Minutes

Meeting	**Regular Council**
Date	**February 4, 2020**
Time	**7:00 PM**
Place	**Municipal Hall - Council Chambers**

Present

Mayor Martin Davis
Councillor Bill Elder
Councillor Sarah Fowler
Councillor Lynda Llewellyn

Staff

Mark Tatchell, Chief Administrative Officer
Janet StDenis, Finance and Corporate Services Manager
Stephane Dionne, Fire Chief

Public

7 members of the public

A. Call to Order

Mayor Davis called the meeting to order at 7:00 p.m.
Mayor Davis acknowledged and respected that Council is meeting upon Mowachaht/ Muchalaht territory

B. Introduction of Late Items and Agenda Changes

L4 under Correspondence - a letter to the Mayor and the CAO regarding the Provincial Police Service Agreement and M4 under New Business a Report to Council regarding the Tahsis Wastewater Treatment Reconfiguration and Upgrade Project.

C. Approval of the Agenda

Fowler/Llewellyn: VOT 050/2020

THAT the Agenda for the February 4, 2020 Regular Council meeting be adopted as amended.

CARRIED

D. Petitions and Delegations

None.

E. Public Input # 1

A member of the public noted that the North Island 1000 is an event that may will bring an influx of ATV and Quad Riders to Tahsis sometime between May 30th and June 4th, 2020.

Amanda Knibbs, 2nd in command, Junior Canadian Rangers spoke to the JCR's Grant-in Aid Application.
A member of the public commented on their correspondence item L2.
A member of the public commented on the Village of Tahsis entrance sign.

F. Adoption of the Minutes

1 **Committee of the Whole January 21, 2020 (2020-2024 Budget)**

Llewellyn/Fowler: VOT 051/2020

THAT the Committee of the Whole meeting minutes of January 21, 2020 (2020-2024 Budget) be adopted as presented. **CARRIED**

2 **Committee of the Whole January 21, 2020**

Llewellyn/Fowler: VOT 052/2020
THAT the Committee of the Whole meeting minutes of January 21, 2020 be adopted as amended. **CARRIED**

3 **Minutes of the Regular Council Meeting held on January 21, 2020.**

Fowler/Elder: VOT 053/2020
THAT the Regular Council meeting minutes of January 21, 2019 be adopted as presented. **CARRIED**

G. Rise and Report
At the January 7, 2020 Closed Council meeting
Llewellyn/Fowler: VOT 036/2020

THAT staff instruct Counsel for the Village to prepare a resolution for Council and notice to the property owner in relation to carrying out repairs to the water service line at 265 N. Maquinna.

H. Business Arising

1 **Report to Council Re: Recreation Centre 2019 Attendance and Revenue Report**

Fowler/Elder: VOT 054/2020
THAT this Report to Council be received. **CARRIED**

2 **Tahsis Fire Department Annual Statistical Report 2019**
The Fire Chief spoke to his report highlighting key changes from 2018 to 2019 and 2019 activity and accomplishments.

Fowler/Llewellyn: VOT 055/2020
THAT this report to Council be received. **CARRIED**

3 **Village of Tahsis Age Friendly Community Action Plan**

Llewellyn/Elder: VOT 056/2020
THAT, WHEREAS the Village completed an Age-Friendly Community Action Plan in December 2019;
AND WHEREAS one recommendation from the Action Plan is to establish a Tahsis Age-Friendly Action Committee (TAAC) to be responsible for implementing the Age-Friendly Community Action Plan;
THEREFORE BE IT RESOLVED THAT Council strike the Tahsis Age-Friendly Action Committee (TAAC), as a Standing Committee of Council, which will meet at least monthly with the following membership:

Chair:	**Councillor Fowler**
Vice-Chair:	**Jack Taylor, President of the Tahsis Seniors Society**
Members:	**Josephine Miladinovic, Community Paramedic**
	Tahsis Seniors Society representatives (3)
Ex Officio:	**Mark Tatchell, Chief Administrative Officer**
	Sarah Jepson, Director of Recreation
	Janet St.Denis, Finance and Corporate Services Manager

CARRIED

4 **Junior Canadian Rangers Re: Grant-in Aid Application**

Fowler/Elder: VOT 057/2020
THAT this Grant-in aid application be received . **CARRIED**

Llewellyn/Elder 058/2020
THAT this Grant-in aid application be approved. **CARRIED**

5 **Councillor Fowler's Notice of Motion from January 7, 2020 Regular Council meeting Re: $10 a Day Child Care Plan**

Llewellyn/Elder: VOT 059/2020
THAT this Notice of Motion be received. **CARRIED**

Fowler/Elder: VOT 060/2020

THAT the Village of Tahsis Council write to the Provincial Government and request they expedite the $10 a day Child Care Plan implementation universally and play an active role in advocating for provincial level changes. **CARRIED**

J. Council Reports
Mayor Davis (written report)

It has been a busy month. I have had a few calls regarding the Community Unity Trail, including a conference call with ATVBC and other mayors who are interested in promoting ATV tourism and relieving some of the permitting and insurance constraints around this kind of travel. ATVBC is promoting a circle tour, provisionally named the North Island 1000, which would like to include our Tahsis to Zeballos ATV trail once it is completed. I was also in contact with a video company that hoping to produce a Honda commercial that would like to use our section of trail for filming.

I had a lengthy call with our MP, Rachel Blaney, which focused on potentials for economic development for Tahsis. The main takeaway for her was our interest in seeing the wharf repair issue resolved and she will do what she can at her political level to see some funds released toward that end.

At the regional district level, I recently asked to join the First Nations Liaison Committee and was promptly nominated and elected to serve as its chairman for 2020. Another learning curve!

Some of you may have seen a recent news item based on new figures from BC Stats. Apparently Tahsis has the highest population growth rate of any community on Vancouver Island, at 8.6%, which CTV described as "explosive"! Munitions comparisons aside, this is good news for our community, while it literally translates into 24 new residents. But we need all the help we can get! Its especially good to see more kids in our community.

One more thing - not directly Tahsis related, but in our area. I have been working with government agencies and Western Forest Products to protect a unique landscape known for lengthy cave systems, rare species, bat hibernacula and some spectacular old growth karst ecosystems. I received word last month that a 512 hectare area of primarily old growth forest has been set aside as a Wildlife Habitat Area. This area can be partly seen from the Head Bay Road as the plateau directly above Malaspina Lake. This effort took ten years of research, lobbying and cultivating allies to make this happen. I would like to thank the following that helped to achieve this: BC Speleological Federation, Vancouver Island Cave Exploration Group, Ministry of Forests, Lands, Natural Resource Operations and Rural Development, Mowachaht-Muchalat First Nations, Western Forest Products, Wildlife Conservation Society Canada, BC Conservation Foundation and in particular, Trudy Chatwin, my primary government contact and former Endangered Species Specialist, whom I shared many research field trips and bureaucratic navigations with. The Globe and Mail will be doing a story on our work in the spring.

Councillor Elder

No report.

Councillor Fowler (written report)

Reflecting a year since my Local Government Leadership Academy training, I have been re-reading some notes I made in Parksville. The Pacific Climate Impacts Consortium mentioned credit for riparian areas and Clean BC spoke to translink and electric vehicle charging network. Oddly enough at my other part time job I received a call from an electrician who used to live in Tahsis who is embarking on a north island tour evaluating public and private opportunities for transitions for green energy.

I mentioned at the last meeting Riparian Area Protection Regulation is something that is on the provincial radar. It is happening right here in our backyard. The Nootka Sound Watershed Society has commissioned Strategic from Campbell river to administer the wildlife prescription and prepare progress reports on the Sucuoa river. This is a year one test case of a multi year habitat restoration treatment program where members of the MMFN and our own local tree planter outfit, Nootka Reforestation are providing the boots on the ground.

I have also received a note from Louis Van Solkema regarding erosion and culvert replacement plans for our own river, north of Tahsis. For the time I have represented the Village at the NSWS round table, an ongoing action item that has not yet been addressed is the bridge at Pete`s Pond. Until what time as we can collectively invest in this maintenance on our heritage property I have decided instead to focus on capacity building and volunteer help the NSWS President Kent O`Neil to interview candidates for the fisheries stewardship Coordinator contract opportunity. One candidate who divides time between Campbell river and North Vancouver included an idea on the cover letter that was very interesting to me. It plays to my upcoming heritage registry motion whereby our municipality can lead by formally recognizing Nootka Sound as a globally unique bio-regional designation.

Further, I have reached out to the below contact in preparation for participation in the AGE-FRIENDLY COMMITTEE.
Accessibility legislation judy.ridgeway@campbellriver.ca (email bounced, so I called and the below number to learn that Judy retired and that Deb Simpson is taking over accessibility legislation at recreation Campbell river.)
250-286-5307
Sincere respect, S. Fowler
Addendum attached NSWS Agenda and Meeting minutes from the Jan 29 meeting & also paper copy of Mr. Van Solkema's letter.

Councillor Llewellyn
No report.

Fowler/Elder: VOT 061/2020
THAT the Council Reports be received. **CARRIED**

K. Bylaws

None.

L. Correspondence

1 **Brenda Lenahan Re: Tahsis Age Friendly Action Plan Committee**

2 **Judy Burgess Re: Tahsis as "Birthplace of B.C."**

3 **Letter from Philippa De Cou Re: M1 under New Business**

4 **Letter from Sergeant J. Wiese Re: Provincial Police Services Agreement**

Llewellyn/Fowler: VOT 062/2020

THAT these correspondence items be received. **CARRIED**

Fowler/Elder: VOT 063/2020

THAT correspondence items 1 and 4 be pulled for discussion. **CARRIED**

L1 Councillor Fowler briefly spoke to this correspondence item noting the importance of accessibility for all ages.

L4 A brief discussion on this item followed. The letter noted a possible reduction in police presence in "community engagement" not in "criminal investigations".

M. New Business

1 **Repairs to the Water Service Line at 265 North Maquinna Drive**

Fowler/Llewellyn: VOT 064/2020

Whereas the Water Regulations and Rates Bylaw, No. 581, 2016 (the "Bylaw") provides in section 24 that all persons must maintain in good order and repair the service pipes, valves, meters, and meter boxes, plumbing and other fixtures located on the parcel;

And Whereas the Bylaw provides in section 29 that if the pipes, connections, fixtures, taps, meters or other fixtures used in connection with the supply of water to premises are found to be defective or leaking, notice in writing shall be given to the persons owning or using the premises to remedy the defects;

And Whereas section 17 of the Community Charter provides that the authority of Council to require that something be done includes the authority to direct that, if a person subject to the requirement fails to take the required action, the municipality may fulfill the requirement;

And Whereas the water service for the property at 265 North Maquinna Drive is leaking to the point where water is being wasted, and a nuisance is being created for adjoining properties as a result of flooding;
Now Therefore Council resolves and orders as follows:

1. The owner of the property at 265 North Maquinna Drive (the "Property") is hereby ordered to take all necessary action, within 48 hours of service of this Order, to repair the water service to the Property so that it does not leak and waste water; and

2. That if the owner fails to repair her water service within the time required by this Order, the Chief Administrative Officer is authorized to retain a contractor to perform the repairs at the cost of the Village, and the Chief Administrative Officer, the Village's contractor, and such other employees or officers of the Village whose assistance is required, are authorized in accordance with sections 16 and 17 of the Community Charter to enter onto the Property at all reasonable times to undertake such repairs. **CARRIED**

2 **Councillor Llewellyn's Proposed Resolution for submission to the AVICC Convention Re: Establishment of a new public highway designation for resource roads**
Mayor Davis spoke to this motion.

Fowler/Elder: VOT 065/2020
THAT the proposed resolution be received. **CARRIED**

Llewellyn/Fowler: VOT 066/2020

THAT WHEREAS many rural and remote communities throughout British Columbia rely on resource roads for food, fuel and medical services;

AND WHEREAS the lower maintenance standards for these roads compared with other provincial roads have contributed to motor vehicle injuries and fatalities;
THEREFORE BE IT RESOLVED THAT the Province establish a new public highway designation for resource roads that serve as the primary or secondary access roads for communities which would have clearly defined standards for construction, maintenance, enforcement and be funded/resourced similarly to the public highway system. **CARRIED**

Fowler/Elder: VOT 067/2020

THAT this motion be submitted to the AVICC 2020 convention in Nanaimo. **CARRIED**

3 **Tahsis ESS Modernization and Training Project (Emergency Support Services 2020 Program, Community Emergency Preparedness Fund)**

Village of Tahsis grant application for improved wireless network at the Tahsis Recreation Centre to meet the provincial Emergency Support Services modernization project standards and training for ESS volunteers

Fowler/Elder: VOT 068/2020

THAT Tahsis Council supports the proposed activities in the grant application and is willing to provide overall grant management. **CARRIED**

4 **Investing in Canada Infrastructure Program: Green Infrastructure - Environmental Quality Sub-Stream**

Tahsis Wastewater Treatment Reconfiguration and Upgrade Project application Report to Council

Llewellyn/Fowler: VOT 069/2020

THAT this Report to Council be received. **CARRIED**

Fowler/Elder: VOT 070/2020

THAT Council direct staff to apply to the Investing in Canada Infrastructure Program, Environmental Quality Component for the Tahsis Wastewater Treatment Reconfiguration and Upgrade Project; **AND THAT** the Capital Works Reserve Fund (current balance - $546,844) be confirmed as the funding source for the municipality's share; **AND FINALLY THAT** staff be directed to include the project in the 2020-2024 Financial Plan. **CARRIED**

N. Public Input #2

A member of the public inquired about the possibility of making "Pete's Farm" a heritage site to which Council responded.

A questions was raised as to whether or not the south treatment plant capacity is expandable. Staff confirmed that future expansion is possible.

Public Exclusion

Llewellyn/Fowler: VOT 071/2020

THAT the meeting is closed to the public in accordance with section 90(1)(c) of the Community Charter- labour relations or other employee relations. **CARRIED**

Recess

Llewellyn/Fowler: VOT 072/2020

THAT the Regular Council meeting recess to go into the in camera meeting. **CARRIED**

Reconvene

Llewellyn/Fowler: VOT 079/2020

THAT the Regular Council Meeting reconvene at 9:06 p.m. **CARRIED**

Rise and Report

None.

Adjournment

Fowler/Elder: VOT 080/2020

THAT the meeting be adjourned at 9:06 p.m. **CARRIED**

Certified Correct this

18th Day of February 2020

Chief Administrative Officer

F1

Minutes

Village of Tahsis

Meeting	**Committee of the Whole**
Date	**Tuesday January 21, 2020**
Time	**10:30 a.m.**
Place	**Municipal Hall - Council Chambers**

Present

Mayor Martin Davis
Councillor Bill Elder
Councillor Sarah Fowler
Councillor Lynda Llewellyn

Staff

Mark Tatchell, Chief Administrative Officer
Deb Bodnar, CPA, CMA, Director of Finance

Public

None.

Call to Order

Mayor Davis called the meeting to order at 10:34 a.m.
Mayor Davis acknowledged and respected that Council is meeting upon Mowachaht/ Muchalaht territory

Approval of the Agenda

LLewellyn : COW 001/20
THAT the Agenda for the January 21st, 2020Committee of the Whole meeting be adopted as presented. **CARRIED**

New Business 1 Proposed 2020 Budget (2020-2024 Financial Plan)

Staff presented the proposed 2020 Budget for Council's consideration. Council requested information on building inspection fees, revenue sources, and propane consumption at the Rec centre. Council adjusted the proposed Council expenditure budget to 2019 actuals. Staff will gather the information for the February 18th Budget committee of the whole meeting.

LLewellyn : COW 002/20

THAT this presentation be received. **CARRIED**

Adjournment

Llewellyn: COW 003/20

THAT the meeting adjourn at 2:22 p.m. **CARRIED**

Certified correct this
4th Day of February, 2020

_____

Corporate Officer

F2

Minutes

Village of Tahsis

Meeting	**Committee of the Whole**
Date	**Tuesday January 21, 2020**
Time	**3:00 p.m.**
Place	**Municipal Hall - Council Chambers**

Present

Mayor Martin Davis
Councillor Bill Elder
Councillor Sarah Fowler
Councillor Lynda Llewellyn

Staff

Mark Tatchell, Chief Administrative Officer

Guests

Kristina Crowson, Managing Partner and Lead Marketing Strategist, Array Web+Creative (by phone)

Public

none

Call to Order

Mayor Davis called the meeting to order at 3:00 p.m.
Mayor Davis acknowledged and respected that Council is meeting upon Mowachaht/ Muchalaht territory

Approval of the Agenda

Llewellyn : COW 004/20

THAT the Agenda for the March 12th, 2019 Committee of the Whole meeting be adopted as presented.

