



Making a difference...together

SURFSIDE PARK ESTATES WATER SERVICE COMMITTEE
Notice of Meeting on **Thursday, June 15, 2023 at 2:00 p.m.**
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.

L. Vallee (Chair)
R. Noyes

P. Brent (EA Director)
K. Wall

W. Mulvin

AGENDA

1. APPROVAL OF AGENDA

2. ADOPTION OF MINUTES3

Recommendation: That the minutes of the February 9, 2023 meeting be adopted.

3. CHAIR’S REMARKS

4. 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 Surfside Park Estates Water Service Committee at iwsadministration@crd.bc.ca.

Requests must be received no later than 4:30 p.m. two calendar days prior to the meeting.

5. SENIOR MANAGER’S REPORT

- Electoral Areas Water Conservation Bylaw No. 1, 2022 (Bylaw No. 4492) – Update

6. COMMITTEE BUSINESS

6.1. 2022 Annual Report.....6

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

6.2. Project and Operations Update16

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

To ensure quorum, advise IWSAdministration@crd.bc.ca if you cannot attend.

**Surfside Park Estates Water Service Committee
Agenda – June 15, 2023**

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7. CORRESPONDENCE

8. NEW BUSINESS

9. ADJOURNMENT

Next Meeting: Tuesday, November 14, 2023 at 2:00pm



Making a difference...together

MINUTES OF A MEETING OF THE Surfside Park Estates Water Service Committee, held Thursday, February 9, 2023 at 2 p.m., In the Goldstream Meeting Room, 479 Island Highway, Victoria, BC

PRESENT: Committee Members: L. Vallee (Chair); P. Brent (Electoral Area Director); W. Mulvin (EP); R. Noyes (EP); K. Wall

Staff: J. Dales, Senior Manager, Wastewater Infrastructure Operations; J. Marr, Acting Senior Manager, Infrastructure Engineering; J. Kelly, Manager, Capital Projects; C. Moch, Manager, Water Quality Operations; L. Xu, Manager, Finance Services (EP); T. Duthie, Manager, Administrative Services; M. Risvold, Committee and Administrative Clerk (Recorder)

EP = Electronic Participation

The meeting was called to order at 2 pm.

1. ELECTION OF CHAIR

The Senior Manager called for nominations for the position of Chair of the Surfside Park Estates Water Service Committee for the term ending December 31, 2023.

W. Mulvin nominated L. Vallee. L. Vallee 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 L. Vallee Chair of the Surfside Park Estates Water Service Committee for the term ending December 31, 2023 by acclamation.

2. ELECTION OF VICE CHAIR

Election of vice-chair was not conducted.

3. APPROVAL OF AGENDA

MOVED by P. Brent, **SECONDED** by K. Wall,
That the agenda be approved.

CARRIED

4. ADOPTION OF MINUTES

MOVED by P. Brent, **SECONDED** by K. Wall,
That the minutes of the November 24, 2022 meeting be adopted.

CARRIED

5. CHAIR'S REMARKS

The Chair thanked the committee for their vote of confidence for another year as Chair.

6. PRESENTATIONS/DELEGATIONS

There were none.

7. SENIOR MANAGER'S REPORT

As a follow-up from the November 24, 2022 meeting, J. Dales advised there is a \$250 deposit on the totes used to transport chemicals. It is challenging to clean the totes for water storage as the chemicals are toxic. Risk management does not support having the totes re-used for water storage. Staff offered to connect the committee with the recycling company if they would like to further discuss the matter.

8. COMMITTEE BUSINESS

8.1. PRESENTATION – SURFSIDE PARK ESTATES WATER SERVICE COMMITTEE ORIENTATION

Staff provided the orientation and responded to questions from the committee regarding:

- Monitoring for grants. Staff advised there are weekly alerts that are monitored for grants for all of Capital Regional District (CRD) services.
- Connection replacement at Wooddale Drive while it is vacant. Staff advised leaks have been identified in this location and it is in the capital plan to be replaced in 2025. There is currently no authorization to proceed as the project would have to be approved in 2024.
- The new storage tank location. Staff advised the new location will be determined by the system review and study.
- Alternative Approval Process (AAP). Staff advised Legislative Services will lead the process, and a notice will be issued for the work including the amount of funds. It will be published in the newspaper, website and social media. If less than 10 percent of system users do not support the AAP, it will proceed. If defeated, another option is a referendum which is more expensive than the AAP.
- Extending the life of the existing plant and tank to optimize grant opportunities. Staff advised the intent is to do maintenance to make the tanks last as long as possible. Having the treatment plant project on the capital plan is beneficial when applying for grants. Infrastructure can begin failing resulting in more expensive repairs.

The Chair advised staff of a space located on lot 20 that has a designated spot for water tanks, noting the owner may sell the section of land. Staff will investigate further.

8.2. Project and Operations Update

Staff provided the capital projects and operational updates and responded to a question regarding a leak on Mariners Way. Staff will report back to the committee regarding how the leak detected on Mariners Way improved water loss.

