



## AGENDA

Agenda for the Regular Meeting of the Tahsis Village Council  
to be held on September 15, 2020 in the Council Chambers  
Municipal Hall, 977 South Maquinna Drive and by electronic means

**Remote access:** To attend this meeting remotely via Zoom/ phone

**Join the Zoom Meeting**

<https://zoom.us/j/7473599558>

**Dial by your location**

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**Meeting ID: 747 359 9558**

**Find your local number:** <https://zoom.us/j/7473599558>

**A. Call to Order** Mayor Davis will call the meeting to order at 7:00 p.m.

Mayor Davis will acknowledge and respect that we are meeting upon  
Mowachaht/Muchalaht territory.

**B. Introduction of  
Late Items**

**C. Approval of the  
Agenda**

**D. Petitions and  
Delegations**

**None.**

**E. Public Input # 1**

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**F. Adoption of the  
Minutes**

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

**G. Rise and Report**

- H. Business Arising**
- 1 **Monitoring Well Installation and Groundwater Sampling Program Summary (Well Head Protection Plan)**
  - 2 **Re: Paracy, Terry 374 Alpine View Road: Failure to Comply with Notice issued on August 10, 2020 under the Property Maintenance Regulation Bylaw No. 614, 2019**
  - 3 **Report to Council Re: April 30, 2020 Power Outage- For Information**
- J. Council Reports**
- 1 **Mayor Davis**
  - 2 **Councillor Elder**
  - 3 **Councillor Fowler**
  - 4 **Councillor Llewellyn**
  - 5 **Cheryl Northcott**
- K. Bylaws**                      **None**
- L. Correspondence**
- 1 **Letter of Complaint to Mayor and Council from Jane Barlow Re: Headbay FSR.**
  - 2 **Email from Geoffrey Denman, Senior Search and Rescue Program Officer, Canadian Coast Guard Re: Inshore Rescue Boat Program**
  - 3 **Letter from Don Beamin, Acting President, Tahsis Salmon Enhancement Society Re: Tahsis Hatchery -Water Line In-feed System**
  - 4 **Letter from Shaye Draper, General Management, Customer Solutions Delivery, Telus Re: Prioritization of Rural Connectivity Across Canada**
- M. New Business**                      **None.**
- N. Public Input #2**
- 
- 

## **Rise and Report**

## **P. Adjournment**



## Minutes

<b><u>Meeting</u></b>	<b>Regular Council</b>
<b><u>Date</u></b>	<b>01-Sep-20</b>
<b><u>Time</u></b>	<b>7:00 PM</b>
<b><u>Place</u></b>	<b>Municipal Hall - Council Chambers and by electronic means</b>

<b><u>Present</u></b>	Mayor Martin Davis Councillor Bill Elder Councillor Sarah Fowler Councillor Lynda Llewellyn Councillor Cheryl Northcott	by video by video
<b><u>Staff</u></b>	Mark Tatchell, Chief Administrative Officer Ian Poole, CPA, CA, Director of Finance Jason Kydd, Acting Fire Chief Janet StDenis, Finance and Corporate Services Manager	by video by video by video
<b><u>Guests</u></b>	Colin Filliter, RPF, SauvAir Cynthia Lu, RPF, SauvAir Leigh Stalker, RPF, Senior Forester, Strategic Natural Resource Consultants Inc. Stephane Valdal, Services Coordinator, CSWM	by video by video by video by video
<b><u>Public</u></b>	3 members of the public	by phone/ video

### **A. Call to Order**

Mayor Davis called the meeting to order at 7:03 p.m.  
Mayor Davis acknowledged and respected that Council is meeting upon Mowachaht/ Muchalaht territory

### **B. Introduction of Late Items and Agenda Changes**

Under New Business as "M3" a motion by Councillor Fowler regarding the selection of a youth delegate for UBCM.

### **C. Approval of the Agenda**

**Fowler/Elder: VOT 0359/2020**

**THAT** the Agenda for the September 1, 2020 Regular Council meeting be adopted as amended.

**CARRIED**

### **D. Petitions and Delegations**

**None.**

### **E. Public Input # 1**

None.

#### **F. Adoption of the Minutes**

##### **1 Minutes of the Regular Council Meeting held on August 4, 2020.**

**Fowler/Elder: VOT 0360/2020**

**THAT** the Regular Council meeting minutes of August 4, 2020 be adopted as presented.

**CARRIED**

##### **2 Minutes of the Special Council Meeting held on August 18, 2020.**

**Fowler/Elder: VOT 0361/2020**

**THAT** the Special Council Meeting minutes of August 18, 2020 be adopted as presented.

#### **G. Rise and Report**

At the August 18, 2020 Closed Committee of the Whole Meeting Council elected to submit a grant application for the Loading Pier and the Boat Launch Plan as per the McElhanney report to the Investing in Canada Infrastructure Program.

#### **H. Business Arising**

##### **1 Comox Strathcona Waste Management Service**

**Stephanie Valdal, Services Coordinator, CSWM: Tahsis Composting Pilot Project- Status Update**

Stephanie Valdal provided Council with two options for a modified composting program and responded to questions from Council.

**Fowler/Elder: VOT 0362/2020**

**THAT** this update be received.

**CARRIED**

**Fowler/Elder: VOT 0363/2020**

**THAT** option #1 as per the modified composting program be approved.

**CARRIED**

##### **2 The Village of Tahsis Community Wildfire Protection Plan**

Cynthia Lu and Colin Filliter briefed Council on the Tahsis Community Wildfire Protection Plan and responded to questions from Council.

The Acting Fire Chief, Jason Kydd noted that the plan recommendations which have already been implemented.

**Fowler/Elder: VOT 0364/2020**

**THAT** the Village of Tahsis Community Wildfire Protection Plan be received.

**CARRIED**

**Fowler/Elder: VOT 0365/2020**

**THAT** the Village of Tahsis Community Wildfire Protection Plan be approved.

**CARRIED**

#### **J. Council Reports**

**Mayor Davis** (written report)

At the last regional district meeting, we approved the Home Away From Home project, for funding temporary accommodations for patients and family members using Campbell River Hospital. This is primarily intended for the small communities such as ours and is most welcome.

At our last council meeting, we approved a 25% rent reduction from April 1, 2020 until December 31, 2020 for all village business tenants, due to the Covid issue and pursuant drop in tourism this year. This is intended to compensate for their not qualifying for other government Covid-related grants relating to rent reductions or deferrals.

We are currently applying for large grant to build a new wharf for town. Our two municipal wharfs are either condemned or in poor condition so lets cross our fingers on this one.

Bylaw enforcement issues are a constant concern for us since losing our acting officer earlier this year. Currently, staff are dealing with some of the issues while the regional district has promised to assist until we can successfully recruit an officer to deal with the backlog.

I went for a walk at Pete's Farm after we had a user group in for four days. The Centre for Spiritual Living used the site for workshops and talks. In exchange, they cleared much of the site, filled a Public Works truck with garbage that went to the dump, made some signs and benches and even pulled the old paddock fence out of the river. Public works provided a portapotty and garbage bin, cleared a parking space on the way in, and also placed a steel plate over the old bridge so that it is driveable for vehicles. At no time was the site closed to the public and some Tahsis citizens visited, including myself. I would like to thank Margarita James for speaking to us about First Nation history of the area and Tony Ellis, who spoke about the history of Pete's Farm. I also gave a talk about caves, bats, conservation and the differences that individuals and groups can make in improving our environment. No money was exchanged between the Village and the Centre in this endeavour, but in-kind labour was provided on both sides. They did spend money in the town on accommodations and building supplies. They definitely left Pete's Farm in better condition than they found it! As always, the site is open to the public and Council will entertain any proposals from citizens to use or improve the site. In the long run, we will be fixing the bridge and removing the old derelict vehicles from the site.

I would also like to note the passing of Richard Illes, a longtime resident of our community and former mill manager back in the day. I know his family was there with him and I send condolences to them and particularly his wife, Birte.

I would also note the passing of Chief Norman George of the Mowachaht Muchalaht First Nation and we will be sending our condolences.

**Councillor Elder** (verbal report)

A long time Tahsis resident Karen Schievink recently passed away.

**Councillor Fowler** (written report)

Great to hear about Home Away From Home program near the Campbell River Hospital.

This afternoon I was listening to Dr. Henry talk about the mushy middle and how we are going back to school this fall with consciousness to cleanliness and contact tracing. I had a meeting today with Mr. Baron; the schools principal to enrol my youngest on kindergarten. It's quite an education. Nootka Sound outdoor program has a found a replacement for Ms. Jones but this new teacher doesn't have any hours in our school.

The alive together; journey into self retreat with Campbell River's Spiritual Living Centre member's was a resounding success. I consider it a collaborative place making effort and think its awesome that Missy emptied out all the garbage out of the old bus. I also love the way Janine made welcome signs and Colette arranged a labyrinth made from wooden nickels. Eric, Christine, Bill and Jill made huge efforts at revitalizing the farm, heritage site. I can only hope Pete would be proud.

Lastly I have included in the attached email from Karenn Bailey about the #salmon story kiosk.

Submitted respectfully,  
Councillor Fowler

Attachment- Salmon Story - Sea to Tree Drive

**Councillor Llewellyn**

No report.

**Councillor Northcott**

No report.

**Fowler/Elder: VOT 0366/2020**

**THAT** the Council Reports be received.

**CARRIED**

**K. Bylaws**

None.

**L. Correspondence**

1

**Email from the Village of Kaslo to Mayor and Council Re: A Strategy for Rural Economic Development Through Health Care**

- 2 Letter from Minister Selina Robinson and the UBCM submission that were provided to Premier John Horgan and Finance Minister Carole James as a contribution to the Province's economic recovery engagement process.

- 3 Mayor Lori Ackerman, City of Fort St. John letter to Premier John Horgan Re: BC Utilities Commission's Approval of BC Hydro's Application to Amend the Net Metering Service under Rate Schedule 1289

- 4 The Office of the Ombudsperson Re: Investigation Closing Summary

- 5 Recycling Council of British Columbia letter Re: Proclaiming your support for waste reduction week in Canada.

- 6 Email from Linda Jordan Re: Bylaw 614

**Fowler/Elder: VOT 0367/2020**

**THAT** these correspondence items be received.

**CARRIED**

**Fowler/Elder: VOT 0368/2020**

**THAT** correspondence items #2,5 and 6 be pulled for discussion.

**CARRIED**

- L2 Letter from Minister Selina Robinson and the UBCM submission that were provided to Premier John Horgan and Finance Minister Carole James as a contribution to the Province's economic recovery engagement process.  
Councillor Fowler spoke to this letter.

