



TOWN OF LAKE COWICHAN

Finance and Administration Committee

Tuesday, February 11th, 2020 at 6:00 p.m. – Council Chambers

AGENDA

1. CALL TO ORDER

Page #

INTRODUCTION OF LATE ITEMS (if applicable)

2. APPROVAL OF AGENDA

3. BUSINESS ARISING AND UNFINISHED BUSINESS

Ongoing Items Still Being Addressed:

(a) Municipal Hall Upgrades- Update.

3

(b) Water Treatment Plant - status report.

4

4. DELEGATIONS AND REPRESENTATIONS

5. CORRESPONDENCE

(a) Lake Cowichan School re: Health Fair – April 8th, 2020.

5

(b) Mayor Dugas, District of Port Hardy re: Emergency Fire Equipment Funds from Insurance Premium Tax.

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6. VERBAL COMMENT FROM THE PUBLIC ON A SUBSEQUENT ITEM ON THE AGENDA

– (maximum 3 minutes per speaker and maximum time allotted 15 minutes)

7. REPORTS

(a) Director of Finance re: Financial Report for the period ending January 31st, 2020.

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(b) Building Inspector's Report for January, 2020.

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(c) Bylaw Officer's Report for December, 2019.

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(d) Superintendent, Public Works and Engineering Services re: Water Treatment Update and Turbidity Issues.

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8. NEW BUSINESS

9. NOTICES OF MOTION

10. PUBLIC RELATIONS ITEMS

11. QUESTION PERIOD (maximum 3 minutes per speaker and maximum time allotted 15 minutes) - Limited to items on the agenda

12. ADJOURNMENT

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Memo

TO: Chair, Finance and Administration Committee

SUBJECT: Municipal Hall Upgrades - Update

DATE: February 7, 2020

FROM: Chief Administrative Officer

UPDATE

Work on upgrades at the municipal hall has been slowed what with the recent snowfalls and the following update can be provided:

- BC Hydro finally relocated the overhead lines on the night of January 23rd, 2020;
- The G&G roofers are unable to begin re-roofing now as the weather has slowed their progress on other projects – they were ready the last time had the electrical work been completed as was originally planned;
- In the meantime, the contractor and the hazmat folks have been tasked with getting the siren re-located; and
- As soon as the roof is done it is hoped that the upgrades can move expeditiously.

Joseph A. Fernandez

FA 20-02-11
3(a) | Page

Memo



TO: Chief Administrative Officer

SUBJECT: WTP update

DATE: February 6, 2020

FROM: Superintendent, Public Works and Engineering Services

Current Status:

- Archie Johnson Plumbing and Heating (AJPH) continue with install check valve at North Shore Intake Pumphouse. Parts will arrive first week of March.
- AJPH ordered check valves for WTP, will arrive on the 7th-Feb and installation is expected the following week.
- Bartek and the PWS Operators will continue the commissioning when the check valves are installed.
- Island Health is visiting the WTP to inspect the Soda Ash Equipment on 7th-Feb.
- Stantec, Trittech, PWS – Substantial completion walkthrough 10th-Feb.
- Third party Level IV water operator site visit on week of 10th-Feb.

A handwritten signature in black ink, appearing to be 'Kam So', written over a horizontal line.

Kam So, P.Eng, MBA (Candidate)
Superintendent, Public Works and Engineering Services

Lake Cowichan School

PO Box 40, Lake Cowichan, BC V0R 2G0 ♦ TEL 250.749.6634 ♦ FAX 250.749.6222
<http://www.sd79.bc.ca/groups/lcss/>

January 30, 2020

RECEIVED FEB 07 2020

To Whom It May Concern

During the morning of Wednesday, April 8, 2020, Lake Cowichan School will be holding a Health Fair. Students from Grade 10 will be presenting their research on various health topics and activities in the gym. The goal of our Health Fair is to inform the students and community about health issues and opportunities in our area. The fair will be open to the community as well as to students in our local schools.

I am wondering if you would be interested in setting up a booth at the fair to provide information about the health benefits that are available through your organization. I am hoping to show the students local, healthy activities that they can participate in, as well as local resources that they can access if they have a health concern.

Please contact me at the school, as soon as possible, by phone or email, if you have any questions or to let me know if you are able to attend and present. I would like to have presenters booked before the end of March so that I can map out where booths will be. Thank you and I look forward to hearing from you soon.

Sincerely



Noni Battye
nbattye@sd79.bc.ca

NB/dm



"LCSS, a caring community committed to making a difference."

FA20-02-11
5(a)

Joseph Fernandez

From: Dennis Dugas <ddugas@porthardy.ca>
Sent: February 6, 2020 3:19 PM
To: Joseph Fernandez
Subject: Emergency Fire Equipment funds from Insurance Premium Tax
Attachments: 1483_001.pdf

Hey Joe great talking to you, glad you are doing well and still doing what you love.

The information attached gives you a brief history of the IPT and what the Province has done through legislation to bury it in Consolidated Revenue Fund.

Then the Province can use the IPT for what ever they wish and not help financially support communities to deal with the costs to provide Fire Protection.

As I mentioned as Small Communities under 5000 population we need to have financial support with the rising costs in providing Fire Protection to our communities.

I hope your Mayor and Council will be supportive of forming a Small Community Coalition to address this issue, as said many times before Together We Are Stronger.

Looking forward to your reply.

Take Care

D2

B.C.'s Insurance Premium Tax: potential revenue source for local fire services

PROBLEM

Rising costs are making it increasingly difficult for B.C. communities to fund fire services. The provincial government provides limited support for community firefighting, and refuses to share revenue from the 4.4% Insurance Premium Tax, which was originally created to fund fire protection.

BACKGROUND

A clear historic link exists between B.C.'s Insurance Premium Tax and the fire insurance premium tax the provincial government introduced in 1921 to offset the costs of the Office of the Fire Marshal, which at the time conducted fire investigations, training and code enforcement.

Over the years, the province has expanded the IPT's reach to include automobile insurance and the entire property insurance premium (not just fire insurance), and made legislative changes to sever the link between collection of the tax and payment for fire services. However, the province re-established that link in 2004, when it raised the IPT from 4% to 4.4% to pay for forest firefighting.

B.C.'s Insurance Premium Tax is the highest in Canada, yet it offers negligible support for community firefighting. The IPT is forecast to raise \$362 million in 2007/08 (more than double what it raised in 1999). Meanwhile, the only direct provincial contribution today towards community firefighting is through the Office of the Fire Commissioner, a governance-oriented body that received \$2.39 million in 2007/2008 (less than 1% of the IPT's revenue).

In Canada, responsibility for fire suppression falls to municipalities, which rely on property taxes for funding. B.C. municipalities collect more than \$397 million per year in property taxes to pay for firefighting, safety inspections and fire investigations.

