



Cowichan Bay Waterworks District

Public Information Meeting

Proposed 2024 Water Tolls, Parcel Tax, Budget, Capital Planning Update Draft Commercial Users Water Conservation Program

When: 7:30 pm, Wednesday, November 29, 2023

Where: Gym [use side entrance], Bench Elementary School, 1501 Cowichan Bay Road, Cowichan Bay, BC¹

Agenda

1. Welcome and Traditional Territorial Acknowledgement
2. Introductions
3. Presentations
 - a. Action Plan update
 - b. 2024 Proposed Budget
 - Tolls cover the cost of Operations
 - Taxes cover the cost of Capital Upgrades
 - c. 2024 Proposed Water Tolls
 - d. Proposed Commercial Water Conservation Program
 - e. Five Year Capital Plan
 - f. 2024 Proposed Parcel Tax
4. Community Discussion / Questions and Answers
5. Next Steps
6. Adjournment

Attachments

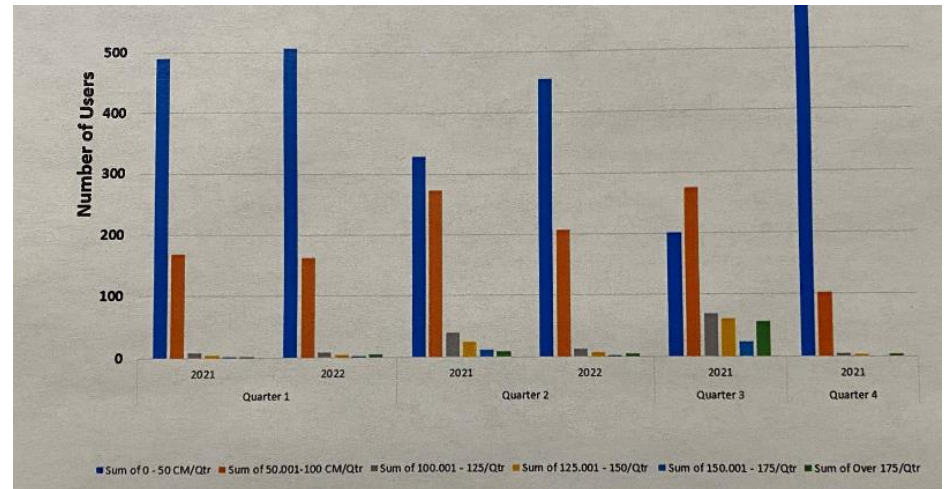
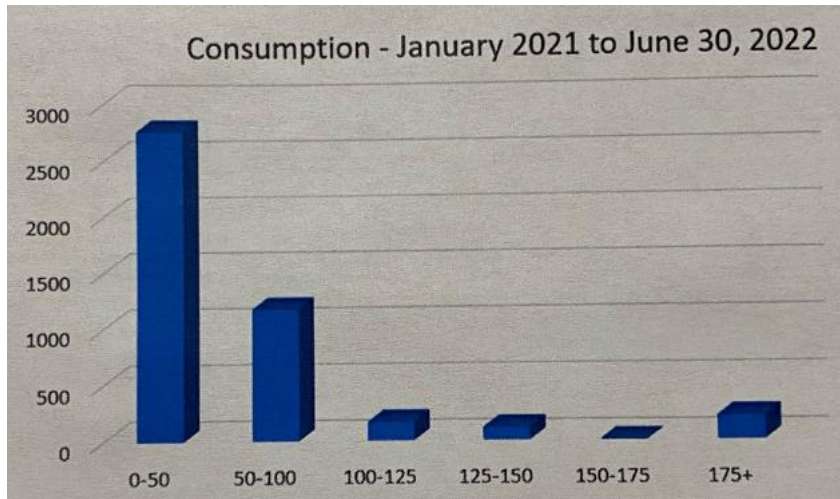
- Water Use Data
- Action Plan
- Proposed 2024 Budget
- Proposed Water Toll Bylaw
- Five Year Capital Plan
- Proposed Parcel Tax Bylaw
- Proposed Water Conservation Program – Commercial Users

