# Notice of Meeting and Meeting Agenda Port Renfrew Utility Services Committee

Monday, June 24, 2024	2:00 PM	Goldstream Conference Room, 479 Island
		Highway, Victoria, BC

For members of the public who wish to listen to the meeting via telephone please call 1-833-353-8610 and enter the Participant Code 1911461 followed by #. You will not be heard in the meeting room but will be able to listen to the proceedings.

#### MEMBERS:

W. Forsberg (Chair); C. Carlsen (Vice Chair); A. Wickheim (EA Director); C. Welham

## 1. Territorial Acknowledgement

#### 2. Approval of Agenda

#### 3. Adoption of Minutes

 3.1.
 24-664
 Minutes of the February 15, 2024 Port Renfrew Utility Services Committee

 Recommendation:
 That the minutes of the February 15, 2024 meeting be adopted.

 Attachments:
 PRUSC2024-02-15Minutes

#### 4. Chair's Remarks

#### 5. Presentations/Delegations

Delegations will have the option to participate electronically. Please complete the online application for "Addressing the Board" on our website and staff will respond with details.

Alternatively, you may email your comments on an agenda item to the Port Renfrew Utility Services Committee at iwsadministration@crd.bc.ca. Requests must be received no later than 4:30 p.m. two calendar days prior to the meeting.

#### 6. Senior Manager's Report

#### 7. Commission Business

## 7.1. <u>24-641</u> 2023 Annual Report

<u>*Recommendation:*</u> There is no recommendation. This report is for information only.

Attachments: Staff Report: 2023 Annual Report Appendix A

 7.2.
 24-661
 Capital Project Status Reports and Operational Updates - June 2024

 Recommendation:
 There is no recommendation. This report is for information only.

Attachments: Staff Report: Project and Operations Update June 2024

#### 8. Correspondence

## 9. New Business

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## 10. Adjournment

Next Meeting: November 2024



#### MINUTES OF A MEETING OF THE Port Renfrew Utility Services Committee, held Thursday, February 15, 2024 at 2 p.m., In the Goldstream Meeting Room, 479 Island Highway Victoria, BC

- PRESENT: Committee Members: W. Forsberg (Chair) (EP); C. Carlsen (Vice Chair) (EP); A. Wickheim (EA Director) Staff: J. Marr, Senior Manager, Infrastructure Engineering; J. Dales, Senior Manager, Infrastructure Wastewater Operations; J. Kelly, Manager, Capital Projects; A. Hliva, Manager, Wastewater Conveyance Operations; M. Risvold (Recorder)
- **REGRETS:** C. Welham
- EP = Electronic Participation

The meeting was called to order at 2:00 pm.

## 1. ELECTION OF CHAIR

The Senior Manager called for nominations for the position of Chair of the Port Renfrew Utility Services Committee for the term ending December 31, 2024.

A. Wickheim nominated W. Forsberg. W. Forsberg accepted the nomination.

The Senior Manager called for nominations a second time.

The Senior Manager called for nominations a third and final time.

Hearing no further nominations, the Senior Manager declared W. Forsberg Chair of the Port Renfrew Utility Services Committee for the term ending December 31, 2024, by acclamation.

## 2. ELECTION OF VICE CHAIR

The Chair called for nominations for the position of Vice Chair of the Port Renfrew Utility Services Committee for the term ending December 31, 2024.

A. Wickheim nominated C. Carlsen. C. Carlsen accepted the nomination.

The Chair called for nominations a second time.

The Chair called for nominations a third and final time.

Hearing no further nominations, the Chair declared C. Carlsen Vice Chair of the Port Renfrew Utility Services Committee for the term ending December 31, 2024, by acclamation.

## 3. APPROVAL OF AGENDA

The following correspondence was added to the agenda:

• Question for Port Renfrew Utility Services Committee Meeting Thursday, February 15, 2024, at 2:00 pm.

**MOVED** by W. Forsberg, **SECONDED** by A. Wickheim, That the agenda be approved as amended.

## 4. ADOPTION OF MINUTES

**MOVED** by W. Forsberg, **SECONDED** by C. Carlsen, That the minutes of the November 10, 2023 meeting be adopted.

#### 5. CHAIR'S REMARKS

The Chair made no remarks.

#### 6. PRESENTATIONS/DELEGATIONS

There were none.

#### 7. SENIOR MANAGER'S REPORT

J. Marr wished the committee a happy new year and advised that he is looking forward to working with the committee in 2024. As a follow-up from the previous meeting regarding streetlighting, he advised there are approximately 24 streetlights in the Beach Camp area. The amount of power usage for the area will be reviewed and an update will be provided in due time.

#### 8. COMMITTEE BUSINESS

#### 8.1. Port Renfrew Refuse Disposal – Local Service: 2024 Initiatives Update

L. Ferris spoke to item 8.1.

Discussion ensued with staff responding to the following questions:

- If there will be an opportunity for the community to participate in the Official Community Plan (OCP) process. Staff advised there is a consultation process, and more information will be provided to the committee in due time.
- Commercial garbage and Recycle BC suspending service. Staff advised Recycle BC will resume service to the depot if CRD can show that commercial recycling has been removed, or if there is a separate stream for recycling so they are not paying the disposal charge. The value that Recycle BC provides to the community is approximately \$100k per year, noting a large portion is for transporting from Port Renfrew to the end location facilities.
- If there is a layout or site plan for any upgrades. Staff advised they are seeking direction from the committee prior to formalizing a plan.
- The committee requested that staff provide a copy of the memo of understanding (MOU) between CRD and the Pacheedaht First Nation. Staff advised the MOU is available on the CRD website and will share the website link with the committee.

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CARRIED

CARRIED

## MOVED by W. Forsberg, SECONDED by A. Wickheim,

The Port Renfrew Utility Services Committee recommends to the Electoral Areas Committee:

That staff be directed to:

- 1. Continue implementing site upgrades with funding from the Growing Communities Fund.
- 2. Work with the business sector on alternative solutions for commercial packaging and printed products.
- 3. Continue to transition the depot from caretaker managed, to a site operator model for late 2024; and
- 4. Continue discussions for long-term waste management in Port Renfrew with the Pacheedaht First Nation and the broader community.