CARRIED

Business Arising

1 Future Direction of the Village's Web Presence

Llewellyn: COW 005/20

THAT this presentation be received.

CARRIED

Following from the Web Traffic Summary report received at the Jan 7th Council meeting, Kristina Crowson discussed potential improvements to the Village's web presence, particularly, new imagery, search engine optimization(e.g., adventure travel, Nootka Sound), map improvements, trip planner, pooling with Gold River and MMFN on digital marketing campaign.
Crowson to prepare list of potential improvements with pricing and share folder for photos and videos.

Adjournment
Llewellyn: COW 006/20
THAT the meeting adjourn at 3:45 p.m. **CARRIED**

Certified correct this
4th Day of February, 2020

Corporate Officer

F3

Minutes

Meeting	**Regular Council**
Date	**January 21, 2020**
Time	**7:00 PM**
Place	**Municipal Hall - Council Chambers**

Present

Mayor Martin Davis
Councillor Bill Elder
Councillor Sarah Fowler
Councillor Lynda Llewellyn

Staff

Mark Tatchell, Chief Administrative Officer
Janet StDenis, Finance and Corporate Services Manager

Public

5 members of the public

A. Call to Order

Mayor Davis called the meeting to order at 7:00 p.m.
Mayor Davis acknowledged and respected that Council is meeting upon Mowachaht/ Muchalaht territory

B. Introduction of Late Items and Agenda Changes

None.

C. Approval of the Agenda

Llewellyn/Elder: VOT 040/2020

THAT the Agenda for the January 21, 2020 Regular Council meeting be adopted as presented.

CARRIED

D. Petitions and Delegations

None.

E. Public Input # 1

A member of the public proposed a celebration for Tahsis' 50th Anniversary with proceeds from the event going towards "Pete's Farm".

F. Adoption of the Minutes

1 **Minutes of the Regular Council Meeting held on January 7, 2020.**

Llewellyn/Fowler: VOT 041/2020
THAT the Regular Council meeting minutes of January 7, 2020 be adopted as presented. **CARRIED**

G. Rise and Report
None.

H. Business Arising
None.

J. Council Reports
Mayor Davis

No report.

Councillor Elder
No report.

Councillor Fowler (written report)
Today was a busy day with the first two meetings on the draft financial plan and website traffic summary (imagery update, seasonally photo reboot or video swap, tourism media marketing campaign) discussion. While reviewing the proposed 2020 Operating Budget I was grateful to be reminded of a laundry list of current direct and indirect services provided to citizens of the village. The shortlist includes financial, asset, project management, grant writing, compliance with provincial and federal legislation and election services. The long list is quite extensive and made possible by our hardworking staff and prior years surplus.

Listening to the radio this past week I heard someone from the Islands Trust discussing a mapping project of Intact forests across smaller towns and it reminded me of our work with the Mckelvie asset inventory. I want to bring attention to the call 4 nomination deadline in March of the Green Municipal Fund 20th anniversary vision award, which is a chance to showcase our important work on our watershed protection plan. Furthermore I was reading a Local Government 2020: Current Issues newsletter published by the Pacific Business and Law Institute whereby it described The Riparian Area Protection Regulation as one of the Hot Topics in Planning Law. Interestingly enough this newsletter also listed Current Challenges for Local Governments as 1. Vacation Rentals; AirBnB. 2.Ride Hailing:Uber, Lyft. 3. Cannabis: illegal growing, dispensaries. Tomorrow I have a webinar at noon by the Community of Practice of Ecosystem approaches to Health. Next week I intend to go to Gold River for the Nootka Sound Watershed Society.

I have been exploring what content to include in my proposed session for April's AVICC in Nanaimo. While still a rough draft (power point; run, win and lead with love) I have been reading the below handbook about youth engagement and watching the Eli Mina video, included below. Service Learning is a new term I learned this week from the below attached UBCM info graphic which helps me to describe how best I try to replace my impatience and combative attitude with ever growing understanding.

Respectfully submitted to the Village of Tahsis, Mayor and council,
S. Fowler

https://www.ubcm.ca/EN/main/resources/local_government_awareness_week/youth-engagement.html

https://www.ubcm.ca/assets/Resources~and~Links/Youth~Engagement/FCM%20-%20Municipal%20Youth%20Engagement%20Handbook.pdf

https://www.youtube.com/watch?v=VsRQN1BrOaY&feature=youtu.be

Councillor Llewellyn (verbal report)

I will report that I had two meetings that I was suppose to be at this past week. One was in Campbell River for the Health Network that got cancelled because of the weather, but I was already in town. The second one was in Nanaimo on Saturday and was the AGM for Vancouver Island Regional Library at which I was elected to the Executive Committee.

At the February 4, 2020 Council meeting I will be bringing forward a motion on resource roads for submission to the AVICC Convention.

Fowler/Llewellyn: VOT 042/2020
THAT the Council Reports be received. **CARRIED**

K. Bylaws

1 **Board of Variance Bylaw No.624, 2020**
Adoption

Llewellyn/Fowler: VOT 043/2020

CARRIED

THAT the Board of Variance Bylaw No.624, 2020 be received for consideration.

Fowler/Llewellyn: VOT 044/2020
THAT the Board of Variance Bylaw No.624, 2020 be reconsidered, finally passed, and adopted as presented on this 21st Day of January, 2020. **CARRIED**

2 **Village of Tahsis Official Community Plan Bylaw No. 623, 2020**
This Bylaw was not received for consideration.

L. Correspondence

1 **Letter from Dan and Corrine Dahling Re: Head Bay Station**

2 **Michelle Harrod Re: Village of Tahsis 50th Anniversary**

3 **Letter from Sierra McGerrigle Re: Pete's Farm Tahsis Revitalization Proposal**

Llewellyn/Elder VOT 045/2020
THAT these correspondence items be received. **CARRIED**

Llewellyn/Fowler VOT 046/2020
THAT all correspondence be pulled for discussion. **CARRIED**

L1 **Letter from Dan and Corrine Dahling Re: Head Bay Station**
Staff advised Council that the Bylaw Officer is attempting to bring the property owner into compliance on a volunteering basis.

L2 **Michelle Harrod Re: Village of Tahsis 50th Anniversary**
There was a brief discussion.
A Committee of the Whole meeting was set for February 3rd, 2020 at 5 p.m. to discuss this correspondence item.

L3 **Letter from Sierra McGerrigle Re: Pete's Farm Tahsis Revitalization Proposal**
A brief discussion followed.

M. New Business

1 **Community Emergency Preparedness Fund, Flood Risk Assessment, Flood Mapping and Flood Mitigation Planning stream: Tahsis Flood Mitigation Preliminary Design Project**

Fowler/Elder: VOT 047/2020
THAT this staff report be received. **CARRIED**

Llewellyn/Fowler: VOT 048/2020
THAT Council support the proposed activities in the Tahsis Flood Mitigation Preliminary Design Project grant application under the Community Emergency Preparedness Fund Flood Risk Assessment, Flood Mapping and Flood Mitigation Planning funding stream and to provide overall grant management. **CARRIED**

N. Public Input #2

A member of the public commented on the "good condition" of Head Bay FSR.

There were two other comments on Head Bay FSR regarding road standards.

Adjournment

Fowler/Llewellyn: VOT 049/2020

THAT the meeting be adjourned at 7:30 p.m. **CARRIED**

Certified Correct this

4th day of February 2020

Chief Administrative Officer

H1

VILLAGE OF TAHSIS

Report to Council

To: Mayor and Council

From: Director of Recreation

Date: January 6, 2020

Re: Recreation Centre 2019 Q4 attendance and revenue report

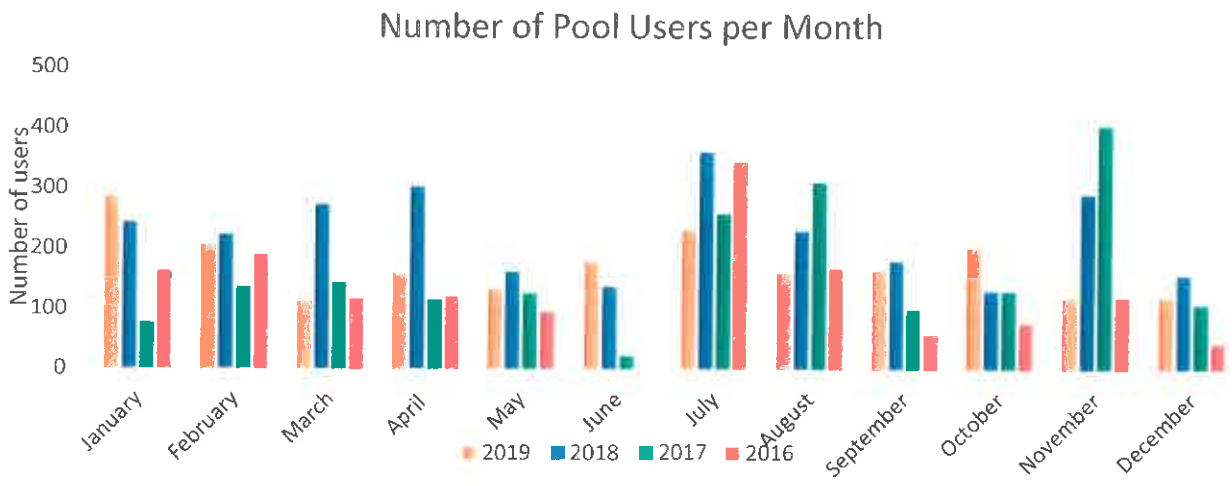
PURPOSE OF REPORT:

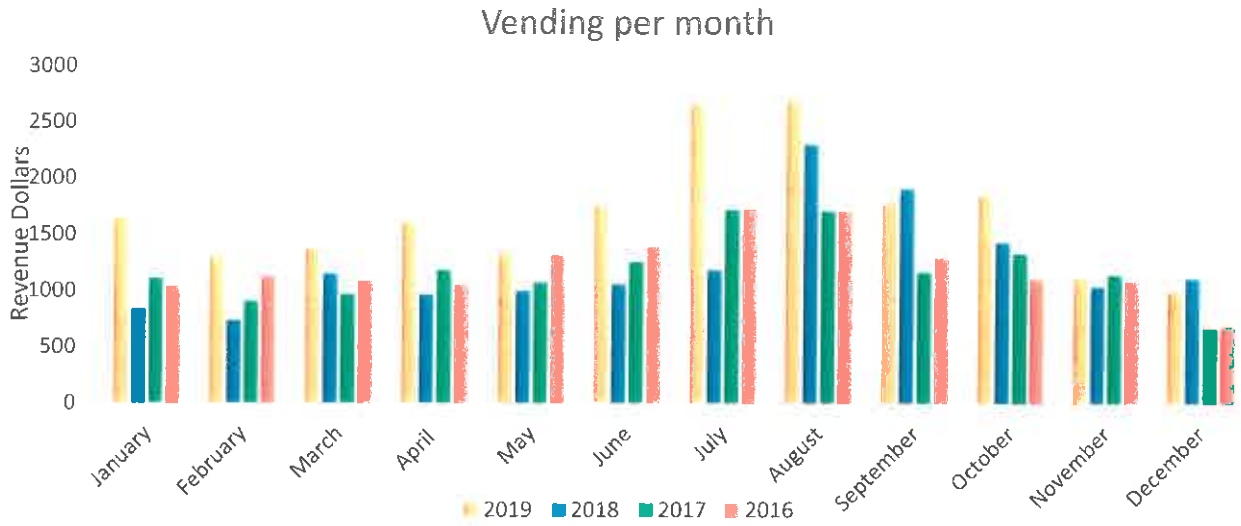
To provide Council with Recreation Centre attendance and revenue information for fiscal year 2019.

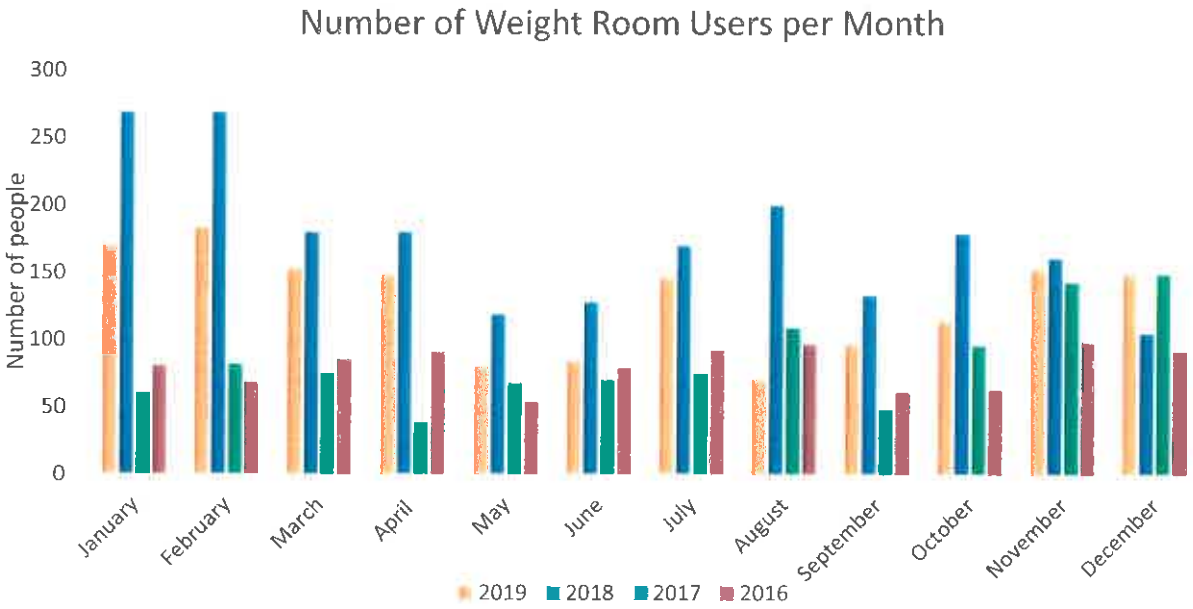
BACKGROUND:

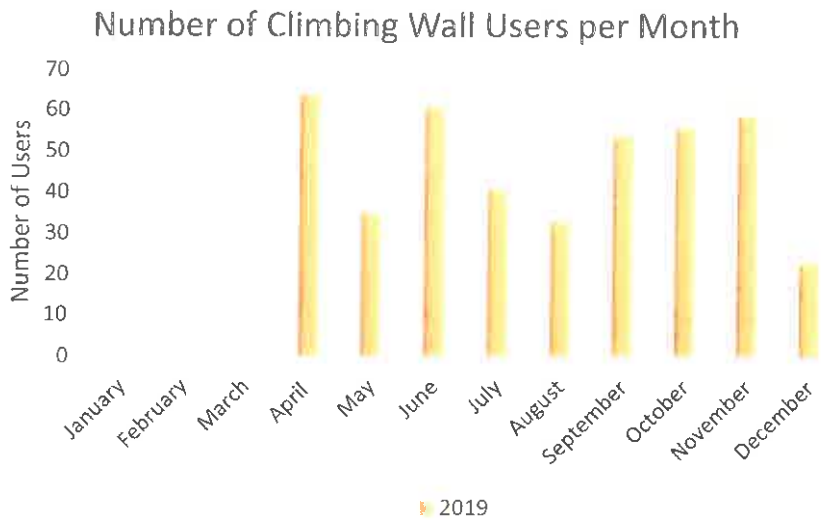
On October 17, 2017 Council adopted Fees and Charges Bylaw No 594 which eliminated fees for persons using the Rec Centre's swimming pool, gym, weight room and sauna. The Bylaw adjusted and established other Rec Centre fees.

Council's decision was made to encourage greater use of the facility in order to improve the overall health and wellness of Tahsis residents. Council concluded that the social and health benefits outweighed the relatively small amount of revenue (about $7,000 in 2016) generated annually in user fees




Vending per month
Revenue Dollars
3000
2500
2000
1500
1000
500
0
January
February
March
April
May
June
July
August
September
October
November
December
2019
2018
2017
2016


Number of Weight Room Users per Month
Number of people
300
250
200
150
100
50
0
January
February
March
April
May
June
July
August
September
October
November
December
2019
2018
2017
2016



Programs offered in 2018

Yogalates, Restorative yoga, Aqua fit, swimming lessons, adult and public swim

Program that were offered in 2019

Restorative yoga, Aqua fit, adult and public swim, climbing wall, Zumba, bowling league, Naloxone Training, Lifeguard Training, First aid and CPR

POLICY/LEGISLATIVE REQUIREMENTS:

Fees and Charges Bylaw No. 594, 2017

FINANCIAL IMPLICATIONS:

Concession revenues and direct product costs:

Year	Revenue	Direct Costs	Net	%Cost/Revenues
2019	20,231.96	14,970.71	5,261.25	74.0%
2018	15,597.73	11,454.80	4,142.93	73.4%
2017	13,839.34	9,437.22	4,402.12	68.2%
2016	13,942.56	7,591.12	6,351.44	54.4%

Prepared by

Sarah Jepson

Sarah Jepson

Approved by

Mark Tatchell

4/2

Tahsis

Volunteer Fire/Rescue

ANNUAL STATISTICAL REPORT 2019

To Mayor and Council:

The statistical information contained in this 2019 report is a summary of the activities of the Tahsis Fire Department ("TFD").