- L5 Recycling Council of British Columbia letter Re: Proclaiming your support for waste reduction week in Canada.  
There was a brief discussion.

**Llewellyn/Elder: VOT 0369/2020**

**THAT** the Village of Tahsis hereby recognize Waste Reduction Week in Canada, October 19-25, 2020.

**CARRIED**

- L6 Email from Linda Jordan Re: Bylaw 614

A discussion followed. Strathcona Regional District will be providing Tahsis with an interim Bylaw Officer.

#### **M. New Business**

- M1 Email from the Ministry of Forests, Lands, Natural Resource Operations and Rural Development Re: Tahsis Salmon Enhancement Society  
The CAO spoke to this item of business.



**Fowler/Elder: VOT 0370/2020**

**THAT** this email from the Ministry of Forests, Lands, Natural Resource Operations and Rural Development be received.

**CARRIED****Fowler/Elder: VOT 0371/2020**

**THAT** the Village grant permission for the Tahsis Salmon Enhancement Society to use a portion of the Village owned property (Lot 64, Plan VIP24168, District Lot 595, Nootka Land District) for purposes of operating a salmon hatchery and all related activity.

**CARRIED**

- 2 Leigh Stalker, Senior Forester- Strategic Natural Resource Consultants Inc. Re: Request for a letter of authorization from the Village of Tahsis to carry out riparian restoration on municipal lands**

Leigh Stalker spoke to her request and responded to questions from Council. (presentation attached).

**Fowler/Elder: VOT 0372/2020**

**THAT** this email and presentation be received.

**Fowler/Elder: VOT 0373/2020**

**THAT** the Village of Tahsis send a letter of authorization to Strategic Natural Resource Consultants Inc. to carry out riparian restoration on municipal lands within the Village of Tahsis.

**CARRIED**

- 3 Councillor Fowler: Motion to submit Brody Eldridge's name to UBCM to be considered for the youth representation delegate.**

**Fowler/Elder: VOT 0374/2020**

**THAT** this motion be received.

**CARRIED****Fowler/Elder: VOT 0375/2020**

**THAT** Brodie Elderidge be selected as the Village of Tahsis' youth UBCM delegate

**CARRIED****N. Public Input #2**

A member of the public thanked Council for approving the "Summer Market".

**Adjournment**

**Fowler/Elder: VOT 0376/2020**

**THAT** the meeting be adjourned at 8:50 p.m.

**CARRIED**

**Certified Correct this**

15th Day of September, 2020

**Chief Administrative Officer**



# NOOTKA SOUND WATERSHED SOCIETY

[www.nootkasound.info](http://www.nootkasound.info)

PO 293 • Gold River • BC • V0P 1G0

To: Councillor Sarah Fowler,  
Village of Tahsis

September 1, 2020

Cc: Dorothy Hunt, Lands and Economic Development  
Lands and Resources, Mowachaht/Muchalaht First Nation  
Kent O'Neil, President of the Nootka Sound Watershed Society

**RE: Project Brief: The Salmon Story, Augmenting Points of Interest on the Tree to Sea Drive.**

Dear Ms. Fowler,

I would like to present to you a concept for adding interest to the Sea to Tree Drive that aims to meet our twin goals of salmon education (Nootka Sound Watershed Society) and the Village's desire to create public attractions that draw visitors to Tahsis and/or enhance tourist and locals enjoyment of the magnificent natural setting for Mayor and Council, and the citizens of Tahsis and Mowachaht/Muchalaht to consider. The Nootka Sound Watershed would be interested in supporting this initiative as it aligns with Coastal Restoration Fund requirement, namely placement of lasting interpretative signage.

The Investing in Canada Infrastructure Program, BC Community Culture and Recreation Infrastructure grant may be a good fit, and has a **deadline of October 1<sup>st</sup>**. If Mayor and Council are interested in this initiative, I would suggest that a grant be developed that funds exploratory research and preliminary costs with a deliverable being feasibility study including risks and challenges, signage content and template with site cards that could be further developed into over time as funds become available. For example, if signage and structures were consistent from site to site, then funding for a kiosk or sign at Head Bay Viewing Site could be funded by a BirdLife or Ducks Unlimited grant, or at the MMFN IR site near Tahsis (should they wish to participate) a kiosk could be funded through First Peoples 'Cultural Council.

Below is an excerpt "sketch" to give you a sense of the initiative and some proposed locations and signage ideas. I believe the concept is in keeping with the MMFN and Village of Tahsis economic development thrust showcasing the natural capital of the region.

I hope you find this Briefing Note valuable and the initiative worthy of future investigation. I am happy to provide a more in-depth draft plan, and assist the development of this idea or a grant.

Thank you,

*Karen Bailey*



# NOOTKA SOUND WATERSHED SOCIETY

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## Sea to Tree and the Salmon Story

### Background:

The Nootka Sound Watershed Society is obliged to create permanent interpretive signage as part of the ‘Silviculture for Salmon’ project. Working in the Gold River to Tahsis corridor this summer inspired me to take this obligation to the next level. Inspiration came in the form of vignettes placed at existing sites on the Tree to Sea Drive sites.

While out in the corridor I enjoyed recreating on trails, campsites and had occasion to tour the hatcheries and play in streams and estuaries. I recently discovered The Investing in Canada Infrastructure Program, BC Community Culture and Recreation Infrastructure grant and thought it could be a good fit for an expanded version of the Salmon Story that ties in with recreational site and trail location improvements. These upgrades and new amenities would benefit locals and visitor’s alike, and combined with the draw of a formalized series of Salmon Story interpretative signage, be a draw for visitors to explore beyond Strathcona Preclinical Park, and even beyond Gold River to Tahsis.

My inspiration is in part my role as Stewardship Coordinator with the Nootka Sound Watershed Society, but also in studying Tourism Management at Royal Road (MA). I have nine years work experience in parks and protected areas and the blending of all this comes together in an idea for a comprehensive plan integrating existing amenities and facilities and attractions highlight natural assets of the area with education and thoughtful, wise use/development. Let’s start with engaging interpretive signage:

### **Example One: Three Sisters Falls**

UTM 9U 676721E 5523788N



Good flow in summer low flow (year-round attraction). Salmon Story opportunity: (illustrate graphically) explain why cold-water is critical to salmonids and add text about climate change and specific to the area. Graphically illustrate the salmonid species that live in this stream, their life stages and other interesting tid bits found through research/talking with locals and elders.

Pull-out sufficient (but needs brushing to be effective) but would be better as a pull-through (as is not suitable for truck pulling boat or trailer and signage) or multi vehicle parking. A ‘heads up’ sign half a kilometer before would be helpful.

A trail to the falls is recommend. Facilities recommended include a garbage can and toilet, geo cache along the path and a sitting place/picnic area within view of the falls.

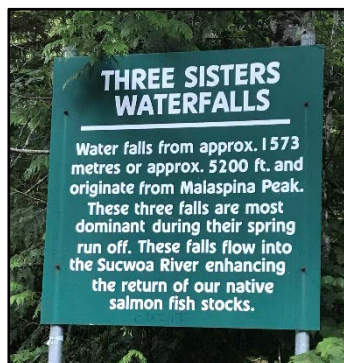


# NOOTKA SOUND WATERSHED SOCIETY

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## Three Sisters falls cont.



## Example Two: Conuma Hatchery

UTM 9U 685600E 5519713 N



Place a kiosk/sign at the Conuma Hatchery entrance (opposite side this sign). The Salmon Story opportunity at this location is to describe the role DFO and volunteer hatcheries play to salmon populations, and highlight programs unique to the west coast Vancouver Island including novel technology or developing research. I had an idea that a summer Intern with the NSWS could, in collaboration with Hatchery Staff provide tours one day a week through the summer.

An opportunity exists to increase public traffic to this sign by re-establishing a campsite or picnic ground at the nearby Conuma Rec Site where there is currently no facilities. This site was not identified in the BC Rec Sites and Trails inventory and need investigation. The Salmon Story at the Conuma Rec Site is ideal to speak about river fishing techniques and spawning cycles etc..

## Example Three: Upana Caves

UTM 9U 698171E 5522076N



This location is popular and additional parking is recommended as it is often over subscribed. A toilet upgrade and garbage can would be beneficial also. The Salmon Story opportunity here is to speak to the nutrients offered by karsts to support fish production, and tell of a little known fact that fish in some karst systems can swim through to the other side.

People observed picnicking on the bridge sill log suggest that locating a picnic area at Nearby Bull Lake would be well suited.





# DFO-CRF Project: Nootka Sound Chinook Salmon River Habitat Riparian Project

Village of Tahsis, Sept 2020



## Project Overview

- **DFO – Coastal Restoration Fund**
  - 3 Years: 2019-2022
  - Total fund: \$904,009  Fisheries and Oceans Canada Pêches et Océans Canada
- *“This project will accelerate the recovery of riparian forest on six Chinook salmon streams in Nootka Sound. The project is intended to assess and treat streamside vegetation to accelerate the recovery of mature forest cover, improve bank cohesion, and future large woody supply, which will improve channel morphology processes on the six streams.”*
- Sucwoa River, Chum Creek, Little Zeballos River, Tahsis River, Leiner/Perry River and Tsowwin River