8.3. Referral From Electoral Areas Committee – Electoral Areas Water Conservation Bylaw No. 1, 2022 (Bylaw No. 4492)

J. Dales presented the bylaw. The committee advised they like the ability for flexibility.

9. SURFSIDE PARK ESTATES WATER SERVICE COMMITTEE MEETING SCHEDULE

Regular meetings of the Surfside Park Estates Water Service Committee shall be held in the Goldstream Conference Room, 479 Island Highway, Victoria, BC on Thursday, February 9, Thursday, June 15 and a date to be determined in November to approve the operating and capital budget. Meetings will commence at 2:00 pm unless otherwise determined.

10. CORRESPONDENCE

There was none.

11. NEW BUSINESS

There was none.

12. ADJOURNMENT

MOVED by P. Brent, **SECONDED** by K. Wall,
That the February 9, 2023 meeting be adjourned at 3:06.

CARRIED

CHAIR

SECRETARY

Surfside Water System

2022 Annual Report



Introduction

This report provides a summary of the Surfside Park Estates Water Service for 2022 and includes a description of the service, summary of the water supply, demand and production, drinking water quality, operations highlights, capital project updates and financial report.

Service Description

The community of Surfside is a rural residential development located on Mayne Island in the Southern Gulf Islands Electoral Area which was originally serviced by a private water utility. In 2003 the service converted to the Capital Regional District (CRD). The Surfside Water Service (Figure 1) area is made up of 127 parcels of which 105 parcels can be inhabited encompassing a total area of approximately 25 hectares. Of the 105 parcels, 68 were connected to the water system in 2022.

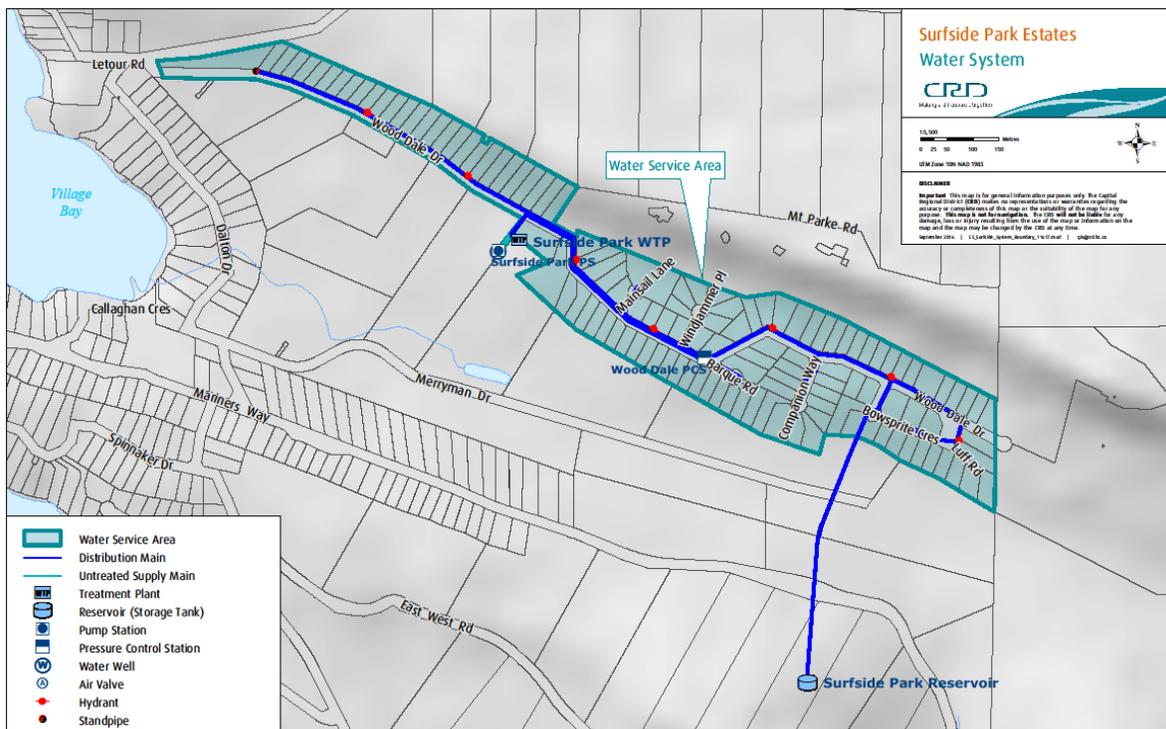


Figure 1: Surfside Park Estates Water Service

The Surfside water system is primarily comprised of:

- One groundwater well, related pumping and control equipment and building.
- Disinfection process equipment (filters, ultraviolet light and chlorine).
- Two steel storage tanks (total volume is 113 cubic meters).
- Distribution system (3,800 meters of water mains).
- Other water system assets: 68 service connections and water meters, five hydrants, three standpipes, 30 gate valves, one air release valve, Supervisory Control and Data Acquisition (SCADA) system and portable generator.

Water Supply

Groundwater supply monthly water levels are highlighted for 2022 in Figure 2. Groundwater levels for 2022 are within typical range and were observed to be 20% to 30% lower for the period of June to October. These lower aquifer levels are likely the result of increasing drought conditions in which the Province declared level 4 drought conditions for the Southern Gulf Islands on July 9 and then increased this to level 5 August 31.