In 2019, TFD responded to 43 emergency calls.

The statistics and information you will find in this report will help the department set new operational goals and objectives in order to meet our mission statement.

I wish to congratulate and thank our members, the volunteer firefighters – for their hard work and dedication to all the services that they provide to help others. Their commitment to the well-being of our community is commendable and greatly appreciated.

I wish also to extend a sincere thank you to the Village Council, the municipal departments, and a special note of gratitude to the Village's Public Works Department. Our thanks also go out to the private business organizations that have helped us in many ways throughout the year.

Respectfully,

Stéphane Dionne MMM, CD
Fire Chief
Tahsis Fire Department

Fire Department

The Tahsis Fire Department is responsible for fire prevention, fire protection, victim extrication, and response to any incident or scene where its personnel and/or apparatus/equipment may be beneficial to the improvement of the situation.

Mission Statement

The Tahsis Fire Department will serve the residents of Tahsis through a dedicated, professional, and competent emergency service that will strive to protect and minimize losses to human life, property, and the environment.

Risk Management

We may risk our lives, in a calculated manner, to save savable human lives. We will not risk our lives for a building or lives that are already lost. We may only risk our lives a little in a calculated manner, to save savable property. We will not trade a life for a life.

Training

The Tahsis Fire Department will receive training to achieve Standard Exterior Firefighting training through the Office of the BC Fire Commissioner and local in-house training. This will enhance the service to the residents of Tahsis. The volunteers, through their dedication and professionalization, will strive to complete their training.

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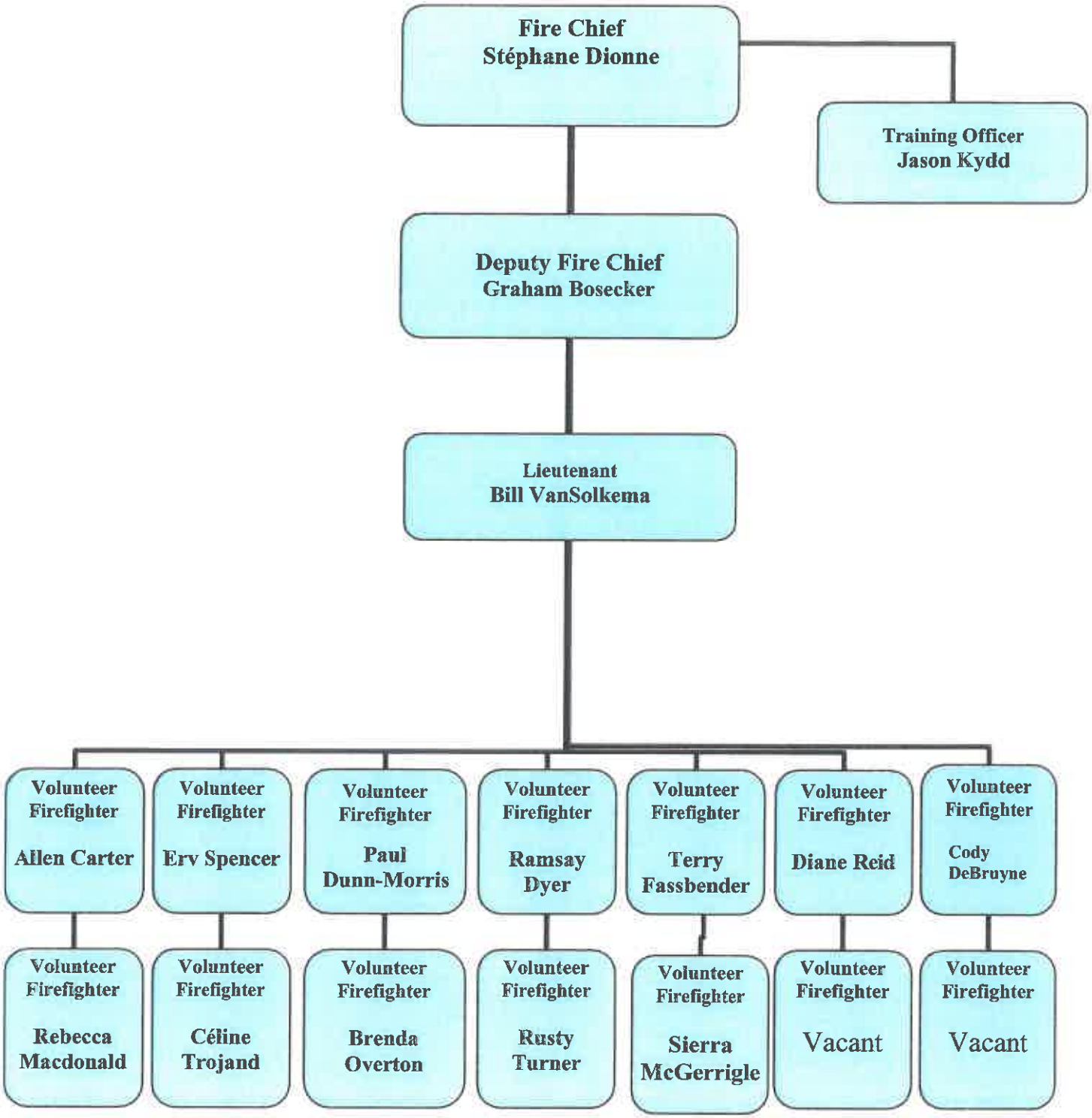
FIRE DEPARTMENT ORGANIZATIONAL CHART

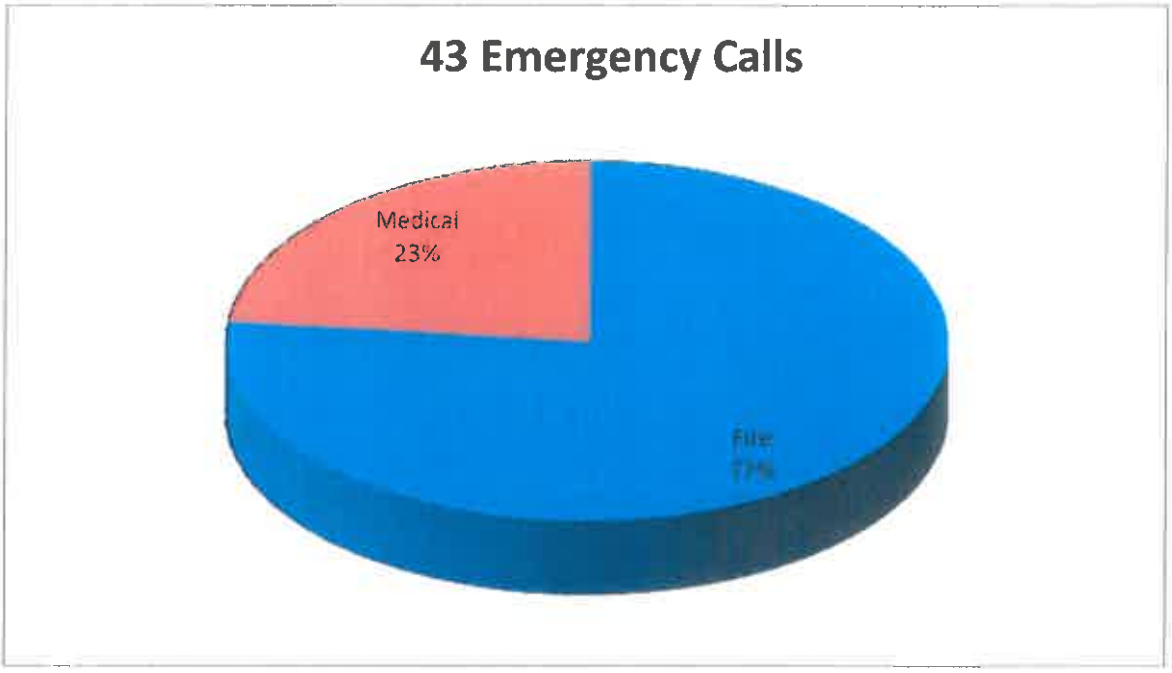


TAHSIS FIRE DEPARTMENT
PERSONNEL CHART

NAME	RANK	SINCE
CHIEF – OFFICERS		
Dionne, Stéphane	Fire Chief/Director	05/2018
Bosecker, Graham	Deputy Chief	07/2012
OFFICERS	**Volunteer**	
Kydd, Jason	Training Officer	10/2016
VanSolkema, Bill	Lieutenant	10/2002
Firefighter	**Rank**	
Dyer, Ramsay	Firefighter	11/2015
Spencer, Erv	Firefighter	12/2017
Dunn-Morris, Paul	Firefighter	10/2015
Carter, Allen	Firefighter	06/2015
Fassbender, Terry	Firefighter	11/2018
Reid, Diane	Firefighter	11/2018
DeBruyne, Cody	Firefighter	11/2018
Macdonald, Rebecca	Firefighter	02/2019
Trojand, Céline	Firefighter	02/2019
Overton, Brenda	Firefighter	02/2019
Turner, Rusty	Firefighter	04/2019
McGerrigle, Sierra	Firefighter	03/2019
Resignation	**Rank**	**Retired in**
Stephan, Myles	Firefighter	06/2019
Moore, Rikki	Firefighter	02/2019

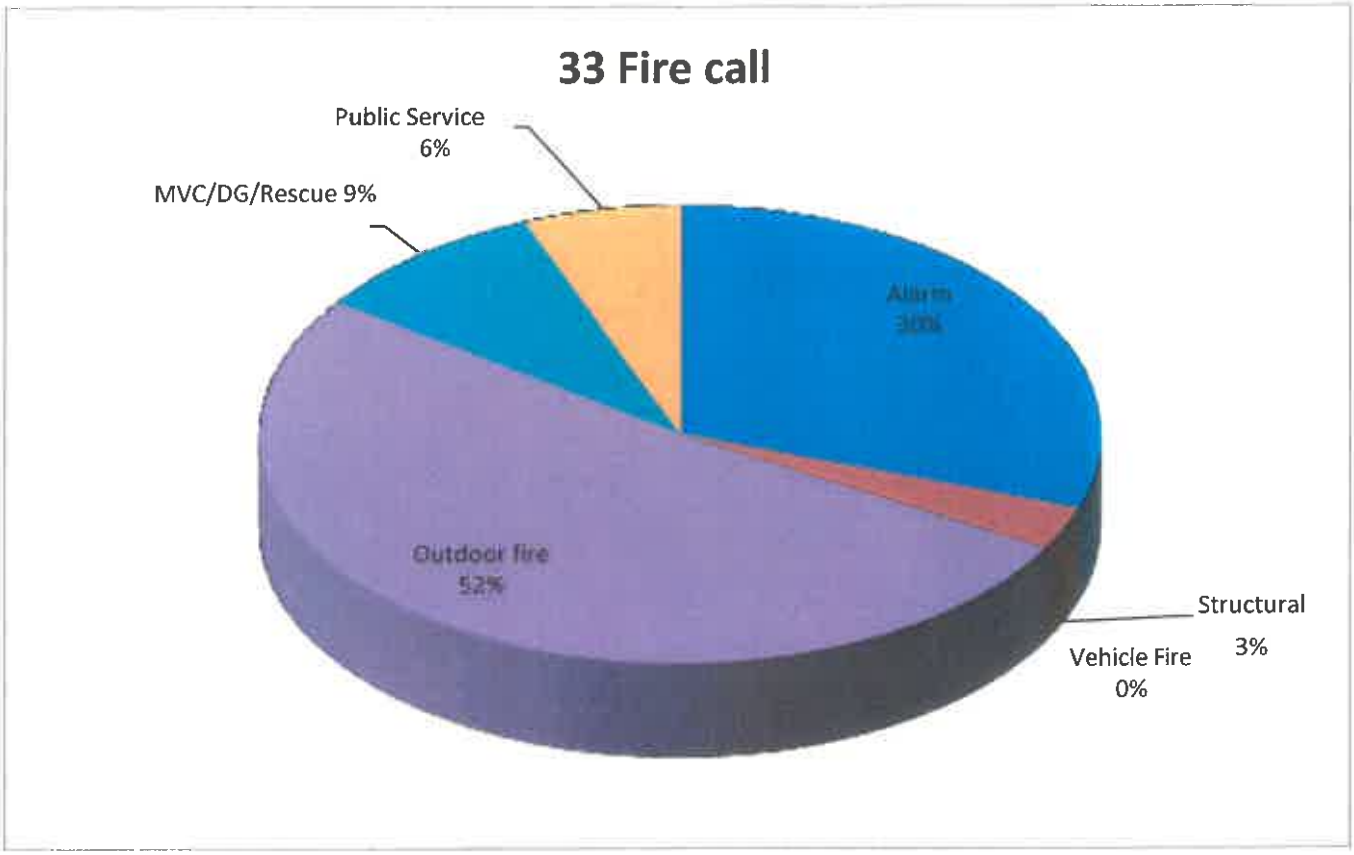
FIRE SERVICE

FIRE RESPONSE TYPES



Emergency Call types	# Calls	% Calls
Emergency Call	33	77%
Medical Assist Call	10	23%

Type of Call Respond		
General Page	23	
Duty officer only	20	



FIRE RESPONSE TYPES	# Calls	% Calls
Automatic fire alarm	10	30%
Outdoor fire	17	52%
MVA, Dangerous good (DG), and Rescue	3	9%
Public assistance (non-urgent)	2	6%
Vehicle fire	0	0%
Structure fire	1	3%
TOTAL	**33**	**100%**

LOCATION OF INJURIES

TOTAL FIREFIGHTER INJURIES	FIRE SERVICE CALLS	AMBULANCE SERVICE CALLS	FIRE STATION ACTIVITIES
0	0	0	0

TYPE OF INJURIES AND LOCATIONS

TYPE OF INJURY	FIRE SERVICE CALLS	AMBULANCE SERVICE CALLS	FIRE STATION ACTIVITIES
0	0	0	0
Total	0	0	0

1

VOLUNTEER FIREFIGHTER ATTENDANCE

MONTH	TOTAL NUMBER OF GENERAL CALL OUTS	TOTAL NUMBER OF RESPONDING VOLUNTEERS	AVERAGE NUMBER OF VOLUNTEER FIREFIGHTERS
January	1	5	5
February	0	0	0
March	0	0	0
April	1	4	4
May	4	27	6.75
June	1	5	5
July	3	27	9
August	4	26	6.5
September	3	22	7
October	1	8	8
November	7	48	6.8
December	1	6	6
TOTAL	**26**	**178**	**6 / calls**

Note: We had an increase of 2 volunteers responding to calls, compare to 2018.

Training

1:

SUMMARY OF TRAINING HOURS

YEAR 2018	TOTAL NUMBER TRAINING SESSIONS	TOTAL NUMBER OF PERSONNEL ATTENDING	TOTAL NUMBER OF HOURS TRAINED
TRAINING AND ATTENDANCE	48	492	1476
PROFESSIONAL DEVELOPMENT AND TRAINING COURSES	8	46	639
TOTAL	**56**	**538**	**2115**

TRAINING SESSIONS AND ATTENDANCE[1]

MONTH	TOTAL TRAINING SESSIONS[2]	VOLUNTEER FIREFIGHTER ATTENDANCE
January	5	39
February	4	41
March	4	54
April	4	48
May	5	48
June	4	37
July	5	54
August	4	40
September	4	36
October	5	34
November	4	32
December	3	29
TOTAL	**51**	**492**

Tahsis Fire Department started Exterior Firefighter Certification through the Office of the Fire Commissioner. Ten members have completed their certification. This provides the tools needed for the members to become more efficient and effective with their skills

[1] Fire Department Completed Attendance Sheet 2019
[2] Excludes professional development, and training courses.