## Project Overview (Koning, 1999)

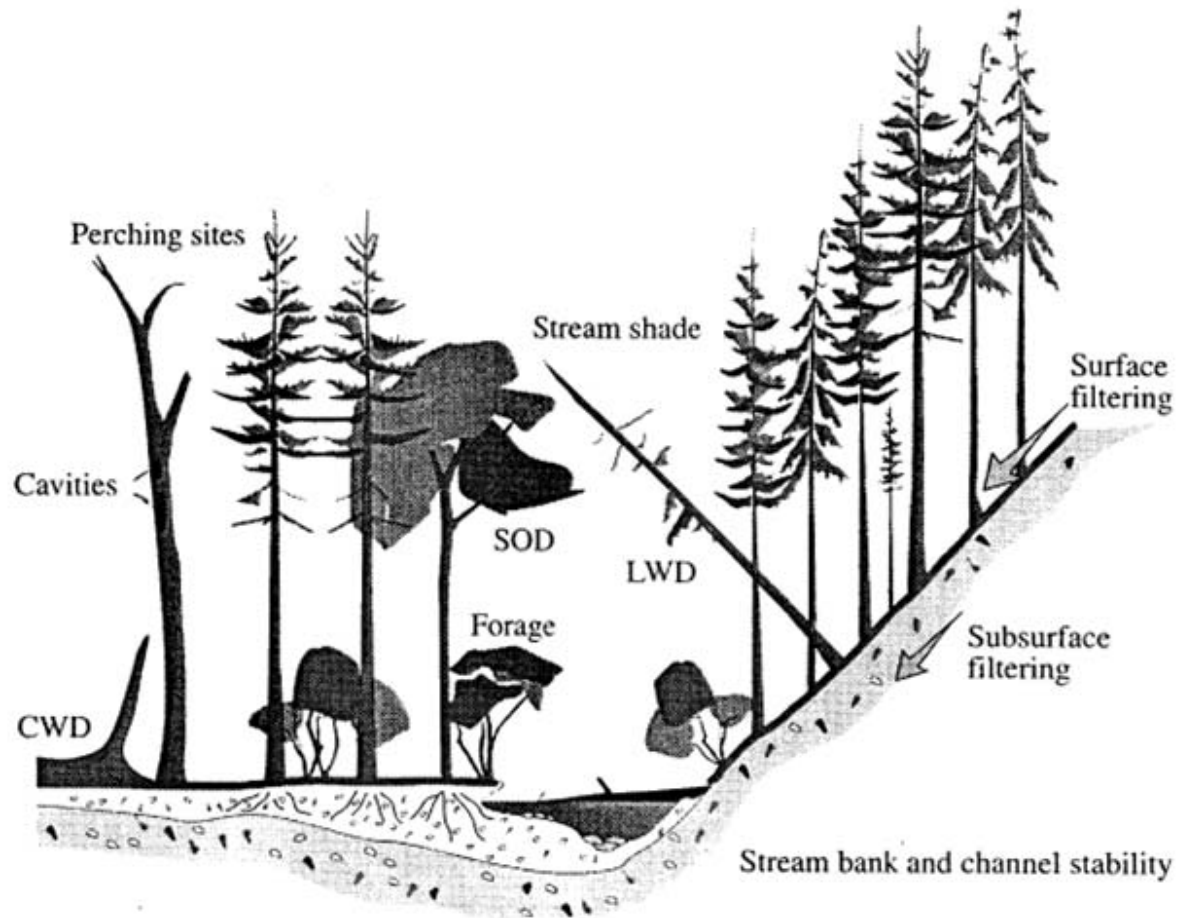









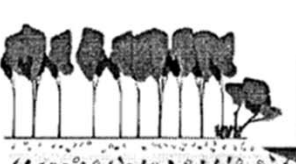




Figure 1. Ecological functions of riparian vegetation.



# Project Overview (Koning, 1999)

**Figure 4.** Examples of stand types that provide opportunities for riparian restoration and some options for restoration.

Scenario	RVT	Function impaired	Rehabilitation action/objective	Treatment	Desired future condition
<b>1</b> Poorly stocked plantation on moist, rich site.		Large and small wood, shade, bank stability.	Cluster planting using large stock to increase conifer stocking on difficult sites.		
<b>2</b> Overstocked plantation on mesic site.		Large wood, forage for wildlife, structural diversity, floodplain stability.	Juvenile spacing to focus growth on fewer trees and increase stand biodiversity.		
<b>3</b> Overtopped conifers on moist, rich site.		Large wood, structural diversity, floodplain stability.	Release understorey conifers by directional felling of deciduous trees, space conifers to riparian densities.		
<b>4</b> Deciduous pole sapling without conifers on moist, rich site.		Large wood, structural diversity, floodplain stability and bank stability.	Fell deciduous trees in groups and plant openings with conifers, follow by aggressive stand tending to ensure conifer survival; alternatively, manage as a deciduous stand.		



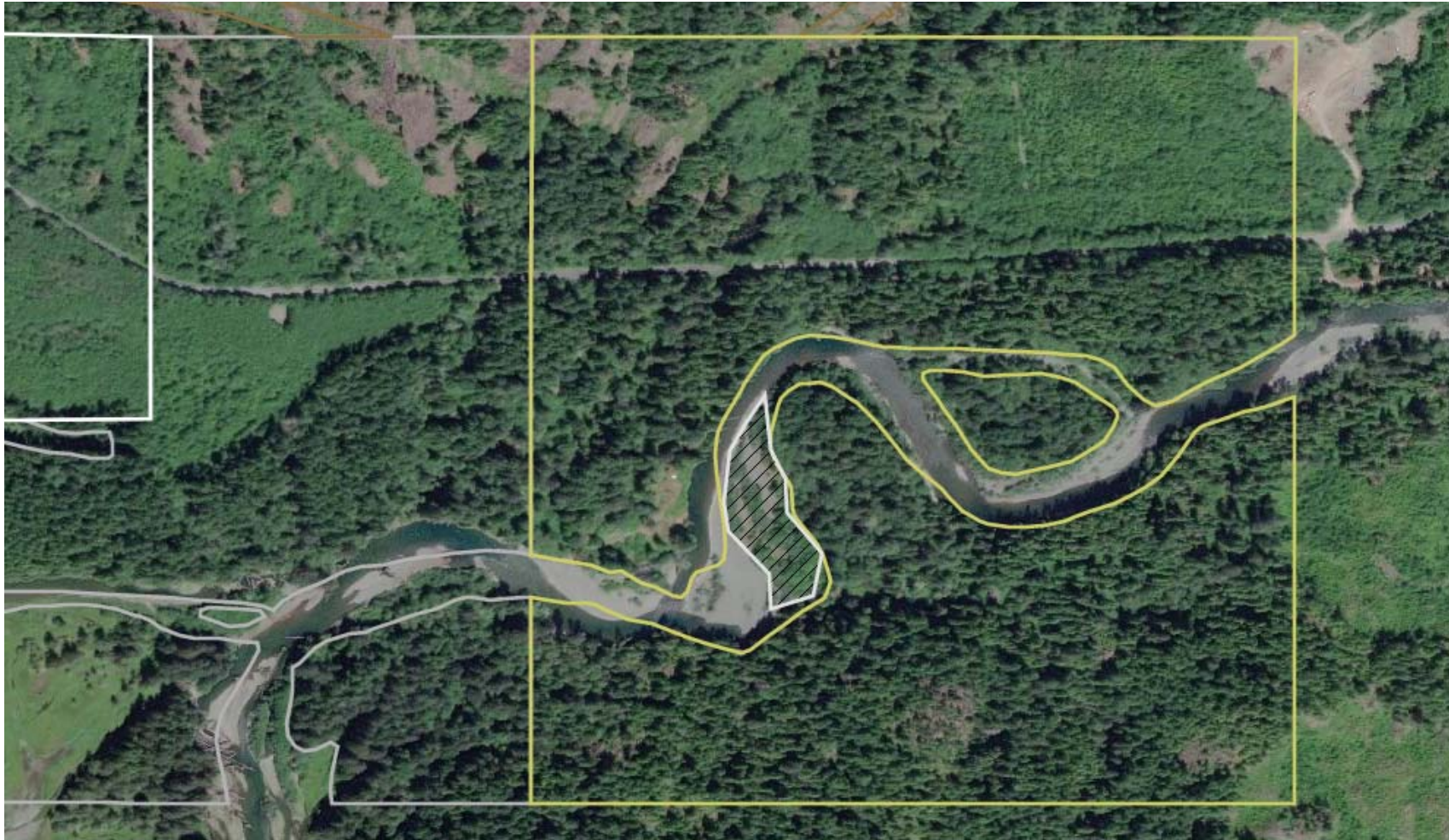


## Year 2: Treatment Strategies





## Leiner River – Request for Authorization to Treat





## Leiner River – Request for Authorization to Treat





# Tahsis River







## Year 2: Refine Monitoring Plan

- Monitoring Plan will be developed
- Three levels of monitoring: Implementation, Effectiveness and Ecological Effects



Strategic Project ID: 19-1316-20

### Preliminary Riparian Restoration Monitoring Plan: Sucwoa River

Date: 2020-03-13

Prepared For:



Nootka Sound Watershed Society  
Coastal Restoration Fund #18-HPAC-01098

PROFESSIONALLY RESOURCEFUL





## Project Benefits

- Area treated
- Lessons learned
- Refined budget / work plan
- Skills developed
- Relationships built
- Local employment and purchases
- Organizational capacity



**Leigh Stalker, RPF**

**Project Manager**

**w. 250-287-2246 x133**

**c. 250-202-7396**

**[leigh.stalker@snrc.ca](mailto:leigh.stalker@snrc.ca)**

**[www.snrc.ca](http://www.snrc.ca)**



**MONITORING WELL INSTALLATION AND  
GROUNDWATER SAMPLING PROGRAM  
SUMMARY**

Submitted To:



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

Submitted By:

Waterline Resources Inc.  
Nanaimo, British Columbia  
August 26, 2020  
3099-20-001



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## 1.0 INTRODUCTION

Waterline Resources Inc. (Waterline) assisted McElhanney in developing a Wellhead Protection Plan (WPP; McElhanney, 2019) for the Village of Tahsis (Village; Figure 1). The WPP characterized the hydrogeological conditions for the groundwater source, supplying potable drinking water to the Village residents. Details of the production well (PW), such as well construction information, the long-term sustainable yield for the well and the well capture zone were included. Also documented in the WPP are the various contaminant sources associated with the different land use types and environmental features such as surface water. Suggested mitigative measures to prevent impacts to the groundwater source were also provided.

Concerns were raised regarding a former dumpsite related to operations at the former Tahsis Sawmill (McElhanney, 2019). Wood waste material, drums, vehicles, and old equipment containing fuels, are believed to have been buried upgradient of the PW (McElhanney, 2019). Risk to groundwater from remnant contaminant sources was deemed “high” (McElhanney, 2019). As such, recommendations were included in the WPP to install groundwater monitoring wells (nested well pairs) upgradient of the PW, in the dumpsite area, to characterize the potential contaminant source(s).

## 2.0 OBJECTIVE AND SCOPE OF WORK

The WPP recommended that groundwater monitoring wells be installed at two locations upgradient of the Village PW, within the well capture zone (Figure 2). The purpose of the nest well pairs, which includes a shallow and a deep well, is to characterize groundwater quality across the aquifer and assess the vertical movement of groundwater across the unconfined aquifer. The monitoring wells are also intended to serve as an early warning detection system for potential changing groundwater conditions. The program included the following tasks:

- borehole drilling;
- well installation;
- well development;
- groundwater sampling; and
- reporting.

This report outlines the methodologies for the tasks completed, details the results of the field investigation, and provides recommendations for future groundwater sampling work.

### 2.1 Regulatory Consideration

The WPP was prepared in support of source approval with the Vancouver Island Health Authority (VIHA), to meet the requirements in the Drinking water Protection Regulation (BC MoE, 2018) standards. The document discusses best practices provided in the Water Sustainability Act - Groundwater Protection Regulation (GWPR; BC MoE, 2016). Waterline reviewed Part 3, 4 and 6 of the GWPR (BC MoE, 2016) which provides requirements for well drilling and installation, to

ensure that proper procedures and standards were maintained as part of the monitoring well installation program. Groundwater sampling was completed in accordance to the British Columbia Field Sampling Manual – Part A Quality Control and Quality Assurance (BC MoE, 2013). All work was conducted under the direct supervision of a Qualified Professional (QP) registered with Engineers and Geoscientist of British Columbia (EGBC).