As fire protection costs have continued to rise, provincial funding to municipalities has dwindled. After consistent reductions to unconditional provincial grants to municipalities over the years, the province stopped providing these grants altogether in 2006 to cities of more than 19,000 people (small communities still receive some support, but below 1998 levels). In addition, the province has gradually assigned to B.C. municipalities many former duties of the Office of the Fire Commissioner – such as safety inspections and fire investigations – without additional provincial funding.

While Insurance Premium Taxes are common across Canada, some provinces and territories provide higher levels of support for community fire services than seen in B.C. The United States also has examples of insurance premium taxes that help offset local fire service costs.

Lobbying by the Fire Chiefs' Association of B.C., the Union of B.C. Municipalities and individual municipalities and regional districts has so far failed to convince the provincial government to re-examine the issue or acknowledge the link between the IPT and funding for community fire services.

Interestingly, the province successfully used a similar argument – the moral link between tax collection and disbursement – in applying for federal funding (such as the gasoline tax).

Legal advice has also shown the merits of possible constitutional challenges related to either the argument that the IPT is discriminatory because it imposes a tax on property owners that other provincial taxpayers do not have to pay, or that the negative effect of diverting the revenue away from fire services outweighs the benefits of applying it as general revenue.

KEY CONCERNS

- **Safety:** Rising costs are forcing communities to make cuts that could negatively impact fire services.
- **Fairness:** In essence, B.C. property owners are paying for the same service twice – once through their property taxes, and again through a tax that was originally intended to pay for fire services. When a tax is collected from a defined group of people for a defined purpose, there is a moral obligation to spend the revenue on that purpose.

¹ *Fire Marshal Act 1921*

Section 32

1. For the purpose of defraying the expenses of administration under this Act, including the salaries of the Fire Marshal and his staff, every company (as defined by the "British Columbia Fire Insurance Act") transacting the business of fire insurance in the Province shall contribute each year a sum to be fixed by the Lieutenant Governor in Council according to such rate as in his opinion will be sufficient to meet the actual expenses of administration under this Act, but not exceeding in any year one-third of one per cent of all premiums or assessments (less return premiums or assessments and reinsurance premiums) paid or payable to such company on risks within the Province, and calculated on the business of the preceding calendar year as reported to the Superintendent, and such contribution shall be in addition to any other fee or tax payable by the company under any other Act: Provided that where the company is not licensed under the "British Columbia Fire Insurance Act" the contribution prescribed by this section shall be made by each insured paying a sum fixed as aforesaid, calculated according to the premium or assessment paid by him to the company during the preceding calendar year.
2. Every company and insured shall, on or before the first day of March in each year, pay to the Superintendent the amount so due from it or him, and the provisions of the "Taxation Act," or, in the absence of appropriate provisions, such provisions as may be adopted by the regulations for the purpose of enforcing payment of any such amount, shall apply in each case.
3. The Superintendent shall pay into the Provincial Treasury all Money received by him under this Act, and shall keep a separate account showing the moneys so received and the moneys expended in administration under this Act, in such a manner as may be required.
4. The salaries of the Fire Marshal and his staff and all expenses of administration under this Act shall, in the absence of a special vote of the Legislature available therefore, be paid by the Minister of Finance out of the Consolidated Revenue Fund.

² *Fire Services Act 1979*

Section 48

1. To defray administration expenses under this Act, including the salaries of the fire commissioner and his staff, each insurance company transacting fire or automobile insurance business in the Province and each person whose property in the Province is insured for a fire hazard with an insurance company not licensed under the *Insurance Act*, shall contribute each year, in addition to all other fees or taxes payable under any other Act, a sum to be fixed by the Lieutenant Governor in Council according to a rate he believes will be sufficient with the money available under section 52 to meet actual administration expenses.
2. The sum fixed for an insurance company shall not exceed in any year 1% of the aggregate of the premiums or assessments, or their portions, paid or payable to the company for a fire hazard on property in the Province in premiums, assessments and reinsurance premiums, calculated on the business of the preceding calendar year, to the superintendent.
3. The sum fixed for a person whose property is insured with an unlicensed company shall not exceed in any year 1% of each premium or assessment paid or payable by him, or premium note given or mutual or other liability assumed by him for a fire hazard under each insurance contract with an unlicensed company during the current calendar year, less return premiums, assessments and other similar rebates, as shown by his returns to the superintendent.

Section 49

Each insurance company shall pay to the Commissioner of Income Tax at Victoria the contribution due from it at the same time and manner as the tax under the *Insurance Premium Tax Act*. Each insured person shall pay to the superintendent his contribution in the same manner and time as the tax imposed on him by the *Insurance Act*.

Section 50

Salaries and expenses necessarily incurred in the administration of this Act shall, in the absence of a vote of the Legislature for that purpose, be paid out of the consolidated revenue fund. If the money collected under this Act is in any year less than the salaries and expenses, the Lieutenant Governor in Council may fix a further sum, subject to the limitation in section 48, to be contributed by the persons and in the manner set out in that section, to meet the deficiency.

Section 51

1. The fire commissioner shall keep an account of the money expended in the administration of this Act, and shall furnish the Lieutenant Governor in Council with the information he may require to fix the rate of contribution under section 48 or 50.
2. The superintendent shall keep an account of the amounts received by him under section 49 or 50, and on request shall furnish the fire commissioner with a statement of them.

Section 52

All license and other fees, money and fines collected or recovered under this Act or regulations shall be accounted for as part of the consolidated revenue fund.

³ *Fire Services Amendment Act, 1982*

Chapter 49

Her MAJESTY, by and with the advice and consent of the Legislative Assembly of the Province of British Columbia, enacts as follows:

1. Sections 48 and 49 of the *Fire Services Act*, R.S.B.C. 1979 c.133, are repealed and the following substituted:

Imposition of tax

48. (1) In this section, 'commissioner' means commissioner as defined in the *Insurance Premium Tax Act*.
 (2) An insurance company transacting the business of fire insurance in the Province shall pay to the commissioner a tax equal to the portion prescribed by the Lieutenant Governor in Council of the aggregate of the premiums and assessments received or receivable by the company in 1983 or any subsequent calendar year for policies insuring property situated in the Province, other than automobiles, after deducting the following:
 - (a) premiums or assessments on property reinsurance ceded to the company by other insurance companies licensed or authorized by permit under the *Insurance Act* to transact business in the Province;
 - (b) property insurance premiums or assessments returned;
 - (c) the cash value of dividends paid or credited to property insurance policy holders.
- (3) A person whose property is insured against a fire hazard with an insurance company that is not licensed under the *Insurance Act* shall pay to the superintendent a tax equal to the portion prescribed by the Lieutenant Governor in Council of the
 - (a) premium or assessment paid or payable,
 - (b) premium note given, or
 - (c) mutual or other liability assumed
 by the person for property insurance under each insurance contract with an unlicensed insurance company in 1983 or any subsequent calendar year.