Reference Material – www.cowichanbaywater.com

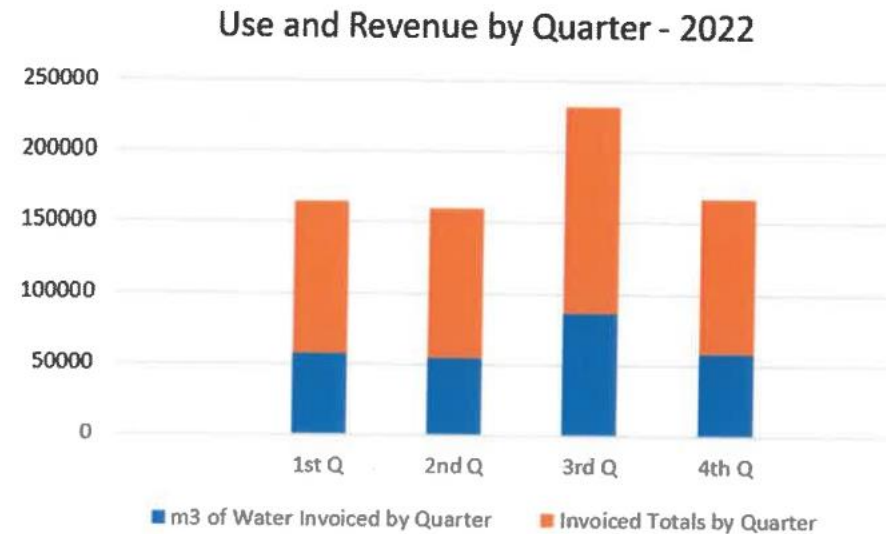
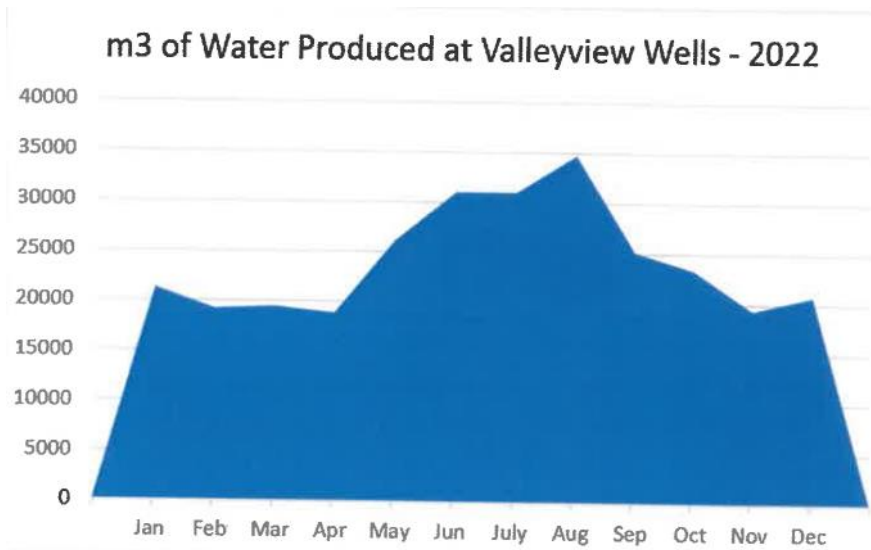
- Master Plan - <https://cowichanbaywater.com/documents/342/MasterPlanJan2023.pdf>
- Source Water Protection Plan - https://cowichanbaywater.com/documents/342/SWPP_Final_compressed.pdf
- Action Plan - https://cowichanbaywater.com/documents/342/summary_table_11x17.pdf
- Current Projects - <https://cowichanbaywater.com/current-projects>
- Letters Patent - <https://cowichanbaywater.com/letters-patent>
- Financial Statements - <https://cowichanbaywater.com/financial-statements>
- Board Minutes - <https://cowichanbaywater.com/board-meetings>
- Annual General Meeting Background - <https://cowichanbaywater.com/annual-general-meetings>
- Other jurisdiction rate comparison