### **3.0 METHODOLOGY**

Drilling, well installation, well development and groundwater sampling were conducted between June 22, 2020, and June 26, 2020. Waterline field staff was onsite throughout drilling to observe drilling activities, design the monitoring well, supervise well construction, document well development, and collect water samples. Red Williams Well Drilling & Pump Installations Ltd. (Red Williams) of Parksville, British Columbia, provided the drilling and well installation services. A photo log, documenting the various stages of the monitoring well installation and the groundwater sampling is provided in Appendix A.

#### **3.1 Drilling and Well Installation**

The monitoring wells (MW's) were drilled using a TH-60 air rotary drill rig equipped with a drill-through casing hammer (Photo A1; Appendix A). This method of “drilling and driving” effectively seals off and isolates the drill bit as the casing is driven down closely behind the bit. The drilling technique allows for sampling of drill cuttings, and vertical profiling of water-bearing units (flow rate and water quality) by airlifting groundwater using the on-board compressor.

For each drilling location (Site 1 and Site 2; Figure 2) a deep and shallow monitoring well was constructed as part of a “nested” well pair. The deep and shallow well were drilled within 3 to 5 m of each other, with the deep well being drilled and cased to the base of the aquifer at its total depth (TD). Information from the deep hole was used to determine the aquifer thickness and construction materials required for both wells.

Drill cutting samples were collected at 1.5 m intervals or where a change in lithology was noted by the driller and Waterline field personnel. Drill cutting samples were collected, recorded, and described using a modified *Unified Soil Classification System*. Observations, including lithology, colour, and grain size were recorded and are included on digital field logs.

Construction details for each MW included:

- Advancing a temporary 203 mm inner diameter (ID) steel casing (surface borehole) to 2.4 m, for the surface seal. Bentonite chips (Photo A2; Appendix A) were used to fill the annular space around the outside of the well casing;
- Advancing a 152 mm ID steel casing (main borehole) to TD;
- Installing a machine slotted screen (Photo A3; Appendix A) and solid PVC riser pipe (52.5 mm ID) into the cased hole and pulling pack the casing to expose the screen;
- Backfilling the annulus to just above the screen using 10-20 silica sand;
- Placing a seal of coated bentonite pellets (Photo A4; Appendix A) above the sand pack to prevent cross contamination of the aquifer zones.
  - For the deep wells, the 152 mm ID casing was pulled up to the top of the bentonite pellets and backfilling continued inside the casing annuls with layers of bentonite chips and gravel (Photo A5; Appendix A) to surface; and
  - For the shallow wells, the 152 mm ID casing was pulled up to the top of the bentonite pellets and backfilling continued inside the casing annuls with bentonite chips to surface.
- A portion of the 152 mm ID steel casing was maintained above ground (stick-up) to act as a surface protector for the PVC well casing (Photo A6 & A7; Appendix A); and
- The ground surface adjacent the well casing was sloped away from the casing, the well was locked, the appropriate well cap was installed, and the well identification plate was properly secured (Photo A6 & A7; Appendix A).

### 3.2 Well Development

Following installation, the wells were developed to flush out fine sediment, as well as optimize hydraulic connection with the formation. Well development consisted of surging the well using an air compressor and a 25 mm PVC hose installed to the base of the monitoring well (Photo A8; Appendix A). The airlifting flow rates were measured using a 20 L pail and timed using a stopwatch. Due to the surging nature of airlifting, flow rates are only estimates, and cumulative volumes are considered approximate. The development water and fine sediment was discharged to ground.

During the well development procedure water samples were collected and field parameters, including pH, electrical conductivity (EC), turbidity, temperature, oxidation reduction potential (ORP), dissolved oxygen (DO), and sand production were measured. Airlifting was deemed complete when one or more of the following criteria was satisfied:

- No fines were produced, and groundwater was clear
- pH variation less than 0.1 for multiple readings
- EC and temperature were +/- 5 % for multiple readings
- Turbidity was stable or decreasing (dependant on fines)
- Volume of groundwater purged was greater than x3 the well volume

### 3.3 Groundwater Sampling

Groundwater samples were collected manually from each well using Waterra tubing and foot valve. Groundwater pH, electrical conductivity, ORP, DO and temperature were recorded during sampling. Water levels were recorded manually using a water level tape before sample collection. Samples were submitted to CARO Analytical Services in Richmond, BC. The following analysis were requested:

- CCME PHC F1-F4 (inc BTEX) Package;
- General, Chemistry 2 Package;
- Total Metals;
- Carbon, Total Organic;
- Polycyclic aromatic hydrocarbons (PAHs);
- LEPH/HEPH Package; and
- Nitrogen, Total & Organic Package.

## 4.0 RESULTS

### 4.1 Drilling and Well Installation

The Site 1 and Site 2 drilling locations (Figure 2) were chosen upgradient of the PW based on the capture zone assessment and site access. The deep wells (MW20-1D & 2D) were completed at the base of the unconfined aquifer to characterize groundwater conditions at the same elevation of the PW screen intake. The shallow wells (MW20-1S & 2S) were completed near the water table, to document near surface conditions. Final well construction details for all four monitoring wells and the PW (including test wells; Figure 2) are provided in Appendix B. Completion details for the monitoring wells are presented in Table 1. Photos of the drill cutting samples collected during the well drilling are also included in Appendix A.

#### 4.1.1 Hydrogeological Conditions for Site 1

MW20-1D (deep) and MW20-1S (shallow) were installed 100 m northeast of the PW (Figure 2) in the unconfined aquifer. Wood fill/chips was encountered at ground level (Photo A9; Appendix A), extending to 4.6 meter below ground level (mbgl). Alternating layers of fine-grained and coarse-grained sediments were encountered below the wood fill/chips. Sands and gravels (Photo A10; Appendix A) extended to 29.6 mbgl, with a distinct clay layer encountered between 27.4 mbgl and 28.2 mbgl (Photo A11; Appendix A).

The static water levels measured at MW20-1D and MW20-1S after well drilling/development and before groundwater sampling were 3.6 and 3.9 mbgl, respectively. Assuming a consistent ground surface elevation, the vertical groundwater gradient was calculated using the difference in static water level depth and the distance between the mid point screen depth of the nested wells. An upward flow component was measured through the aquifer with a gradient of 0.018 m/m. Using the on-board air compressor, flow tests were performed in both the shallow and deep monitoring wells. The tests indicate high permeability across the aquifer with flows ranging from 110 to over



327 m<sup>3</sup>/day. These flow test results cannot be directly compared with the well development results from the PW or test wells, due to the difference in testing method (airlifting in cased-hole vs completed well). However, the reported flow measurements are good indication that aquifer conditions at these monitoring well locations can support similar long-term well yields (same order of magnitude) as those reported from the PW and test well locations (McElhanney, 2019).

#### 4.1.2 Hydrogeological Conditions for Site 2

MW20-2D (deep) and MW20-2S (shallow) were installed 200 m northeast of the PW (Figure 2) in the unconfined aquifer. Wood fill/chips were encountered at ground level, extending to 4.6 mbgl (Photo A9; Appendix A). Sands and gravels were encountered below this depth, extending to TD (23.8 mbgl; Photo A10; Appendix A).

The static water levels measured at MW20-2D and MW20-2S after well drilling/development and before groundwater sampling were 4.6 and 4.8 mbgl, respectively. Assuming a consistent ground surface elevation, the vertical groundwater gradient was calculated using the difference in static water level depth and the distance between the mid point screen depth of the nested wells. An upward flow component was measured across the aquifer with a gradient of 0.013 m/m. Using the on-board air compressor, flow tests were performed in each well and indicated similar inflows as Site 1, ranging from 110 to over 327 m<sup>3</sup>/day.

**Table 1: Well Construction Details**

Well Name	MW20-1D	MW20-1S	MW20-2D	MW20-2S
Well Type	Monitoring Well	Monitoring Well	Monitoring Well	Monitoring Well
Completion Date (dd/mm/yyyy)	24/06/2020	24/06/2020	25/06/2020	25/06/2020
BC Well Plate ID	43937	43938	43935	43936
UTM Easting (zone 9)	668584	668574	668547	668544
UTM Northing (zone 9)	5533840	5533863	5533982	5533960
Ground Elevation (masl)	10.4	10.4	15.5	15.5
Casing Stick-up (magl)	2" Well= 0.73 6" Casing= 0.96	2" Well= 0.78 6" Casing = 0.84	2" Well= 0.58 6" Casing = 0.68	2" Well= 0.70 6" Casing= 0.80
Drilling Contractor	Red Williams	Red Williams	Red Williams	Red Williams
Drilling Method	TH-60 Air Rotary	TH-60 Air Rotary	TH-60 Air Rotary	TH-60 Air Rotary
Borehole TD (mbgl)	29.6	10.8	23.8	8.2
Inside Diameter PVC Casing (mm)	52	52	52	52
Aquifer Formation	Sand and Gravel	Gravel, some sand	Sand and Gravel	Gravel, trace sand
Aquifer Top (mbgl)	4.6	4.6	4.6	4.6
Aquifer Bottom (mbgl)	27.4	10.8	23.8	8.2
SWL (mbgl)	3.58	3.90	4.58	4.77
Available Head (m) <sup>1</sup>	23.0	6.4	18.9	3.0
Screen Interval (mbgl)	23.6 to 26.6	7.2 to 10.3	20.5 to 23.5	6.3 to 7.8
Screen Type	Slotted PVC	Slotted PVC	Slotted PVC	Slotted PVC
Screen Slot Size	20-slot	20-slot	20-slot	20-slot

Notes: SWL means static groundwater level; <sup>1</sup>Available Head calculated from SWL to bottom of screens; 'masl' means metres above sea level; 'magl' means metres above ground level; 'mbgl' means metres below ground level

## 4.2 Well development

The well development time for the deep and shallow wells varied based on stabilization of field parameters. Recorded values for all field water quality parameters measured at Site 1 and Site 2 are included in Appendix C (Table C1 and Table C2, respectively). A summary of the development method and final purge volumes are included in Table 2

**Table 2: Summary of Well Development Methods and Purge Volumes**

Well Name	Date of Well Development (dd/mm/yyyy)	Well Development Method	Duration of Well Development (min)	Estimated Flow rate (L/min)	Purged Volume (L)	Required Purge Volume <sup>1</sup> (L)	Total Well Volumes Purged
MW20-1D	24/06/2020	Airlifting	50	95	4,750	138	102
MW20-1S	24/06/2020	Airlifting	82	5	410	38	33
MW20-2D	25/06/2020	Airlifting	45	95	4,275	113	114
MW20-2S	26/06/2020	Waterra	-	-	18	18	3

**Notes:** L means liters; L/min means liters per minute; <sup>1</sup> indicates that the required purge volume is equivalent to three well volumes

It should be noted that well development of MW20-2S was not successful using the airlifting technique due to the limited available head in the well. The air compressor was not able to lift the water out of the well in a consistent manor that allowed for accurate field water quality measurements. Instead, Waterline field staff purged the necessary 3 well volume using Waterra tubing.