## CARRIED

## 8.2. Project and Operations Update

J. Marr spoke to item 8.2.

Staff responded to the following questions:

- Annual hydrant maintenance. Staff advised annual maintenance was completed last year and there were no clearing issues but noted the equipment is getting older. Staff are hesitant to replace all the hydrants as the master plan may have other requirements.
- If the old generator will be re-used. Staff advised they are unsure if the generators will be re-used. Alternative use will be considered if the generators are functional.
- If an alternative approval process (AAP) is the only option for future high-value capital programs. Staff advised there are other options such as a petition process or a referendum, noting a referendum can be more expensive and less timely than an AAP. There will be a final report and discussion with the committee to determine how to present the information to the public.
- If there was a tour of the wastewater treatment plant. Staff are in the process of planning multiple tours, including Port Renfrew, for late march.
- If there is a set date for the culvert repair. Staff advised after an assessment; it was
  determined that a full replacement is required. The community works fund (CWF)
  application was revised and successful. Further temporary repair work will be
  completed at the end of the month, but a full replacement is required and will be
  completed as part of the depot upgrades.

#### 9. PORT RENFREW UTILITY SERVICES COMMITTEE MEETING SCHEDULE

Regular meetings of the Port Renfrew Utility Services Committee shall be held in the Goldstream Conference Room, 479 Island Highway, Victoria, BC in February, June, and in November to approve the Operating and Capital Budget. Additional meetings are at the call of the Chair.

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# **10. CORRESPONDENCE**

10.1. Question for Port Renfrew Utility Services Committee Meeting Thursday, February 15, 2024, at 2:00 pm.

Discussion ensued regarding:

- Cost effective solutions
- Public safety concerns
- Adequate streetlighting
- Increasing population

The correspondence was received for information.

# **11. NEW BUSINESS**

The committee thanked the operators that were working on the water leak in Port Renfrew the previous week. Discussion ensued.

# **12. ADJOURNMENT**

**MOVED** by W. Forsberg, **SECONDED** by C. Carlsen, That the February 15, 2024 meeting be adjourned at 3:22 pm.

CARRIED

CHAIR

SECRETARY

# Port Renfrew Utility System

# 2023 Annual Report

# **CPD** | Drinking Water, Wastewater, Street Lighting and Refuse

# Introduction

This report provides a summary of the Port Renfrew Utility Services for the year 2023 and includes a description of services and a summary of the water, sewer, street lighting, and refuse disposal services in terms of operations, maintenance, capital upgrades, and finances for each service.

# Port Renfrew Utility Services Committee

The Port Renfrew Utility Services Committee (PRUSC) has authority delegated by the Capital Regional District (CRD) Board for provision of water, sewer, street lighting and refuse disposal for the Port Renfrew community. Refuse disposal service is also provided to the Pacheedaht First Nation under a service delivery agreement. This Annual Report relates to the services provided under the authority of the PRUSC. Snuggery Cove Water Local Service (Debt Servicing) was created for the sole purpose of servicing debt relating to the expansion of the Port Renfrew water system to the Snuggery Cove area. The debt was paid off and the service budget was discontinued from 2021 onwards.

# WATER SERVICE

# **Service Description**

The community of Port Renfrew, located in the Juan de Fuca Electoral Area of the CRD, is comprised of rural residential and commercial and institutional development. The Port Renfrew water service was originally owned by a forestry company and was transferred to the CRD in 1989 to service the Beach Camp area. In 2002, the water service area was extended to include the Snuggery Cove area and again in 2016 to include the lands to the south of Beach Camp. The water service consists of approximately 231 parcels, encompassing a total area of approximately 98.3 hectares. Of the 231 parcels, 315.6 Single Family Equivalents (SFE) were customers to the water system in 2023.



Figure 1: Map of the Water Service Area

The Port Renfrew water system is primarily comprised of:

- One groundwater well, related pumping and control equipment and building.
- Disinfection process equipment (chlorine) and an aeration tower/scrubber for hydrogen sulfide reduction to improve water taste and odour.
- Two steel storage tanks total combined volume is 888 cubic meters (or 235,000 US gallons).
- Distribution system: 4,400 metre network of 150 millimeters (mm) and 100 mm diameter asbestos cement (AC) water mains to the Beach Camp area and a 2,200 metres network of 150 mm and 100 mm polyvinyl chloride (PVC) water mains to the Snuggery Cove area.
- Other water system assets: 195 service connections, 25 hydrants and an auxiliary generator.

# Water Supply

2023 data shows that the water level in the winter, when at its highest, was 24 metres above the well pump, and in the summer at its lowest point was 14 metres above the pump.

# Water Production and Demand

Referring to Figure 2, 82,006 cubic meters of water was extracted (water production) from the well in 2023; an increase of 14% over the previous year and 25% above the five-year average. The monthly comparison of treated water volumes, produced for the years 2018 to 2023 inclusive, shows that there continues to be a very high demand in August which is typically the peak of drought like conditions and tourism in the area, before trending lower for the rest of the year.

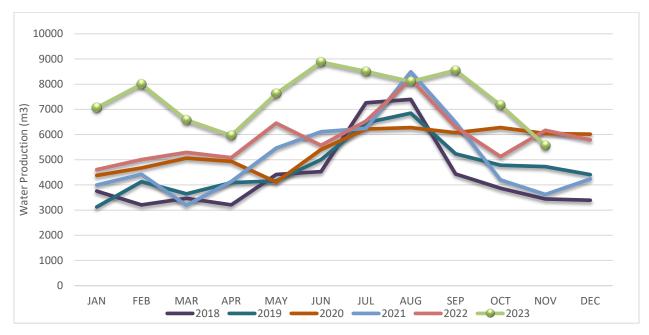


Figure 2: Water Service Monthly Water Production

# **Drinking Water Quality**

The analytical results (biological, chemical, and physical parameters) of water samples collected in 2023 from the Port Renfrew water system indicate that the drinking water was of good quality and within Guidelines for Canadian Drinking Water Quality (GCDWQ) health-related regulatory and aesthetic limits, including disinfection by-products.

While the treated water temperature did exceed the aesthetic limit of  $15^{\circ}$ C during the summer months (August 8 – September 19), this had no other negative impact on the drinking water quality.