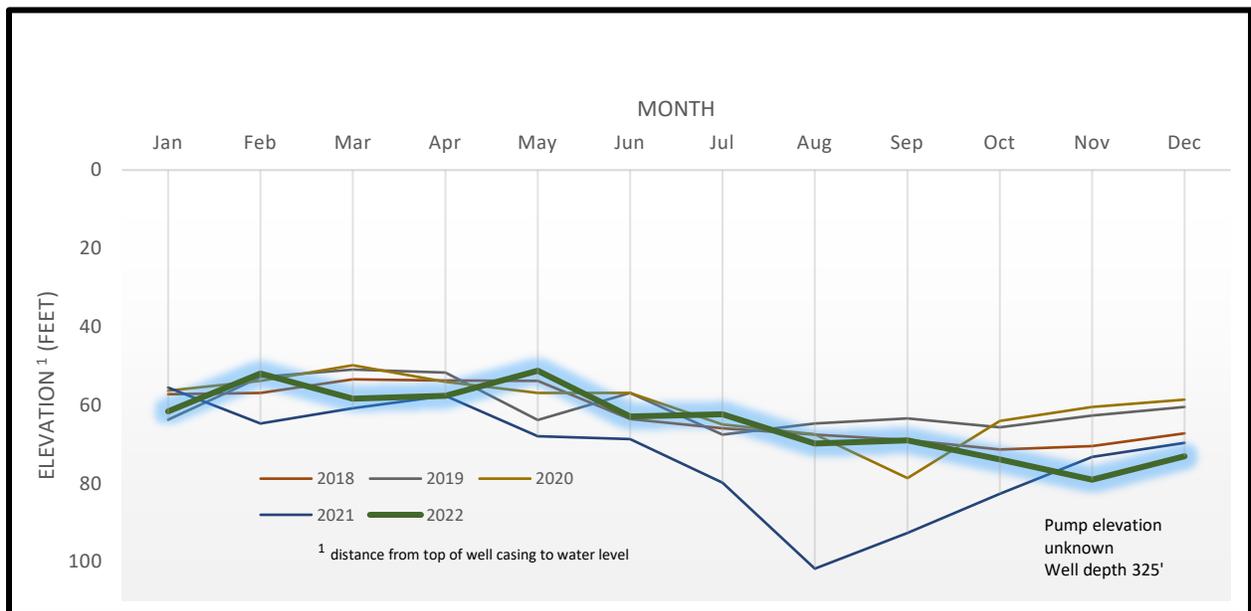


Figure 2: Surfside Park Estates Well #5A Groundwater Supply Monthly Water Level

Water Production and Demand

Referring to Figure 3, 13,301 cubic meters of water was extracted (water production) from the groundwater source (Well #5) in 2022; a 15% increase from the previous year and a 15% increase from the five year average. Water demand (customer water billing) for the service totaled 5,632 cubic meters of water; a 17% decrease from the previous year and a 13% increase from the five year average.