## 4.3 Groundwater Chemistry

A summary of the key groundwater quality parameters collected as part of the baseline groundwater monitoring program are presented in Table 3. Relevant groundwater quality data collected from the PW in 2019 and 2020 are also included in Table 3 for comparison. The water quality results are compared with the Guideline for Canadian Drinking Water Quality (GCDWQ, Health Canada, 2019). The GCDWQ sets standards based on aesthetic objectives (AOs) and maximum acceptable concentrations (MACs) for health-related parameters. Groundwater quality tables for all sampled parameters, including field measured parameters (Table D1 to D7) and the laboratory certificate, are included in Appendix D.

Based on the laboratory analysis for samples collected at Site 1, Site 2 and the PW, groundwater from the unconfined aquifer, is a calcium carbonate-bicarbonate type (Piper Plot; Figure 3), with an average total dissolved solids (TDS) concentration of 46 mg/L (Table 3). The groundwater type at Site 1, in both the shallow and deep zones of the aquifer are comparable, while at Site 2, the groundwater type in the shallow and deep zones varied, with different percentage of anion and or cation end members (Figure 3).

Table 3: Summary of Key Groundwater Quality Parameters

Sample Location	Units	GCDWQ MAC Exceedance	GCDWQ AO Exceedance	MW20-1D	MW20-1S	MW20-2D	MW20-2S	Tahsis Well	Tahsis Well
Sample Date				June 26, 2020	June 26, 2020	June 26, 2020	June 26, 2020	October 22, 2019	March 17, 2020
Field Sample ID				MW20-01D	MW20-01S	MW20-02D	MW20-02S	Tahsis Well	Tahsis Well
Lab ID				0062861-01	0062861-02	0062861-03	0062861-04	WT9446	XO3150
General Chemistry – Analytical Results									
Total Organic Carbon (TOC)	mg/L			2.48	0.77	0.68	10.5	<0.5	<0.5
Conductivity (EC)	µS/cm	-	-	119.0	99.1	76.9	60.2	94.0	100.0
Total Dissolved Solids-Calculated	mg/L	-	-	63.9	47.0	36.5	28.4	44.0	48.0
Total Hardness (CaCO <sub>3</sub> )	mg/L	-	-	56.1	44.0	33.4	22.7	41.7	-
Turbidity	NTU	-	-	6.4	211	98.3	61.2	0.8	-
pH		7 – 10.5	-	8.03	7.63	7.59	6.16	7.48	7.78
Iron (Fe)-Dissolved	mg/L	-	0.3	<0.010	<0.010	<0.010	0.435	-	-
Manganese (Mn)-Dissolved	mg/L	0.12	0.02	0.0126	0.015	<0.0002	0.077	-	-
Nitrogen – Analytical Results									
Ammonia – Total (as N)	mg/L	-	-	0.055	0.059	<0.050	0.058	-	-
Nitrate + Nitrite	mg/L	-	-	0.0908	0.0815	0.0914	0.04	-	-
Nitrate	mg/L	10	10	0.0908	0.0815	0.0914	0.04	-	-
Nitrite	mg/L	1	1	<0.005	<0.005	<0.005	<0.005	-	-
Total Nitrogen	mg/L	-	-	0.446	2.98	0.091	0.501	-	-
Total Organic Nitrogen	mg/L	-	-	0.391	2.92	0.091	0.443	-	-
BTEX – Analytical Results									
Benzene	mg/L	0.005	0.005	<0.0005	<0.0005	<0.0005	<0.0005	-	-
Toluene	mg/L	0.06	0.02	<0.001	<0.001	<0.001	<0.001	-	-
Ethylbenzene	mg/L	0.14	0.002	<0.001	<0.001	<0.001	<0.001	-	-
Xylene	mg/L	0.09	0.02	<0.002	<0.002	<0.002	<0.002	-	-
LEPHw and HEPHw – Analytical Results									
LEPHw	mg/L	-	-	<0.25	<0.25	<0.25	<0.25	-	-
HEPHw	mg/L	-	-	0.316	<0.25	<0.25	0.978	-	-
Total Metals – Analytical Results									
Antimony (Sb)	mg/L	0.006	0.006	<0.0002	0.00028	0.00021	<0.0002	-	-
Arsenic (As)	mg/L	0.01	0.01	0.00145	0.00648	0.00204	0.00241	-	-
Barium (Ba)	mg/L	1	1	0.0356	0.0234	0.168	0.0124	-	-
Boron (B)	mg/L	5	5	<0.05	<0.05	<0.05	<0.05	-	-
Cadmium (Cd)	mg/L	0.005	0.005	0.000048	0.000261	0.000964	0.000063	-	-
Chromium (Cr)	mg/L	0.05	0.05	0.006	0.0435	0.00937	0.00417	-	-
Copper (Cu)	mg/L	2	1	0.0333	0.134	0.716	0.0183	-	-
Iron (Fe)	mg/L	-	0.3	5.23	34.1	8.51	3.04	-	-
Lead (Pb)	mg/L	0.005	0.005	0.00258	0.0014	0.00029	0.00182	-	-
Manganese (Mn)	mg/L	0.12	0.02	0.306	0.981	5.25	0.241	-	-
Mercury (Hg)	mg/L	0.001	0.001	<0.00001	<0.00001	<0.00001	<0.00001	-	-
Selenium (Se)	mg/L	0.05	0.05	<0.0005	<0.0005	<0.0005	<0.0005	-	-
Sodium (Na)	mg/L	-	200	2.92	2.3	1.5	3.51	-	-
Strontium (Sr)	mg/L	7	7	0.0745	0.0531	0.0536	0.0274	-	-
Uranium (U)	mg/L	0.02	0.02	0.000943	0.00204	0.000552	0.000845	-	-
Zinc (Zn)	mg/L	-	5	0.0267	0.0548	0.0326	0.0195	-	-

Notes: µS/cm means microseimens per centimeter; mg/L means milligram per liter; NTU means nephelometric turbidity units; LEPH means light extractable petroleum hydrocarbons; HEPH means heavy extractable petroleum hydrocarbons.



Other notable results include:

- The **Total Organic Carbon (TOC)** concentration at MW20-2S is elevated in comparison to all other monitoring well locations (Table 3);
- **Laboratory pH** at MW20-2S was below the GCDWQ AO range (7-10.5; Table 3);
- The **Dissolved Iron** concentration at MW20-2S exceeded the AO (0.3 mg/L; Table 3);
- The **Dissolved Manganese** concentration at MW20-2S exceeded the AO (0.02 mg/L; Table 3);
- **Total Organic Nitrogen** is the main contributor of total nitrogen in groundwater (Table 3);
- Concentrations of **BTEX** and **Light Extractable Petroleum Hydrocarbons (LEPH)** are all below the method detection limit (Table 3);
- **Heavy Extractable Petroleum Hydrocarbons (HEPH)** were detectable at MW20-1D and MW20-2S (Table 3). More specifically, the F3 (C16 – C34) petroleum hydrocarbon (PHC) was the only fraction component detected (Table D5; Appendix D);
- **Total Iron** concentrations at all monitoring locations exceeded the AO (0.3 mg/L; Table 3);
- **Total Manganese** concentrations at all monitoring locations exceeded the MAC (0.12 mg/L; Table 3); and
- **All other parameters** had concentrations that were below the laboratory detection limit and or did not exceed the GCDWQ guidelines (Table D2 to D7; Appendix D).

## 5.0 DISCUSSION AND CONCLUSIONS

Following the drilling of the nested well pairs 100 m (Site 1) and 200 m (Site 2) northeast of the PW (both upgradient; Figure 2), the aquifer was confirmed to be locally extensive. The stratigraphy observed at the newly drilled monitoring wells is consistent with that reported from the PW (Appendix B), confirming the hydrogeological conceptual model described in the WPP (McElhanney, 2019). Waterline findings from the field investigation are summarized as follows:

- The unconfined aquifer is transmissive and permeable, with high inflow measured through the coarse sand and gravel sequences. The static water level observed in the deep and shallow wells, indicate that the vertical groundwater gradient was in the upwards direction. An upward groundwater flow direction suggest shallow groundwater is not moving into the deeper aquifer zones and that there might have been a “hydraulic barrier” to downward vertical migration of possible surface contamination prior to installing the village PW. The high permeability in the upper portion of the aquifer may have also provided for high contaminant “flushing rates” when the dumping was initiated and completed 50 years ago (McElhanney, 2019). As indicated in the WPP (McElhanney, 2019), at the current maximum pumping rates, particle tracking from capture zone analysis suggests that near surface contaminants would not be drawn into the PW. Only under higher pumping rates did the particle tracking model indicate that it is possible to drawn shallow groundwater into the PW. The direction of the vertical pressure gradient could be seasonal and should be investigated during high recharge periods, expected in the late fall and winter.

- The groundwater in the unconfined aquifer is a calcium carbonate-bicarbonate type water, likely from a fresh source with a young age (Freeze and Cherry, 1979). Slight variation in groundwater type at Site 2, the furthest upgradient of the PW location (Figure 2), indicates that groundwater could be influenced by different recharge sources. Considering McKelvie Creek and the Tahsis River are both hydraulically connected to the aquifer and are contributors to groundwater recharge (McElhanney, 2019), proximities to these sources could be the cause for the slight difference in groundwater types.
- The groundwater chemistry results from Site 1 or Site 2 suggest that sources of hydrocarbons, metals, nitrates, or other mineralized deposits, that could be associated with operation of the former Tahsis Sawmill are not present in groundwater upgradient of the PW; concentrations of these constituents are either below the method detection limit and or the GCDWQ guidelines (Health Canada, 2019). Some exceedances or elevated concentrations were reported but are believed to be naturally occurring and are not likely related to anthropogenic sources. These include:
  - Elevated iron and manganese (total and dissolved) concentration. These minerals are commonly occurring in groundwater systems. Although it could be related to metallic waste in the upgradient dumpsite, elevated iron and manganese was observed in both the shallow and deep monitoring wells. Given there is no indication that shallow groundwater is moving in the downward direction via the natural hydraulic gradient or by induced vertical movement from pumping, concentrations are considered naturally occurring; and
  - The detection of F3 PHC (C16 – C34) at MW20-2S and MW20-1D. F3 PHC's could be associated with diesel fuel, oils and lubricants but is also a characteristic of biogenic organic compounds (fatty acids, sterols waxes, etc.; Kelly-Hooper et. al, 2009). Because an elevated TOC concentration was detected at MW20-2S and wood fill/chips were documented to be present at both well drilling locations, it is believed that detectable concentrations of PHC – F3 are from natural sources.