1:

PROFESSIONAL DEVELOPMENT AND TRAINING COURSES

GROUP AND COURSE	NUMBER OF STAFF	CLASS ROOM	ONLINE SELF-STUDY	OUTSIDE TAHSIS	NUMBER OF HOURS	TOTAL NUMBER OF HOURS
VOLUNTEER FIREFIGHTERS						
SPP-WFF 1, Wildland Firefighter level 1	11	YES	-	-	6	66
Exterior Firefighting Train the trainer	5	YES	-	-	16	80
Air brake course	7	YES	-	-	20	140
Understanding the working of my SCBA	6	YES	-	-	1.5	9
Animal first aid course	5	YES		YES	2	10
Pump operator training	9	YES		-	32	288
Liaison Officer Course	1		YES		14	14
FireSmart Coordinator Training	2			YES	16	32
TOTAL	**46**				**107.5**	**639**

FIRE PREVENTION EDUCATION

FIRE PREVENTION ACTIVITES

MONTH	FIRE STATION TOURS	FIRE DRILLS	PUBLIC EDUCATION	PRE-FIRE PLANNING	OTHER ACTIVITIES	TOTAL
TOTAL	0	1	2	0	1	4

In 2019, fire prevention education planning for fire station tours, fire drills, and public education sessions in schools were initiated.

Our thanks to all members who were involved in public education throughout the year.

FIRE INSPECTIONS

Under the British Columbia Fire Code, the department is responsible for inspecting the following:

- A1 – *Assembly occupancies* intended for the production and viewing of the performing arts
- A2 – *Assembly occupancies* not elsewhere classified in Group A
- A3 – *Assembly occupancies* of the arena type
- A4 – *Assembly occupancies* in which the occupants are gathered in the open air
- B1 – *Detention occupancies* in which persons are under restraint or are incapable of self-preservation because of security measures not under their control
- B2 – *Treatment occupancies*
- B3 – *Care occupancies*
- C – *Residential occupancies*
- D – *Business and personal services occupancies*
- E – *Mercantile occupancies*
- F1 – *High-hazard industrial occupancies*
- F2 – *Medium-hazard industrial occupancies*
- F3 – *Low-hazard industrial occupancies*

Note 1:

Residential occupancies are inspected only upon request to the Fire Chief.

	"A" *occupancy*	"B" *occupancy*	"C" *occupancy*	"D" *occupancy*	"E" *occupancy*	"F" *occupancy*	Total inspection
Occupancy Category	**5**	**0**	**1**	**16**	**2**	**14**	**38**

Note 2:

Only one inspection was not carried out this year.

Note 3:

2020 Fire Inspections, a new business will be added it to the list.

Tahsis Firefighter Association

MONTH	ACTIVITIES
January	Polar Bear swim (with the Lion Club)
June	Car wash to raise money for members' social activities and training. Annual BBQ during Tahsis Days.
October	Halloween Fireworks Fire Prevention Week – presentations to schools on fire safety
December	Christmas Tree Light Up (with the Lions' Club) Christmas Party and Gifts (with the Lions' Club)

GLOSSARY

ACT OR OMISSION
The human element by which a person has done something (an act) or failed to do something (an omission). The act or omission indicates whether the fire/incident was deliberate, neglectful, or accidental.

ARSON FIRES
Includes arson, suspected incendiary, riot, mischief, or vandalism.

APPLIANCES AND EQUIPMENT
Includes dryer, air conditioning equipment, pressing iron, and incinerator.

CASUALTY
A person injured or killed accidentally as a direct result of a fire/incident.

CONSTRUCTION, DESIGN, OR INSTALLATION DEFICIENCY
Includes construction or design deficiency, installation too close to a combustible, other installation deficiency or over-fusing.

COOKING EQUIPMENT
Includes stove, range, food warming appliance, deep-fat fryer, broiler, or portable cooking unit.

DEATH
A person killed as a direct result of a fire/incident or a person who dies from a fire/incident injury within one year following the date on which the injury was sustained.

FIRE
Fire is any instance of destructive or uncontrolled burning of combustible solids, liquids, or gases.

HEATING EQUIPMENT
Includes a central heating unit, service water heater, space heater, fireplace, chimney, flue pipe, or steam or hot water pipe.

HUMAN FAILING
Includes person asleep, temporary loss of judgement, physical disability, panic, influence of alcohol or drugs, and ignorance of hazard.

INCENDIARY OR SET FIRES
Includes arson, suspected incendiary, riot, mischief, or vandalism.

GLOSSARY

INJURY
A person injured as a direct result of a fire/incident.

JUVENILE FIRE SETTERS
Children and/or adolescent (under 18 years of age) that engage in fire setting.

LOSS
Dollar loss is an estimate of the value of the property loss due to a fire. Dollar loss ($ Loss) data is received from the fire department or from insurance company claims for the actual dollar loss amount that was paid to the claimant. Dollar loss does not include loss of business or income as a result of fire.

MISCELLANEOUS
Includes internal combustion engines, heat treatment equipment, industrial ovens, tar pots, fireworks, conveyors, commercial and industrial machinery, and chemical reactions.

MISUSE OF MATERIAL IGNITED
Includes fuel spilled accidentally, improper fueling technique, cleaning or washing parts, improper container, overheated cooking oil, combustible placed too close to heat, and improper storage.

MISUSE OF SOURCE OF IGNITION
Includes disposal of smoker's material, thawing, inadequate control of an open fire, children playing with a source of ignition, welding or cutting too close to combustible material, or torch too close to combustible material.

OUTSIDE AND OTHER FIRES
This category includes any fire that is not a structure or vehicle fire. It includes: outside grass, brush, forest, crop or other vegetation fires, outside trash fires, outside fires involving property of value (such as storage or equipment) and unclassified fires.[3]

RESIDENTIAL
Property in which sleeping accommodation is provided for normal residential purposes. Includes one- and two-family dwellings, apartments, rooming or boarding houses, hotels, motels, dormitories, and mobile homes

SOURCE OF IGNITION
The actual equipment, device, or object which brings about ignition.

GLOSSARY

SMOKER'S MATERIAL AND OPEN FLAMES
Includes cigarettes, pipes, cigars and/or matches, lighters when used in conjunction with smoking. Includes matches and lighters not associated with smoker's material, candles, cutting torches, welding equipment, and hot ashes.

STRUCTURE FIRES
Any fire in or on a building or other structure is considered a structure fire even if the structure itself was not damaged. Mobile property used as a fixed structure, such as manufactured homes and portable buildings, are considered structures.[4]

SUSPICIOUS FIRES
Includes arson, suspected incendiary, riot, mischief, or vandalism.

VEHICLE FIRES
Vehicles include highway-type vehicles such as cars, trucks, recreational vehicles, buses and motorcycles, as well as aircraft, rail vehicles, boats or water vehicles, and industrial, agricultural, home, garden, and construction vehicles. A vehicle that burns inside a structure with the fire limited to the vehicle only is, however, considered a vehicle fire.[27]

NOTES

CONTACT INFORMATION FOR TAHSIS EMERGENCY AND PROTECTIVE SERVICES

977 S Maquinna Dr
P.O. BOX 219
Tahsis, BC
V0P 1X0

Phone: 250-934-6666
Fax: 250-934-4422
Email: firedepartment@villageoftahsis.com

H4

Grant in Aid Application
Policy #2007

Name of Group or Organization: **Junior Canadian Rangers** Date: **December 31st 2019**

I hereby request a Grant in Aid from the Village of Tahsis. The details of this request are below.

1. State the exact amount of monies or in-kind assistance (eg. free use of facilities) requested.

The JCR would like to request the free use of the recreation centre once a week for JCR meetings, once a week for target shooting, and access to the meeting room for other JCR related meetings. Due to the schools, rec centres, and other youth available activities having a constant changing schedule we would like to keep the two days we use the facility open and works with the rec centre staff on a continues bases to ensure there are no scheduling conflicts.

2. Briefly outline the purpose of this assistance.

This would ensure that our youth have safe and meaningful after school activities and learn various life, ranger, and traditional skills.

3. Who will benefit from this activity? How many people will benefit?

Mainly Youth age 12 to 18, but as the JCRs help with various community events and volunteer initiatives the hole community will benefit as well.

4. What steps have you taken to raise funds?

The JCRs does bottle drive which helps pay for our various activities, as well as equipment.

5. What other local groups have been approached for assistance? Please indicate what was requested from these groups and whether they have agreed to assist.

We have not approached any other groups since we are just looking for use of the facility.

6. Have you approached the Federal or Provincial governments for assistance? Please indicate what was requested from these Senior Governments and whether they have agreed to assist.

The CAF covers the cost of the insurance and provides funds some of the activities we do.

Grant in Aid Application
Policy #2007

7. Will this project proceed if funds or in-kind assistance are not provided by the Village?
Without a meeting space that can accommodate both class room and physical activities the group will not be able to operate.

_____
Signature of Authorized representative

Please attach a budget for your project. Please be as complete as you can. You may be asked for further financial information.

If a Grant in Aid for funding is approved, the cheque should be made payable to:

_____

and be mailed to: P.O. Box 32 , Tahsis, B.C. V0P 1X0

Contact person: Amanda Knibbs

Phone number: 250-934-6515

Addendum to Junior Canadian Rangers ("JCR's) Grant-in-Aid Application dated December 31, 2019

Further to section 1:

All proposed schedule changes from the JCRs will be sent to recreation@villageoftahsis.com

Shooting practice will conclude by January 29, 2020 after which time the gym will be open to the public on Sundays starting February 2, 2020.

Unless the JCRs email recreation@villageoftahsis.com at least one week before, JCRs will share the gym with other members of the public.

JCR's may use the upstairs room at any time, except as noted below.

The JCRs will be given one week's notice if the Village needs to use the upstairs room. Upon receiving notice, the JCRs will temporarily move the air rifles into another approved location.

JCR's will clean the table and vacuum the upstairs room each week. A vacuum will be provided by the Village.

L 1

January 27, 2020

Village of Tahsis
977 South Maquinna Drive
PO Box 219
Tahsis, BC
V0P 1X0

Dear Mayor and Council,

I am writing to you to make a suggestion regarding the proposed Tahsis Age Friendly Action Committee.
I am happy to hear about this initiative and would like to suggest that the committee broadens it's reach by incorporating a strong commitment to Accessibility in the terms of reference.

Accessibility is the concept of designing the built environment, as well as programs and services, to meet the needs of the greatest number of people possible.
This term is often used in reference to persons with disabilities but it is also completely relevant with regards to creating an Age Friendly community. Accessibility benefits all of us.

It is important to note that in the fall of 2020, the BC government (led by the Ministry of Social Development and Poverty Reduction) is set to unveil the first ever Accessibility Legislation in this province. This is going to create a wave of change in both the public and private sector. It will be a learning process for all in BC and Tahsis can definitely benefit by embracing the change and being proactive in this respect. It is extremely beneficial to our community to ensure that an accessibility and inclusion lens is applied to all village projects, programs and services.

There are many grants that are specifically geared towards accessibility improvements. The Village of Tahsis completed a Rick Hansen Foundation Accessibility Assessment in recent years. This provides a solid roadmap to guide improvements to the built environment in our village. This RHF Assessment is a valuable document to provide when applying for grants. Having an

accessibility mandate entrenched in the terms of reference for the Age Friendly Committee will also help to strengthen grant applications.

In our small village, I would suggest that combining Accessibility with Age Friendly initiatives could be an efficient use of resources.

Alternatively, I would recommend that a separate Accessibility Committee could be created.

I would be more than happy to be involved as you move forward with the potential of the new committee. I have served as a committee member on the Cumberland Accessibility Committee for almost three years and I stay current with accessibility and disability initiatives in BC. My son is a wheelchair user and my daily inspiration to learn. We own our home and business in Tahsis. It is my community and I care deeply about the future for all of us who call it home. An accessibility lens is so important to future proof our community and ensure that we can ALL age in place no matter what challenges life brings.

Thank you for your time and consideration.

Sincerely

Brenda Lenahan

589 Cardiac Climb
Tahsis, BC
(250) 344-1206

Box 174, 751 North Maquinna Drive,
Tahsis, B.C. V0P 1X0

Mayor and Council, Village of Tahsis

January 22nd, 2020

Dear Mayor and Council re. Tahsis as "Birthplace of B.C."

On reading Michelle Harrod's letter re. "Pete's Farm Tahsis Revitalisation Proposal" on the agenda for the most recent Council meeting (of January 21st) I noticed that Michelle referred to Tahsis as "the Birth Place of British Columbia". While not at all wanting to rain on anyone's parade, I feel I should let you know, that, according to research I have done, Tahsis appears to have no legitimate claim, at all, to any such moniker.

While I realize that there are many such "titles" around, with probably several communities claiming to be "the salmon capital of the World" for instance (and likely several others also claiming to be "the birthplace of British Columbia", I imagine!) I have to say that, after taking the time to research Tahsis history very thoroughly, when I first came here, I'm afraid I could not find any grounds at all for Tahsis' claim. (As I continued with this research I had, meantime, joined the Tahsis Heritage Society. We were able to use some of the information that I had researched, for a Heritage Society project. After a lot more research and work by all of us, and much consultation, we produced our Tahsis historical information board, "A Historic Journey Through Tahsis Times" which is now situated down by the inlet.)

I do not know exactly who came up with the idea that Tahsis was the "birth place of British Columbia", but I suspect that it had something to do with a belief that one at least of the "Nootka Conventions" was negotiated and signed here. Even before I actually moved here, several enthusiastic Tahsis residents informed me about this very interesting historical event. I was told that this took place during the time, in 1792, that England's Captain George Vancouver met the Spanish Captain, Bodega y Quadra on Nootka Island. According to the story I was told, the purpose of this visit was to negotiate the "Nootka Convention". The Nootka Convention agreements, I later discovered, (once I started to research this) were indeed very significant historical documents. The second Nootka Convention between the English and the Spanish led to the Spanish giving up their long-held claim to the whole of western North America, so allowing the eventual settlement of western Canada by the British. Heady stuff! But how was Tahsis supposed to be involved, you might ask?

According to the story I was told, Captains Vancouver and Quadra headed for Tahsis to meet with local Chief Maquinna in order to include him in the negotiations. (Tahsis, at that time, was, of course, exclusively a native village). I was told that it was in Tahsis that the document was actually signed. Since I have rather a passion for history, as well as a back ground in historical research, I really wanted to find out more about this new-to-me local history. (Before coming to Tahsis I had lived in the Nanaimo area, where I

had enjoyed using my skills to research some local coal-mining history for the Regional District of Nanaimo.) For me, this Tahsis history was an exciting new field to explore.

My first action was to request every book that our regional library system had listed that related to the history of this area in this period of time. I was a bit surprised that, although several of these books did describe significant activity in this area, at this time, there was no mention of the important historic event in Tahsis. I was, happily, more successful at the next stage of my research, which involved the checking out of local (Campbell River) second-hand bookstores. This has always been a very enjoyable activity for me!

I came across a "treasure trove" of information in the form of a book first printed in 1955. (A delightful advantage of studying history is that older and more historic books themselves often provide vital information!) The book, by James Stirrat Marshall and Carrie Marshall, was called "Vancouver's Voyage" and told this whole story in vivid and exquisite detail, quoting relevant documents extensively. It included a complete copy of Vancouver's original instructions from his naval bosses as well as copies of some very informative letters by a certain John Mears, who described himself as "Lieutenant in His Majesty's navy". This book, plus other material I was able to find, painted a somewhat different picture.

The whole adventure is a fascinating story and indeed Captain George Vancouver did visit Tahsis with the Spanish Captain, Bodega y Quadra. They also did meet with Chief Maquinna and much celebration took place. However this visit did not actually involve any negotiations at all. The visit was to "honour" Maquinna, whom the Spanish had hugely upset when a previous Spaniard, named Martinez, was responsible for the shooting death of Chief Callicum of Tahsis. The "Nootka Conventions" were actually both signed in Spain, the first in 1790 the second in 1794. The reason George Vancouver visited Nootka Island and Captain Quadra was because Quadra was supposed to hand over a small plot of land that John Mears had claimed he had bought from Maquinna and that the Spanish had confiscated. This was a very small detail of the terms the Spanish had agreed to in the first Nootka Convention that the Spanish Prime Minister (equivalent) had signed previously in Spain with the British Ambassador. The main terms of this first Nootka Convention concerned the confiscation of British ships and imprisonment of British sailors by the Spaniard, Martinez, who had sent all to the Spanish port of San Blas. As well as demanding the release of the men and the ships, the British had also demanded (and received) substantial damages from the Spanish for this "outrage". (The Spanish had, reluctantly, decided they could not really afford to go to war with the British over this, at this time, much as they would have liked to.)