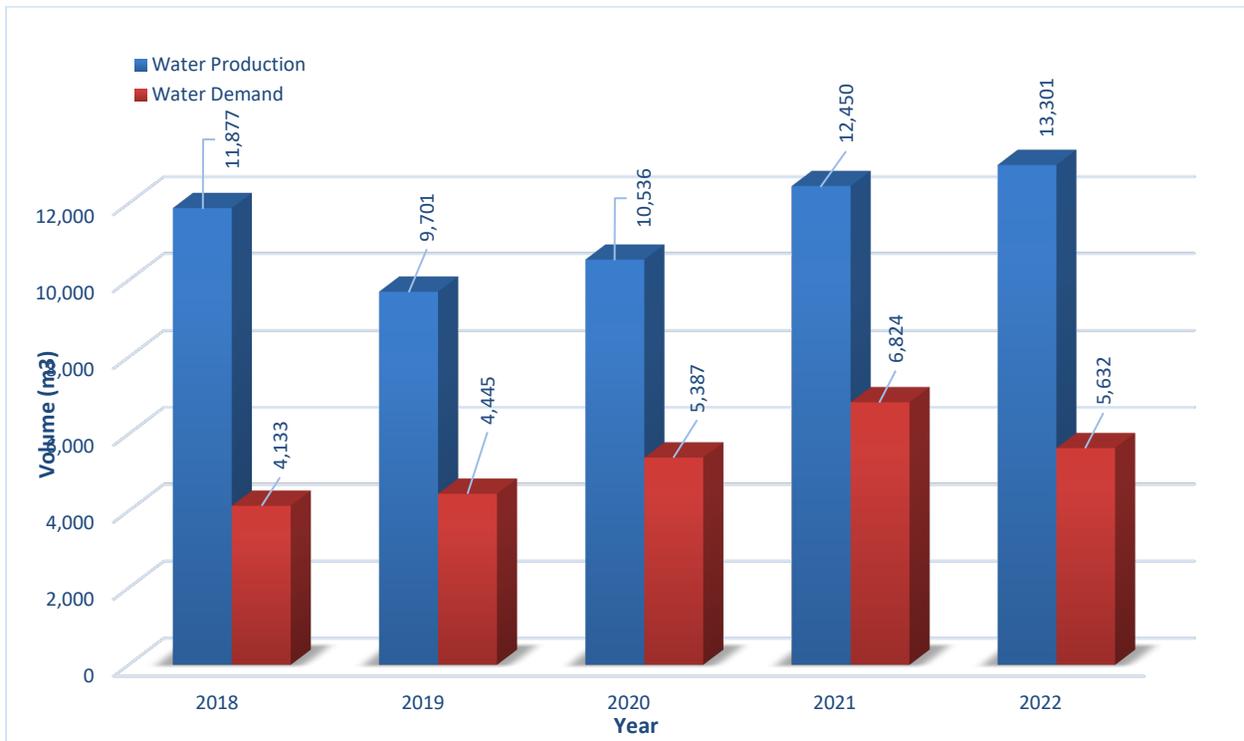


Figure 3: Surfside Park Estates Water Service Annual Water Production and Demand

The difference between annual water production and annual customer water demand is referred to as non-revenue water and can include water system leaks, water system maintenance and operational use (e.g. water main flushing, filter system backwashing), potential unauthorized use and fire-fighting use.

The 2022 non-revenue water (7,669 cubic meters) represents approximately 62% of the total water production for the service area. Approximately 264 cubic meters of water can be attributed to operational use so the remaining amount (56%) of non-revenue water is considered significant for a small water service. It is important to note that leak detection and repair efforts continue to be prioritized for the service. Water system leaks located and repaired in 2022 did not result in a reduction of non-revenue water from the previous year. Leak detection efforts will continue for the service.

Figure 4 below illustrates the monthly water production for 2022 along with the historical water production information for the previous four years. Typically, the monthly water production trend is greatest during the summer period (June to September). However, monthly water production for the most part is consistent throughout the year which indicates limited outdoor water use.

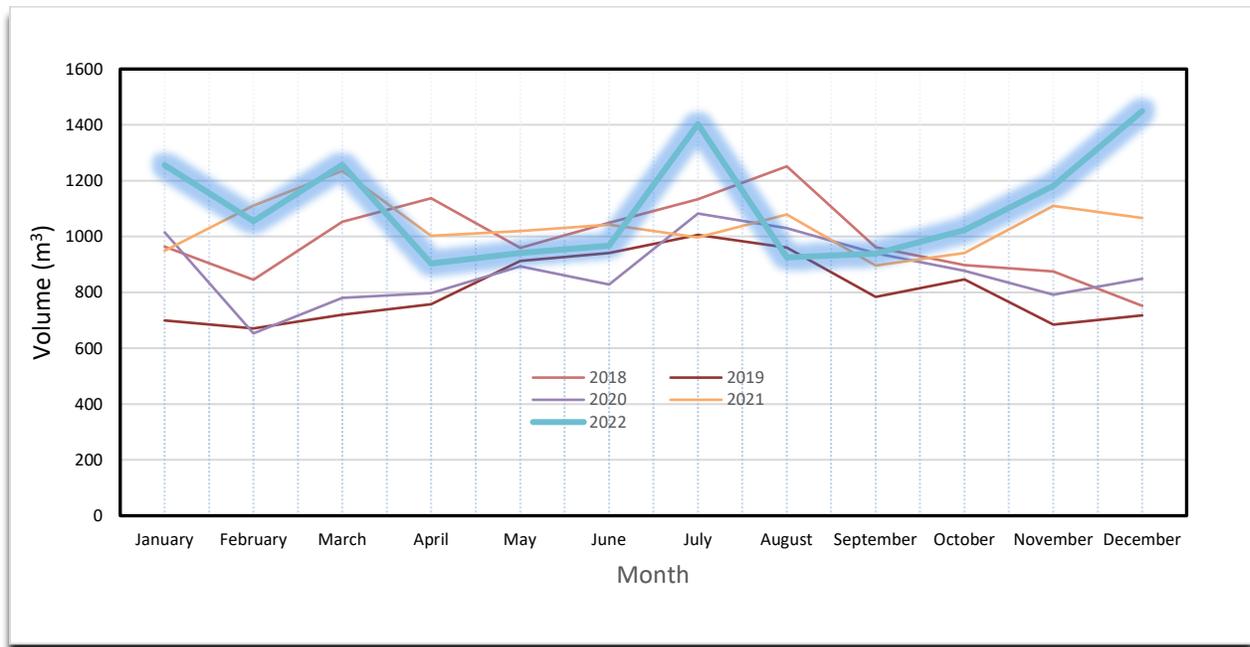


Figure 4: Surfside Park Estates Water Service Monthly Water Production

Drinking Water Quality

Staff completed the water quality monitoring program at Surfside based on the regulatory requirements and system specific risks. Samples were collected at regular frequencies from both the raw water as well as from a number of sampling stations at the treatment plant and in the distribution system. The samples were submitted for various analyses to the CRD's Water Quality Lab or to external laboratories for special analyses such as disinfection by-products or metals.