¹ No food or drink is permitted in the Gym. All footwear with heels or hard soles is forbidden. No street shoes nor street runners are allowed in the Gym

Water Use Data - January 2021 to June 2022

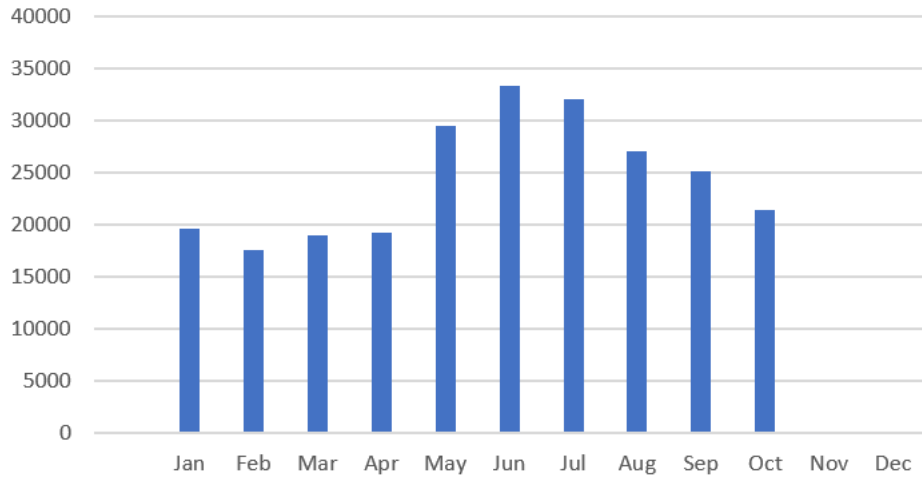


Water Use Data - 2022

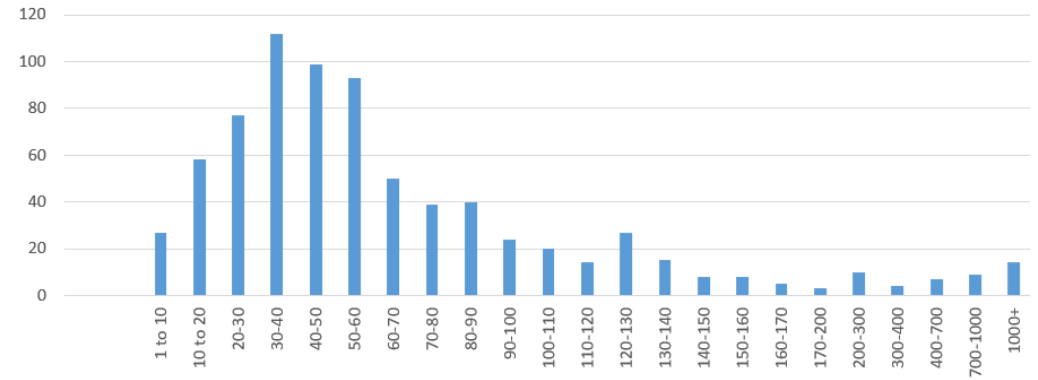


Water Use Data - 2023

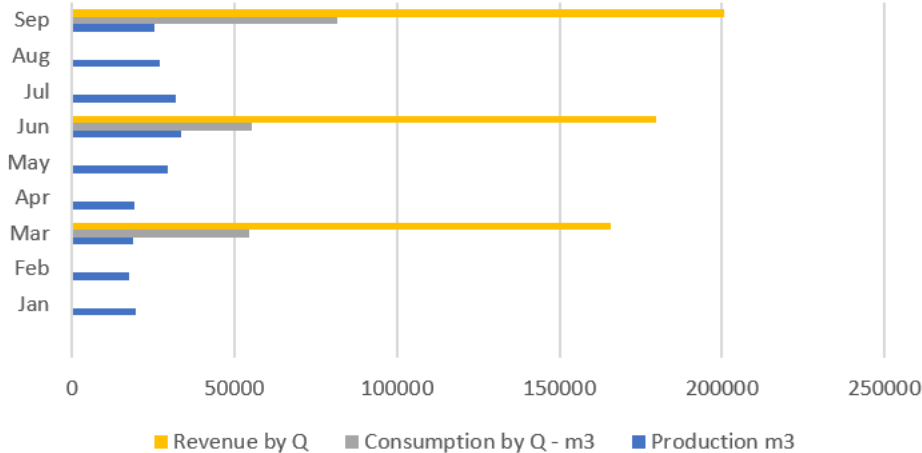
2023 Water Production by m³



2nd Quarter - Consumption Comparison Number of Users per m³ Used

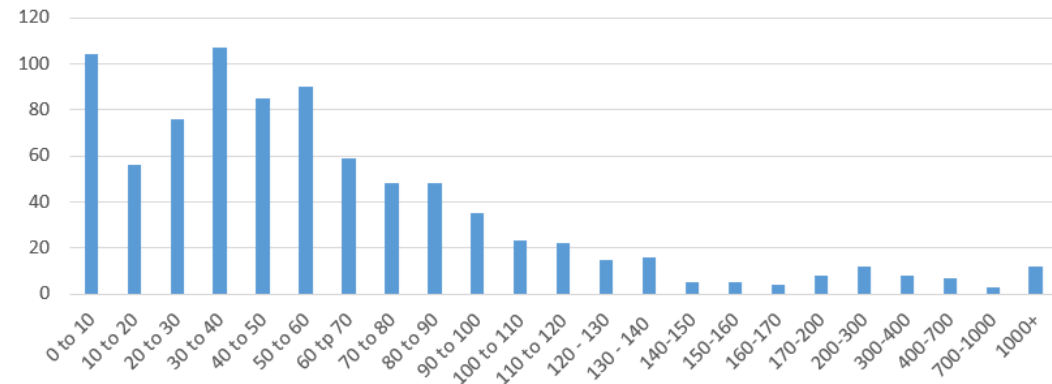


Production / Consumption / Revenue



3rd q consumption

3rd Quarter Consumption Comparison Number of Users by m³ Used



Cowichan Bay Waterworks District Water Toll and Parcel Tax Framework

Cowichan Bay Waterworks District is an Improvement District incorporated under the provincial *Local Government Act* [s. 17] in 1946. Improvement Districts are autonomous local government bodies, akin to a city or town, responsible for providing one service [*i.e.* community water]. Cowichan Bay Waterworks District is administered by an elected board of five trustees, each elected for a rotating a three-year term by eligible landowners of the improvement district.

The current water supply system serves approximately 3000 residents in Cowichan Bay [and includes Valleyview Centre in Cobble Hill]. The water supply system consists of two active wells, three reservoirs, two booster pumps, one fire pump, one treatment station, two pressure zones, two pressure reducing valves, 80+ fire hydrants and 20 km of watermains. A new Treatment System is being developed for the Pavenham Well. The water is treated with minor amounts of sodium hypochlorite.

Cowichan Bay Waterworks District is entitled to levy water tolls to recover the costs of administering, operating, and maintaining the water supply system.

Cowichan Bay Waterworks District is also entitled to levy an annual parcel tax to cover the cost of capital upgrades, new infrastructure and replacing aging infrastructure. These upgrades are informed by a Water System Master Plan and Action Plan. The District collects Capital Expenditure Charges, Latecomer Fees and a variety of application and service fees to recover the costs for new development [as per the *Local Government Act*].

Review of the Water Toll Framework continues as the District encourages conservation. The water toll serves three purposes, (i) to monitor water usage, (ii) to encourage conservation and (iii) to recover water production and delivery costs. With the principles of fairness and consistency being the cornerstone of Cowichan Bay Waterworks District, it is imperative that the water toll framework achieve these objectives on a user pay basis.