Application of *Insurance Premium Tax Act* and *Insurance Act*

49. (1) Subject to this section, the *Insurance Premium Tax Act* applies in respect of the tax payable under section 48
 (2) Commencing on January 1, 1983, section 4.1 of the *Insurance Premium Tax Act* applies to an insurance company whose tax payable, under section 48 of this Act, in the preceding calendar year exceeded \$25,000
 (3) Part 9 of the *Insurance Act* applies in respect of the tax payable under section 48 (3).
2. Section 50 is repealed.
3. Section 51 is amended
 - (a) in subsection (1) by striking out "of contribution under section 48 or 50" and substituting "of tax under section 48", and
 - (b) in subsection (2) by striking out "section 49 or 50" and substituting "section 48"



Memo

TO: Chief Administrative Officer
FROM: Director of Finance
DATE: February 7, 2020

SUBJECT: Financial Report for the Period Ending January 31, 2020

The statements of revenues and expenditures for the general, sewer and water funds for the year ended December 31, 2019 and the month ended January 31, 2020 are attached for your information.

Points of Note

- The 2019 financial information as presented has not been finalized. Work on year end is ongoing and there are still adjustments to be made.
- The budget estimates for 2020 are preliminary numbers only as budget discussions are currently underway.
- The 2020 budget numbers are presented with the following assumptions:
 - 5% tax increase in the general revenue fund
 - 3% increase in water, sewer and garbage rates
 - \$50 increase in the sewer parcel tax - \$150 per parcel
 - \$60 increase in the water parcel tax - \$200 per parcel
- The capital budget includes \$20,000 for review of the Development Cost Charges as directed by Council
- The capital projects as shown for 2020 are also preliminary numbers for discussion purposes only.

Ronnie Gill, CPA, CGA
Director of Finance

TOWN OF LAKE COWICHAN
Statement of Expenditure - January 31, 2020

	2018 YTD Actual	2019 Budget	2019 YTD Actual	2020 Budget	2020 YTD Actual	2020 %
REVENUES						
Taxes	2,071,964	2,144,601	2,146,518	2,275,178	-	0%
Supplemental Adjustments	-	-	-	(8,200)	-	0%
Grants-In-Lieu	55,016	57,280	55,108	58,900	-	0%
Penalties and Interest on Taxes	63,046	60,000	63,177	60,000	129	0%
Business Licences	21,800	18,000	18,275	18,500	1,125	6%
Building and Other Permits	68,731	25,000	61,278	24,700	1,334	5%
Storm Drain Connection Fees	1,890	-	3,080	-	60	-
Dog Tags and Fines	3,590	3,200	3,655	3,300	1,315	40%
Interest on Investments	92,378	30,000	128,261	50,000	1,067	2%
Fire Service to CVRD	272,682	321,847	312,469	322,918	-	0%
BC Wildfire Recoveries	16,896	-	-	-	-	-
Fire Department Recovery	-	-	35,139	-	-	-
Garbage Revenues	380,404	383,500	386,875	396,100	340,930	86%
Lakeview Revenues	203,016	191,000	213,747	199,000	55,837	28%
Sale of Assets	-	-	89,740	-	-	-
Public Works Revenues	2,689	-	4,259	-	-	-
Fire Department Revenues	49,772	-	8,034	-	-	-
Other Revenue	26,767	9,250	33,819	9,300	359	4%
Ambulance Building Lease	44,829	45,000	47,851	45,000	8,021	18%
Public Health Lease	16,617	16,700	16,675	16,800	2,779	17%
Clec Revenues	388,483	417,000	345,360	386,000	500	0%
Unconditional Transfers	477,193	451,900	494,157	491,900	-	0%
Conditional Transfers	91,736	3,778,000	9,500	640,000	-	0%
Transfers From Reserve Funds	75,442	630,000	-	185,000	-	0%
Transfers From Building Reserve	-	481,000	-	900,000	-	0%
Transfer From Fire Dept Reserves	-	400,000	-	-	-	-
Transfer From Statutory Reserves	-	-	-	-	-	-
Transfer from Parks Dedication Reserve	-	-	-	-	-	-
Short term debt	-	300,000	225,000	-	-	-
Prior year Surplus	-	-	-	-	-	-
Police Tax Levy	156,542	166,480	166,630	169,800	-	0%
Library Levy	134,872	133,729	133,728	150,202	-	0%
Collections For Other Govts.	2,251,430	2,476,441	2,475,888	2,527,525	-	0%
	6,967,784	12,539,928	7,478,222	8,921,923	413,456	5%

TOWN OF LAKE COWICHAN
Statement of Expenditure - January 31, 2020

	2018 YTD Actual	2019 Budget	2019 YTD Actual	2020 Budget	2020 YTD Actual	2020 %
EXPENDITURES						
General Government Services	538,913	567,600	418,234	554,400	136,200	25%
Fire Department	364,906	427,000	447,374	459,700	22,728	5%
Police Force	156,542	166,480	166,630	169,800	-	0%
Bylaw Enforcement & Other	74,033	61,000	44,845	61,000	2,190	4%
Public Works Administration	57,542	61,300	26,339	52,100	10,602	20%
Public Works Roads	291,965	435,700	345,563	435,000	19,918	5%
Public Works - Equipment & Other	(130,134)	-	(105,430)	-	(11,428)	-
Garbage Expenses	395,405	402,100	387,599	408,500	15,215	4%
Planning, Health & Other	56,442	71,300	43,318	63,500	1,775	3%
Centennial Hall Expenses	-	-	-	-	-	-
Info Centre	19,049	22,000	18,415	22,000	-	0%
Parks	236,283	254,100	229,288	254,100	1,783	1%
Lakeview Park	180,398	178,300	177,237	187,100	2,091	1%
CLEC Expense	481,699	472,000	426,183	440,800	12,512	3%
Lakeview Road	5,650	13,000	2,312	10,000	(979)	-10%
Transfer To Library	134,872	133,729	133,728	150,202	-	0%
Capital	876,052	6,414,774	1,455,895	3,221,000	17,278	1%
Debt Charges - Interest	3,192	3,000	3,928	4,000	283	7%
Debt Payments - Fire	186,003	198,100	155,636	209,000	-	0%
Amortization	593,468	-	-	-	-	-
Transfers To Reserve Funds	181,231	136,000	-	138,000	-	0%
Transfer Equip. Recovery to Reserve	128,726	-	-	-	-	-
Transfer To Surplus	-	46,004	-	-	-	-
Transfers To Other Governments	2,251,430	2,476,441	2,475,888	2,527,525	-	0%
	7,083,668	12,539,928	6,852,983	9,367,727	230,167	2%
Surplus(Deficit)	(115,884)	-	625,239	(445,804)	183,289	

TOWN OF LAKE COWICHAN
Statement of Expenditure - January 31, 2020
General Fund - Schedule of General Government Expenses