The main purpose of Vancouver's visit to this area was to map this whole new area of interest. Vancouver's mapping activities and Spanish ships doing possibly a similar task for Spain, led to them being the first Europeans to discover that Vancouver Island was actually an island and not attached to the mainland at all, which had previously been thought was the case. This was why, when Vancouver and Quadra (and a whole lot of other officers and sailors) were being rowed back to Nootka Island from their Tahsis celebrations, Vancouver responded well to Quadra's suggestion. Quadra suggested that

they celebrate the friendship that had developed between them by naming a landscape feature after both of them. Vancouver suggested that they should name the "newly discovered" island, "Quadra and Vancouver's Island", which Quadra readily agreed to. (Somehow, Quadra's name was quietly used for a much smaller island, at some point in time, leaving just the name, "Vancouver's Island" and then to today's "Vancouver Island".)

I realize that some Tahsis residents would have probably much preferred for me to find evidence that proved Tahsis was the birthplace of B.C. rather than that it was not! Some residents, of course, may refuse to believe that my findings are the "truth". What people choose to believe is, of course, entirely up to them. However, I did think that if Michelle and Sierra were thinking of using this belief to justify applications for funding, it might be better to justify their requests with accurate information. I can assure Michelle and Sierra that here in Tahsis we certainly have plenty of truthful, as well as fascinating, history to tell any funding bodies about, as well as to interest potential visitors to this community. I suggest we leave "Birthplace of B.C." claims to other communities who have less genuine history to celebrate!

Yours sincerely,

J. A. Burgess

Judy Burgess

Sources of Information:

"Vancouver's Voyage" (1967) (2nd Edition) by James Stirrat Marshall & Carrie Marshall

"The Life of Juan Francisco De La Bodega Y Quadra" (2008) by Freeman M. Tovell

"Journal written by Archibald Menzies during his term as surgeon accompanying Captain George Vancouver on his voyage from England to the Northwest Coast."
(Photocopy of fiche record of original hand-written journal in Archives of British Columbia collection, Victoria. B.C.)

L3

RECEIVED

January 29 2020

Dear Village of Tahsis:
Honourable Council:
CEO. mark Tatchell:

Good day.
Thank you for correspondence I got Jan. 28 2020 delivered by hand from crew RCV Spencer.
I wish to thank you, ahead of time, for passing the water issue Order - scheduled on February 04 2020 in Council.

The H_2O issue regards to collapsing land & rotten water lines on N. Maquinna Drive, Tahsis BC, and my parcel at 265 North Maquinna, continues to be a challenge for myself and many other residents at N. Maquinna Dr.

Again, I wish to thank you, in advance, for your hard work and deligence, in this matter of rotten infrastructure, which is invading Tahsis, and also many other communities within and through out Canada.

Yours truely, Philippa De Cou
265 N. Maquinna Dr.
Tahsis BC V0P1X0

Late Item L4

Janet St. Denis

Subject: FW: Letters to Mayors Provincial Police Service Agreement
Attachments: 8.1 Letter 2 Mayors 2020-01-28_signed.pdf; 20-01-28 SG PPSA Ltr.pdf

Importance: High

From: Joshua WIESE <joshua.wiese@rcmp-grc.gc.ca>
Sent: January 30, 2020 10:52:21 AM
To: grmmclean@cablerocket.com; grbmcrae@conumacable.com; Mark Tatchell; Kevin Kowalchuk
Subject: Letters to Mayors Provincial Police Service Agreement

Good Morning Kevin, Mark, Brad and I included Maxine as Brad is currently away from the office.

Please share the attached letters with your local leadership regarding the Provincial Police Service Agreement. This correspondence is actually directed to our municipal contract partners in a 70/30 contract or a 90/10 contract, but it will add insight as to why we may be short police officers in the near future in Nootka Sound. I personally will be resistant to releasing any of my officers as we are very limited in our resources, but as part of the Provincial Policing Agreement I may be directed to deploy resources. Should this happen, I expect no change in our service delivery to criminal investigations, calls for service and emergency response. Where I might have to dial back service would be on our community engagement as I ensure my folks have a work life balance that protects their health and wellness. I will do my best to keep you informed if the detachment deploys resources so you are up to speed if any community policing services may change. As I said, frontline core police work will not be affected in any way.

Please do not hesitate to call me if you have concerns or wish to discuss further.

Regards

Josh

Sergeant Joshua Wiese
Detachment Commander
Royal Canadian Mounted Police
Nootka Sound Detachment
"E" Division British Columbia
ph (250) 283 2227
fax (250) 283 7657

Sergent Joshua Wiese
Sous-officier responsable
Gendarmerie royale du Canada
Détachement de Nootka Sound
Division "E" Colombie-Britannique
Téléphone (250) 283 2227
copieur (250) 283 7657

Royal Canadian Mounted Police
Gendarmerie royale du Canada

RCMP "E" Division Headquarters
14200 Green Timbers Way
Surrey, B.C. V3T 6P3

January 28th, 2020

Municipal Mayors and CAOs

Re: Coastal Gaslink pipeline Injunction Order Enforcement

Dear Mayors and Chief Administrative Officers,

On October 2nd 2018, LNG Canada announced plans for Coastal GasLink (CGL) to construct a natural gas liquefaction facility at Kitimat, British Columbia (BC) which requires approximately 620km of pipeline construction from Dawson Creek to Kitimat. On December 31st 2019, the BC Supreme Court in Prince George provided a court injunction decision with an associated order which prohibits interference with work being done on the pipeline. The police are required by the B.C. Supreme Court to enforce the order but have limited discretion regarding timing; specifically that is required to accommodate formal and timely efforts to resolve the situation; and key project deadlines as articulated by CGL, the plaintiff in this court action.

While the LNG project is supported by the elected First Nation governments along the pipeline route, there remains opposition from some hereditary leaders. The geographic focus for opposition are three encampments located along the Morice West Forest Service Road west of Houston BC. On January 4th 2020, the Unist'ot'en with support from Wet'suwet'en Hereditary Chiefs evicted CGL staff from the area. The camps maintain blockades on the Morice West Forest Service Road barring access to CGL in violation of the court order.

The RCMP has made significant efforts along with government and industry to facilitate a resolution but has been unsuccessful thus far. While this process continues, an operational and communication strategy to enforce this order has been developed. Local jurisdictional police do not have sufficient resources to deal with the situation at hand within their geographical boundaries. On January 27th, 2020, Minister Farnworth wrote the BC RCMP advising that he was satisfied that this constitutes a provincial emergency under the Provincial Police Service Agreement (PPSA).

As an urgent and critical situation of a temporary nature requiring additional resources, pursuant to Article 9.1 of the PPSA, Minister Farnworth authorized the internal redeployment of resources within the Provincial Police Service to the extent necessary to maintain law and order, and to ensure the safety of persons, property, and communities in the area. Redeployment is inclusive of BC Municipal resources, pursuant

to article 9.1 under the Municipal Police Service Agreement (MPSA). The purpose of this letter is to formalize our communications on this matter and any impact it may have on the municipal policing unit.

Pursuant to Article 8.1(a) under the Municipal Police Unit Agreement (MPUA), part of your Municipal Police Service may be redeployed to provide additional police resources as is reasonably necessary to maintain law and order, keep the peace and protect the safety of persons, property or communities. The actual timing and number of resources will be left to the discretion of the designated commander. In accordance with Article 8.1(b), the Province is responsible for paying the costs of any redeployment including salary, transportation and maintenance, at the applicable cost-sharing ratio set out in sub-article 11.1 MPUA.

Any deployment from your detachment will be in consultation with the District and Detachment Commander. While it is important to address emergencies such as this, it is also essential that your community continues to receive adequate policing. The District and Detachment Commander will ensure this balance is maintained and will continue to update and consult with you on any resourcing requests relating to this operation.

Respectfully,

Eric Stubbs, Assist Commissioner
'E'-Division Criminal Operations

M 4

Late Item

New Business

M 4 **Investing in Canada Infrastructure Program; Green Infrastructure -Environmental Quality Sub-Stream**
Tahsis Wastewater Treatment Reconfiguration and Upgrade Project application, Report to Council

Moved, seconded by Councillors _____ **THAT** this Report to Council be received.

Moved, seconded by Councillors _____ **THAT** Council direct staff to apply to the Investing in Canada Infrastructure Program, Environmental Quality Component for the Tahsis Wastewater Treatment Reconfiguration and Upgrade Project; **AND THAT** the Capital Works Reserve Fund (current balance - $546,844) be confirmed as the funding source for the municipality's share; **AND FINALLY THAT** staff be directed to include the project in the 2020-2024 Financial Plan.

VILLAGE OF TAHSIS

Report to Council

To: Mayor and Council

From: Mark Tatchell, CAO

Date: February 1, 2020

Re: Tahsis Wastewater Treatment Reconfiguration and Upgrade Project

PURPOSE OF REPORT:

For Council's consideration of the proposed above-noted grant application under the Investing in Canada Infrastructure Program.

OPTIONS / ALTERNATIVES

1. THAT Council direct staff to apply to the Investing in Canada Infrastructure Program, Environmental Quality Component for the Tahsis Wastewater Treatment Reconfiguration and Upgrade Project; AND THAT the Capital Works Reserve Fund (current balance - $546,844) be confirmed as the funding source for the municipality's share ; AND FINALLY THAT staff be directed to include the project in the 2020-2024 Financial Plan;
2. Council direct staff to revise the scope and/or budget of the project for Council's consideration;
3. Council not approve proceeding with the grant application; or
4. Any other option that Council deems appropriate.

PROJECT DESCRIPTION AND RATIONALE:

McElhanney Ltd. recently conducted an evaluation of the Village's two wastewater treatment plants, including detailed condition assessments and recommendations for optimizing the community's management of liquid waste. (The McElhanney report is appended to this staff report for Council's information). The study determined that the smaller (South) treatment plant has enough capacity to handle the current and future demands of the community, allowing the North plant to be decommissioned, which has become increasingly challenging to operate.

The proposed project includes three key components:

- Reconfiguration of the wastewater collection system to redirect flows to the South plant;
- Decommissioning of the North plant; and
- Implementation of a series of required and recommended infrastructure renewal upgrades at the South plant to improve operational efficiency and extend usable life of the asset

Decommissioning the North Plant will enable the Village to save approximately $69,440 per year in costs associated with annual operations and maintenance; the reduction in energy demands will equate to a reduction of 1.6 tonnes of CO2 equivalent in GHG emissions annually.

The outfall of the North plant discharges into the mouth of the Tahsis River, which poses a risk to swimmers, fish (including salmon), mammals, birds and other species and possibly drinking water.

The North plant is located within the Tahsis River floodplain and is more susceptible to floods and potential Sea Level Rise. The South plant is at an elevation above the expected high water level tide for 2100, which is 5.1m above sea level. The North plant is also directly located adjacent to the Tahsis River and is at risk of bank failure due to long term erosion.

The North plant requires more maintenance and is at a higher risk of failure. It also requires more operator knowledge to get optimum results.

The North plant is the older of the two plants and is near the end of its useful life. The South plant is in considerably better condition. By continuing to operate the North plant, the Village is at risk of more significant mechanical failures and system downtime due to failures, which could result in more bypasses of effluent directly to the riverine/marine environment.

The North plant is located on a smaller parcel of land which has little room for future expansion such as a disinfection system, sludge storage and/or sludge dewatering if/when required in the future.

OPTIONS:

1. Status quo (do nothing) – many of the components of the Village's wastewater collection system and treatment plants are due for replacement, as identified and documented in the appended detailed condition assessment report. In addition, the North plant is becoming increasingly difficult to operate. The North plant, at some future point, will experience significant mechanical failures and system downtime which could result in more bypasses of effluent directly into the Tahsis River.

2. Repairs only (no reconfiguration) – this option may temporarily address the immediate repair requirements at the North plant but it does not address the operational challenges and the ongoing risk of more mechanical failures. Moreover, this option would not meet the eligibility requirements of the ICIP grant program.

POLICY/LEGISLATIVE REQUIREMENTS:

1. N/A

FINANCIAL IMPLICATIONS:

Total project cost:	$1,700,500
Grant request:	$1,246,977 (73.33% of total project cost)
Municipal contribution:	$453,523 (revenue source: Capital Works Reserve Fund)
Application Deadline:	February 26, 2020

STRATEGIC PRIORITY:

Yes:

Continue to seek grant funding to repair and replace infrastructure

RECOMMENDED RESOLUTION:

Moved, Seconded by Councillors _____

1. THAT Council direct staff to apply to the Investing in Canada Infrastructure Program, Environmental Quality Component for the Tahsis Wastewater Treatment Reconfiguration and Upgrade Project; AND THAT the Capital Works Reserve Fund (current balance - $546,844) be confirmed as the funding source for the municipality's share ; AND FINALLY THAT staff be directed to include the project in the 2020-2024 Financial Plan;

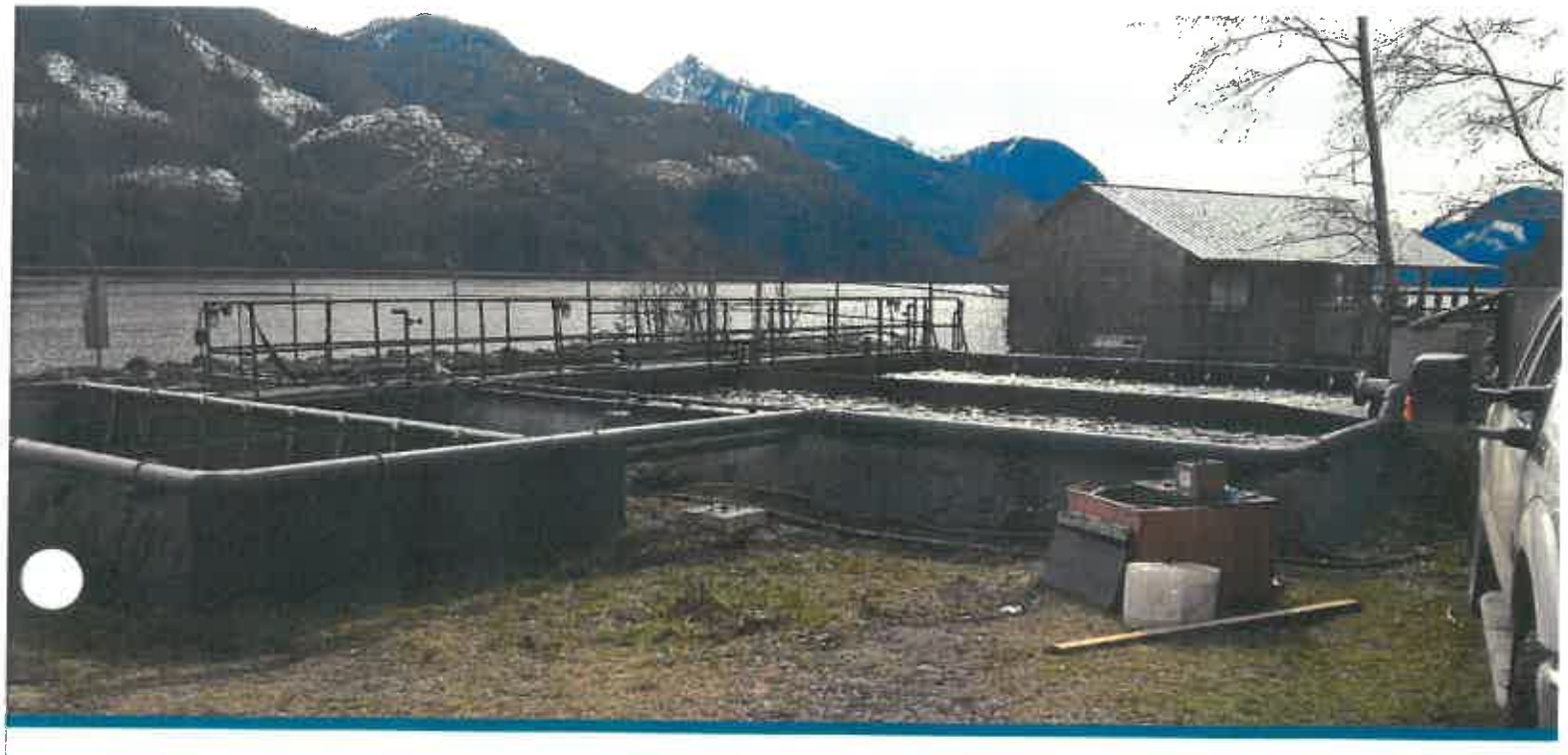
Respectfully submitted:

_____

Mark Tatchell, CAO

McElhanney

BEST MANAGED COMPANIES



Wastewater Treatment Review for the Village of Tahsis

January 15, 2020 | Revision #1

Submitted to: Village of Tahsis
Prepared by McElhanney

Contact
Mark DeGagné, PEng
Project Manager
250-287-7799
mdegagne@mcelhanney.com

Address
1196 Dogwood Street,
Campbell River, BC
V9W 3A2

Our file: 2221-49140-00 T2016

Your Challenge.
Our Passion.