- The 2023 water toll framework recovered water production costs based upon consumption, cost recovery and climate change [the 3-C's].
- The 2024 water toll framework proposes to continue recovering water production costs based upon the 3-C's and proposes a Commercial Users Water Conservation Program to lower use and cost
 - eliminates the unintended consequence of the base rate penalizing users of less than 25 m³ per quarter.
 - reduces the impact of the upper tier by reducing it to \$4/m³ thereby recognizing conservation efforts made by commercial users and those with brown, crunchy lawns.

A review of the Parcel Tax rate also occurred in order to plan for implementation of the Master Plan [see the Action Plan]. The water distribution system is designed for average use and is adequate for the current population. Given some ratepayers tend to use amounts well in excess of North American averages, a new source of water is required to meet increased demand. Water conservation efforts have been strongly encouraged to reduce water use, and, to date, in 2023 data indicates that most ratepayers and some commercial users have reduced water use, in compliance with conservation measures and outdoor watering restrictions. The parcel tax rate has been determined by using the identified priorities and cost estimates in the Master Plan and then dividing that by the number of parcels on the tax roll [1040 parcels].

The parcel tax roll also underwent a tri-party review this year [CBWD, BCAA, Land Title Office and the Ministry of Municipal Affairs]. This review identified parcels that were not previously on the parcel tax roll, resulting in the addition of several parcels to the tax roll and an increase in projected tax revenue.

| Cowichan Bay Waterworks District | 2022- 2024 Action Plan Summary | | | | | |
|--|--|------|------|------|-----------------------------|-----------|
| Project by Priority | Status | 2022 | 2023 | 2024 | AC Pipe Replacement Program | 2026~2040 |
| 1. Office Filing System | Complete | | | | | |
| 2. Demolish / Dispose George Rd Station | Complete | | | | | |
| 3. Source Water Protection Plan | Complete | | | | | |
| 4. Telegraph Reservoir Repairs | Complete | | | | | |
| 5. System Water Quality Review / Pavenham Well Commission | In progress | x | | | | |
| 6. Scada – Ordano | In progress (Cowichan Bay Estates warranty) | x | | | | |
| 7. Scada – Valleyview | In progress | x | | | | |
| 8. Office Heat Pump | Complete | | | | | |
| 9. Safety Upgrades | Complete | x | | | | |
| 10. Hydrant Upgrades/Maintenance | Fall 2023 | | x | | | |
| 11. Valleyview Transducers | Planning phase | x | | | | |
| 12. Back up Generator | Planning phase | x | | | | |
| 13. New Water Source | Consultation initiated | x | | | | |
| 14. Chlorine Analyzer Bi-annual Maintenance | Complete | | x | | | |
| 15. Cubic Feet to Cubic Meter Replacement | In progress – 80% complete | x | x | | | |
| 16. Valve Assessment / Repair / Upgrade / Mapping | In progress – 50% complete | x | x | | | |
| 17. Ordano Chlorine Analyzer – no longer necessary | Removed | | | | | |
| 18. Valleyview Station Upgrade | Planning phase with Valleyview Mall upgrade & sewage permit apply | | | x | | |
| 19. Flush Stations | To do | | x | | | |
| 20. SWPP Recommendations [well fence, signage, bentonite seal] | In progress | | x | x | | |
| 21. Cow Bay Rd [Hecate to Botwood] | Design phase | | x | | | |
| 22. Cow Bay Rd [Glen to Longwood] | Complete | | x | | | |
| 23. Wilmot Rd [Pritchard to Cow Bay Rd] | Spring 2024 | | | x | | |
| 24. Kidd Well Assessment | Complete | | x | | | |
| 25. Wessex Road | Fall 2023 | | x | | | |
| 26. Engineering Specifications | In progress | | x | | | |
| 27. Engineering Model | In progress | | x | | | |
| 28. Bicks Rd | Design complete | | x | | x | |
| 29. Pavenham Rd – 1964 | To do | | | | x | |
| 30. Glen Rd [east of McGill] - 1964 | To do | | | | x | |
| 31. George Rd – 1965 | To do | | | | x | |
| 32. Longwood Rd – 1970 | To do | | | | x | |
| 33. Fenwick Rd – 1972 | To do | | | | x | |
| 34. Austin Place – 1972 | To do | | | | x | |
| 35. McGill Rd – 1974 | To do | | | | x | |
| 36. Glen Rd [west of McGill] - 1974 | To do | | | | x | |
| 37. Alder Glen Rd – 1974 | To do | | | | x | |
| 38. Maple Glen Rd - 1976 | To do | | | | x | |
| 39. Wilmot Rd [George to Falcon] | To do | | | | x | |
| 40. Nelson Rd [prior to Booster] | To do | | | | | x |
| 41. Woods Rd [prior to Booster] | To do | | | | | x |
| 42. Sears Rd [prior to Booster] | To do | | | | | x |
| 43. Telegraph Booster Station [after AC pipe replacements] | To do | | | | | x |
| 44. Demolish Ordano shed and Pavenham cement reservoir | TBD | | | | | x |