	2018 Actual	2019 Budget	2019 Actual	2020 Budget	2020 Actual	2020 %
General Government Services						
Mayor and Council Indemnities	84,331	80,000	80,475	81,400	3,119	4%
Mayor and Council Expenses	36,568	42,500	37,917	45,100	1,885	4%
Mildred Child Annex	2,196	3,100	1,944	2,500	-	0%
Municipal Hall	18,121	25,600	20,043	25,500	1,040	4%
Office Wages	431,477	435,000	442,633	450,000	23,314	5%
Office Expenses	31,706	56,500	38,831	54,000	3,012	6%
Data Processing	17,137	24,600	18,353	26,000	16,939	65%
Legal Expense	26,079	30,000	25,123	30,000	-	0%
Audit	16,695	26,000	16,125	26,000	-	0%
Elections	3,666	4,000	-	4,000	-	0%
Insurance	91,284	100,000	40,371	100,000	70,652	71%
Grants-in-aid	4,700	3,000	2,449	3,000	-	0%
Ohtaki expense	3,163	6,000	-	3,000	-	0%
Ohtaki recoveries	(20)	-	-	-	-	-
Payroll Benefits Clearing	13,510	-	(37,329)	-	16,238	-
Insurance and administration recover	(241,700)	(268,700)	(268,700)	(296,100)	-	0%
	538,913	567,600	418,234	554,400	136,200	25%

TOWN OF LAKE COWICHAN
Statement of Expenditure - January 31, 2020
General Fund - Schedule of Protective Services Expenses

	2018 Actual	2019 Budget	2019 Actual	2020 Budget	2020 Actual	2020 %
Fire Department						
Firefighters indemnities	101,324	110,000	98,929	110,000	-	0%
Other Wage Costs	19,543	18,000	20,208	18,000	621	3%
Town Administration	13,000	13,000	13,000	14,000	-	0%
Fire Hall Operations and Maint.	47,687	55,200	86,160	61,500	2,427	4%
Miscellaneous Operations	104,170	111,900	110,305	117,100	7,431	6%
Training	21,408	28,000	28,907	28,000	1,841	7%
Fire Vehicles & Equipment	56,286	80,900	81,030	101,100	3,396	3%
	363,418	417,000	438,539	449,700	15,715	3%
Firesmart	-	-	-	-	-	-
Community Wildfire Protection Plan	1,488	10,000	8,835	10,000	7,013	70%
	1,488	10,000	8,835	10,000	7,013	70%
Total Fire Department	364,906	427,000	447,374	459,700	22,728	5%
Bylaw Enforcement & Other						
BC Wildfire - Recoveries	(16,896)	-	-	-	-	-
Emergency Measures	20,520	5,000	-	5,000	-	0%
Bylaw Enforcement/Animal Control	16,455	19,000	15,601	19,000	934	5%
Building Inspection	37,058	37,000	29,244	37,000	1,255	3%
	74,033	61,000	44,845	61,000	2,190	4%

TOWN OF LAKE COWICHAN
Statement of Expenditure - January 31, 2020
General Fund - Schedule of Public Works Expenses

	2018 Actual	2019 Budget	2019 Actual	2020 Budget	2020 Actual	2020 %
PW Administration						
Shop and Yard	48,132	47,000	45,155	47,000	807	2%
PW Admin Wages	165,012	180,000	161,455	180,000	9,209	5%
PW Admin Other	8,988	16,500	4,895	10,100	33	0%
Safety and Training	24,810	34,000	31,035	34,000	553	2%
Office Administration Charge	14,700	13,900	13,900	14,000	-	0%
Recovery from Utilities	(204,100)	(230,100)	(230,100)	(233,000)	-	0%
	57,542	61,300	26,339	52,100	10,602	20%
Equipment Costs						
Equipment	144,370	-	136,629	-	2,298	-
Equipment Allocations	(274,504)	-	(242,059)	-	(13,726)	-
	(130,134)	-	(105,430)	-	(11,428)	-
Other Costs						
Billable Outside Jobs	-	-	-	-	-	-
Billable Outside Jobs - Recoveries	-	-	-	-	-	-
	-	-	-	-	-	-

TOWN OF LAKE COWICHAN
Statement of Expenditure - January 31, 2020
General Fund - Schedule of Public Works Expenses

	2018 Actual	2019 Budget	2019 Actual	2020 Budget	2020 Actual	2020 %
Road Maintenance						
Banners	2,826	9,000	5,095	9,000	-	0%
Boulevards	25,001	31,000	22,129	31,000	-	0%
Crack Sealing	-	10,000	-	10,000	-	0%
Dangerous Trees	13,939	15,000	10,963	20,000	-	0%
Ditches & Culverts	4,177	10,000	3,642	10,000	-	0%
Dust Control	3,475	4,000	3,989	5,000	-	0%
Landscaping	8,470	10,000	9,573	10,000	-	0%
Litter Control	8,557	16,000	7,832	14,000	-	0%
Marking	3,031	10,000	10,600	10,000	-	0%
Mowing	6,050	13,000	5,095	10,000	-	0%
Patching	11,237	20,000	16,792	20,000	-	0%
Roads-other	9,635	14,000	4,753	11,000	277	3%
Seasonal decoration	25,737	12,000	21,738	12,000	-	0%
Shoulders	3,478	14,000	2,142	14,000	-	0%
Sidewalks	19,361	20,000	13,638	20,000	-	0%
Signs	5,653	11,000	15,607	16,000	-	0%
Snow removal	4,338	50,000	31,339	50,000	17,503	35%
Storm Drains & Catch Basins	18,189	50,000	23,519	40,000	1,919	5%
Street Lighting	88,181	84,000	97,951	90,000	220	0%
Street Sweeping	9,629	11,000	17,468	11,000	-	0%
Office Administration Charge	21,000	21,700	21,700	22,000	-	0%
	291,965	435,700	345,563	435,000	19,918	5%

TOWN OF LAKE COWICHAN
Statement of Expenditure - January 31, 2020
General Fund - Schedule of Garbage Collection

	2018 Actual	2019 Budget	2019 Actual	2020 Budget	2020 Actual	2020 %
Garbage Collection						
Revenues						
Regular collections	318,583	323,000	327,433	333,000	333,108	100%
Toter rentals	4,575	3,000	4,069	3,500	3,177	91%
Penalties	3,451	3,500	3,782	3,600	-	0%
Recycling	53,794	54,000	51,592	56,000	4,645	8%
	380,404	383,500	386,875	396,100	340,930	86%
Expenditures						
Regular collection costs	248,415	249,000	234,311	250,000	15,215	6%
Office Administration Charges	17,600	18,000	18,000	18,000	-	0%
PW Administration Charges	24,600	25,100	25,100	25,500	-	0%
Tipping Fees	64,954	66,000	66,688	69,000	-	0%
Recycling costs	39,837	44,000	43,501	46,000	-	0%
	395,405	402,100	387,599	408,500	15,215	4%
Net	(15,002)	(18,600)	(724)	(12,400)	325,714	

TOWN OF LAKE COWICHAN
Statement of Expenditure - January 31, 2020
General Fund - Schedule of Other Development Services