Our File: 2221-49140-00 T2015

January 28, 2020

Village of Tahsis
977 South Maquinna Drive
Tahsis, BC, V0P 1X0

Attention: Mark Tatchell, CAO

Waste Water Treatment Plant Review – Final Report

With pleasure, McElhanney submits the attached final report to the Village of Tahsis, which summarizes the findings of our recent assessment of the Village's Waste Water Treatment Plants, and provides recommendation in regard to significantly streamlining the operations, while maintaining capacity in the system. To this end, it is concluded that all sewage collected in Tahsis should be directed to the South Treatment Plant, which is in better condition than the north plant, is easier to maintain and more cost effective to upgrade.

The enclosed report is the work of several parties including John Manson, PEng., external consultant to Tahsis; Lorne Sandberg of H2Ops, the Village's contract system operator and the Village's Public Works staff who assisted greatly with inspections. We trust the enclosed provide clear direction for the Village. Should you have any question, please contact the undersigned.

Sincerely,
McElhanney Ltd.

Mark DeGagné, Senior Municipal Engineer
mdegagne@mcelhanney.com | 250-287-7799

Contents

1. Introduction

The Village of Tahsis (the Village) has been experiencing significant change in recent years, after more than three decades of steady decline. The natural setting, public services and affordability have led to renewed interest in the community, which offers a peaceful natural environment with world class recreational experiences. Through the decline in population, the Village has struggled to properly maintain the two waste water treatment plants (WWTP) it owns, especially the plant that services the north part of town, which was built to service a vibrant community with two wood processing mills, a school full of children and stable population of about 2000 in the early 1980s. Now, at a population of about 250 permanent citizens, and a peak seasonal population of over 1000, Tahsis is a different community looking toward the future.

The Village is bisected by the Tahsis River resulting in two distinct neighbourhoods known as the North (Valley) and South (Townsite) sections. Each area is currently served by a dedicated WWTP. The following report summarizes a recent condition assessment of the Village's two waste water treatment plants (WWTP), and provides recommendations for optimizing the communities management of liquid waste. The focus of the report is to determine if the smaller South WWTP has enough capacity to handle the future demands of the community, allowing the abandonment of the North WWTP, which has become more and more operationally challenging. In addition, the North WWTP lies within the floodplain of the Tahsis River and at significant risk to flood damage, which could also lead to significant environmental harm.

The scope of work included:

- visual inspection and condition assessment of the major components of the South Wastewater Treatment Plant (WWTP) with the aeration basin drained and cleaned; and
- visual inspection and condition assessment of the North WWTP while in full operation.

The intent of the inspection was to provide a summary Technical Memorandum as a deliverable with the following content:

- inspection summary and recommended renewal items complete with photos and recommendations for repairs;
- capacity assessment based on the flow data, inflow characteristics, and expected efficiencies in the wastewater treatment process;
- recommendations for utilizing the South WWTP as the sole WWTP in Tahsis; and

- updated cost estimate with included recommendations for repairs and process modifications, as warranted.

2. WWTP Inspections

Before a description of the inspections is provided, a brief description of each plant's configuration is summarized below:

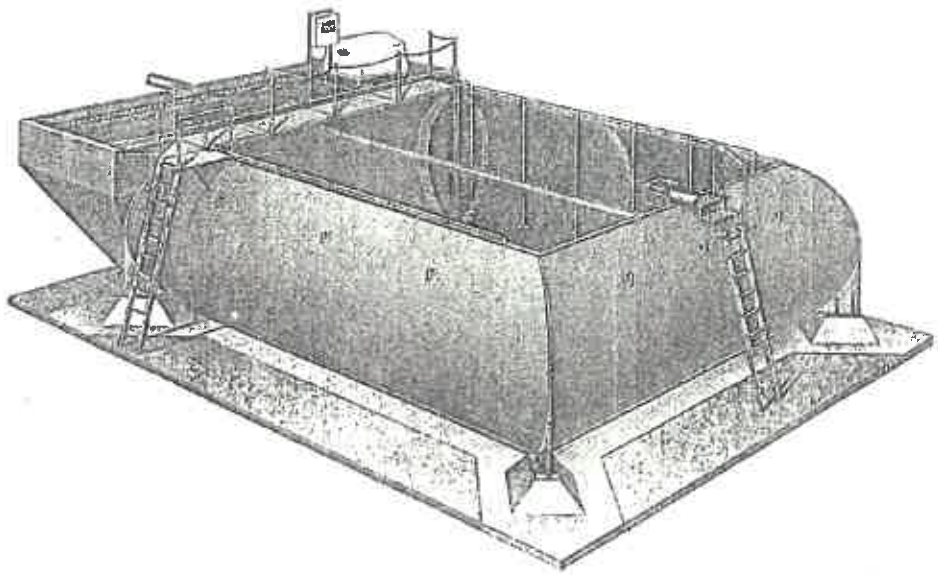
2.1. SOUTH WWTP CONFIGURATION

The South WWTP (Figure 1) currently treats sewage origination from the South section of Tahsis in an Extended Aeration Activated Sludge (EAAS) process. The WWTP includes the following components:

- coarse screening;
- rectangular aeration/equalization tank providing secondary sewage treatment;
- internal return activated sludge (RAS) recycle. Currently, four air lift pumps are used for internal sludge recycling and wasting. Four air lift pumps are also used for scum return;
- air distribution system c/w disk type diffusers. The total of twenty diffusers provides the process air supply;
- four secondary inverted cone type clarifiers;
- aerobic sludge digester/holding tank. The total of ten diffusers provides the process air supply; and
- operations building, housing three aeration blowers and electrical controls.

Sludge is periodically wasted from the bioreactor and stored/digested in an on-site aerobic digester prior to hauling off site. Effluent is currently discharged to a marine outfall with the permitted maximum capacity of 580 m^3/day (PE-3601). The Permit states that effluent Biochemical Oxygen Demand (BOD) and Total Suspended Solids (TSS) shall not exceed 45 mg/L and 60 mg/L, respectively. Effluent quality data from 2017 to 2019 indicate that the facility consistently meets effluent quality criteria.

Figure 1: South WWTP (*Smith & Loveless, 1975*)



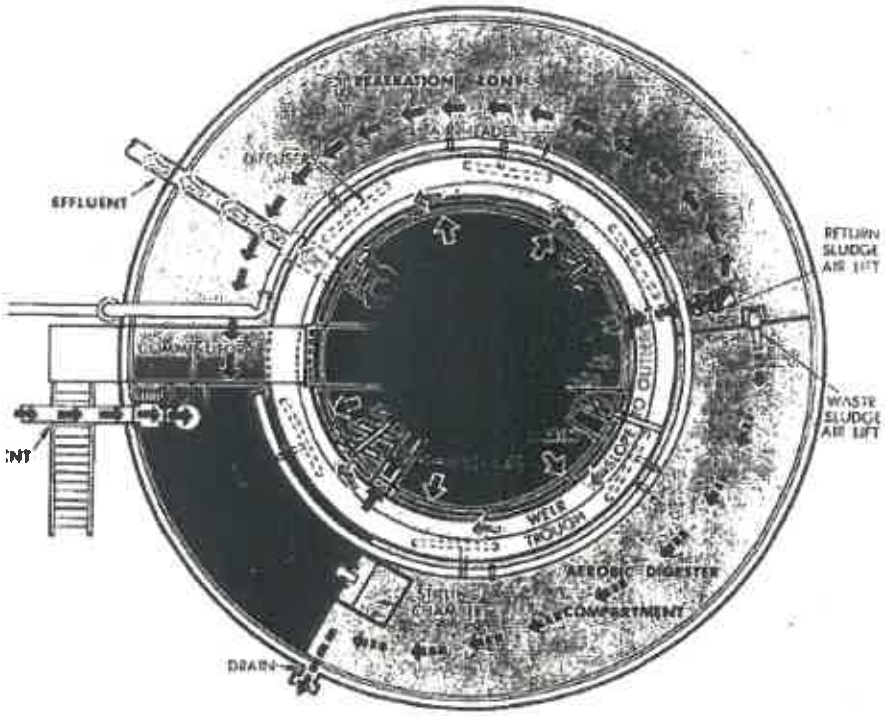
2.2. NORTH WWTP CONFIGURATION

The North WWTP (Figure 2) currently treats sewage origination from the North section of Tahsis in an EAAS process. The WWTP includes the following components:

- comminutor (macerator);
- circular aeration/equalization tank providing secondary sewage treatment;
- internal RAS recycle. Currently, air lift pumps are used for internal sludge recycling;
- air distribution system c/w disk type diffusers;
- secondary circular clarifier;
- aerobic sludge digester/holding tank; and
- operations building housing two aeration blowers and electrical controls.

Sludge is periodically wasted from the bioreactor and stored/digested in an on-site aerobic digester prior to hauling off site. Effluent is currently discharged through an outfall into the Tahsis Inlet with the permitted average capacity of 375 m^3/day (PE-321). The Permit states that effluent Biochemical Oxygen Demand (BOD) and Total Suspended Solids (TSS) shall not exceed 45 mg/L and 60 mg/L, respectively. Effluent quality data from 2017 to 2019 indicate that the facility consistently meets effluent quality criteria.

Figure 2: North WWTP (*Smith & Loveless*)



Visual inspection and condition assessment of both the South and North WWTPs was completed on September 17, 2019. The aeration tank of the South WWTP was completely drained and cleaned for the inspection while the North WWTP was in full operation. It should be noted that the primary focus of the inspection and condition assessment was on the South WWTP as the Village explores the possibility of using the South WWTP as the sole wastewater treatment plant in Tahsis.

2.3. SOUTH WWTP

The following was noted during the site visit (refer to Appendix 1, for inspection report):

- The interior condition of the bioreactor tank and side walls is very good considering the age of about 45 years. No signs of corrosion were noticed with the exception of surficial corrosion observed along the top edges of the aeration tank and in some localized areas on the external walls.
- An external tank inspection undertaken in January 2020 confirmed the outside of the tank, which has been buried below ground since its initial installation, is in good condition.
- The bioreactor concrete bottom is in good condition without the signs of corrosion and sulphur attack.
- Air manifold and aeration diffusers on the South side of the bioreactor have one vertical air distribution leg and diffuser missing.

- Air manifold and aeration diffusers on the North side of the bioreactor have two vertical air distribution legs and diffusers missing.
- Air header on the North side is broken. Consequently, this air header is not currently functional.
- Return Activated Sludge (RAS) trough has visible external corrosion.
- Light floatables (e.g., toilet paper, plastic bags, etc) are noticeable in the secondary clarifiers.
- The clarifier V-notch weir operation was assessed as adequate. The outflow measurement has been upgraded to an ultrasonic recorder with digital data logging capability. However, an allowance for upgrading or reconfiguration should be considered in light of possible increasing in flows to avoid backwatering, which leads to erroneous measurements.
- All air lift pumps were functional but pose operational issues with frequent disruptions and breakdowns.
- All access walkways are in need of renewal showing rust perforations and broken points of connection.
- All three blowers in the operations building were tested and demonstrated acceptable performance in terms of delivered air flows and pressures.
- Sludge digester was fully operational during the site visit. Mixing patterns and air supply observed in the tank were assessed as adequate. The sludge digester has settled approximately 70mm (3") from the west end to the east end, which requires correction for proper digester operation.
- The Village should consider implementing sludge handling facility as there are non at present, and there was significant sludge build-up in the aeration basin. As a minimum a sludge decanting/thickening tank should be installed to allow for sludge thickening and reduce sludge hauling costs.
- Ventilation fan in the operations building was not functional.
- Building and site improvements include interior upgrades for the washroom and possibly an eye wash station,

2.4. NORTH WWTP

Following the inspection of the South WWTP, the North WWTP was visited with Village staff and the following observations were made (refer to Appendix 1, for inspection report). Though the plant was functional, it bears distinct signs that it is at the end of its useful lifespan. The plant is an above ground steel tank structure which shows many areas of significant rust and deteriorated mechanical function, such as a clarifier rake that has not been working for years. Being the larger of the two plants, it requires more electrical energy to operate, as well as more dedicated labour resources.

- The interior condition of the bioreactor tank could not be assessed as the WWTP was fully operational.

- Interior tank walls in the vicinity of the flow weir have corroded significantly in many places, impacting the accuracy of outflow readings.
- Comminutor was not operational.
- Several vertical air distribution legs and diffusers were noted missing.
- Light floatables (e.g., toilet paper, plastic bags, etc) were reported to create operational issues.
- The secondary clarifier was reported to have a non-operational sludge rake mechanism on the bottom used for sludge collection.
- The clarifier V-notch weir operation was assessed as adequate. A new digital recording ultrasonic, level reader has been installed and is operational.
- All air lift pumps were functional.
- Both blowers in the operations building were tested and demonstrated acceptable performance in terms of delivered air flows and pressures.
- Sludge digester was fully operational during the site visit. Mixing patterns and air supply observed in the tank were assessed as adequate.
- The lift station, which pumps all collected effluent into the plant, is in need of significant repair, as the valves in the valve chamber have been leaking for sometime resulting in bypass of effluent and wasted energy consumption.

3. South WWTP Process Analysis

3.1. POPULATION DATA

According to Canada census data, the Village of Tahsis population was 248 people in 2016: a drop of 21.5% from 316 people in 2011. The community has 400 private dwellings, of which 152 homes are permanently occupied. Average household occupancy is 1.6 people/home. According to anecdotal information, the community population can increase to approximately 1,000 people during the summer period.

3.2. SOUTH WWTP DESIGN PARAMETERS

According to (Smith & Loveless, 1975), the South WWTP supplier, the bioreactor was designed for BOD loading of 77.2 kg/day with the total air supply of 1,095 cfm (1,362.6 m^3/day). Three blowers provide 365 cfm of air each totalling 1,095 cfm. Each blower is rated for 10 HP (7.5 kw).

Volumes of the bioreactor and digester tanks are 412 m^3 and 85 m^3, respectively. The process was originally designed for the population of 1,000 people, maximum flow of 580 L/capita/day, and organic loading of 77 gr/capita/day. Settling tank detention time is 3 to 4 hours. Hydraulic Retention Time (HRT) in the bioreactor is estimated at 17 hours at design flow of 580 m^3/day. The clarifier overflow rate is 2.2 m^3/m^2/hr at design flow.

3.3. OBSERVED FLOWS

Historical flow records for both the South and North WWTPs from 2017 to 2019 indicate inconsistencies in flow measurements (Figures 3 and 4). Reasons for this are unknown. For example, summer flows at the South WWTP are inexplicably low when the population in the Village reaches approximately 1,000 people. Flow data at the North WWTP show virtually no seasonal flow variations. Consequently, the flow data are considered unreliable and could not be used for the process analysis.