2024 DRAFT BUDGET

| OPERATIONS INCOME | | CAPITAL INCOME | |
|----------------------------------|--------------------------|------------------------------|--------------------------|
| Water Tolls | \$ 625,000 | Taxes | \$ 350,000 |
| Fees & Charges | \$ 3,000 | Interest | \$ 10,000 |
| Bank Interest | \$ 4,000 | Grant Income | \$ - |
| Penalties | \$ 6,000 | | |
| Pre-Paid Admin | \$ 10,000 | | |
| Transfers - Capital Projects | \$ 330,000 | | |
| TOTAL OPERATIONS INCOME | <u>\$ 978,000</u> | TOTAL CAPITAL INCOME | <u>\$ 360,000</u> |
| ADMINISTRATION | | OPERATIONS | |
| Salaries Wages Benefits | \$ 160,000 | Salaries Wages Benefits | \$ 150,000 |
| Training | \$ 3,000 | Training | \$ 5,000 |
| Trustee Remuneration | \$ 13,500 | Capital Projects | \$ 330,000 |
| AGM & Trustee Mtgs | \$ 1,000 | Freight | \$ 500 |
| Memberships & Licenses | \$ 20,000 | Memberships/Licenses | \$ 3,000 |
| Computer Services [office] | \$ 5,000 | Computer Services - Stations | \$ 5,000 |
| Office Supplies | \$ 5,000 | Truck Insurance | \$ 1,500 |
| Office Equipment | \$ 1,000 | Truck Fuel | \$ 1,500 |
| Office Maintenance/Repairs | \$ 1,000 | Truck Repairs / Maintenance | \$ 1,500 |
| Bank Charges | \$ 500 | Tool Rental | \$ 2,500 |
| Audit | \$ 24,000 | Tools/ Equipment | \$ 8,000 |
| Conventions Seminars | \$ 1,000 | Materials & Supplies | \$ 23,000 |
| Insurance | \$ 40,000 | Engineering Services | \$ 10,000 |
| Legal Services | \$ 5,000 | Contractors | \$ 25,000 |
| Advertising | \$ 500 | Station Maintenance | \$ 15,000 |
| Janitor | \$ 2,000 | Reservoir Maintenance | \$ 15,000 |
| Copier | \$ 2,000 | Hydrant Maintenance | \$ 5,000 |
| Postage Courier | \$ 5,500 | PRV Maintenance | \$ 5,000 |
| Sewer | \$ 300 | System Repairs | \$ 23,550 |
| Security | \$ 600 | Safety | \$ 5,000 |
| Land Title Search Fees | \$ 500 | BC Hydro | \$ 25,000 |
| Internet (Pavenham) | \$ 1,000 | Internet (VV, Ordano) | \$ 1,000 |
| Telephone | \$ 550 | Telus (cell) | \$ 2,500 |
| | | Water Treatment | \$ 20,000 |
| | | Lab Fees | \$ 1,000 |
| | | BC One Call | \$ 500 |
| Subtotal - Administration | <u>\$ 292,950</u> | Subtotal - Operations | <u>\$ 685,050</u> |
| | | TOTAL EXPENSES | <u>\$ 978,000</u> |