	2018 Actual	2019 Budget	2019 Actual	2020 Budget	2020 Actual	2020 %
Public Health						
Ambulance Building Lease	44,829	45,000	47,851	45,000	8,021	18%
Public Health Lease	16,617	16,700	16,675	16,800	2,779	17%
Public Health Expenses	9,721	17,800	7,199	17,000	-	0%
NET	51,725	43,900	57,327	44,800	10,800	24%
Planning						
Planning and Zoning Expenses	39,673	40,000	23,380	40,000	1,775	4%
Other Functions						
Town Economic Development	3,855	1,000	965	1,000	-	0%
Columbarium	-	-	750	1,000	-	0%
Heritage Advisory	1,036	500	912	500	-	0%
Cowichan Aquatic Centre	2,158	4,000	3,345	4,000	-	0%
75th Birthday Celebration	-	8,000	6,767	-	-	-
	7,048	13,500	12,738	6,500	-	0%
Total Development Services Expenses	56,442	71,300	43,318	63,500	1,775	3%
Info Centre						
PW Labour	820	2,200	452	2,200	-	0%
Water, Sewer & Garbage	-	700	-	700	-	0%
Contracted Services	15,000	15,000	15,000	15,000	-	0%
Other Expenses	4,429	5,300	4,164	5,300	-	0%
Recoveries - hydro	(1,200)	(1,200)	(1,200)	(1,200)	-	0%
	19,049	22,000	18,415	22,000	-	0%

TOWN OF LAKE COWICHAN
Statement of Expenditure - January 31, 2020
General Fund - Schedule of Parks

	2018 Actual	2019 Budget	2019 Actual	2020 Budget	2020 Actual	2020 %
Parks						
Beaver Park	4,077	6,100	5,665	6,000	-	0%
Bell Tower School	1,316	2,400	1,341	2,400	-	0%
Centennial Park	42,577	22,000	33,160	22,000	-	0%
Central Park	14,804	18,500	14,838	18,500	-	0%
Civic Square	495	2,500	794	1,000	-	0%
Communities in Bloom	125	2,000	-	2,000	-	0%
Cougar Sign Landscaping	2,894	3,200	1,408	3,000	-	0%
Dashwood Park	280	1,200	105	1,000	-	0%
Entrance Sign	8,835	10,000	9,479	10,000	-	0%
Footbridge	1,758	4,500	1,232	2,000	13	1%
Footpath maintenance	400	1,600	212	1,500	-	0%
Gillespie Park	594	1,000	607	-	-	-
Heritage Garden	12,656	7,000	6,796	7,000	-	0%
Kaatza Museum	8,746	10,800	12,219	13,800	-	0%
Kates Park - King George	7,145	10,000	4,380	10,000	-	0%
Lakedays Preparation	585	2,000	336	1,000	-	0%
Marina Park	6,043	3,200	3,280	3,200	-	0%
Forest Workers Memorial Park	6,490	6,700	8,035	9,000	-	0%
Ohtaki/Kasapi Park	2,425	10,000	1,941	10,000	-	0%
Park Bench Maintenance	1,552	5,000	8,251	6,000	-	0%
Parks General	25,821	20,700	34,974	23,500	704	3%
Parkstone Park	1,980	2,500	1,011	2,000	-	0%
Joginder Bains Park - Point Ideal	6,700	4,200	3,358	4,000	-	0%
Rivers Edge Memorial Garden	6,745	6,700	4,315	5,000	-	0%
Riverside Park	3,901	5,900	3,598	5,000	539	11%
Sahtlam Park	3,637	3,000	1,488	3,000	-	0%
Saywell Park	15,557	20,500	20,596	20,500	-	0%
Seniors Centre	2,813	3,100	2,011	3,100	-	0%
Ted Burns Nature Preserve	392	1,000	1,709	2,000	-	0%
Pickleball Courts	3,557	3,200	977	3,000	-	0%
Town Square	4,909	5,000	2,992	5,000	-	0%
Trans Canada Trail	8,146	5,900	876	4,000	-	0%
Trestle Walkway	864	3,000	814	2,000	13	1%
Vandalism	50	5,000	-	5,000	-	0%
Washrooms	11,859	15,000	21,097	20,000	423	2%
West Entrance	455	600	-	500	-	0%
Winter Park	4,098	7,000	3,291	5,000	90	2%
Office Administration Charge	11,000	12,100	12,100	12,100	-	0%
	236,283	254,100	229,288	254,100	1,783	1%

TOWN OF LAKE COWICHAN
Statement of Expenditure - January 31, 2020
General Fund - Schedule of Parks

	2018 Actual	2019 Budget	2019 Actual	2020 Budget	2020 Actual	2020 %
Lakeview Park						
Reservations	156,349	150,000	152,923	150,000	43,719	29%
Walk Ins	8,174	8,000	17,239	16,000	91	1%
Power Fees	23,041	22,000	24,401	23,000	10,320	45%
Wood and ice sales	4,637	4,500	4,777	4,000	-	0%
Operating Grant	2,981	-	7,762	-	-	-
Moorage	7,833	6,500	6,645	6,000	1,707	28%
	203,016	191,000	213,747	199,000	55,837	28%
Office Administration Charge	8,400	8,500	8,500	8,500	-	0%
CLEC Admin Charges	31,000	31,000	31,000	36,000	-	0%
Summer Student Wages	53,925	55,000	54,335	56,000	-	0%
Maintenance Wages	1,974	7,000	11,765	7,000	-	0%
Contracted Services	16,781	15,000	16,140	15,000	85	1%
PW Labour	1,574	1,500	2,570	1,500	-	0%
Hydro and Electricity	8,393	9,000	7,734	9,000	-	0%
Materials and Supplies	12,674	12,000	9,675	12,000	-	0%
Other Expenses	7,565	10,800	7,456	10,800	1,845	17%
Water, Sewer & Garbage	9,898	8,000	8,157	8,500	-	0%
Park Attendant/ Security	24,688	15,000	16,508	17,000	-	0%
Public Works Charges	612	700	1,399	1,000	-	0%
Telephone	2,116	3,000	1,998	3,000	161	5%
Equipment allocations	800	1,800	-	1,800	-	0%
	180,398	178,300	177,237	187,100	2,091	1%
Net	22,618	12,700	36,510	11,900	53,746	

TOWN OF LAKE COWICHAN
Statement of Expenditure - January 31, 2020
General Fund - Schedule of CLEC