The water system performed well in 2022 and generally supplied drinking water of good quality to its customers. None of the raw water samples tested positive for *E.coli* or total coliform bacteria in 2022. All treated water samples tested negative for *E.coli* or total coliform bacteria in 2022. The raw water exhibited consistently high arsenic concentrations as well as elevated manganese concentrations. Except for a brief period between December 2 and 13, 2022, when the system was under a public water quality advisory due to elevated arsenic concentrations in the treated water, the existing treatment successfully reduced these concentrations to levels well below the health related and aesthetic limits in the Guidelines for Canadian Drinking Water Quality.

The data below provides a summary of the water quality characteristics in 2022:

Raw Water:

- Results from Well #5, the only water source, indicated that produced water contained no *E.coli* bacteria and no total coliform bacteria.
- The raw water continued to have naturally high concentrations of arsenic and manganese. The arsenic concentration in the raw water ranged from 46.4 to 64.1 µg/L. Manganese had a median concentration of 40.4 µg/L.
- The raw water turbidity was low with a median of 0.55 Nephelometric Turbidity Unit (NTU).
- The raw water was slightly hard (median hardness 37.1 mg/L (CaCO₃). pH was not tested in 2022.

Treated Water:

- The treated water was safe to drink with no E. coli or total coliform bacteria in any sample.
- The treated water turbidity was very low with a median of < 0.14 NTU.
- The arsenic concentration after treatment was generally below the maximum allowable concentration (MAC) of 10 µg/L. The annual median arsenic concentration was 4.66 µg/L. Between December 2nd and 13th, a public water quality advisory was in place due to an arsenic exceedance post filter treatment. The filter media had expired faster than anticipated and led to arsenic concentrations up to 17 µg/L in the distribution system. After a filter media change and extensive flushing, staff in consultation with Island Health concluded on December 13 that no further arsenic related health concerns existed.
- Very low manganese concentrations in the treated water indicate the effectiveness of the filtration system in terms of arsenic and manganese removal. One sample on February 1, 2022, from the system end on Wood Dale Drive exhibited a manganese concentration in excess of the aesthetic limit but below the health limit (31 µg/L) due to accumulation effects. Spot flushing by staff addressed this issue.
- The annual average levels of the disinfection by-product total trihalomethanes (TTHM) were well below the MAC. Haloacetic acids (HAA) were not tested in 2022. Typically, when THM concentrations are low, HAA are also low.
- The free chlorine residual concentrations ranged from 0.19 to 1.43 mg/L in the distribution system indicating good secondary disinfection in most parts of the system except for some dead-end sections with older water age.

Table 1 and 2 below provide a summary of the 2022 raw and treated water test results.

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

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

Operational Highlights

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

- Water treatment plant:
 - Communications antenna replacement
 - Space heater replacement
 - Standby generator replacement
- Reservoir supply line leak detection and repairs

Capital Projects Update

The Capital Projects that were in progress or completed in 2022 include:

- System Review Project – Engineering and operations staff commenced high level reviews of options for location and replacement of existing tanks. Due to resource limitations and market escalation, further details on this assessment were deferred until 2023.

Financial Report

Please refer to the attached 2022 Statement of Operations and Reserve Balances.

Revenue includes parcel taxes (Transfers from Government), fixed user fees (User Charges), and interest on savings (Interest earnings), a transfer from the Operating Reserve Fund, and miscellaneous revenue such as late payment charges (Other revenue).

Expenses include all costs of providing the service. 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 costs 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 water system, including insurance, supplies, water testing and electricity.

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.

Submitted by:	Jason Dales, B.Sc., WD IV, Senior Manager, Wastewater Infrastructure Operations
	Joseph Marr, P.Eng., Acting Senior Manager, Infrastructure Engineering
	Glenn Harris, Ph.D., R.P.Bio., Senior Manager, Environmental Protection
	Rianna Lachance, BCom, CPA, CA, Senior Manager, Financial Services
Concurrence:	Ian Jesney, P.Eng., Acting General Manager, Integrated Water Services
	Larisa Hutcheson, P.Eng., General Manager, Parks & Environmental Services

Attachments: Table 1 - Summary of Raw Water Test Results
 Table 2 - Summary of Treated Water Test Results
 2022 Statement of Operations and Reserve Balances