## 6.0 RECOMMENDATIONS

According to the WPP, the Village should continue to monitor the groundwater quality and water levels in the PW and monitoring the wells, to allow for detection of changing groundwater conditions. Based on these suggestions and the results of this investigation, Waterline recommends:

1. Biannual (summer and winter) water quality sampling of all monitoring wells in conjunction with sampling of the PW, to document seasonal conditions and help confirm current geochemical trends. Parameters should include general chemistry, total organic carbon, total and dissolved metals, hydrocarbons, phenols, and total Tannin & Lignin;
2. One-time water quality sampling of McKelvie Creek and the Tahsis River to help confirm the groundwater surface interaction, including groundwater recharge conditions;
3. Installing a pressure transducer in one deep and or shallow monitoring well to assess any water level fluctuations and possible hydraulic gradient reversal caused by seasonal changes or pumping activity; and
4. The monitoring data (water quality and water level) should be reviewed annually by a qualified hydrogeologist to assess aquifer and well performance. After baseline trends are established (8 monitoring events; 4-years), the monitoring frequency should be reevaluated and could be reduced to annual events.



## 7.0 CERTIFICATION

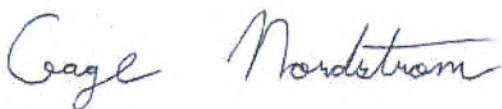
This document was prepared under the direction of a professional geoscientist registered in the Province of British Columbia.

Waterline Resources Inc. trusts that the information provided in this document is sufficient for your requirements. Should you have any questions or concerns, please do not hesitate to contact the undersigned.

Respectfully submitted,

**Waterline Resources Inc.**

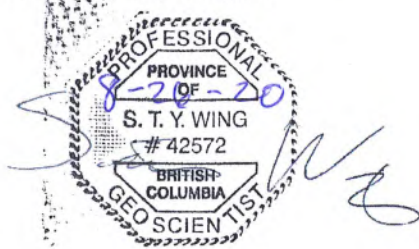
**Reviewed by:**



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Principal Hydrogeologist



Simon Wing, B.Sc., P.Geo  
Intermediate Hydrogeologist

## 8.0 REFERENCES

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- McElhanney (McElhanney) 2019. Wellhead Protection Plan. Report submitted to Village of Tahsis. Campbell River, BC, April 04, 2019.

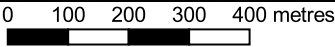


## Figures

**Figure 1: Location Map**

**Figure 2: Site Map of Monitoring Well Locations**

**Figure 3: Piper Diagram**



Coordinate System: NAD83 / UTM Zone 9N

- Site 1
- Site 2
- River/Stream - Definite
- River/Lake

References:  
ESRI World Imagery, Freshwater Atlas Rivers (2011), Freshwater Atlas Stream Network (2011), Canada Basemap - Transportation (WMS)

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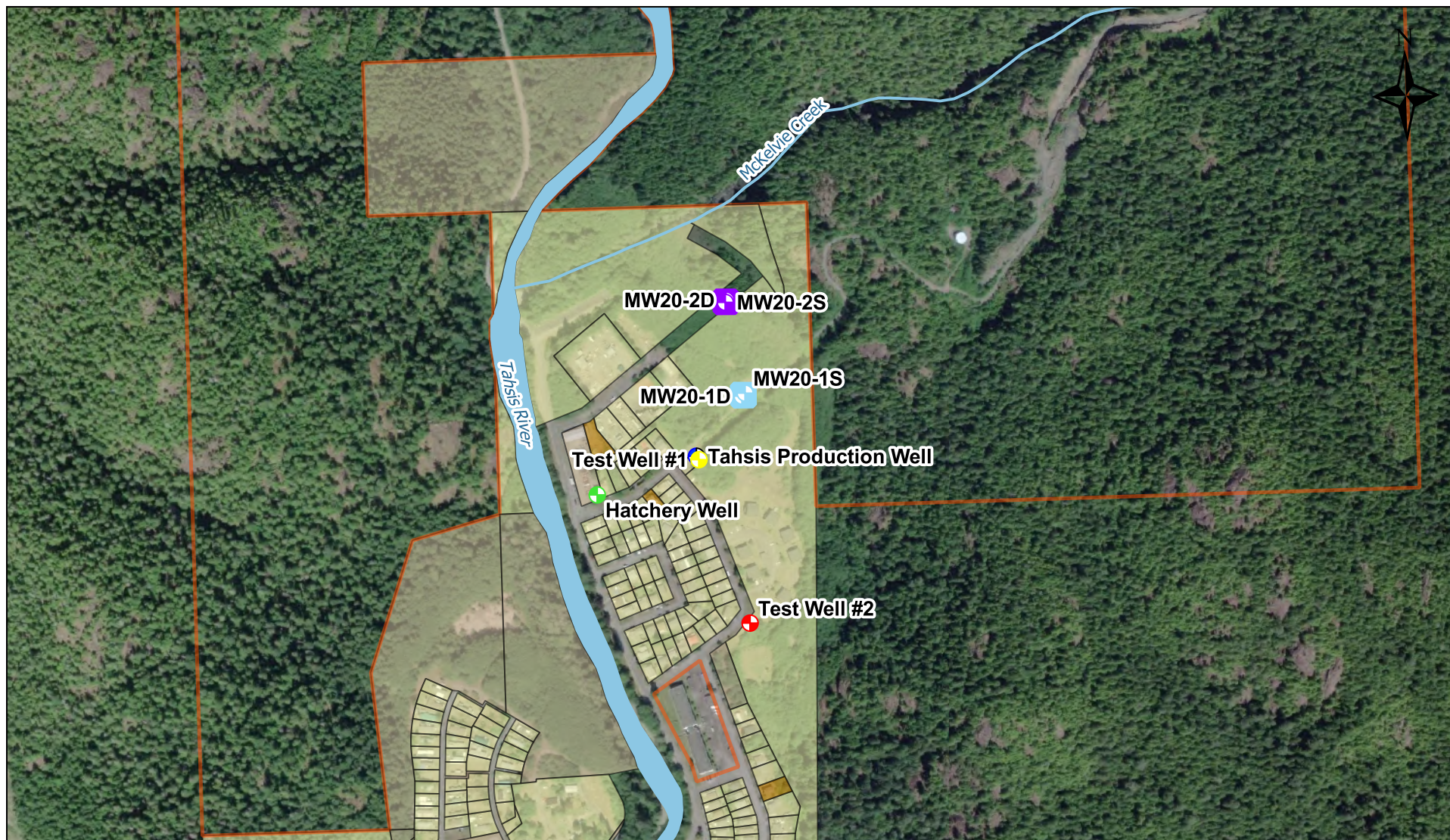
Monitoring Well Installation and Groundwater Sampling Program  
Village of Tahsis, BC  
Submitted to Mark Tatchell (Chief Administrative Officer/EOC Director)

LOCATION MAP

	Prepared By: Waterline Resources Inc.
	Project Number: 3099-20-001
	Compiled By: cgd
	Date Issued: 2020-Jul-28
	Date Revised: --

FIGURE 1





0 100 200 300 400 metres

Coordinate System: NAD83 / UTM Zone 9N

- River or Stream
- Private Parcel
- Crown Agency Parcel
- Municipal Parcel
- Unspecified Parcel
- Site 1
- Site 2

## References:

\*The Hog Fuel and Mineral Fill Area originates from the Village of Tahsis, Map 4 – Schedule B of the 2010 OCP entitled Man Made Hazardous Conditions Development Permit Area.

ESRI World Imagery, Freshwater Atlas Rivers (2011), Freshwater Atlas Stream Network (2011)

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**Monitoring Well Installation and Groundwater Sampling Program**  
**Village of Tahsis, BC**  
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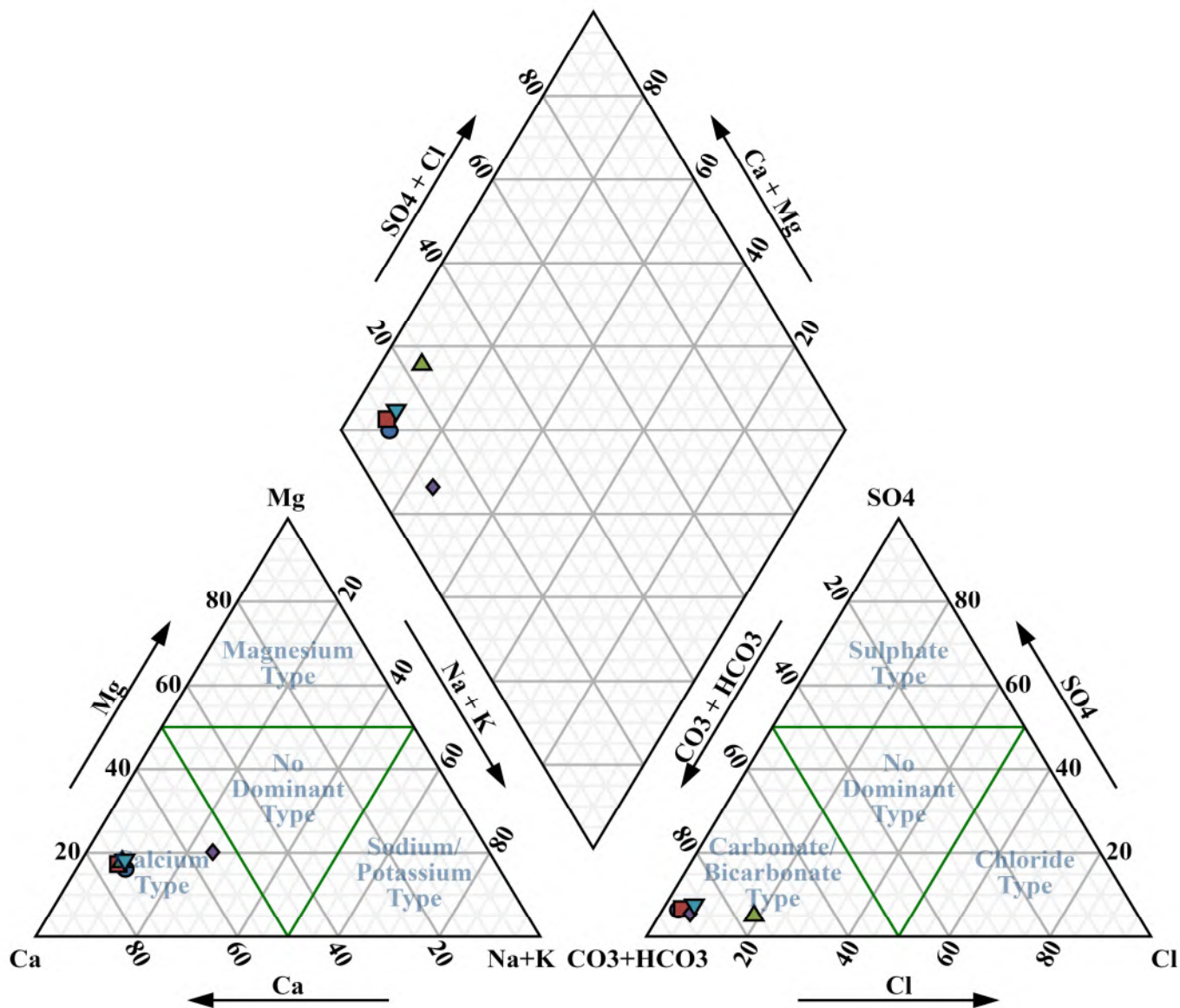
## SITE LOCATION MAP