	2018 Actual	2019 Budget	2019 Actual	2020 Budget	2020 Actual	2020 %
Revenues						
Group Revenues	372,745	402,000	339,360	380,000	-	0%
Programming revenues	9,738	9,000	-	-	-	-
Rental Income	6,000	6,000	6,000	6,000	500	8%
	<u>388,483</u>	<u>417,000</u>	<u>345,360</u>	<u>386,000</u>	<u>500</u>	<u>0%</u>
Expenditures - Variable						
Program Services	2,786	8,000	250	2,000	-	0%
Kitchen Wages	69,458	80,000	62,508	65,000	-	0%
Food Supplies	69,908	71,000	68,929	68,000	-	0%
Custodians	36,732	40,000	29,262	35,000	-	0%
Supplies	3,371	4,000	2,070	3,000	-	0%
	<u>182,255</u>	<u>203,000</u>	<u>163,020</u>	<u>173,000</u>	<u>-</u>	<u>0%</u>
Expenditures - Fixed						
Admin Salaries	179,131	182,000	171,653	182,000	9,140	5%
Wage Recoveries	(31,000)	(31,000)	(31,000)	(36,000)	-	0%
Housing Allowance	6,000	6,000	6,000	6,000	500	8%
Town Administration	22,500	22,500	22,500	22,000	-	0%
Electricity	20,865	22,000	19,429	22,000	-	0%
Heat	17,515	14,000	14,859	14,000	1,024	7%
Telephone & other Utilities	10,753	11,500	11,217	11,800	727	6%
Bad Debts	-	-	-	-	-	-
Advertising	807	1,000	-	5,000	-	0%
Contracted Services	28,745	10,000	14,523	10,000	470	5%
Maintenance	33,059	23,000	23,029	23,000	69	0%
Public Works Charges	11,069	8,000	10,954	8,000	583	7%
Miscellaneous Operations	-	-	-	-	-	-
	<u>299,444</u>	<u>269,000</u>	<u>263,164</u>	<u>267,800</u>	<u>12,512</u>	<u>5%</u>
Total Expenses	<u>481,699</u>	<u>472,000</u>	<u>426,183</u>	<u>440,800</u>	<u>12,512</u>	<u>3%</u>
NET CLEC OPERATIONS	<u>(93,216)</u>	<u>(55,000)</u>	<u>(80,824)</u>	<u>(54,800)</u>	<u>(12,012)</u>	<u>22%</u>
NET LAKEVIEW AND CLEC	<u>(70,598)</u>	<u>(42,300)</u>	<u>(44,314)</u>	<u>(42,900)</u>	<u>41,734</u>	<u>-97%</u>
Lakeview Park Road						
Road maintenance	5,650	13,000	2,312	10,000	(979)	43%
NET	<u>(76,248)</u>	<u>(55,300)</u>	<u>(46,626)</u>	<u>(52,900)</u>	<u>42,713</u>	

TOWN OF LAKE COWICHAN
Statement of Expenditure - January 31, 2020
General Fund - Schedule of Capital Expenses

	2018 YTD Actual	2019 Budget	2019 YTD Actual	2020 Budget	2020 YTD Actual	2020 Var
General						
Asset appraisal - Insurance	-	-	-	-	-	-
Asset management plan	-	50,000	5,000	50,000	-	0%
Computer Equipment	6,394	15,000	-	30,000	14,632	49%
Demo costs - Neva Road	34,315	100,000	-	-	-	-
Development Cost Charge Review	-	-	-	20,000	-	0%
Hazmat Inventory	-	10,000	1,821	10,000	-	0%
Health Unit Repairs	-	10,000	9,367	2,000	-	0%
Office Equipment	-	20,000	8,034	60,000	-	0%
Land Purchase	9,911	14,000	1,200	-	-	-
Museum	-	30,000	-	50,000	-	0%
Mildred Child Demo	-	300,000	-	60,000	-	0%
Town hall renovations	7,518	1,804,000	95,462	1,700,000	-	0%
	58,137	2,353,000	120,884	1,982,000	14,632	1%
CLEC						
Carpet / Flooring	-	5,000	-	5,000	-	0%
Electrical upgrades	9,788	3,000	5,319	5,000	-	0%
Exterior Building Paint	-	-	-	3,000	-	0%
Clec JCP	11,629	-	-	-	-	-
Mattresses	1,099	-	-	5,000	-	0%
Water system/well	44,384	50,000	63,437	10,000	-	0%
	66,899	58,000	68,756	28,000	-	0%
Fire Department						
Gas monitor and controls	7,250	-	-	-	-	-
Storz hydrant upgrades	16,675	-	-	-	-	-
Office renovation	-	10,000	14,674	10,000	-	0%
Heat Pump/Generator Replacement	11,510	15,000	133	15,000	-	0%
Forestry Hose and Gear	-	10,000	6,145	10,000	-	0%
#6 New Fire truck equipment	-	27,000	32,972	-	-	-
Misc Fire Equipment	-	-	-	-	-	-
FD#16 New Tank	-	5,000	-	5,000	-	0%
Firehall repairs	-	6,000	2,046	6,000	2,646	44%
Training Ground Facilities	96,102	48,500	64,421	60,000	-	0%
Truck purchase	-	700,000	728,710	-	-	-
Tools and Equipment	535	3,000	3,323	3,000	-	0%
Hoses and valving	9,513	8,000	-	8,000	-	0%
	141,585	832,500	852,422	117,000	2,646	2%

TOWN OF LAKE COWICHAN
Statement of Expenditure - January 31, 2020
General Fund - Schedule of Capital Expenses

	2018 YTD Actual	2019 Budget	2019 YTD Actual	2020 Budget	2020 YTD Actual	2020 Var
Public Works						
Equipment Purchase	-	560,000	357,140	70,000	-	0%
Truck purchase	75,442	70,000	37,364	35,000	-	
Garbage Truck	-	-	-	80,000	-	0%
Active Transportation Plan	-	-	-	50,000	-	0%
Annual Paving Program	-	-	-	200,000	-	0%
Lakeview Park - chip seal	-	-	-	20,000	-	0%
Cross Walk lights - Post Office	-	20,000	-	-	-	-
Engineering Design - King George St	-	-	-	-	-	-
North Shore Rd Engineering	-	-	-	25,000	-	0%
Garbage facilities - clec	-	20,000	-	40,000	-	0%
PW Office/Yard - Cap	-	100,000	-	20,000	-	0%
Sidewalks	-	-	-	100,000	-	0%
Signs - Capital	-	50,000	-	-	-	-
Refurbish footbridge	-	-	-	-	-	-
Stormwater Mapping	-	-	-	-	-	-
Small tools	2,713	5,000	3,691	5,000	-	0%
	78,155	825,000	398,196	645,000	-	0%
Lakeview Park						
Garbage facilities	3,309	-	-	-	-	-
Golf Cart purchase	-	-	-	5,000	-	0%
Resurfacing campsites - gravel/sand	-	-	1,168	5,000	-	0%
Floating walkway repairs	-	10,000	2,938	10,000	-	0%
Lakeview Washrooms	-	-	-	-	-	-
	3,309	10,000	4,106	20,000	-	0%
Parks						
Centennial Park Upgrades	472,924	100,000	-	125,000	-	0%
Centennial Park Washrooms	-	100,000	-	100,000	-	0%
Columbarium planning	48,325	-	-	-	-	-
Connecting Communities	-	2,005,000	-	-	-	-
Footbridge improvements	-	-	-	10,000	-	0%
Marina Park Dock Repairs	5,047	25,000	-	25,000	-	0%
Pickleball/Tennis Courts	1,671	13,274	1,831	-	-	-
Sahtlam Park	-	10,000	-	10,000	-	0%
Riverside Park - Washrooms	-	50,000	-	65,000	-	0%
River's Edge Memorial Garden	-	-	-	70,000	-	-
Saywell Park Improvements	-	25,000	-	24,000	-	0%
Town Square Ramp	-	8,000	9,700	-	-	-
	527,967	2,336,274	11,531	429,000	-	0%
Total General Capital	876,052	6,414,774	1,455,895	3,221,000	17,278	1%