Figure 3: Historical Flow Records for South WWTP (2017 - 2019)

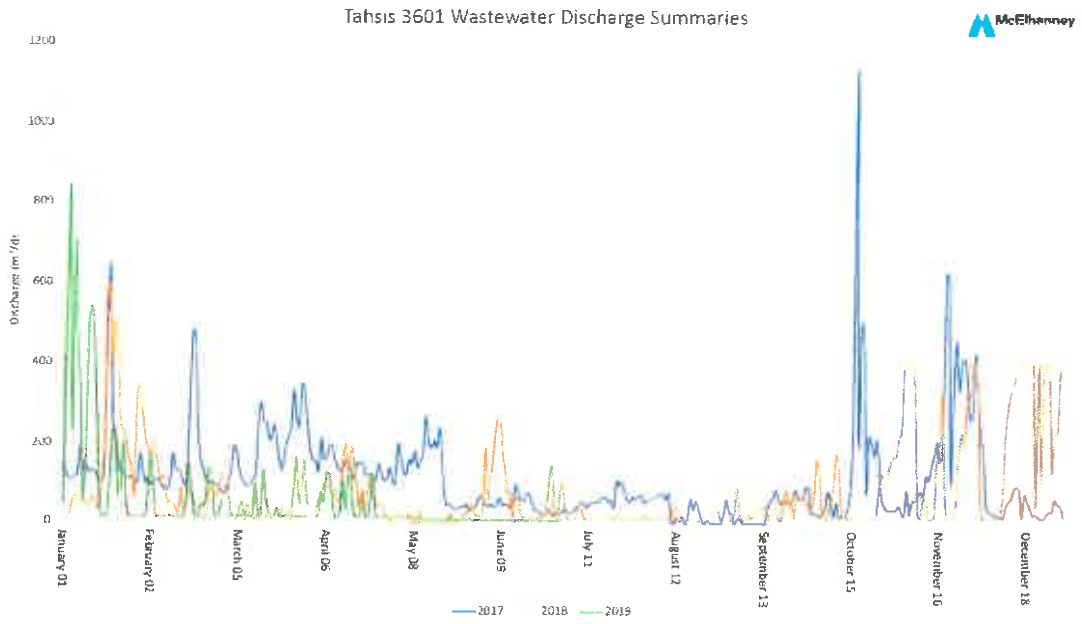
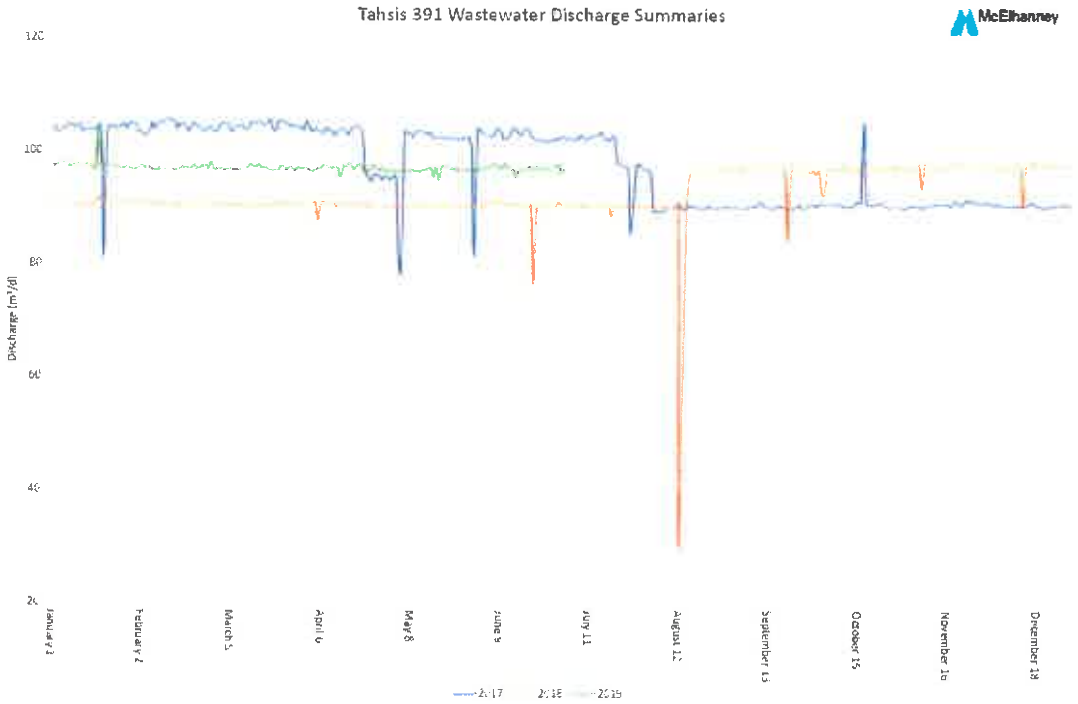


Figure 4: Historical Flow Records for North WWTP (2017 - 2019)



3.4. ESTIMATED DESIGN FLOWS

The estimated, more realistic Average Dry Weather Flow (ADWF), Maximum Day Flow (MDF), and Peak Wet Weather Flow (PWWF) of sanitary wastewater for the South WWTP, based on the design population of 1,000 people, are summarized in Table 1. The ADWF is used for the process design of a WWTP while the MDF is used for the hydraulic design. The PWWF is used for the design of the collection system.

Table 1: Flow Estimates

Parameter	Value	Units	Comments/Reference	Year	Cassidy Population	Population Growth	Pop. Growth per Year	Comment
ADWF (Note 1)	250	L/capita/day	Average Dry Weather Flow					
Home #	400	homes						
Dwelling Occupancy	2.5	people/home						
Population	1,000	people						
Peak Day Flow Factor	2.3	-	Maximum Day Flow; includes I/I component					
Peak Hour Flow Factor	3.8		Hydraulic peak flow factor; includes I/I component	Harmon	3.8	INAC	3.8	

Location	Population	Dwellings	Pop./Dwel. Ratio	ADWF (l/sec)	ADWF (m^3/day)	f_{day}	MDF (l/sec)	MDF (m^3/day)	f_{hr} -	PWWF (l/sec)	PWWF (m^3/day)
Tahsis	1,000	400	2.5	2.9	250	2.3	6.7	580	3.8	11.0	950

Notes:
Note 1 - Design Guidelines for Rural Residential Community Water Systems (MFLNRO, 2012)
ADWF - Average Dry Weather Flow
MDF - Maximum Day Flow
PWWF - Peak Wet Weather Flow

3.5. ORGANIC LOADINGS

The wastewater treatment plant organic loads based on the design population of 1,000 people are summarized in Table 2.

Table 2: Organic Loading

Parameter	Symbol	Units	Tahsis
Population			
Projected Population	P	people	1,000
Flow			
Average Day (Dry Weather) Flow	ADWF	m^3/day	250
Per Capita Hydraulic Loading at ADWF (ADWF/P)	Lcd	L/capita/day	250
Maximum Day Flow (f_{MDF}xADWF)	MDF	m^3/day	580
Maximum Day Flow Factor	f_{MDF}	-	2.3
Peak Wet Weather Flow	PWWF	m^3/day	950
Biochemical Oxygen Demand (BOD_5)			
Average Day (Dry Weather) per Capita Loading	grcd	gr/capita/day	80
Average Day (Dry Weather) Loading (Pxgrcd)	ADWL	kg/day	80
Average Day (Dry Weather) Concentration (ADWL/ADWF)	C_{ADWF}	mg/L	320
Max. Day Loading Factor	f_{MDL}	-	1.5
Max. Day Loading (f_{MDL}xADWL)	MDL	kg/day	120
Total Suspended Solids (TSS)			
Average Day (Dry Weather) per Capita Loading	grcd	gr/capita/day	80
Average Day (Dry Weather) Loading (Pxgrcd)	ADWL	kg/day	80
Average Day (Dry Weather) Concentration (ADWL/ADWF)	C_{ADWF}	mg/L	320
Max. Day Loading Factor	f_{MDL}	-	1.5
Max. Day Loading (f_{MDL}xADWL)	MDL	kg/day	120
Total Kjeldahl Nitrogen (TKN)			
Average Day (Dry Weather) per Capita Loading	grcd	gr/capita/day	12.5
Average Day (Dry Weather) Loading (Pxgrcd)	ADWL	kg/day-N	13
Average Day (Dry Weather) Concentration (ADWL/ADWF)	C_{ADWF}	mg/L	50
Max. Day Loading Factor	f_{MDL}	-	1.5
Max. Day Loading (f_{MDL}xADWL)	MDL	kg/day	19
Total Phosphorus (TP)			
Average Day (Dry Weather) per Capita Loading	grcd	gr/capita/day	2.5
Average Day (Dry Weather) Loading (Pxgrcd)	ADWL	kg/day-P	2.5
Average Day (Dry Weather) Concentration (ADWL/ADWF)	C_{ADWF}	mg/L	10
Max. Day Loading Factor	f_{MDL}	-	1.5
Max. Day Loading (f_{MDL}xADWL)	MDL	kg/day	3.8
Other Parameters			
Alkalinity		mg/L-$CaCO_3$	200 - 250
Min. Liquid Temperature		°C	10

Biochemical Oxygen Demand (BOD) and Total Suspended Solids (TSS) load calculations in Table 2 are based on average per capita BOD and TSS mass loads of 80 gr/capita/day. This load produces realistic BOD and TSS concentrations of 320 mg/L for medium strength sewage at ADWF. Average organic (BOD) load to the plant is 80 kg/day while the maximum load is 120 kg/day.

The Total Kjeldahl Nitrogen (TKN) load calculations are based on the average per capita TKN mass load of 12.5 gr/capita/day yielding the TKN concentration of 50 mg/L at Average Dry Weather Flow (ADWF) conditions.

The Total Phosphorus (TP) load calculations are based on the average per capita TP mass load of 2.5 gr/capita/day yielding the TP concentration of 10 mg/L at ADWF conditions.

Influent BOD, TSS, TKN, and TP are expected to be diluted during wet weather flow periods.

In accordance with *BC MOE, Environmental Management Act, Municipal Wastewater Regulation, BC Reg. 129/99, 2012 (MWR, 2012)* design criteria, and in absence of, or due to unreliable, site-specific flow data, the Maximum Day Flow (MDF) for design of a wastewater treatment facility is defined as 2 x ADWF. However, for the purposes of this assessment, the peak flow factor of 2.3 was used to closely match the permitted MDF for the South WWTP. A maximum day mass loading factor of 1.5 was assumed as an allowance for peak mass loading conditions in the design of a wastewater treatment facility.

3.6. PROCESS IMPLICATIONS

Typical design/operating parameters for the EAAS process and comparison to operational conditions at the South WWTP are provided in Table 3.

Table 3: Typical Operating Parameters for cBOD Reduction (*References: M&E, 1991; M&E, 2003; M&E, 2014*)

Parameter / Component	EAAS (Note 1)	South WWTP
Headworks	Screening (3-6 mm), Grit Removal (optional), Flow Equalization	Screening (est. 12 mm), Limited Flow Equalization inside the Bioreactor
F/M Ratio (kg BOD/kg MLVSS) (Note 2)	0.04 - 0.15	0.1 – 0.15 (assuming MLVSS concentration of 3,200 mg/L)
HRT (hours) (Note 3)	18 - 36	40 (ADWF) – 17 (MDF)
Volumetric Organic Loading (kg BOD/m^3/day)	0.1 - 0.40	0.2 – 0.3
MLSS (mg/L) (Note 4)	2,500 - 3,500	2,500 - 3,500 (assumed for inverted cone type clarifier)

Notes:
Note 1: EAAS – Extended Aeration Activated Sludge
Note 2: F/M – Food-to-Microorganisms Ratio; BOD – Biochemical Oxygen Demand; MLVSS – Mixed Liquor Volatile Suspended Solids
Note 3: HRT – Hydraulic Retention Time
Note 4: MLSS - Mixed Liquor Suspended Solids
BOD - Biochemical Oxygen Demand
ADWF – Average Dry Weather Flow; MDF – Maximum Day Flow

The process comparison indicates that the operational parameters of the South WWTP fall within typical operational parameters for the EAAS process. Air calculations indicate that one existing blower is able to meet process air requirements (Appendix 2). The second blower can be used to handle occasional shock loads or for the aerobic digester. The third blower can be used as spare.

4. Costs and Savings

4.1. ESTIMATED COSTS FOR UPGRADES

The cost estimate provided is a Class 'C' level estimate based on our recent experience with similar work in the area, and carries appropriate level contingencies, which will be refined as the project progresses through the design stages. According to the Engineers and Geoscientists of BC, a Class C estimate should be within ±25-40% of anticipated costs, which is prepared with limited site information and based on probable conditions affecting the project. It represents the summation of all identifiable project elemental costs and is used for program planning, to establish a more specific definition of client needs and to obtain preliminary project approval. On this basis, the estimated costs for the South WWTP upgrades and sewer collection system reconfiguration is $1,380,000, as shown on Table 4 below.

Table 4: Class 'C' Capital Cost Estimate

	Quantity	Unit	Unit Price	Cost
Soft Costs				
Mobilization/Demobilization	1	LS	$ 24,000	$ 24,000
Engineer Design and Contract Administration	1	LS	$ 125,000	$ 125,000
			Subtotal	$ 149,000
Required Upgrades				
Repair Local Areas of Corrosion and Paint	1	LS	$ 40,000	$ 40,000
New Aluminum Walkways	1	LS	$ 55,000	$ 55,000
Replace missing vertical air distribution legs, diffusers, and air headers	1	LS	$ 16,500	$ 16,500
Replace RAS Trough	1	LS	$ 32,000	$ 32,000
Exterior Upgrades: Roof, Fencing, Yard	1	LS	$ 34,000	$ 34,000
Replace a HVAC components in the operations building	1	LS	$ 15,000	$ 15,000
			Subtotal	$ 193,000
Recommended Upgrades for Improved Operations				
Purchase and Install Head End Screener (<6mm)	1	LS	$ 150,000	$ 150,000
Sludge Decanting/Thickening Tank incl pump and piping	1	LS	$ 110,000	$ 110,000
Backup Generator	1	LS	$ 85,000	$ 85,000
Monitoring, Instrumentation and Alarms (SCADA)	1	LS	$ 45,000	$ 45,000
Replace Clarifier Air Lift Pumps with Submersibles	1	LS	$ 27,500	$ 27,500
			Subtotal	$ 418,000
Collection System Re-Configuration				
Divert LS #4 to LS #6, new forcemain from NWWTP to old Firehall	350	LM	$ 450	$ 157,500
Bridge Crossing	55	LM	$ 500	$ 27,500
Gravity Sewer from Firehall to LS#6	430	LM	$ 450	$ 193,500
Conections	1	LS	$ 12,000	$ 12,000
Lift Station Upgrades	1	LS	$ 65,000	$ 65,000
			Subtotal	$ 456,000
			Construction Cost Subtotal	$1,216,000
General contingency allowance (25%)				$ 304,000
Contingency allowance for inflation and adminstration (15%)				$ 182,000
			Total (rounded to the nearest $10,000)	$1,700,000

4.2. ESTIMATED OPERATION AND MAINTENANCE SAVINGS

It is assumed that the decommissioning of the plant is cost neutral as there is salvage value in the structural steel tank, and it is assumed that salvage contractors would decommission the plant at zero cost to the Village in return for the salvage of the materials. Once the plant is shutdown, the Village will save considerable funds in annual operations and maintenance funds, as outlined below.

Annual estimated operation costs for labour	$ 37,440
Annual estimated operation costs for contract labour	7,000
Annual estimated maintenance costs for parts and external labour	6,500
Annual estimated energy costs for BC Hydro	18,500
Average Annual Estimated Savings	$ 69,440

In addition to the above monetary savings, the reduction in the energy demands for running the North WWTP will equate to a reduction of 1.6 tonnes of CO_2 equivalent green house gas emissions per year for the Village. This is in consideration of the 11 tonnes of CO_2 eq/gigawatt hour figure published by BC Hydro, and an average annual energy savings of about 145,000 kW-h. This is a conservative estimate of the GHG savings per year, as this number does not account for Village staff resources such as truck and equipment, which is likely to be in the several hundred kilograms of CO_2 equivalent green house gas emissions per year.

4.3. ADDITIONAL CONSIDERATIONS FOR SYSTEM RECONFIGURATION

In addition to the monetary and GHG considerations, there are a number of intangible considerations for transferring all sewerage to the South WWTP, and decommissioning the North WWTP, namely:

- The North WWTP outfall discharges into mouth of the Tahsis River, which poses a risk to swimmers, juvenile salmon, and possibly drinking water.

- The North WWTP is located within the Tahsis River floodplain and is more susceptible to floods and potential Sea Level Rise. The South WWTP is at an elevation above the expected high high-water level tide for 2100, which is 5.1m above sea level. The North WWTP is also located directly adjacent to the Tahsis River and is at risk of bank failure due to long term erosion.

- The more complex operation of the North WWTP requires more maintenance and a higher risk of failure. It also requires more operator knowledge to get optimum results.

- The North WWTP is the older of the two plants and is near the end of it's useful life. The South WWTP is in considerably better condition. It can be expected that by continuing to operate the North WWTP, the Village is at risk of more significant mechanical failures and system downtime due to failures, which could result in more bypasses of effluent directly to the riverine/marine environment.

- The North WWTP is located on a smaller parcel of land, which has little room for future expansion such as a disinfection system, sludge storage and/or sludge dewatering if/when required in the future.

- The North WWTP does not have the ability to take components out of service for maintenance without bypassing to the river, while recent changes to the South WWTP allow for the temporary maintenance of either the aeration basin, digester tank, or one of the three clarifiers.

5. Conclusions

The following conclusions are based on the inspections completed and the summary of process analyses provided above:

- The South WWTP can serve the population of 1,000 people, i.e., the entire population of the Village of Tahsis, in its existing EAAS configuration.
- The EAAS configuration will be able to meet currently permitted secondary effluent quality requirements.
- The air supplied by the existing blowers is adequate for the EAAS process and aerobic digester.
- The EAAS process lends itself to further upgrades and/or process retrofits to meet more stringent effluent quality requirements anticipated in the future.
- The North WWTP has reached its serviceable lifespan, and should be decommissioned, once collection systems from the north half of Tahsis are re-directed toward the South Waste Water Treatment Plant.