Prepared By: Waterline Resources Inc.
Project Number: 3099-20-001
Compiled By: cgd
Date Issued: 2020-Jul-23
Date Revised: --


**FIGURE 2**





### Legend

- MW20-1D
- MW20-1S
- ▲ MW20-2D
- ◆ MW20-2S
- ▼ Tahsis Production Well

PROJECT Village of Tahsis - Monitoring Well Installation and Groundwater Sampling Program Tahsis, B.C.		
TITLE  Piper Plot		
	PREPARED BY: Waterline Resources Inc.	FIGURE 3
	PROJECT: 3099-20-001	
	COMPILED BY: GN	
	DATE ISSUED: July 2020	
REVISED: -		



August 10, 2020

374 Alpine View Road

DELIVERED BY HAND

Dear Property Owner,

**Re: 374 Alpine View Road, Tahsis, B.C.**

**Lot 67, Plan VIP30721, District Lot 595, Nootka Land District**

The Village of Tahsis has received a complaint regarding the unsightly condition of the above noted property.

After a site visit conducted on August 10, 2020, it was confirmed that the property is not in compliance with the *Property Maintenance Regulation Bylaw, 2019, No. 614*. Please see excerpt below:

- (1) An Owner or Occupier must not cause or permit Refuse or other noxious, offensive or unwholesome objects, materials or items to collect or accumulate on or around the Land of that Owner or Occupier.
- (2) An Owner or Occupier must not cause or permit the Land of the Owner or Occupier to become or remain an untidy or Unsightly Property.

**Please remove all unwholesome, materials and items such as garbage bags, bags with beverage cans, totes, buckets from your property by August 21, 2020.**

If you fail to bring your property into compliance by the given date, this matter will proceed to Council to make an Order to Comply.

Be advised that if the removal of the unsightly and untidy materials on your property is not completed within the time given in an Order to Comply, the Village will proceed to carry out the removal of the offending material the cost of which will be charged to you as the property owner and may be recovered as debt to the Village.

Thank you for your immediate attention and cooperation in this matter.

Sincerely,

A handwritten signature in dark ink, appearing to be 'Mark Tatchell', with a stylized, flowing script.

Mark Tatchell  
Chief Administrative Officer  
Village of Tahsis

Property Maintenance Regulation Bylaw No. 614 (ss 34-40)

**NOTICE TO COMPLY**

34. *In addition to any other remedy under any enactment or otherwise available at law, if a Bylaw Enforcement Officer determines that the Owner or Occupier of Land or a Building or any other person, does not comply with this Bylaw, the Bylaw Enforcement Officer may, by written notice, require the Owner, Occupier or other person to comply with this Bylaw.*
35. *Each notice pursuant to this Bylaw must contain the following:*
- (a) in the case of a notice to an Owner or Occupier,*
    - (i) the name of the Owner or Occupier to which it is directed, and the municipal address or location of any Land or Building to which it applies;*
    - (ii) particulars to describe how the Owner or Occupier fails to comply with this Bylaw;*
    - (iii) reasonable particulars of what is required in order to bring the Owner or Occupier into compliance with this Bylaw;*
    - (iv) a reasonable time within which to complete any repairs, work or other actions necessary to bring the Owner or Occupier into compliance with this Bylaw;*
    - (v) a statement that if such repairs, work or other actions are not completed within the time given, the matter may proceed to Council for an order to comply; and*
    - (vi) a statement that if such repairs, work or other actions are not completed within the time given in an order to comply issued by the Council, the Village may proceed to carry out such repairs, work or other actions, and the costs of the Village in doing so will be charged to the Owner or Occupier and may be recovered as a debt to the Village, and if not paid by December 31st of the year in which the costs are incurred, will be added to the property taxes for the Land and Building of the Owner or Occupier as taxes in arrears;*
  - (b) in the case of a notice to another person,*
    - (i) the name of the person to which it is directed, and the municipal address or location of any Land or Public Place to which it applies;*
    - (ii) particulars to describe how the person fails to comply with this Bylaw; (iii) reasonable particulars of what is required in order to bring the person into*

*compliance with this Bylaw; (iv) a reasonable time within which to complete any work or other actions necessary to bring the person into compliance with this Bylaw;*

*(v) a statement that if such work or other actions are not completed within the time given, the matter may proceed to Council for an order to comply; and*

*(vi) a statement that if such work or other actions are not completed within the time given in an order to comply issued by the Council, the Village may proceed to carry out such work or other actions, and the costs of the Village in doing so will be charged to the person and may be recovered as a debt to the Village.*

36. *Any notice required to be given pursuant to this Bylaw must be served by one of the following methods:*

*(a) being personally delivered to the person to whom it is addressed;*

*(b) being left with a person apparently over the age of sixteen years at the location of the Land or Building to which it relates;*

*(c) being mailed by registered mail to the most recent address of the person to whom it is addressed as shown on the Village's property tax records; or*

*(d) being posted in a conspicuous place on the Land or Building to which it relates, including near the front entrance of any Building on the Land.*

#### **ORDER TO COMPLY**

37. *If an Owner or Occupier fails to comply with a notice from a Bylaw Enforcement Officer, Council may order the Owner or Occupier to comply, within a time specified in the order, with the requirements of this Bylaw that are not being met in respect of the Land or Building of the Owner or Occupier.*
38. *Prior to Council making an order under section 37, the Owner or Occupier of the Land or Building shall be given the opportunity to be heard by Council in respect of the matter contained in the notice from the Bylaw Enforcement Officer.*
39. *If the Owner or Occupier fails to comply with an order of Council under section 37, the Village, by its employees, contractors or agents, may act in accordance with section 17 of the Community Charter to fulfil the requirements of the order and to recover the costs of doing so as a debt due to the Village from the Owner or Occupier of the Land or Building which is the subject of the order.*
40. *If any of the costs of carrying out the order of Council under section 37 remains unpaid on December 31<sup>st</sup> of the year in which the costs were incurred, the costs may be added to the property taxes for the Land and be recovered as taxes in arrears.*





September 1, 2020

374 Alpine View Road  
Tahsis, BC  
VOP 1X0

**DELIVERED BY HAND**

Dear Property Owner

**Re: 374 Alpine View Road, Tahsis, BC**  
**Lot 67, Plan VIP30721, DL 595, Nootka Land District**

On August 10, 2020, you were served with a Notice to Comply (attached) pursuant to s. 34 of the Property Maintenance Regulation Bylaw, 2019 No. 614. You were found to be in non-compliance with the following provisions.

9. (1) *An Owner or Occupier must not cause or permit Refuse or other noxious, offensive or unwholesome objects, materials or items to collect or accumulate on or around the Land of that Owner or Occupier.*
- (2) *An Owner or Occupier must not cause or permit the Land of the Owner or Occupier to become or remain an untidy or Unsightly Property.*

You failed to comply with the Bylaw by the date stated in the Notice.

On September 15, 2020 at 7 PM, Council will decide whether to order you, as the Property Owner, to comply with the Bylaw. Prior to making that decision, Council will provide you with an opportunity to be heard at the Council meeting. If you choose not to participate in the meeting, Council will make a decision based on the information included in this letter.

Please contact the Village office ([reception@villageoftahsis.com](mailto:reception@villageoftahsis.com) or 250-934-6344) to advise if you plan to speak to Council at this meeting. When you contact the office, you will be given instructions for participating in the meeting by phone or Zoom. Due to the COVID-19 pandemic and social distancing requirements, you will not be permitted to attend the meeting in person.

Sincerely,

A handwritten signature in dark ink, appearing to be 'Mark Tatchell', with a stylized, flowing script.

Mark Tatchell  
Chief Administrative Officer

Attachments:

**Mark Tatchell**

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**From:** Mark Tatchell  
**Sent:** Thursday, September 10, 2020 9:24 AM  
**To:** Mark Tatchell  
**Subject:** 374 Alpine View #2



Sent from my iPhone

September 3, 2020  


**Mark Tatchell**

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**From:** Mark Tatchell  
**Sent:** Thursday, September 10, 2020 9:20 AM  
**To:** Mark Tatchell  
**Subject:** 374 Alpine View



Sent from my iPhone

September 4, 2020

# VILLAGE OF TAHSIS

## Report to Council

**To:** Mayor and Council

**From:** Mark Tatchell, CAO

**Date:** September 3, 2020

**Re:** April 2020 power outage

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**PURPOSE OF REPORT:**

To report out on the follow up from the unplanned Village-wide power outage which occurred from approximately 1 PM on April 28 until approximately 12:15 AM on April 30, 2020

**BACKGROUND:**

On April 28<sup>th</sup>, a piece of heavy equipment on a low bed trailer hit a BC Hydro powerline taking down the line and multiple power poles. The entire Village of Tahsis experienced a power outage. To maintain critical services, Village staff worked 24 hours/day. Those activities included moving portable generators to power lift stations, treatment plants and pumping stations. Staff also maintained and serviced generators at the community groundwater water well, which provides potable water to the community, the generator at the Municipal Hall and moved a generator to the Recreation Centre so the facility could be used as a reception centre for local residents whose homes were not heated. Village staff and volunteers served coffee, tea, snacks and dinner to 30 residents and delivered meals to 22 residents. The reception centre, including meal service, was executed with social distancing. The Rec Centre was completely sanitized after the incident. The Tahsis Volunteer Fire Department provided brief (30 min- 1 hour) generator service to households without generators to power freezers.

