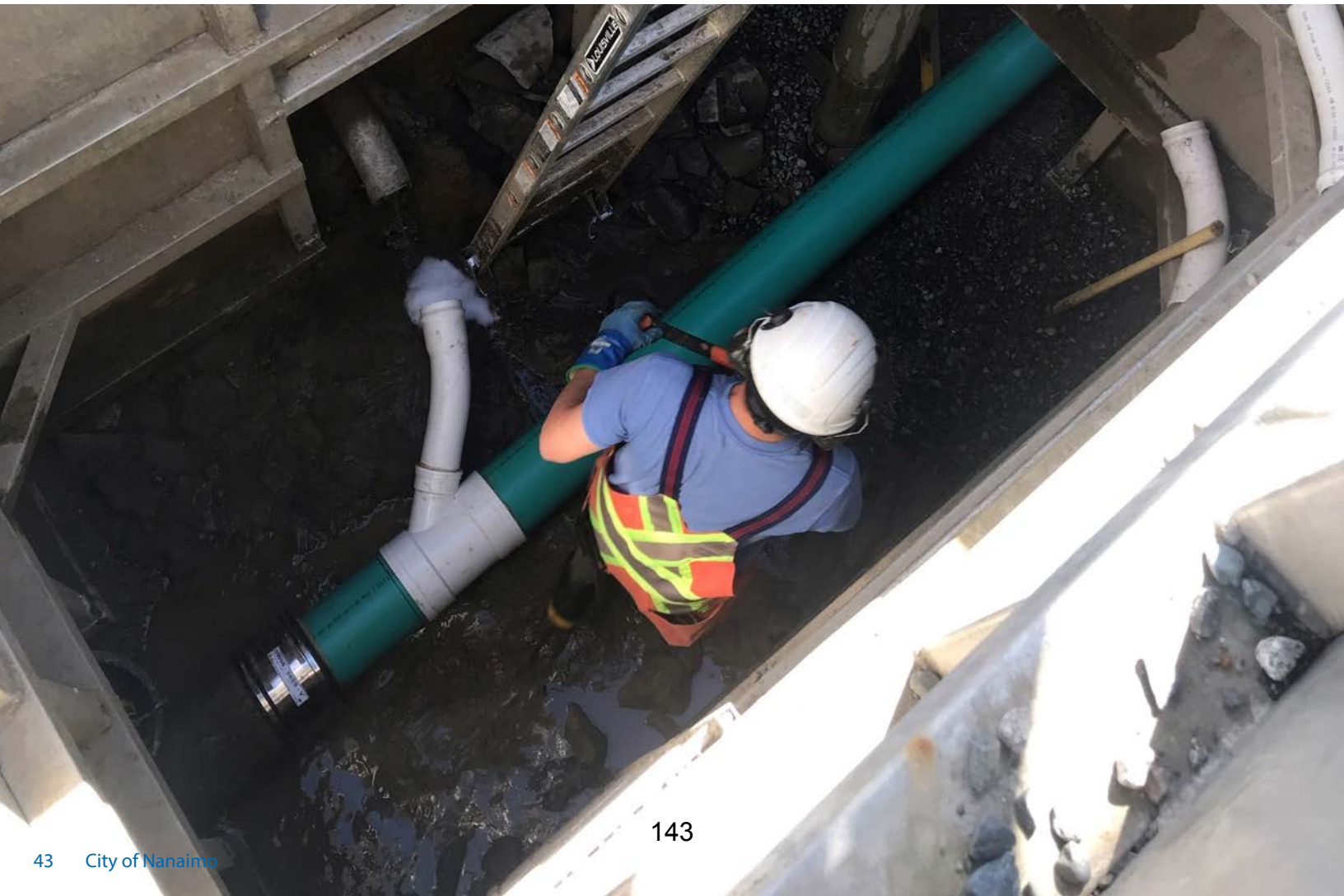
The City's Revenue Services unit, within the Finance department, is responsible for the following utility billing processes:

- Customer account maintenance;
- Collection of metered water consumption data; and
- Customer billing and revenue collection.

Each City water service has a meter to record water consumption. Water meter reader staff collect the water consumption data for each meter three times a year or approximately every four months.

The City is divided into 16 areas, or categories, with up to eight routes per area that meter readers follow to collect water consumption data.

The City's Revenue Services staff monitor metered water consumption data and advise utility customers through either a note on a subsequent billing statement or a courtesy letter of significant issues. These issues can include a significant increase or decrease in water consumption, water consumption that has been estimated and for adjustments. A significant increase in water consumption may be due to an undetected water leak or change in property use which will require further action.



APPENDIX 4: REVIEW REFERENCES

The City's Utility Rate Review included review of external reference materials including the National Guide to Sustainable Municipal Infrastructure (Water and Sewer Rates: Full Cost Recovery 2006), the American Water Works Association (AWWA) Manual of Water Supply Practices, Principles of Water Rates, Fees and Charges (Seventh Edition) and a survey of other municipalities through a questionnaire.

WATERWORTH, a dedicated utility rate setting software, was used for rate structure modelling. The WATERWORTH team has worked with small and medium-sized communities for over 15 year and provided valuable support and advice for the City's Utility Review process.

GLOSSARY

Asset Management: An integrated approach involving planning, engineering and finance to effectively manage existing and new municipal infrastructure to maximize benefits, reduce risk and provide satisfactory levels of service to the community.

Base Rate: A fixed or flat rate charged to utility users each billing period that is intended to provide the utility with a reliable revenue stream that will recover a portion of the total utility costs.

Decreasing Block Rate: A volumetric rate structure with multiple rate levels with decreasing consumption blocks. Usually used for users that have limited ability to control consumption.

Development Cost Charges (DCC): The Local Government Act allows the City to collect monies from developers to offset infrastructure investment needed for growth.

Full-Cost Recovery: Full Cost Recovery requires the collection of sufficient revenues to cover the total costs of operating, maintaining, renewing and upgrading infrastructure required to provide specific levels of service.

Increasing Block Rate: A volumetric rate structure with multiple rate levels with increasing consumption blocks. Higher demand by users will increase billing in blocks with higher rates and incent conservation.

Level of Service: A composite indicator that reflects the social, environmental and economic goals of the community and may include any of the following parameters: safety, customer satisfaction, quality, quantity, capacity, reliability, responsiveness, environmental, cost and availability.

Reserves: Reserves can be compared to 'savings accounts' and are used to support the City's long-term financial stability and sustainability.

Sustainability: The pillars of sustainability include ensuring that the current social, economic and environmental commitments are considered in investment decisions and that those decisions will not compromise the ability of future generations to meet their own needs.

Upgrade: Investment in added or enhanced components to existing infrastructure assets designed to increase service capacity required for growth. Infrastructure upgrades may also be required to meet building code changes, new regulations, adjusted service levels, or technology improvements.

Volumetric Rate: A rate that is based on water consumption. The rate can be a single, decreasing or an increasing block rate.