Typical Port Renfrew drinking water quality characteristics for 2023 are summarized as follows:

Raw Water

- The source water from the well was free of *E. coli* and only had one sample with a very low concentration of total coliform bacteria in August.
- The well water was low in iron and manganese concentrations, slightly hard (mean hardness 44.25 mg/L) and had a neutral pH of 7.1.
- The median raw water turbidity was 0.15 Nephelometric Turbidity Units (NTU).
- The source water has consistently high concentrations of hydrogen sulfide, well above the GCDWQ aesthetic objective. This is removed successfully at the well and treatment site.

**Treated Water** 

- The water delivered to the customers was safe to drink throughout the year. No sample out of 84 compliance samples in the distribution system tested positive for *E. coli* or total coliform bacteria in 2023.
- The mean annual free chlorine concentration in the distribution system was an acceptable 0.44 mg/L.
- The average annual disinfection by-product total concentrations for trihalomethanes (TTHM) were well below the GCDWQ limit. Haloacetic acids (HAA) were not tested in 2023. HAA concentrations are typically low when THM concentrations are low.

Table 1 and 2 included as attachments provide a summary of the 2023 raw and treated water test results.

Water Quality data collected from this drinking water system can also be reviewed on the CRD website:

https://www.crd.bc.ca/about/data/drinking-water-quality-reports

# Water Service Operational Highlights

The following is a summary of the major operational issues that were addressed by CRD Integrated Water Services staff:

- Multiple water leaks were responded to and repaired throughout the system.
- A new chlorine storage shed was erected, and repairs were made to the chlorine injection pumps.
- Annual maintenance was completed on all hydrants, standpipes, and system valves. A failed standpipe was replaced.

# Water Service Capital Projects Update

The Capital Projects that were in progress or completed in 2023 include:

• Wickanninish Road AC Watermain Replacement – Construction completed in 2023.

# SEWER SERVICE

# **Service Description**

The Port Renfrew sewer system serves 88 properties in the Beach Camp and localized residential area below and has continued to operate reliably in the past year, although the wastewater treatment plant (WWTP) occasionally had difficulty processing peak flow events. The treatment process consists of an extended aeration facility and a steel outfall which discharges treated effluent to the San Juan River estuary under a Ministry of Environment permit. The 88 properties are comprised of 97.77 SFE's.



Figure 3: Map of the Sewer Service Area

A sewage volume of 13,622 cubic meters was treated and discharged in 2023 (December data was missing which would have raised the total to approximately 15,000 cubic meters). which equates to an average of 139 cubic meters/SFE. Sewage flows in Port Renfrew went down by 5% from 2023 which can be influenced by annual rainfall and tourist numbers. During the rainy season, inflow and infiltration water enters the sewer system through cracks and defects in the pipes and manholes that were installed in the 1960's.

Figure 4 shows Port Renfrew sewer flow trends over the last 10 years.

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Figure 4: Port Renfrew Sewer Flow Trends

# **Treated Effluent Discharge Quality**

Regulatory Compliance – Wastewater

Flow and effluent quality are assessed for compliance with the provincial discharge permit on a daily and monthly basis, respectively. Mean daily flows in 2023 were similar to flow rates recorded since 2007; flow exceeded the permitted daily maximum one time in December 2023, due to heavy rains. There was one total suspended solids (TSS) exceedance in September of the permitted effluent quality limits, as a result of a blockage in the RAS line.

# **Receiving Water**

Routine receiving water monitoring was last required for the Port Renfrew Wastewater Treatment Plant in 2020 (delayed until 2021) and will be next required in 2024 unless there are planned bypasses, plant failures/overflows, or wet weather overflows that exceed three days duration in the winter or one day duration in the summer. Bypass or overflow sampling is only required once per season for events that are similar in nature as long as the first seasonal sampling confirms results were within guidelines set to protect human primary contact for recreation.

There was no overflow/emergency receiving water sampling conducted in 2023.

# **Sewer Service Operational Highlights**

The following is a summary of the major operational issues that were addressed by CRD Integrated Water Services staff:

- Improvements were made to the surface water drainage around the Plant to prevent water from pooling and creating an electrical hazard; as well as help mitigate localized flooding in the area.
- Annual maintenance was completed on both lift pumps with some minor corrective maintenance performed.
- Improvements to the scum collection system were completed which will have an overall benefit to the entire treatment process.

# Sewer Service Capital Projects Update

The Capital Projects that were in progress or completed in 2023 included:

• Generator Upgrade – supply contract was entered into to provide a new standby power generator capable of powering the entire wastewater treatment plant during a power outage. Delivery isn't expected until late 2023.

# **Street Lighting Service**

Street lighting service is provided in the area of Port Renfrew known as Beach Camp. The street lights are operated and maintained by BC Hydro, and costs are recovered through a parcel tax and user charge on parcels in the area where the service is provided. There were no significant issues with this service in 2023.

# **Refuse Disposal Service**

The Port Renfrew Refuse Disposal service serves 379 taxable folios including 330 residential folios within the service area and is funded through direct tax requisition based on the value of each property. The Pacheedaht First Nation also utilizes the service through a fee-for-service agreement. The tonnages of materials received and transferred from the Port Renfrew Garbage and Recycling Depot in 2023 are as follows:

Port Renfrew Garbage 8	Recycling Depot
------------------------	-----------------

(tonnes)

	2023	2022			
Garbage	201	237			
Recyclables					
- Scrap metal and large appliances	66	78			
- Packaging and printed paper	32	27			
- Tires/electronics	3	4			
Note: Beverage containers, paint, used motor oil and used cooking oil are also accepted at the depot – quantities are not available due to the hauling and processing arrangements in place for these products.					

In 2023 the Service secured \$262,500 in grant funding through the Growing Communities Fund to address concerns for the service around collection capacity, transportation, the transition of depot management from caretaker to operator model, Recycle BC's concerns and provide an opportunity to conduct a study for the future of the service. This work is expected to commence in 2024.

## **Financial Report**

Please refer to the attached 2023 Statement of Operations and Reserve Balances for Port Renfrew Water, Sewer, Street Lighting and Refuse Disposal services.

Revenue includes parcel taxes (Transfers from Government), fixed user fees (User Charges), Water Sales, interest on savings (Interest earnings), and miscellaneous revenue such as late payment charges (Other revenue).

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Expenses include all costs for providing the services. General Government Services include budget preparation, financial management, utility billing and risk management services. CRD Labour and Operating Costs include CRD staff time as well as the cost of equipment, tools, and vehicles. Debt servicing costs are interest and principal payments on long term debt. Other Expenses include all other costs to administer and operate the services, for example, insurance, supplies, water testing and electricity etc.