Existing Water Toll Rates - 2023

| Metered Rates | | | |
|---------------|---|-------------------------------------|------------------------|
| Tier | Usage | Cost | Water Tax in Lieu |
| | Quarterly Rate ¹ [includes the first 25m ³] | \$85 per connection and/or unit. | \$70 per connection |
| 1 | 25.0001 m ³ to 49.99 m ³ | \$0.50 / m ³ | |
| 2 | 50 m ³ to 74.99 m ³ | \$0.75 / m ³ | |
| 3 | 75 m ³ to 99.99 m ³ | \$1.00 / m ³ | |
| 4 | 100 m ³ to 124.99 m ³ | \$3.00 / m ³ | |
| 5 | Over 125 m ³ | \$5.00 / m ³ | |

Proposed Water Toll Rates - 2024

| Tier | Usage | Cost | Water Tax in Lieu |
|------|---|-------------------------------------|-------------------------|
| | Quarterly Rate ¹ [includes the first 15m ³] | \$80 per connection and/or unit. | \$170 per connection |
| 1 | 15.0001 m ³ to 49.99 m ³ | \$0.50 / m ³ | \$0.50 / m ³ |
| 2 | 50 m ³ to 74.99 m ³ | \$0.75 / m ³ | \$0.75 / m ³ |
| 3 | 75 m ³ to 99.99 m ³ | \$1 / m ³ | \$1 / m ³ |
| 4 | 100 m ³ to 149.99 m ³ | \$3 / m ³ | \$3 / m ³ |
| 5 | 150 m ³ and over | \$4 / m ³ | \$4 / m ³ |



2022 to 2030 Capital Expenditure Plan – Cowichan Bay Waterworks District
2022-2030

| Tax Income | Tax Project <small>[as per Master Plan]</small> | Cost | Year | Funding Source | Reserve / Levy / Borrow / Grant Project <small>[as per Master Plan, SWPP, Order, other identified priority]</small> |
|-----------------------------------|---|-------------|-------------|---|---|
| 2022 tax - \$180 000 | Wessex Main | \$160 000 | Fall 2023 | tax | |
| 2023 tax - \$225 000 | Wilmot Main | \$260 000 | Spring 2024 | Tax + high interest savings | |
| 2024 tax - \$350 000 ¹ | Pavenham Main | \$300 000 | 2025 | tax | |
| 2025 tax - \$350 000 ¹ | Glen Main – McGill east | \$300 000 | 2026 | tax | |
| 2026 tax - \$350 000 ¹ | George Main | \$300 000 | 2027 | tax | |
| 2027 tax - \$350 000 ¹ | Longwood & Bicks Main | \$500 000 | 2028 | Tax + high interest savings | |
| 2028 tax - \$350 000 ¹ | Fenwick Main Demo Pavenham/Ordano | \$300 000 | 2029 | tax | |
| 2029 tax - \$400 000 ¹ | Austin & McGill Mains | \$500 000 | 2030 | Tax [+ 2028 surplus] + high interest savings | |
| | | \$142 000 | 2022 | Bylaw 351 | Misc projects [safety, Valleyview, hydrants, valves, SWPP] |
| | | \$71 000 | 2023 | Bylaw 352 | Misc capital [generator, heat pump, George demo] |
| | | \$176 000 | 2023 | Bylaw 367 | Cow Bay Rd waterline - Longwood to Glen Valleyview pump. Scada Server |
| | | \$600 000 | 2023/2024 | Tbd ² | Pavenham treatment |
| | | \$65 000 | Fall 2023 | | Village Main design |
| | | \$ | 2024 | | New water source design |
| | | \$ | 2024 | | Valleyview Station design |
| | | \$1 000 000 | 2025 | | Village main install |
| | | \$1 000 000 | 2026 | | New water source |