TOWN OF LAKE COWICHAN
Statement of Expenditure - January 31, 2020
Sewer Fund

	2018 YTD Actual	2019 Budget	2019 YTD Actual	2020 Budget	2020 YTD Actual	2020 %
Revenues						
User Rates	486,145	471,000	496,316	498,000	485,380	97%
Connection Fees	3,920	1,000	3,080	1,000	30	3%
Penalties And Other Interest	4,538	4,500	4,857	4,500	-	0%
Sewer Facilities Grant	-	2,200,000	-	2,200,000	-	0%
Parcel Tax	165,800	166,500	166,700	250,050	-	0%
Contribution from others	-	-	-	-	-	-
Transfer From Surplus	-	1,053,000	-	-	-	-
	<u>660,403</u>	<u>3,896,000</u>	<u>670,953</u>	<u>2,953,550</u>	<u>485,410</u>	<u>16%</u>
Expenditures						
Administration	2,376	3,000	3,846	3,000	-	0%
Office Administration	57,000	67,000	67,000	68,000	-	0%
Consumption Rebates	100	-	-	-	-	-
PW Administration	83,900	90,000	90,000	90,000	-	0%
Discounts	35,451	35,500	35,635	36,000	11,784	33%
General Maintenance	64,793	67,000	69,995	70,000	3,274	5%
Connections Maintenance	2,305	9,000	4,747	9,000	-	0%
Chlorination	9,008	10,000	8,752	10,000	-	0%
New Connections	3,665	5,000	362	3,000	-	0%
Sewer Flushing	6,586	7,000	4,845	6,000	-	0%
Sewer Pump Maintenance	41,520	76,500	47,557	75,000	2,550	3%
Sewer Lagoon Maintenance	61,382	91,000	58,209	91,000	1,727	2%
Transfer to Surplus	-	-	-	-	-	-
Amortization - Sewer Fund	93,654	-	-	-	-	-
Capital	18,551	3,435,000	112,056	3,495,000	-	0%
	<u>480,292</u>	<u>3,896,000</u>	<u>503,005</u>	<u>3,956,000</u>	<u>19,334</u>	<u>0%</u>
Surplus(Deficit)	<u>180,111</u>	<u>-</u>	<u>167,948</u>	<u>(1,002,450)</u>	<u>466,076</u>	

TOWN OF LAKE COWICHAN
Statement of Expenditure - January 31, 2020
Sewer Fund

	2018 YTD Actual	2019 Budget	2019 YTD Actual	2020 Budget	2020 YTD Actual	2020 %
SEWER CAPITAL						
Liftstation Upgrades	18,551	60,000	75,683	275,000	-	0%
Liftstation #1 Upgrade	-	75,000	-	-	-	-
Sewer I&I	-	150,000	-	-	-	-
Sewer Modelling	-	-	-	70,000	-	0%
Sewer Treatment Plant Upgrades	-	3,000,000	-	3,000,000	-	0%
Sewer Lagoon	-	150,000	36,373	150,000	-	0%
Riverside Force Main	-	-	-	-	-	-
	18,551	3,435,000	112,056	3,495,000	-	0%

TOWN OF LAKE COWICHAN
Statement of Expenditure - January 31, 2020
Water Fund

	2018 YTD Actual	2019 Budget	2019 YTD Actual	2020 Budget	2020 YTD Actual	2020 %
Revenues						
User Rates	576,804	575,000	589,748	595,000	591,156	99%
Connection Fees	11,860	1,000	9,550	1,000	680	68%
Fire Hydrant Installation & other	31,674	4,000	3,300	4,000	2,290	57%
Other Penalties And Interest	5,410	5,400	5,829	5,500	15	0%
Grant - Water main upgrades	343,792	182,075	239,583	-	-	-
Infrastructure Grant	3,248,687	-	-	-	-	-
CONTRIBUTION FROM OTHERS	-	-	-	-	-	-
Parcel Tax	236,880	238,420	238,420	340,600	-	0%
Transfer From Surplus	-	503,005	-	-	-	-
	<u>4,455,108</u>	<u>1,508,900</u>	<u>1,086,429</u>	<u>946,100</u>	<u>594,141</u>	<u>72%</u>
Expenditures						
Administration	1,504	3,400	2,470	3,400	-	0%
Office Administration	76,500	92,000	92,000	117,500	-	0%
PW Administration	95,600	115,000	115,000	117,500	-	0%
Consumption Rebates	100	-	-	-	-	-
Discounts	42,938	43,000	43,405	44,000	15,035	34%
Safety and Training	1,926	4,500	1,984	4,000	-	0%
Chlorination	13,975	14,000	12,363	14,000	347	2%
Flushing	10,153	12,500	11,912	12,000	-	0%
Reservoir	5,783	20,000	18,427	20,000	420	2%
General Maintenance	74,131	100,000	89,843	100,000	17,460	17%
Hydrants	18,698	22,500	12,354	22,500	57	0%
New Connections	10,713	10,000	3,852	10,000	-	0%
Connection Maintenance	52,422	75,000	55,629	75,000	2,544	3%
Water Meters	20,450	20,000	12,895	20,000	417	2%
Pump House Maintenance	39,402	42,000	38,291	42,000	889	2%
Small equipment	2,269	-	5,345	-	-	-
Booster Pumps Maintenance	9,244	12,000	10,622	12,000	-	0%
Slopes water pump station	5,820	8,000	6,696	8,000	(0)	0%
Greendale Water Connection	4,023	-	3,356	-	105	-
Water treatment plant	1,400	95,000	134,321	200,000	6,537	3%
Transfer to surplus	-	-	-	-	-	-
Amortization - Water Fund	111,692	-	-	-	-	-
Capital	<u>5,310,230</u>	<u>820,000</u>	<u>1,043,415</u>	<u>489,000</u>	<u>600</u>	<u>0%</u>
	<u>5,908,972</u>	<u>1,508,900</u>	<u>1,714,179</u>	<u>1,310,900</u>	<u>44,410</u>	<u>3%</u>
Surplus(Deficit)	<u>(1,453,864)</u>	<u>-</u>	<u>(627,749)</u>	<u>(364,800)</u>	<u>549,731</u>	