The difference between Revenue and Expenses is reported as Net revenue (expenses). Any transfers to or from capital or reserve funds for the service (Transfers to Own Funds) are deducted from this amount and added to any surplus or deficit carry forward from the prior year, yielding an Accumulated Surplus (or deficit) that is carried forward to the following year.

	Jason Dales, B.Sc., WD IV, Senior Manager, Wastewater Infrastructure Operations
	Joseph Marr, P.Eng., Senior Manager, Infrastructure Engineering
Submitted by:	Glenn Harris, Ph.D., R.P.Bio., Senior Manager, Environmental Protection
	Russ Smith, Senior Manager, Environmental Resource Management
	Angela Linwood, CPA, CMA, Controller, Financial Services
Concurrence:	Alicia Fraser, P.Eng., General Manager, Integrated Water Services
Concurrence.	Luisa Jones, MBA, General Manager, Parks, Recreation & Environmental Services

Attachments: Table 1

Table 2

2023 Statement of Operations and Reserve Balances

For questions related to this Annual Report please email IWSAdministration@crd.bc.ca

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# Table 1

PARAMETER		20	23 ANALYT	ICAL RESUL	TS	CANADIAN GUIDELINES	2013	- 2022 AN	ALYTICAL	RESULTS
Parameter	Units of	Annual	Samples	Ra	nge			Samples	F	Range
Name	Measure	Median	Analyzed	Minimum	Maximum	$\leq$ = Less than or equal to	Median	Analyzed	Minimum	Maximu
neans Not Detected by analytical	method used									
	F	hysical	Paramet	ers/Non	-Metallic	Inorganics				
Carbon, Total Organic	mg/L	0.79	3	0.62	1.5		1.4	27	0.2	43
Hydrogen Sulfide	mg/L	0.29	4	0.21	0.3	<0.05 AO	0.37	5	0.3	0.47
Hardness as CaCO3	mg/L	44.25	4	42.1	45.3	No Guideline Required	40.75	28	7.71	47.8
рН	pH units	7.1	3	7	7.8	6.5 - 8.5 AO	7.4	48	6.6	8.48
Turbidity	NTU	0.15	7	0.1	0.4		< 0.14	42	0.05	< 1.4
Water Temperature	°C	8.8	11	8.1	10.2	>15 AO	8.6	111	5	12.1
	Į		Micro	bial Para	meters	<u> </u>				
Indicator Bacteria and	l Turbidity									
Coliform, Total	CFU/100 mL	<1	13	<1	1		< 1	119	<1	2
E. coli	CFU/100 mL	<1	13	<1	<1		<1	119	<1	<1
E. con			10					115		
				Metals						
Aluminum	ug/L as Al	6.4	4	5.4	7.2	2900 MAC / 100 OG	7	28	5.8	123
Antimony	ug/L as Sb	< 0.5	4	< 0.5	< 0.5	6 MAC	< 0.5	28	< 0.5	< 0.5
Arsenic	ug/L as As	0.12	4	0.12	0.14	10 MAC	0.12	28	< 0.1	< 0.5
Barium	ug/L as Ba	1.2	4	1.2	1.3	1000 MAC	1.2	28	< 1	< 9
Beryllium	ug/L as Be	< 0.1	4	< 0.1	< 0.1		< 0.1	28	< 0.1	< 3
Bismuth	ug/L as Bi	< 1	4	< 1	< 1		< 1	26	< 1	< 1
Boron	ug/L as B	120	4	111	121	5000 MAC	110.5	28	< 50	943
Cadmium	ug/L as Cd	< 0.01	4	< 0.01	< 0.01	7 MAC	< 0.01	28	< 0.01	0.19
Calcium	mg/L as Ca	7.925	4	7.54	8.03	No Guideline Required	7.39	28	2.96	8.73
Chromium	ug/L as Cr	<1	4	< 1	< 1	50 MAC	< 1	28	< 1	< 10
Cobalt	ug/L as Co	< 0.2	4	< 0.2	< 0.2		< 0.2	28	< 0.2	< 20
Copper	ug/L as Cu	< 0.2	4	< 0.2	0.9	2000 MAC / ≤ 1000 AO	0.225	28	< 0.2	12
Iron	ug/L as Fe	< 5	4	< 5	< 5	≤ 300 AO	< 5	28	< 5	80
Lead	ug/L as Pb	< 0.2	4	< 0.2	< 0.2	5 MAC	< 0.2	28	< 0.2	< 0.5
Lithium	ug/L as Li	< 2	4	< 2	< 2		< 2	12	< 2	< 5
Magnesium	mg/L as Mg	5.935	4	5.64	6.14	No Guideline Required	5.545	28	0.081	6.62
Manganese Molybdenum	ug/L as Mn ug/L as Mo	9.9 < 1	4	9.8 < 1	10	120 MAC / ≤ 20 AO	10 < 1	28 28	< 4 < 1	12.1 < 20
Nickel	ug/Las No ug/Las Ni	<1	4	<1	1.6		<1	28	<1	< 20
Potassium	mg/Las Ni	3.425	4	3.39	3.53		3.365	28	0.199	3.73
Sulphur	mg/L as K	3.425	4	< 3	5.8		< 3	26	< 3	3.73
Selenium	ug/L as Se	1.24	4	< 0.1	1.94	50 MAC	0.13	20	< 0.1	3.04
Silicon	mg/L	4535	4	4460	5400		4445	28	1400	7120
Silver	ug/L as Ag	< 0.02	4	< 0.02	< 0.02	No Guideline Required	< 0.02	28	< 0.02	< 10
Sodium	mg/L as Na	29.05	4	28.6	31.2	≤ 200 AO	27.6	28	23.5	38.2
Strontium	ug/L as Sr	57.6	4	57	61.2	7000 MAC	54.25	28	43	82
Tin	ug/L as Sn	< 5	4	< 5	< 5		< 5	28	< 5	< 20
Titanium	ug/L as Ti	< 5	4	< 5	< 5		< 5	28	< 5	< 10
Thallium	ug/L as Ti	< 0.01	4	< 0.01	< 0.01		< 0.01	26	< 0.01	< 0.0
Uranium	ug/L as U	< 0.1	4	< 0.1	< 0.1	20 MAC	< 0.1	26	< 0.1	< 0.1
Vanadium	ug/L as V	< 5	4	< 5	< 5	2011110	< 5	28	< 5	22
Zinc	ug/L as V	< 5	4	< 5	9.7	≤ 5000 AO	< 5	28	< 5	136
Zirconium	ug/L as Zr	< 0.1	4	< 0.1	< 0.1		< 0.1	26	< 0.1	< 0.5