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

Table 1

Table 1: 2022 Summary of Raw Water Test Results, Surfside Water System										
PARAMETER		2022 ANALYTICAL RESULTS				CANADIAN GUIDELINES	2012-2021 ANALYTICAL RESULTS			
Parameter Name	Units of Measure	Annual Median	Samples Analyzed	Range Minimum Maximum		≤ = Less than or equal to	Median	Samples Analyzed	Range Minimum Maximum	
ND means Not Detected by analytical method used										
Physical Parameters										
Hardness as CaCO ₃	mg/L	37.1	4	21.5	50.8	No Guideline Required	41.9	35		18.2
Turbidity	NTU	0.55	12	0.25	0.85		0.35	34		0.12
Water Temperature	deg C	6.5	15	5.5	11.8	15°C AO	6.45	167		5.2
pH	pH units	Not analyzed in 2022				AO pH 7.0 -10.5	8.71	25		7
Total Organic Carbon	mg/L	0.73	2	2.00	2		0.78	21		< 0.5
Metals										
Aluminum	ug/L as Al	19.20	4	7.2	27.8	2900 MAC / 100 OG	14.7	35		7.6
Antimony	ug/L as Sb	< 0.5	4	< 0.5	< 0.5	6 MAC	< 0.5	35		< 0.5
Arsenic	ug/L as As	54.15	12	46.4	64.1	10 MAC	42.2	134		<0.5
Barium	ug/L as Ba	54.20	4	35.8	67.5	1000 MAC	59.8	35		32.9
Beryllium	ug/L as Be	< 0.1	4	< 0.1	< 0.1		< 0.1	35		< 0.1
Bismuth	ug/L as Bi	< 1	4	< 1	< 1		< 1	28		< 1
Boron	ug/L as B	1720.00	4	1420	2110	5000 MAC	1700	35		1.25
Cadmium	ug/L as Cd	< 0.01	4	< 0.01	< 0.01	5 MAC	< 0.01	35		< 0.01
Calcium	mg/L as Ca	12.05	4	7.05	16.4	No Guideline Required	13.5	35		5.91
Chromium	ug/L as Cr	< 1	4	< 1	< 1	50 MAC	< 1	34		< 1
Cobalt	ug/L as Co	< 0.2	4	< 0.2	< 0.2		< 0.2	35		< 0.2
Copper	ug/L as Cu	1.12	4	< 0.2	3.47	2000 MAC / ≤ 1000 AO	0.57	35		< 0.2
Iron	ug/L as Fe	24.85	4	19	27.1	≤ 300 AO	25.2	34		< 10
Lead	ug/L as Pb	< 0.2	4	< 0.2	< 0.2	5 MAC	< 0.2	35		< 0.2
Lithium	ug/L as Li	58.25	4	54.9	68.5		62.6	12		50.4
Magnesium	mg/L as Mg	1.70	4	0.942	2.36	No Guideline Required	2	35		0.831
Manganese	ug/L as Mn	40.40	4	32	61.8	120 MAC / ≤ 20 AO	40.9	35		< 4
Molybdenum	ug/L as Mo	< 1	4	< 1	< 1		< 1	35		< 1
Nickel	ug/L as Ni	< 1	4	< 1	< 1		< 1	35		< 1
Potassium	mg/L as K	1.78	4	1.6	1.9		1.88	35		1.58
Selenium	ug/L as Se	< 0.1	4	< 0.1	< 0.1	50 MAC	< 0.1	35		< 0.1
Silicon	ug/L as Si	7305.00	4	6760	7840		7180	35		912
Silver	ug/L as Ag	< 0.02	4	< 0.02	< 0.02	No Guideline Required	< 0.02	35		< 0.02
Sodium	mg/L as Na	122.50	4	116	145	≤ 200 AO	123	35		13.1
Strontium	ug/L as Sr	243.00	4	160	352	7000 MAC	277	35		0.312
Sulfur	mg/L as S	17.30	4	13.6	21.1		16.8	28		11.7
Thallium	ug/L as Tl	< 0.01	4	< 0.01	< 0.01		< 0.01	28		< 0.01
Tin	ug/L as Sn	< 5	4	< 5	< 5		< 5	35		< 5
Titanium	ug/L as Ti	< 5	4	< 5	< 5		< 5	35		< 5
Uranium	ug/L as U	< 0.1	4	< 0.1	< 0.1	20 MAC	< 0.1	28		< 0.1
Vanadium	ug/L as V	< 5	4	< 5	< 5		< 5	35		< 5
Zinc	ug/L as Zn	< 5	4	< 5	7.5	≤ 5000 AO	< 5	35		< 1
Zirconium	ug/L as Zn	< 0.1	4	< 0.1	< 0.1		< 0.1	28		< 0.1
Microbial Parameters										
Indicator Bacteria										
Coliform, Total	CFU/100 mL	< 1	12	< 1	< 1		ND	116		ND - 28
<i>E. coli</i>	CFU/100 mL	< 1	12	< 1	< 1		ND	116		ND
Heterotrophic bacteria, 7 day	CFU/mL	Not analyzed in 2022								
Parasites										
<i>Cryptosporidium</i> , Total oocysts	oocysts/100 L	Last tested in 2015				Zero detection desirable	ND	7		ND
<i>Giardia</i> , Total cysts	cysts/100 L	Last tested in 2015				Zero detection desirable	ND	7		ND