TOWN OF LAKE COWICHAN
Statement of Expenditure - January 31, 2020
Water Fund

	2018 YTD Actual	2019 Budget	2019 YTD Actual	2020 Budget	2020 YTD Actual	2020 %
<u>WATER CAPITAL</u>						
Greendale Road Watermain	450,770	-	293,794	-	-	-
Greendale Trestle Watermain Upgrade	7,749	355,000	22,904	-	-	-
North Shore Pump Station Backup Powe	-	100,000	-	100,000	-	0%
Ohtaki Bridge Watermain Upgrade	-	-	-	-	-	-
River Road Water Main	-	-	14,176	189,000	-	0%
Water Modelling	24,953	35,000	3,980	-	-	-
Water Treatment Upgrade	4,826,757	300,000	680,581	200,000	600	0%
Watermain Upgrades	-	-	-	-	-	-
Water metering	-	30,000	27,980	-	-	-
	<u>5,310,230</u>	<u>820,000</u>	<u>1,043,415</u>	<u>489,000</u>	<u>600</u>	<u>127%</u>



Building Report

TO: Chief Administrative Officer

SUBJECT: Building Permit Summary for the Month of JANUARY

DATE: FEB. 4, 2020

FROM: Building Inspector

Applications

	Outstanding Permits		Applications Completed		Taken out in Current Month
	Previous Years'	Current Year	Previous Years'	Current Year	
Single Family Dwellings	27		7		
Commercial	5		1		
Carport / garage	10	2			2
Demolitions	2		1		
Renovations	30	1			1
Deck	10				
Lawn Sprinkler / Woodstove	1				
Relocated Home					
Other _____					
TOTALS	85	3	9	0	3

Building Permit Fees

	Value of construction	Permit fees
For the current month	49,200.00	452.00
Year to Date	49,200.00	452.00

Dennis Young

FA20-02-11
7(b)

Bylaw Complaint Report
Town of Lake Cowichan
December, 2019



To: CAO

From: Bylaw Officer

Complaints	#	Outcome
High consumption notices	11	Delivered
Chattel on public property	7	Compliance
Complaint on building to close to the property line	1	Complaint not founded

Signature

A handwritten signature in black ink, appearing to be "D. Sp...", is written over a horizontal line.

FA 20-02-11
7(c)

Memo



TO: Chief Administrative Officer

SUBJECT: WTP Status Update and Turbidity Issues

DATE: February 6, 2020

FROM: Superintendent, Public Works and Engineering Services

On the night of 31-Jan-02, heavy rain from the Pineapple Express Storm struck the Town of Lake Cowichan and the surround areas. The result saw overflows of the Cowichan Lake and Cowichan River with considerable flooding in areas with resulting run-offs into the receding waters.. The run off spiked the NTU's to the North Shore Intake Pumphouse to 10 NTU and ranging as high as 20 NTU.

When the Water Treatment Plant receives turbidity over 5, the intake pipe shuts off the water and alerts the PWS Water Operator for further direction. At about 9 am on the 1st-Feb-02, the NTU at the lake was spiked at 20 NTU's. The decision was made to shut off the intake of raw water and only use reservoir water. The intent was to see if the NTU's from the lake would settle down naturally. We calculated that the town had 2-3 days of water supply. The water at the WTP was monitored every three hours and we noticed the NTU's slightly decreasing, but forecasted the NTU's would not drop below the 3 NTU within a reasonable time. On Sunday 2nd-Feb, 2pm, the reservoir was at 40% capacity and it was decided that for precautionary measures we should start refilling the reservoir and issue a Boil Water Notice.

Letting the reservoir drop further than 40% would put at risk firefighting activities. In addition, a serious water leak in a worst case scenario could drain 40% of the reservoir in 3-5 hours.

How does WTP remove Turbidity?

The WTP has a rapid filtration system. Water is filtered through the sand and coal layers which removes particles that make up a high NTU. When the filters are working properly, the NTU's in water will be below 0.3.

Why are the rapid filtration system turned on?

For the filter system to properly work, there needs to be chemicals (ClearFloc ClearPac) added to the raw water in the Coagulation and Flocculation phases. The purpose of the chemicals is for the positively charged Alum Salts to mix with the suspended colloidal to add aggregation to the coagulated particles. These larger particles can be picked up in the filters and removed from the water.

Why don't we just add these chemicals?

The WTP is not fully commissioned and the WTP Operators need to run several cycles of coagulation, flocculation, filtration and backwashing to determine confirm the calculated dosages and determine if all the equipment is working.

Why don't we start running cycles of Filtration?

A side effect of the chemical additions is the coagulation chemicals will lower the pH of the water. To raise the pH, back to neutral soda ash needs to be injected to the water.

Why are we not adding Soda Ash in the water to lower the pH?

The characteristics of water behave differently depending on the water source. Although the pH from the raw water in Cowichan Lake is at an acceptable level, the addition of the coagulants will lower the pH level.

The original design of the WTP did not include a process for soda ash installation. A separate contractor Archie Johnstone Plumbing and Heating was contracted to install and connect the soda ash injection equipment. Veloydene the manufacture of the soda ash equipment was training the PWS crew on how to load and operate the equipment the week of the 13th-Jan.

So why aren't we running cycles of the system and figuring out the right proportion of chemicals again?

During commissioning it was discovered that there is a check valve at the Intake Pumphouse and on River Road that if turned on, would have untreated water bypass the WTP and lead directly through the distribution network and into people's home. There also needs to be a check valve installed at the Intake Pumphouse to prevent the backflow of water treated with chemicals from releasing into the lake.

We are currently waiting for the two check valves to be capped and one check valve to be installed before the PWS can run water cycles within the WTP to treat the water at an acceptable drinking level.

What are the odds that the check valves would fail or turn on accidentally?

The odds are low that there would be problem with the check valves during the week of the boil water advisory. But the consequences of the public drinking or the lake receiving the untreated water is dire and an unacceptable risk when compared to a Boil Water Advisory.

Ok, we know what the risks are, just turn on the coagulation, flocculation, filtration, soda ash and reduce the NTU's.

It would not have been inappropriate for the Town to have attempted to implement the full water treatment processes without all of the equipment fixes being in place. A Boil Water Advisory was a safer alternative to the risks that could have been posed by any attempt to avoid the Advisory.

We are working diligently with our contractors to resolve outstanding issues with the treatment processes in the meantime.

Questions from the Public:

Is the WTP is broken? – The water treatment is not broken. The WTP is a new facility and it takes time for the PWS crew to properly operate the facility.

The public does not have any information on the status of the WTP. A report is written on the status of the WTP every month during the Finance and PWS committee meetings. The reports are published on the town website.

<http://www.lakecowichan.ca/meeting-schedule.php>

Is this the worst flood ever? Although Climate change will result in more extreme events. The mountains and surrounding area used to be filled with century old trees that would slow the flow of water into the Lake and even absorb large amounts of water. Clear cutting of areas have resulted in increased runoff leading to water quality issues in the Lake.

Does flooding of Septic Fields have resulted in turbidity?

PWS tests the water for Total Coliform & E.Coli. We are watching the test reports to determine if there is an issue.



Kam So, P.Eng, MBA (Candidate)
Superintendent, Public Works and Engineering Services