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# Table 2

PARAMETER		Test Results, Port Renfrew Water System 2023 ANALYTICAL RESULTS			CANADIAN GUIDELINES	2013 - 2022 ANALYTICAL RESULTS				
	Units of	Annual	Samples			CANADIAN GUIDELINES	2013 -			
Parameter Name	Measure	Median	Analyzed	Rar Minimum	Maximum	< = Less than or equal to	Median	Samples Analyzed	Minimum	ange Maximum
Not Detected by analytic		Wethan	Analyzeu	WIITIITIUTT	IVIAXIIIIUIII		INECIALI	Analyzeu	WIITIITIUTT	IVIAXIIIIUII
ID means not detected by analytic		Dhysical	Daramo	tors/Non	Motallia	Inorganics				
	1	Filysical	rarame	lers/NOT	-wetainc	inorganics				1
Carbon, Total Organic	mg/L as C	0.69	4	0.57	0.74		0.56	31	< 0.3	15
Hydrogen Sulfide	mg/L	0.00215	4	< 0.002	0.0046	<0.05 AO	< 0.002	5	< 0.002	0.0069
Hardness as CaCO3	mg/L	44.3	4	42.8	46	No Guideline Required	41.9	25	37.1	48
pH	pH units	7.2	3	7.1	7.6	6.5 - 8.5 AO	7.3	38	6.9	8.28
Turbidity	NTU	0.1	1	0.1	0.1	0.0 0.0710	0.15	12	< 0.14	0.25
Water Temperature	degrees C	7.8	160	4.2	17		10.5	1618	0.7	24.1
				bial Para						,
Microbial Param	neters									
Coliform, Total	CFU/100 mL	< 1	84	< 1	< 1	0 MAC	< 1	526	<1	26
E. coli	CFU/100 mL	<1	84	< 1	< 1	0 MAC	< 1	526	<1	2
Hetero. Plate Count, 7 day	CFU/1 mL	60	4	10	450	No Guideline Required	50	13	< 10	390
		1	U	isinfecta	ints	·			1	1
Chlorine, Free Residual	mg/L as Cl2	0.44	337	0.06	1.03	No Guideline Required	0.4	1833	< 0.02	15.7
Chlorine, Total Residual	mg/L as Cl2		Not teste	d in 2023		No Guideline Required	0.54	695	0.05	2.14
			Disinfo	ction By-	Droduc	to.				
		1	DISIMI		-Frouuc	15				1
	\									
Trihalomethanes	(IHMS)									
-										
Bromodichloromethane	ug/L	9.85	4	8.7	14		17	29	1.94	26.7
Bromoform	ug/L	9	4	6.9	11		8.7	29	< 0.1	20.7
Chloroform	ug/L	6.45	4	5.7	8.6		9.1	29	1.84	16.7
Chlorodibromomethane	ug/L	15.5	4	13	18	100 140 0	25	29	< 0.1	40.3
Total Trihalomethanes	ug/L	41	4	35	51	100 MAC	58	29	3.78	98.8
Haloacetic Acids	(HAAs)									
HAA5	ug/L		Not teste	d in 2022		80 MAC	8.4	4	< 5	12
										]
		1		Metals	i					
					_					
Aluminum	ug/L as Al	6.85	4	5.9	7	2900 MAC / 100 OG	7.9	25	6	102
Antimony	ug/L as Sb	< 0.5	4	< 0.5	< 0.5	6 MAC	< 0.5	25	< 0.5	< 0.5
Arsenic	ug/L as As	0.14	4	0.13	0.16	10 MAC	0.14	25	0.11	< 0.5
Barium	ug/L as Ba	1.35	4	1.3	1.6	1000 MAC	1.6	25	1	< 9
Beryllium	ug/L as Be	< 0.1	4	< 0.1	< 0.1		< 0.1	25	< 0.1	< 3
Bismuth	ug/L as Bi	< 1	4	< 1	< 1		< 1	24	< 1	< 1
Boron	ug/L as B	118.5	4	113	124	5000 MAC	114	25	100	505
Cadmium	ug/L as Cd	< 0.01	4	< 0.01	< 0.01	7 MAC	< 0.01	25	< 0.01	< 0.1
Calcium	mg/L as Ca	8.04	4	7.76	8.45	No Guideline Required	7.6	25	6.88	8.81
Chromium	ug/L as Cr	< 1	4	< 1	< 1	50 MAC	< 1	25	< 1	< 10
Cobalt	ug/L as Co	< 0.2	4	< 0.2	< 0.2		< 0.2	25	< 0.2	< 20
Copper	ug/L as Cu	1.71	4	1.14	3.29	2000 MAC / ≤ 1000 AO	2.11	25	0.2	< 8
Iron	ug/L as Fe	5.3	4	< 5	9.6	≤ 300 AO	12.6	25	< 5	221
Lead	ug/L as Pb	< 0.2	4	< 0.2	< 0.2	5 MAC	< 0.2	25	< 0.2	< 0.5
Lithium	ug/L as Li	< 2	4	< 2	< 2		< 2	11	< 2	< 2
Magnesium	mg/Las Mg	5.825	4	5.69	6.13	No Guideline Required	5.48	25	4.82	6.33
Manganese	ug/L as Mn	4.8	4	4	5	120 MAC / ≤ 20 AO	6.9	25	2.7	EXG 21
Molybdenum	ug/L as Mo	<1	4	< 1	<1		< 1	25	< 1	< 20
Nickel	ug/L as Ni	<1	4	< 1	< 1		< 1	25	<1	< 50
	mg/L as K	3.46	4	3.41	3.51	50 140 0	3.33	25	3.1	3.72
Potassium		< 0.1	4	< 0.1 < 3	< 0.1	50 MAC	< 0.1	25	< 0.1	0.821
Selenium	ug/L as Se				< 3		< 3	24	< 3	< 3 < 10
Selenium Sulphur	mg/L as S	< 3	4		~ 0.00			05	~ ^ ^ ^ ^	
Selenium Sulphur Silver	mg/L as S ug/L as Ag	< 0.02	4	< 0.02	< 0.02	No Guideline Required	< 0.02	25	< 0.02	-
Selenium Sulphur Silver Sodium	mg/L as S ug/L as Ag mg/L as Na	< 0.02 32.8	4 4	< 0.02 32.5	35.6	No Guideline Required ≤ 200 AO	30.9	25	24.5	36
Selenium Sulphur Silver Sodium Silicon	mg/L as S ug/L as Ag mg/L as Na mg/L	< 0.02 32.8 4545	4 4 4	< 0.02 32.5 4440	35.6 5420	≤ 200 AO	30.9 4440	25 25	24.5 3630	36 5000
Selenium Sulphur Silver Sodium Silicon Stirontium	mg/L as S ug/L as Ag mg/L as Na mg/L ug/L as Sr	< 0.02 32.8 4545 58.55	4 4 4 4	< 0.02 32.5 4440 57.6	35.6 5420 61.7		30.9 4440 54.2	25 25 25	24.5 3630 48.2	36 5000 67.9
Selenium Sulphur Silver Sodium Silicon Strontium Tin	mg/L as S ug/L as Ag mg/L as Na mg/L ug/L as Sr ug/L as Sn	< 0.02 32.8 4545 58.55 < 5	4 4 4 4 4	< 0.02 32.5 4440 57.6 < 5	35.6 5420 61.7 < 5	≤ 200 AO	30.9 4440 54.2 < 5	25 25 25 25 25	24.5 3630 48.2 < 5	36 5000 67.9 < 20
Selenium Sulphur Silver Sodium Silicon Strontium Tin Thallium	mg/L as S ug/L as Ag mg/L as Na mg/L ug/L as Sr ug/L as Sn ug/L as Ti	< 0.02 32.8 4545 58.55 < 5 < 0.01	4 4 4 4 4 4	< 0.02 32.5 4440 57.6 < 5 < 0.01	35.6 5420 61.7 < 5 < 0.01	≤ 200 AO	30.9 4440 54.2 < 5 < 0.01	25 25 25 25 25 24	24.5 3630 48.2 < 5 < 0.01	36 5000 67.9 < 20 < 0.01
Selenium Sulphur Silver Sodium Silicon Strontium Tin Thallium Titanium	mg/L as S ug/L as Ag mg/L as Na mg/L ug/L as Sr ug/L as Sn ug/L as Ti ug/L as Ti	<ul> <li>&lt; 0.02</li> <li>32.8</li> <li>4545</li> <li>58.55</li> <li>&lt; 5</li> <li>&lt; 0.01</li> <li>&lt; 5</li> </ul>	4 4 4 4 4 4 4	< 0.02 32.5 4440 57.6 < 5 < 0.01 < 5	35.6 5420 61.7 < 5 < 0.01 < 5	≤ 200 AO 7000 MAC	30.9 4440 54.2 < 5 < 0.01 < 5	25 25 25 25 24 25	24.5 3630 48.2 < 5 < 0.01 < 5	36 5000 67.9 < 20 < 0.01 < 10
Selenium Sulphur Silver Sodium Silicon Strontium Tin Thallium Titanium Uranium	mg/L as S ug/L as Ag mg/L as Na mg/L ug/L as Sr ug/L as Sn ug/L as Ti ug/L as Ti ug/L as U	< 0.02 32.8 4545 58.55 < 5 < 0.01 < 5 < 0.1	4 4 4 4 4 4 4 4 4	< 0.02 32.5 4440 57.6 < 5 < 0.01 < 5 < 0.1	35.6 5420 61.7 < 5 < 0.01 < 5 < 0.1	≤ 200 AO	30.9 4440 54.2 < 5 < 0.01 < 5 < 0.1	25 25 25 25 24 25 24 25 24	24.5 3630 48.2 < 5 < 0.01 < 5 < 0.1	36 5000 67.9 < 20 < 0.01 < 10 < 0.1
Selenium Sulphur Silver Sodium Silicon Strontium Tin Thallium Titanium	mg/L as S ug/L as Ag mg/L as Na mg/L ug/L as Sr ug/L as Sn ug/L as Ti ug/L as Ti	<ul> <li>&lt; 0.02</li> <li>32.8</li> <li>4545</li> <li>58.55</li> <li>&lt; 5</li> <li>&lt; 0.01</li> <li>&lt; 5</li> </ul>	4 4 4 4 4 4 4	< 0.02 32.5 4440 57.6 < 5 < 0.01 < 5	35.6 5420 61.7 < 5 < 0.01 < 5	≤ 200 AO 7000 MAC	30.9 4440 54.2 < 5 < 0.01 < 5	25 25 25 25 24 25	24.5 3630 48.2 < 5 < 0.01 < 5	36 5000 67.9 < 20 < 0.01 < 10