Table 2

Table 2: 2022 Summary of Treated Water Test Results, Surfside Water System										
PARAMETER		2022 ANALYTICAL RESULTS				CANADIAN GUIDELINES	2012-2021 ANALYTICAL RESULTS			
Parameter Name	Units of Measure	Annual Median	Samples Analyzed	Range Minimum Maximum		≤ = Less than or equal to	Median	Samples Analyzed	Range Minimum Maximum	
ND means Not Detected by analytical method used										
Physical Parameters										
Hardness	mg/L as CaCO3	40.5	8	20.3	47.2		33.95	44	25	55.9
pH	pH units	Not tested in 2022				AO pH 7.0 -10.5	8.5	23	7	8.7
Turbidity	NTU	< 0.14	12	0.1	0.35		< 0.14	34	< 0.14	1.8
Total Organic Carbon	mg/L	0.375	8	< 0.2	0.62		< 0.5	45	< 0.3	1.51
Water Temperature	deg C	6.5	71	0.32	15.6	15°C AO	6.5	1925	4	24.5
Microbial Parameters										
Indicator Bacteria										
Coliform, Total	CFU/100 mL	< 1	56	< 1	< 1	0 MAC	< 1	407	< 1	1
<i>E. coli</i>	CFU/100 mL	< 1	56	< 1	< 1	0 MAC	< 1	407	< 1	< 1
Hetero. Plate Count, 7 day	CFU/1 mL	Not tested in 2022				No Guideline Required	60	44	<1	940
Disinfectants										
Disinfectants										
Chlorine, Free Residual	mg/L as Cl2	0.65	64	0.19	1.43		0.54	1947	0.12	2.06
Chlorine, Total Residual	mg/L as Cl2	Not tested in 2022					0.61	1608	0.12	2.2
Disinfection By-Products										
Disinfection Byproducts										
Bromodichloromethane	ug/L	2.3	8	< 1	4.9		2.5	48	1.1	18
Bromoform	ug/L	5.4	8	2.4	12.0		4.95	48	< 0.1	12
Chloroform	ug/L	1.6	8	< 1	2.2		1.85	48	< 0.1	10
Chlorodibromomethane	ug/L	5.5	8	2.4	12.0		5.05	38	1.5	14.1
Total Trihalomethanes	ug/L	16.0	8	6.3	27.0	100 MAC	21	47	5.7	50
Haloacetic Acids (HAAs)										
Not tested in 2022										
HAA5	ug/L					80 MAC	< 5	4	< 5	< 5
Metals										
Aluminum	ug/L as Al	5.05	8	< 3	32.2	2900 MAC / 100 OG	4.8	43	< 3	59
Antimony	ug/L as Sb	< 0.5	8	< 0.5	< 0.5	6 MAC	< 0.5	43	< 0.05	< 2.5
Arsenic	ug/L as As	4.66	23	0.11	17.1	10 MAC	4.43	148	< 0.03	31
Barium	ug/L as Ba	45.95	8	34.1	60.2	1000 MAC	46.2	43	3.2	69.9
Beryllium	ug/L as Be	< 0.1	8	< 0.1	< 0.1		< 0.1	43	< 0.1	< 3
Bismuth	ug/L as Bi	< 1	8	< 1	< 1		< 1	41	< 1	< 5
Boron	ug/L as B	1665	8	1520	2040	5000 MAC	1760	43	1200	2240
Cadmium	ug/L as Cd	< 0.01	8	< 0.01	< 0.01	5 MAC	< 0.01	43	< 0.01	< 0.1
Calcium	mg/L as Ca	12.65	8	6.22	15.1	No Guideline Required	10.4	44	7.62	18
Chromium	ug/L as Cr	< 1	8	< 1	< 1	50 MAC	< 1	43	< 1	< 10
Cobalt	ug/L as Co	< 0.2	8	< 0.2	< 0.2		< 0.2	43	< 0.2	24
Copper	ug/L as Cu	2.185	8	0.91	5.91	2000 MAC / ≤ 1000 AO	3.51	43	1.68	21.8
Iron	ug/L as Fe	< 5	8	< 5	63.1	≤ 300 AO	7	43	< 5	54.7
Lead	ug/L as Pb	< 0.2	8	< 0.2	0.66	5 MAC	0.3	43	< 0.2	1.09
Lithium	ug/L as Li	58.1	8	54.9	62.7		61.3	19	54.3	71.1
Magnesium	mg/L as Mg	2.125	8	1.16	2.46	No Guideline Required	1.99	44	1.04	3.05
Manganese	ug/L as Mn	< 1	8	< 1	31	120 MAC / ≤ 20 AO	< 1	43	< 1	25
Molybdenum	ug/L as Mo	< 1	8	< 1	< 1		< 1	43	< 1	< 20
Nickel	ug/L as Ni	< 1	8	< 1	< 1		< 1	43	< 1	< 50
Potassium	mg/L as K	1.83	8	1.66	1.9		1.8	44	1.47	2.35
Selenium	ug/L as Se	< 0.1	8	< 0.1	< 0.1	50 MAC	< 0.1	43	< 0.1	< 0.5
Silicon	ug/L as Si	7195	8	7070	7760		6910	43	2350	8950
Silver	ug/L as Ag	< 0.02	8	< 0.02	< 0.02	No Guideline Required	< 0.02	43	< 0.02	< 10
Sodium	mg/L as Na	120.5	8	117	133	≤ 200 AO	125.5	44	102	142
Strontium	ug/L as Sr	297	8	176	355	7000 MAC	286	43	171	399
Sulphur	mg/L as S	16.15	8	14.6	18.7		18.05	42	13.8	22.4
Thallium	ug/L as Tl	< 0.01	8	< 0.01	< 0.01		< 0.01	41	< 0.01	< 0.05
Tin	ug/L as Sn	< 5	8	< 5	< 5		< 5	43	< 5	< 25
Titanium	ug/L as Ti	< 5	8	< 5	< 5		< 5	43	< 5	< 25
Uranium	ug/L as U	< 0.1	8	< 0.1	< 0.1	20 MAC	< 0.1	41	< 0.1	< 0.5
Vanadium	ug/L as V	< 5	8	< 5	< 5		< 5	43	< 5	< 25
Zinc	ug/L as Zn	< 5	8	< 5	10.8	≤ 5000 AO	7.8	43	< 5	167
Zirconium	ug/L	< 0.1	8	< 0.1	< 0.1		< 0.1	41	< 0.1	< 0.5