While existing discharges are typically grandfathered and exempted from having to meet new regulatory requirements, such as the Federal *Wastewater Systems Effluent Regulations* (*WSER, 2015*), the decision by the BC government, with consideration for the *WSER* requirements, to register all discharges under the harmonized (*MWR, 2012*), and/or increases in average annual wastewater flows greater than 10% of the currently authorized flows, are expected to trigger a requirement for compliance with the (*MWR, 2012*) in the future.

6. Recommendations

In order to improve the process reliability and prolong the asset longevity, the following work is recommended:

- Retain the existing Extended Aeration Activated Sludge (EAAS) process to continue serving the entire community.
- Upgrade an up-front coarse screen to a finer 6 mm mechanical screen.
- Repair areas of localized corrosion along the bioreactor tank top edges and on exterior walls.
- Repair/replace missing vertical air distribution legs, diffusers, and air headers.
- Consider replacing existing air lift RAS/WAS (return activated sludge/waste activated sludge) pumps with submersible pumps to provide more process flexibility and adaptability to varying operational conditions.
- Replace RAS trough.
- Repair/replace a ventilation fan in the operations building.
- Reconfigure the wastewater collection system to enable sewage diversion from the North section of the Village of Tahsis to the South WWTP.
- Retain blowers from the North WWTP and use them for potential future upgrades.

APPENDIX 1 – INSPECTION REPORTS

McElhanney

Site Inspection Report

CLIENT Village of Tahsis	PROJECT NUMBER 2221-49140-00
PROJECT LOCATION Village of Tahsis	
INSPECTOR(s) Dragan Rokic, Mark DeGagne	OTHER PERSONNEL Village of Tahsis Operations Staff

DATE (MM/DD/YY)	TIME	WEATHER	TEMP
09/17/2019	10 am to 2 pm	Rainy / Cloudy	12 C°

SCOPE OF INSPECTION

1. Visual inspection and condition assessment of the major components of the South Wastewater Treatment Plant (WWTP) with the aeration basin drained and cleaned;
2. Visual inspection and condition assessment of the North WWTP while in full operation;
3. The intent of the inspection is to provide a summary Technical Memorandum as a deliverable with the following content:
   a. Inspection summary and recommended maintenance items complete with photos and recommendations for repairs;
   b. Capacity assessment based on flow data, inflow characteristics, and expected efficiencies in the wastewater treatment process;
   c. Recommendations for utilizing the South WWTP as the sole Sewage Treatment Plant (STP) in Tahsis; and
   d. Updated cost estimate with included recommendations for repairs and process modifications, if warranted.

REMARKS (UNSAFE CONDITIONS, URGENT REQUIREMENTS, ETC)

PHOTOS

Figure 1: Aeration diffusers on the South side with one diffuser missing. Return Activated Sludge (RAS) trough is noted in the foreground with visible corrosion.

Figure 2 Aeration diffusers on the North side with two diffusers missing. Top edge of the aeration tank is in the foreground with visible corrosion.

Figure 3: Bioreactor steel side walls (west view) in the overall good condition.

Figure 4: Bioreactor steel side walls (east view) in the overall good condition.

Figure 5: Bioreactor concrete bottom (looking from North towards South) in overall good condition. Air header on the North side has a visible damage.

Figure 6: Bioreactor top edge showing signs of surficial corrosion; however, it is considered repairable.

Figure 7: Digestor basin appears to be in excellent condition with only minor corrosion of the structural steel at the top of the tank.

Figure 8: Original mixer unit at digestor not functioning.

Figure 9: Clarifier tanks were not inspected, but generally appear to be in similar condition to the rest of the underground steel components.

Figure 10: Outlet weir now equipped with an ultrasonic level meter. All appear to be in good condition and functioning to expectation.

Figure 11: Walkways and railing are in poor condition with significant corrosion damage. Photo also shows the poor condition of the sludge pumps from the clarifiers, which are performing adequately but are not without operational problems such as failures and plugging.

Figure 12: Control / Blower building is in good condition with only cosmetic defects noted.

Figure 13: All blowers were operated and noted to be in good operating condition. All internal piping was also noted to be in good operating condition.

Figure 14: Electrical cabinets were found to be in generally good condition. No assessment of the electrical equipment was made, but should be reviewed by a qualified professional, especially if future electrical upgrades are required.

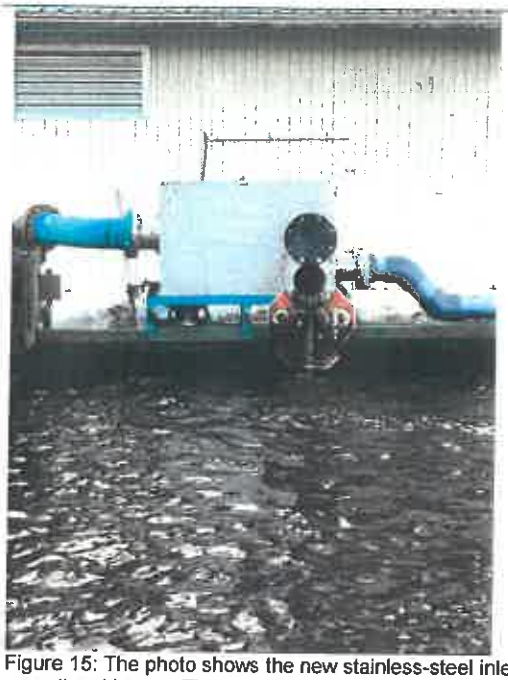


Figure 15: The photo shows the new stainless-steel inlet box, which is functioning well, but still allows "flushable" rags to pass creating some operational issues. The control building louvre appeared to be in good condition.

Figure 16: Interior walls are in good condition. Interior heaters and exhaust fans should be upgraded.

Figure 17: Photos Above are from September 2008 and show the control building and yard. The control building has not deteriorated significantly in 11 years and is functioning well. Additional rooms inside provide areas for expanded equipment if required. The yard photo shows room for expansion/modifications if required.

Dragan Rokic, P.Eng. & Mark DeGagné, P.Eng.

INSPECTOR'S SIGNATURE

McElhanney

Site Inspection Report

CLIENT Village of Tahsis	PROJECT NUMBER 2221-49140-00
PROJECT LOCATION Village of Tahsis	
INSPECTOR(s) Dragan Rokic, Mark DeGagne	OTHER PERSONNEL Village of Tahsis Operations Staff

DATE (MM/DD/YY)	TIME	WEATHER	TEMP
12/13/2019	2 pm to 4 pm	Cloudy	8 C°

SCOPE OF INSPECTION

1. Visual inspection and condition assessment of the major components of the North Waste Water Treatment Plant (North WWTP) in full operation.

REMARKS (UNSAFE CONDITIONS, URGENT REQUIREMENTS, ETC)

- Interior tank walls in the vicinity of the flow weir have corroded significantly in many places, impacting the accuracy of outflow readings.
- Exterior of the Tank shows significant signs of corrosion.
- Comminutor was not operational.
- Several vertical air distribution legs and diffusers were noted missing.
- Light floatables (e.g., toilet paper, plastic bags, etc.) were reported to create operational issues.
- The secondary clarifier was reported to have a non-operational sludge rake mechanism on the bottom used for sludge collection.
- The clarifier V-notch weir operation was assessed as adequate. A new digital recording ultrasonic, level reader has been installed and is operational.
- All air lift pumps were functional.
- Both blowers in the operations building were tested and demonstrated acceptable performance in terms of delivered air flows and pressures.
- Sludge digester was fully operational during the site visit. Mixing patterns and air supply observed in the tank were assessed as adequate.
- The lift station, which pumps all collected effluent into the plant, needs significant repair, as the valves in the valve chamber have been leaking for some time resulting in bypass of effluent and wasted energy consumption.

PHOTOS

Photo 1: Tank exterior and exterior piping showing significant corrosion.

Photo 2: Outlet weir box is significantly deteriorated leading to concerns with the outflow discharge measurements.

Photo 3: Clarifier Rake is detached and not working. Sludge build up is likely significant

Photo 4: Comminutor is not working and intake trash rack is not fine enough resulting in significant floating debris within the treatment plant.

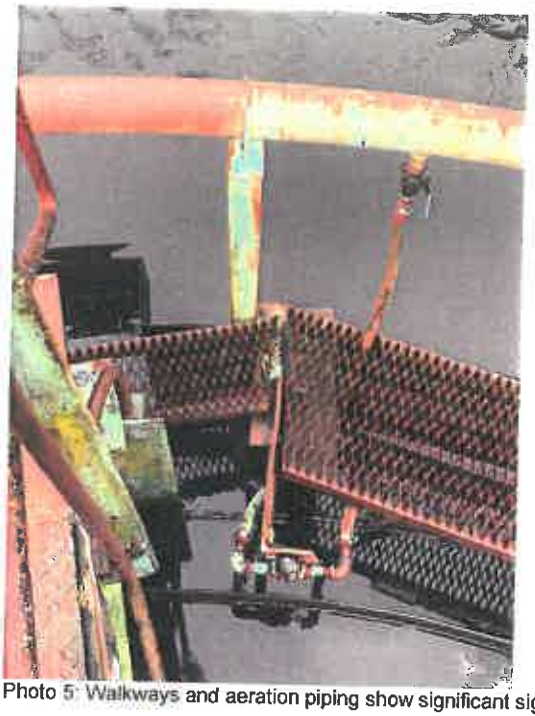


Photo 5: Walkways and aeration piping show significant signs of deterioration and corrosion.

Photo 6: Aeration system and blowers is in working order, but a few of the diffusers are in disrepair or missing.

Photo 7: Blowers are in good repair. If North Plant is shutdown these should be salvaged for use in the South Plant

Photo 8: Building is in relatively good condition with a steel roof, yard fencing is in disrepair, grounds are in good condition. This plant lies within the Tahsis River Floodplain.

Photo 9: The valve at the top of the photo leaks during pumping operations and requires replacement. The Lift Station, in general needs a complete mechanical overhaul

Photo 10: The interior of the North Treatment Plant Lift Station has had some recent minor repairs to the guide rails, but really needs to be renewed, complete with a new lid and safety grates.

Photo 11: The lift station electrical panel is in good condition. There is no backup generator for the lift station or the plant, which requires more energy for pumping and operation the South Waste Water Treatment Plant

Photo 12: The Interior of the Control / Blower building is in good condition with only cosmetic defects noted.

Photo 13: Recent instrumentation upgrades for the outflow level recorder are working well, but the plant should be upgraded with a broader monitoring instrumentation, controls and alarms. This leads to the potential requirement for a SCADA system

John Manson, P.Eng.

INSPECTOR'S SIGNATURE

APPENDIX 2 – AERATION CALCULATIONS

Process Air - Summer Operating Conditions

Parameter	Symbol	Value	Units	Comment
Actual Oxygen Rate (AOR)				
Design BOD		120.0	kg BOD/day	Peak day load
Design NH_3-N		0.0	kg NH_3-N/day	Peak day load
Air for BOD Oxidation		1.25	kg O_2/kg BOD/day	
Air for NH_3-N Oxidation		4.6	kg O_2/kg NH_3-N/day	
Air for BOD Oxidation		150.0	kg O_2/day	
Air for NH_3-N Oxidation		0.0	kg O_2/day	
Field Oxygen Transfer Rate	OTR	150.0	kg O_2/day	
Standard Oxygen Rate (SOR)				
DO Surface Saturation Concentration	C^*_{st}	8.263	mg/L	at wastewater operating temperature t
DO Surface Saturation Concentration	C^*_{s20}	9.092	mg/L	at standard temperature (20°C)
Temperature Correction Factor	τ	0.909		$\tau = C^*_{st}/C^*_{s20}$
Relative DO Saturation to Clean Water	β	0.95	-	Typically 0.95 - 0.98
Standard Barometric Pressure	P_s	101.325	kPa	at sea level
Barometric Pressure at Test Site	P_b	101.100	kPa	at elevation h; $P_b = P_s * \Omega$
Acceleration due to Gravity	g	9.810	m/s^2	
Air Molecular Weight	M	28.97	g/mole air	
Elevation	h	20.0	m	in meters
Universal Gas Constant	R	8,314	Nm/(mole air * K)	
Air Temperature	$T_{C\,air}$	35	°C	summer/winter; summer is critical
Temperature	T_{air}	308.15	K	T_{air} = 273.15 + °C
Pressure Corection Factor	Ω	0.998		$\Omega = P_b/P_s \cdot \exp(-gMh/RT_{air}))$
Diffuser Depth	D_f	2.50	m	in bioreactor
Mid-Depth Correction Factor	d_e	0.40	-	Typically 0.25 - 0.45 (0.40)
Saturated DO Value at Sea Level	$C^*_{\infty 20}$	9.97	mg/L	$C^*_{\infty 20} = C^*_{s20}\,[1+d_e(D_f/P_s)]$ at standard temperature (20°C)
Average DO Concentration	C	2.0	mg/L	in bioreactor
Empirical Temperature Correction Factor	θ	1.024	-	typically 1.024
Wastewater Field (Operating) Temperature	t	25	°C	summer/winter; summer is critical
Standard Temperature	T_s	20	°C	
Relative Oxygen Transfer Rate	α	0.65	-	in process water versus clean water; typically 0.4 - 0.8 for diffused aeration
Fouling Factor	F	0.80		typically 0.65 - 0.9 for diffused aeration
OTR/SOTR		0.39	-	$OTR/SOTR = [(\tau\beta\Omega C^*_{\infty 20}-C)/C^*_{\infty 20}]*[\theta^{t-Ts}]\alpha F$
Oxygen Transfer Rate under Standard Conditions	SOTR	387.7	kg O_2/day	
Air Mass and Volume				
Percent of Oxygen by Weight	$O_{2\,by\,weight}$	23.18	%	in air
Diffuser Oxygen Transfer Efficiency	OTE	6.5	%/m	of tank depth (fine bubble diffusers)
Total Oxygen Transfer Efficiency	OTE_{tot}	16.3	%	$OTE_{tot} = OTE * D_f$
Mass Air Flow	Q_{mass}	10,292	kg/day air	$Q_{mass} = SOTR/(O_{2\,by\,weight} * OTE_{tot})$
Air Density	ρ_{air}	1.146	kg/m^3	$\rho_{air} = P_s M/RT_{air}$
Air Volume	$Q_{air,d}$	8,982	m^3/day	of air; $Q_{air,d} = Q_{mass}/\rho_{air}$
Air Volume	$Q_{air,hr}$	374	m^3/hour	of air; $Q_{air,hr} = Q_{air,d}/24$
Air Volume	$Q_{air,min}$	6.2	m^3/min	of process air; $Q_{air,min} = Q_{air,d}/1440$
Air Volume	$Q_{air,min}$	220	cfm	of process air; $Q_{air,min} = Q_{air,d}/1440$

Blower Power

Process Blower				
Air Flow in Ambient Condition	Q_{air}	6.2	m^3/min	
Inlet Pressure (Absolute)	P_1	101.100	kPa	barometric pressure at test site
Outlet Pressure (Absolute)	P_2	150.000	kPa	
Pressure Differential		48.9	kPa	
Pressure Differential		489	mbar	
Pressure Differential		7.1	psig	
Blower Efficiency	e_B	0.7		
Motor Efficiency	e_M	0.8		
Blower Power	P_w	7.6	kW	
Blower Power	P_w	10.3	HP	

Contact
Mark DeGagne, PEng
250-203-1520
mdegagne@mcelhanney.com

McElhanney

CANADA BEST MANAGED COMPANIES

100 Ouwatin Rd.
Box 459
Gold River, B.C. V0P 1G0

Phone: (250) 283-2015
Fax: (250) 283-2335
Website: www.yuquot.ca

Mowachaht/Muchalaht First Nation

January 7, 2020

Village of Tahsis
977 South Maquinna Drive
PO Box 219 Tahsis BC
V0P 1X0

Attention: Mark Tatchell, CAO

Dear Mark,

RE: Village of Tahsis Wasewater Comprehensive Improvement Project

On behalf of the Council of Chiefs for Mowachaht/Muchalaht First Nation, they would like to confirm their support to the Village of Tahsis for the grant application with respect the above named project.

The Council of Chiefs believe it is very important for Tahsis to ensure compliance with provincial and federal regulations regarding effluent discharge. With such an important project, we are hopeful that you are successful in obtaining this grant.

Please feel free to contact me if you require anything further.

Sincerely,

Kevin Kowalchuk
Administrator
Mowachaht/Muchalaht First Nation