# PORT RENFREW WATER Statement of Operations (Unaudited) For the Year Ended December 31, 2023

	2023	2022
Revenue		
Transfers from government	66,243	64,508
User Charges	66,457	64,558
Other revenue from own sources:		
Transfer from Operating Reserve	-	13,000
Interest earnings	98	150
Other revenue	972	837
Total Revenue	133,770	143,053
Expenses		
General government services	6,155	5,355
Contract for Services	4,663	5,665
CRD Labour and Operating costs	82,731	96,235
Other expenses	21,628	21,236
Total Expenses	115,177	128,491
Net revenue (expenses)	18,593	14,562
Transfers to own funds:		
Capital Reserve Fund	13,593	4,562
Operating Reserve Fund	5,000	10,000
Annual surplus/(deficit)	-	-
Accumulated surplus/(deficit), beginning of year	-	-
Accumulated surplus/(deficit), end of year \$	-	-

# CAPITAL REGIONAL DISTRICT

# PORT RENFREW WATER Statement of Reserve Balances (Unaudited) For the Year Ended December 31, 2023

	Capital Reserve		
	2023	2022	
Beginning Balance	58,573	52,500	
Transfer from Operating Budget Transfer from Completed Capital Projects	13,593 -	4,562	
Transfer to Capital Projects	(30,000)	-	
Interest Income	2,109	1,511	
Ending Balance	44,275	58,573	

	Operating Reserve		
	2023	2022	
Beginning Balance	1,171	4,071	
Transfer from Operating Budget Transfer to Operating Budget Interest Income	5,000 - 115	10,000 (13,000) 100	
Ending Balance	6,286	1,171	