CAPITAL REGIONAL DISTRICT

SURFSIDE WATER

Statement of Operations (Unaudited)

For the Year Ended December 31, 2022

	2022	2021
Revenue		
Transfers from Government User	23,100	22,000
Charges	95,588	81,748
Other revenue from own sources:		
Interest Earnings	39	18
Transfer from Operating Reserve	10,837	5,000
Other Revenue	742	435
Total Revenue	\$ 130,306	109,201
Expenses		
General Government Services	4,563	4,698
Contract for Services	17,220	21,445
CRD Labour and Operating costs	77,340	50,009
Capital Purchases	6,686	-
Other Expenses	21,497	16,963
Total Expenses	\$ 127,306	93,115
Net revenue (expenses)	3,000	16,086
Transfers to own funds:		
Capital Reserve Fund	3,000	15,000
Operating Reserve Fund	-	1,086
Annual surplus/(deficit)	-	-
Accumulated surplus/(deficit), beginning of year	-	-
Accumulated surplus/(deficit), end of year	\$ -	-

CAPITAL REGIONAL DISTRICT

SURFSIDE WATER

Statement of Reserve Balances (Unaudited)

For the Year Ended December 31, 2022

	Capital Reserve	
	2022	2021
Beginning Balance	65,217	49,087
Transfer from Operating Budget	3,000	15,000
Transfer from Completed Capital Projects	-	273
Transfer to Capital Projects	-	-
Interest Income	1,888	857
Ending Balance	70,105	65,217

	Operating Reserve	
	2022	2021
Beginning Balance	24,374	27,842
Transfer from Operating Budget	-	1,086
Transfer to Operating Budget	(10,837)	(5,000)
Interest Income	718	446
Ending Balance	14,255	24,374



**REPORT TO SURFSIDE PARK ESTATES WATER SERVICE COMMITTEE
MEETING OF THURSDAY, JUNE 15, 2023**

SUBJECT Capital Project Status Reports and Operational Updates – June 2023

ISSUE SUMMARY

To provide the Surfside Park Estates Water Service Committee with capital project status reports and operational updates.

BACKGROUND

The Surfside Park Estates Water System is located on the southwest side of Mayne Island in the Southern Gulf Islands Electoral Area and provides drinking water to approximately 68 customers. Capital Regional District (CRD) Integrated Water Services is responsible for the overall operation of the water system with day-to-day operation, maintenance, design and construction of water system facilities provided by the CRD Infrastructure Engineering and Operations Divisions. The quality of drinking water provided to customers in the Surfside Park Estates Water System is overseen by the CRD Water Quality Section.

CAPITAL PROJECT UPDATE

21-01 | System Review

Project Description: Review the system with tank location and accessibility taken into account.

Project Rationale: Review the location and replacement of the existing tanks, with accessibility taken into account, resulting in recommendations for future improvements. Staff are to review options for tank replacement for maintenance and maintaining a resilient water system. Tank sizing, location and pumping requirements will all be considered to ensure a sustainable water supply can be effectively delivered.

Project Update and Milestones:

Milestone	Completion Date
Project will commence when the CRD Board approves the project budget	March 16, 2022
Staff are compiling background documents (flow requirements, zoning, record drawings and easements) for project delivery	Ongoing

OPERATIONAL UPDATE

This is an operational update reporting period from February 2023 through May 2023.

- Weekly routine operational site visits by Saanich Peninsula and Gulf Islands Operations Staff. Routine site visits are typically performed on Thursdays.

Surfside Park Estates Water Service Committee – June 15, 2023
Capital Project Status Reports and Operational Updates – June 2023

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- Completed annual hydrant preventative maintenance program.
- Change-out of arsenic filtration media in Vessel A February 28 and Vessel B May 11 respectively at the water treatment facility.
- Investigation of arsenic filter Vessel A piping system to confirm there are no system bypass occurring.
- Preventative maintenance water system valve exercising program completed. Two corrective maintenance work orders created (missing valves).
- Corrective maintenance performed on the chlorine chemical feed pump and cleaning of the chlorine chemical storage tank.
- Completed the review and revision of the water meter location data which is used for emergency leak response work.

RECOMMENDATION

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

Submitted by:	Jared Kelly, P.Eng., Manager, Capital Projects
Submitted by:	Dan Robson, A.Sc.T., Manager, Saanich Peninsula and Gulf Islands Operations
Concurrence:	Joseph Marr, P.Eng., Acting Senior Manager, Infrastructure Engineering
Concurrence:	Jason Dales, B.Sc., WD IV., Senior Manager, Wastewater Infrastructure Operations
Concurrence:	Ian Jesney, P.Eng., Acting General Manager, Integrated Water Services