¹ Equates to a parcel tax of \$350 [\$400 in 2029]

² Options include loans, grants, levies, partnerships, bylaw, operations funds

Draft 2024 Tax Rates

The Trustees of Cowichan Bay Waterworks District ENACT AS FOLLOWS:

1. For the year 2024, there are hereby levied the following taxes:

| | | |
|-------|--|---------------------------|
| i. | A tax of \$ 350 on all parcels of land classified into Group A. | <i>SFD</i> |
| ii. | A tax of \$ 350 on all parcels of land classified into Group A1. | <i>Wood Rd</i> |
| iii. | A tax of \$ 300 on all parcels of land classified into Group B. | <i>Vacant</i> |
| iv. | A tax of \$ 300 on all parcels of land classified into Group C. | <i>Water not supplied</i> |
| v. | A tax of \$ 700 on all parcels of land classified into Group D. | <i>Two dwellings</i> |
| vi. | A tax of \$ 350 on all parcels of land classified into Group E. | <i>Commercial</i> |
| vii. | A tax of \$ 700 on all parcels of land classified into Group F. | <i>Commercial multi</i> |
| viii. | A tax of \$ 8 500 on all parcels of land classified into Group G. | <i>Valleyview</i> |
| ix. | A tax of \$ 10 150 on all parcels of land classified into Group H. | <i>Wessex</i> |
| x. | A tax of \$ 350 on all parcels of land classified into Group I. | <i>Ocean Front</i> |
| xi. | A tax of \$3 900 on all parcels of land classified into Group J. | <i>4 ways</i> |
| xii. | A tax of \$0 on all parcels of land classified as tax exempt. | <i>Tax exempt</i> |

Draft - Cowichan Bay Waterworks District

Water Conservation Program

Cowichan Bay Waterworks heard the concerns expressed by the commercial users and is investigating offering water use audits to commercial facilities within the Waterworks District boundary. Water audits are an effective way to determine water use and efficiencies, and can help to identify conservation opportunities, reduce use, cost and measure water savings. Water use audits can help to identify the most cost-effective ways to increase savings and to reduce water use. There are certain areas for savings that generally have a quick and high Return on Investment:

| Type of Facility | Areas for Water Savings |
|------------------|--|
| Food Services | Once through cooling in walk in coolers and freezers and ice machines, toilets, taps, kitchen equipment, outdoor landscaping |
| Office | Toilets, server room once-through water cooled air conditioners, irrigation systems, cooling towers, outdoor landscaping |
| Retail | Toilets, irrigation systems, refrigeration, outdoor landscaping |
| Institutional | Toilets, continuous flush urinals, irrigation systems, outdoor landscaping |

No matter the type of facility, areas that will always show water savings are removing once-through water cooled equipment, and removing old, water wasting faucets and toilets.

Contact the District Administrator if you would be interested in this program – c.wirsz@cowichanbaywater.com

An example of water savings efforts by a local business resulted in savings of over 700 m³ [\$3500] and included staff education and understanding by team members on water usage and conservation, water on/off solenoids that run inline with on/off commands for equipment that uses the water, rebuilds of equipment, lower flow capacity sprayer heads, changing rinse stations to knee activated paddles and utilization of high pressure washing for sanitation.

Once this program has been established, the District will review options for water use audits in multi-family and residential settings.

While the aquifer will fill up during rainy periods, water use doubles in the summer—primarily due to lawn and garden watering.

The effects of climate change include longer dry spells in the summer months and shorter, more intense rain events are expected.

Having as much water available as possible provides the assurance that not only will there be a sufficient quantity of drinking water for the year, but provides the flexibility to deal with drought and forest fires.

Population growth will eventually require expansion of our water supply system, but ongoing water conservation can delay upgrades.

Rate Comparisons Other Local Jurisdictions

[see separate package]