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# PORT RENFREW SEWER Statement of Operations (Unaudited) For the Year Ended December 31, 2023

	2023	2022
Revenue		
Transfers from government	64,750	62,294
User Charges	64,734	62,595
Recovery Cost	-	3,477
Other revenue from own sources:		
Interest earnings	182	330
Other revenue	1,472	1,404
Total Revenue	131,138	130,100
Expenses	5.040	5 0 4 4
General government services	5,218	5,041
Contract for Services	22,690	3,856
CRD Labour and Operating costs	63,463	75,021
Other expenses	23,209	25,780
Total Expenses	114,580	109,698
Net revenue (expenses)	16,558	20,402
Transfers to own funds:		40,400
Capital Reserve Fund	12,558	16,402
Operating Reserve Fund	4,000	4,000
Annual surplus/(deficit)	-	-
Accumulated surplus/(deficit), beginning of year	-	-
Accumulated surplus/(deficit), end of year	\$-	-

# CAPITAL REGIONAL DISTRICT

# PORT RENFREW SEWER Statement of Reserve Balances (Unaudited) For the Year Ended December 31, 2023

	Capital Reserve		
	2023	2022	
Beginning Balance	24,997	7,612	
Transfer from Operating Budget Transfer from Completed Capital Projects Transfer to Capital Projects Interest Income	12,558 - - 1,289	16,402 687 - 296	
Ending Balance	38,844	24,997	

	<b>Operating Reserve</b>		
	2023	2022	
Beginning Balance	4,377	349	
Transfer from Operating Budget Transfer to Operating Budget Interest Income	4,000 - 258	4,000 - 28	
Ending Balance	8,635	4,377	

# CAPITAL REGIONAL DISTRICT

# PORT RENFREW STREET LIGHTING Statement of Operations (Unaudited) For the Year Ended December 31, 2023

	2023	2022
Revenue		
Transfers from government	3,589	3,485
User Charges	3,762	3,654
Other revenue from own sources:		
Interest earnings	35	31
Other revenue	269	254
Total Revenue	7,655	7,424
<b>Expenses</b> General government services Electricity	449 7,333	444 6,979
Other expenses	95	66
Total Expenses	7,877	7,489
Net revenue (expenses)	(222)	(65)
Annual surplus/(deficit)	(222)	(65)
Accumulated surplus/(deficit), beginning of year	1,455	1,520
Accumulated surplus/(deficit), end of year	\$ 1,233	1,455

# PORT RENFREW REFUSE DISPOSAL Statement of Operations (Unaudited) For the Year Ended December 31, 2023

	2023	2022
Revenue		
Transfers from government	34,856	33,852
Recovery from Pacheedaht FN	35,538	37,262
Recovery from CRD Solid Waste	17,860	17,000
Recyclables Sales	9,677	12,158
Other revenue from own sources:		
Interest earnings	164	78
Other revenue	374	347
Total Revenue	98,469	100,697
Expenses		
General government services	4,175	4,037
Contract for Services	80,335	88,641
Utilities & Telecommunications	5,003	2,781
Other expenses	363	168
Total Expenses	89,876	95,627
Net revenue (expenses)	8,593	5,070
Transfers to own funds:		
Capital Reserve Fund	6,593	4,000
Equipment Replacement Fund	2,000	1,070
Annual surplus/(deficit)	-	-
Accumulated surplus/(deficit), beginning of year	-	
Accumulated surplus/(deficit), end of year	\$-	-

# PORT RENFREW REFUSE DISPOSAL Statement of Reserve Balances (Unaudited) For the Year Ended December 31, 2023

	Capital Re	serve
	2023	2022
Beginning Balance	36,050	55,260
Transfer from Operating Budget	6,593	4,000
Transfer from Completed Capital Projects	-	463
Transfer to Capital Projects	-	(25,000)
Interest Income	1,771	1,327
Ending Balance	44,414	36,050

	Equipment Replacement Fund	
	2023	2022
Beginning Balance	39,253	37,871
Transfer from Operating Budget Purchases from ERF	2,000	1,070
Interest Income	365	312
Ending Balance	41,618	39,253



## REPORT TO PORT RENFREW UTILITY SERVICES COMMITTEE MEETING OF MONDAY, JUNE 24, 2024

## **<u>SUBJECT</u>** Capital Project Status Reports and Operational Updates – June 2024

#### **ISSUE SUMMARY**

To provide the Port Renfrew Utility Services Committee with capital project status reports and operational updates.

#### BACKGROUND

The Port Renfrew Water System is located on the west coast of Vancouver Island in the Juan de Fuca Electoral Area and provides drinking water to approximately 317 Single Family Equivalents (SFE) in a part of the Town of Port Renfrew, known as Beach Camp and Snuggery Cove. The Port Renfrew sewer system serves approximately 98 SFE's in the Beach Camp localized residential area. Capital Regional District (CRD) Integrated Water Services is responsible for the overall operation of the water and sewer systems with day-to-day operation, maintenance, design and construction of water and sewer system facilities provided by the CRD Infrastructure Engineering and Operations Divisions. The quality of drinking water provided to customers in the Port Renfrew Water System is overseen by the CRD Water Quality Section.

The Port Renfrew Refuse Disposal Service is a local service funded by the Pacheedaht First Nation, local property owners and the broader CRD Solid Waste Service. The service's primary function is to provide local garbage collection through the Port Renfrew Garbage and Recycling Depot. Historically the service has also been able to support the collection of recyclables with revenue generated from favourable commodity markets and third party extended producer responsibility service agreements.

#### CAPITAL PROJECT UPDATE

#### Port Renfrew Water

#### 24-01 | Water Master Planning Study

Project Description: Master Planning study for the Port Renfrew Service Area. Subject to successful budget approval and grant funding. To be delivered in conjunction with wastewater master planning study.

Project Rationale: To provide water servicing requirement to the growing Port Renfrew Community as well as the Pacheedaht First Nation. Capacity of the existing and future systems will be assessed as well as the potential to combine Pacheedaht First Nation's and CRD water system into one system.

Project Update and Milestones:

Milestone	Completion Date
Request for Proposal	Q2 2024
Budget and Grant Approval	End of 2023 (Budget has received early approval)

23

## 20-01 | Hydrant Replacement Program

Project Description: Hydrants are reaching their end of life and require replacement.

Project Rationale: The hydrants in the water system are nearing their end of life. To maintain fire protection planned hydrant replacement is required on an annual basis. Priority is based on Operator and community input.

Project Update and Milestones:

Milestone	Completion Date
2024 works not yet progressed due to other priority work.	On Hold

#### Port Renfrew Sewer

#### 24-01 | Sewer Master Planning Study

Project Description: Master Planning study for the Port Renfrew Service Area. Subject to successful budget approval and grant funding. To be delivered in conjunction with water master planning study.

Project Rationale: To provide wastewater servicing requirement to the growing Port Renfrew Community as well as the Pacheedaht First Nation. Capacity of the existing and future systems will be assessed.

Project Update and Milestones:

Milestone	Completion Date
Request for Proposal	Q2 2024
Budget and Grant Approval	End of 2023 (Budget has received early approval)

#### 22-01 | Genset Upgrade

Project Description: A new genset is required to provide standby power for the whole Wastewater Treatment Plant (WWTP).

Project Rationale: The existing genset only provides standby power for the influent pumps. During a power outage, the blowers do not operate, and this puts the WWTP out of compliance with the regulations. A new genset is required to provide standby power for the whole WWTP.

Project Update and Milestones:

Milestone	Completion Date
Installation Planning Efforts and coordination with potential contractors.	Ongoing
Generator Delivery	Q1 2024
Submitted a Community Works Fund application followed by procurement through a quotation process.	Complete

# 22-02 | Alternative Approval Process (AAP) – Project Has Been Deferred To 2025

Project Description: Based on information received from the Master Plan (24-01), carry out an AAP in order to borrow funds for required system renewal (one or multiple phases).

Project Rationale: Following approval of Growing Communities Fund (GCF) grant for Master Plan studies to be completed in 2024, this AAP process is proposed to be delayed to 2025/26 so that Master Plan results can be captured and incorporated.

Project Update and Milestones:

Milestone	Completion Date
Project on hold pending Master Plan completion.	Hold

# **OPERATIONAL UPDATE**

# Port Renfrew Water

25

This is an operational update for the reporting period from January 2024 through May 2024.

- Operations responded to numerous water leaks that were the result of the frigid temperatures in January. One of the leaks discovered was on a cracked two-inch polyvinyl chloride (PVC) fire line inside a private subdivision. Another one was in the Osprey Road area.
- A new chlorine storage shed with spill containment was assembled by operation's staff.
- Operational staff assisted with the tie-in and sampling for a new section of watermain that was installed as part of the Beachview Rise project.
- Operational teams responded to numerous Power Outages related to stormy weather and snowfall during this operational period.
- The well level indicator experienced a fault resulting in the in-ability to acquire an aquifer level reading. A replacement part has been attained and is scheduled to be installed later in June.

# Port Renfrew Sewer

This is an operational update for the reporting period from January 2024 through May 2024.

- The hot water tank in the facility had failed and was replaced and installed by Operations.
- Further improvements to the drainage around the Treatment Plant were completed by operations. We believe these improvements will help mitigate pooling water around the facility. Operations responded to numerous power outages related to stormy weather and snowfall.
- A site tour for representatives of Environment Canada's Shellfish Harvesting department was accommodated by operations.
- Operations continues to look for ways to optimize and improve the overall treatment Plant process.

## Port Renfrew Refuse Disposal

This is an operational update for the reporting period from January 2024 through May 2024. Collection continues at the Port Renfrew Garbage and Recycling Depot for the following material streams:

- Garbage
- Plastic, metal, and paper containers
- Cardboard and mixed paper
- Paint
- Motor oil

- Scrap metal
- Appliances
- Tires
- Beverage containers
- Propane tanks and canisters

Staff continue to implement the activities that were identified in the February 15, 2024 Initiatives Update Report (Appendix A) to address the issues arising for the service including:

- garbage collection capacity and transportation costs,
- the pending retirement of the site's long-time caretaker, and
- withdrawal of Recycle BC's support for residential packaging and printed paper products.

This work includes:

- Planning and implementation of site upgrades including installation of compactor bins to improve garbage collection capacity, construction of an operator shed, and improvements to site layout and traffic plan to address concerns raised by Recycle BC;
- Work to transition the depot from caretaker managed to a site operator model for late 2024; and
- Continued discussions for long-term waste management in Port Renfrew with the Pacheedaht First Nation and the broader community.

Additionally, staff have initiated a meeting with Recycle BC to discuss reinstatement of service. As a condition of reinstatement of service, the depot will need to prove to Recycle BC that commercial recycling is not included within residential recycling collection funded by Recycle BC.

Historically, the depot has been able to support the collection of recyclables with revenue generated from favourable commodity markets and third party extended producer responsibility service agreements, including Recycle BC. As Recycle BC has indicated they will not support commercial recycling through their program, the Solid Waste Service does not have budget to cover the cost of commercial recycling. If the depot were to remain a collection site for commercial recycling, this could be provided through a fee for service model, where the private sector would pay to drop off quantities of recyclable materials. Alternatively, the private sector could arrange for their own recycling services, as is done elsewhere across the Capital Region. Continued delivery of commercial recycling without funding from the commercial sector would require a service budget amendment and associated increase in taxation requisition. Over the coming months, staff will initiate a consultation with the commercial sector to determine preference and then come to the committee for direction.

Barefoot Planning and Design has been retained to undertake the Port Renfrew Official Community Plan update. The consultation process will include gathering input on solid waste in terms of future-oriented services and preferred locations. Community consultation is anticipated to occur between July and September 2024.

# RECOMMENDATION

There is no recommendation. This report is for information only.

Submitted by:	Jared Kelly, P.Eng., Manager, Capital Projects
Submitted by:	Liz Ferris, M.Sc., PMP, Manager, Policy and Planning, Environmental Resource Management
Submitted by:	Adam Hliva, Manager, Core Area Wastewater Conveyance Operations
Concurrence:	Joseph Marr, P.Eng., Senior Manager, Infrastructure Engineering
Concurrence:	Jason Dales, B.Sc., WD IV., Senior Manager, Wastewater Infrastructure Operations
Concurrence:	Russ Smith, Senior Manager, Environmental Resource Management
Concurrence:	Alicia Fraser, P.Eng., General Manager, Integrated Water Services