The incident was caused by Holbrook and Dyson Logging, although the company has not admitted it is at fault. Legal advice from Peter Johnson, Stewart Macdannold Stuart, was obtained to assist the Village in preparing a claim. A claims adjuster from Kernaghan (Debbie Halstead) was assigned as the adjuster for Marsh JLT. The Village submitted a claim to the Municipal Insurance Association of BC for the municipal costs incurred. The claim was accepted and the Village has been reimbursed for all costs claimed.

**POLICY/LEGISLATIVE REQUIREMENTS:**

N/A

**FINANCIAL IMPLICATIONS:**

The claim information is attached to this staff report.

**STRATEGIC PRIORITY:**

N/A

**RECOMMENDATION:**

No recommendation

Respectfully submitted:

A handwritten signature in dark ink, appearing to be 'Mark Tatchell', written in a cursive style.

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Mark Tatchell, CAO

**Village of Tahsis****Power Outage Costs - April 28-29 & May 24, 2020***Updated July 6, 2020*

		<u>Rate per Fees &amp; Charges Bylaw No.</u>		
<u>Item</u>	<u>Quantity</u>		<u>594, Schedule "F"</u>	<u>Total</u>
Public Works staff hours - Regular Time	31.5	\$	30.00	945.00
Public Works staff hours - Overtime	34.0	\$	45.00	1,530.00
Total Labour				<u>2,475.00</u>
Non-emergency service call - May 24, 2020	1	\$	200.00	200.00
Hand tools, light equipment usage (hours)	16	\$	30.00	480.00
Breaker repair due to power outage				742.50
Diesel For Generators During Outage				394.34
Diesel 200 LT, Gas 150 LT				282.91
Total Costs				<u>4,574.75</u>



To Mayor Matheson  
&  
Council

L1



Village of Tahsis

COMPLAINT FORM

Name: Jane Barlow

Telephone Number: 1-250-756-0460

Email Address: jrbarlow@yahoo.ca

Address: 415 N. McQuinn Dr (permanent-1599 Sherwood L  
P.O. Box 81 Nanaimo BC  
Tahsis V9T.1H1

Complaint: (Please be as specific as possible)

RE: HEADBAY F.S. Rd.

I have, several times over the past 18 months, called Main Rd Office and also spoken with Mike Pearson (District Manager of Transportation) about the absolutely deplorable condition of the above mentioned Road. Most recently (about 12 days ago) I asked and was told by Main Rd office staff, that there have been NO complaints from the Mayor of Tahsis or any other village officials. That seems inconceivable to me, given the condition the road is in. Is it not in the interests of all who live in Tahsis, that the current Mayor & Council fight for the well-being of us all in this regard? If it takes a community to raise a child, what then should we expect from elected officials?

Signed: J Barlow (Jane)

PTD →

Date: 27 Aug 2020



The squeaky wheel gets greased - - - complacency nothing!  
May I suggest you have Main Road taken to task to  
have this road ploughed AND maintained - - - they get  
"Millions", do they not, for this contract and they should  
be held accountable, before another life is lost, or  
someone seriously injured.

We all need to get on board and serious about this  
road we travel and the seriousness of it's neglect.  
When Tragedy strikes, then what?  
AND who takes responsibility,  
AND where does the negligence lie?

Thank you  
Jane Barker.

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**From:** Denman, Geoffrey

**Sent:** Wednesday, April 22, 2020 6:11 PM

**To:** '[firedepartment@villageoftahsis.com](mailto:firedepartment@villageoftahsis.com)' <[firedepartment@villageoftahsis.com](mailto:firedepartment@villageoftahsis.com)>; '[preparedness@srd.ca](mailto:preparedness@srd.ca)' <[preparedness@srd.ca](mailto:preparedness@srd.ca)>; Tabor, Trent <[Trent.Tabor@dfo-mpo.gc.ca](mailto:Trent.Tabor@dfo-mpo.gc.ca)>

**Subject:** FW: Canadian Coast Guard Inshore Rescue Boat Station Nootka Sound, Friendly Cove BC

Hello Stephan and Shaun,

My name is Geoffrey Denman and I work with Canadian Coast Guard Search and Rescue Programs in Victoria B.C., thank you for taking the time to speak with me today.

I am reaching out to today in regards to our Inshore Rescue Boat Program, a seasonal Search and Rescue service provided to the Canadian public. We are writing to let you know that from **May 22nd to September 08, 2020** this essential service will operate to ensure the safety of all boaters in your community of Tahsis B.C and Nootka Sound, Friendly Cove.

With the current COVID-19 situation, we know that people are concerned with visitors in their area, so we want to let you know ahead of time that we are taking the necessary precautions to keep your community safe. Our top priority is to ensure the safety of our personnel, and the people in the communities we serve.

We would like to take a proactive approach to connecting with the Community of Tahsis and Nootka Sound communities.

Please share the attached letter with Tahsis Council, community website, community Face Book page and Harbour Authority to connect with the residents of Tahsis.

Trent Tabor, OIC Inshore Rescue Boat PGM and myself will be happy to answer any questions or concerns.

Warm regards,

Geoffrey

Geoffrey Denman  
Senior Search and Rescue Program Officer  
Canadian Coast Guard | Garde côtière canadienne  
Western Region | Region de l'Ouest  
25 Huron St. | 25, rue Huron  
Victoria, BC, V8V 4V9

[Geoffrey.Denman@dfo-mpo.gc.ca](mailto:Geoffrey.Denman@dfo-mpo.gc.ca)

Telephone | Téléphone: 250.480.2740

Facsimile | Télécopieur: 250.413.2793



P.O. Box 73  
Tahsis, BC V0P 1X0  
Tel: 250-934-7925

August 19, 2020

Mayor and Council  
Village of Tahsis  
P.O. Box 219  
Tahsis, BC V0P 1X0

Dear Mayor and Council:

RE: Tahsis Hatchery – Water Line In-feed System

As representatives of the Tahsis Salmon Enhancement Society, we are writing to you to ask for financial assistance in repairing the water line in-feed system that feeds both the Hatchery and the Village (as a back-up water system). We have been experiencing a number of problems with the system recently. Upon further investigation we have determined that the screen needs to be repaired as it is allowing sand and silt into the water.

Laura Perry, Community Advisor for the Department of Fisheries and Oceans (DFO) Salmon Enhancement Program, has been overseeing this repair work. Kirby Engineer and Fabricator are currently working on the project. Laura estimates the cost to be around \$22,000 to \$25,000.

As co-owner of this system, we respectfully request that the Village of Tahsis provide funds for half of this repair work. We met yesterday with Mark Tatchell, CAO of the Village of Tahsis and he is fully apprised of the requirements of this project should you have any questions.

Once this system is fixed, we should not have any more problems for the Hatchery and Village crews. It will ensure that once again we have a reliable water supply for the Hatchery and a back-up supply for the Village, and the Fire Department or for any other emergencies. At the end of the day, it's all about the fish too!

On behalf of our Salmon Enhancement executive members, Don Beamin, Bill Dwulit, Richard Isl and Frank Collins, we respectfully request your financial assistance with this repair work. Thank you.

Sincerely,

Don Beamin  
Acting President  
Tahsis Salmon Enhancement Society

c.c. Laura Perry, DFO  
Mark Tatchell, Village of Tahsis

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**Subject:** FW: Prioritization of Rural Connectivity Across Canada  
**Attachments:** Letter to PM from municipalities - Rural connectivity.docx  
**Importance:** High

**From:** Jennifer Lastiwka <[Jennifer.Lastiwka@telus.com](mailto:Jennifer.Lastiwka@telus.com)> **On Behalf Of** Shaye Draper  
**Sent:** Wednesday, September 9, 2020 3:07 PM  
**To:** Shaye Draper <[Shaye.Draper@telus.com](mailto:Shaye.Draper@telus.com)>  
**Subject:** Prioritization of Rural Connectivity Across Canada  
**Importance:** High



## Prioritization of Rural Connectivity Across Canada

General Manager Shaye Draper, member of the TELUS team

September 9, 2020

Good afternoon,

As a follow up to the update I sent earlier today, I'm reaching out to gauge your interest in sending a letter to Prime Minister Justin Trudeau to request that his government prioritizes rural connectivity in the upcoming Speech from the Throne on September 23. Municipalities of all sizes play a role in representing rural and remote communities and know too well the essential role connectivity infrastructure plays in the daily lives of Canadians.

COVID-19 has reinforced the importance of access to high speed internet and wireless services not only to stay in touch with loved ones, but to enable telecommuting, virtual health care services, and remote learning. While many Canadians and businesses have been able to adapt to this new reality, there are still too many rural Canadians that are being left behind.

That is why we need your help to urge the Government of Canada to prioritize policies that encourage private sector investment in connectivity for rural and remote communities, including a new approach to spectrum policy.

To assist, we've taken the liberty of providing a proposed draft letter (**attached**) to the Prime Minister, that can be customized as you see fit.

If you have any questions, please let me know. Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "Shaye".

**Shaye Draper**

General Manager, Customer Solutions Delivery

**TELUS**

**T** 250 388 8300 | **M** 250 886 2013



September XX, 2020

The Right Honourable Justin Trudeau, P.C., M.P.  
 Prime Minister of Canada  
 Office of the Prime Minister  
 80 Wellington Street  
 Ottawa, ON K1A 0A2

By email: [pm@pm.gc.ca](mailto:pm@pm.gc.ca)

CC: [Chrystia.Freeland@canada.ca](mailto:Chrystia.Freeland@canada.ca) (Hon. Chrystia Freeland, Minister of Finance)

CC: [ISI.minister-ministre.ISI@canada.ca](mailto:ISI.minister-ministre.ISI@canada.ca) (Hon. Navdeep Bains, Minister of Innovation, Science and Industry)

CC: [Alyx.holland@pmo-cpm.gc.ca](mailto:Alyx.holland@pmo-cpm.gc.ca); [ryan.dunn@canada.ca](mailto:ryan.dunn@canada.ca); [elder.marques@canada.ca](mailto:elder.marques@canada.ca); [jeremy.broadhurst@dpmo-cvpm.gc.ca](mailto:jeremy.broadhurst@dpmo-cvpm.gc.ca)

Dear Prime Minister,

On behalf of [INSERT NAME OF MUNICIPALITY], I am writing to you to raise the urgent need for increased rural connectivity, and to ask that you **prioritize rural connectivity in the upcoming Speech from the Throne** on September 23. The ongoing COVID-19 pandemic has reinforced the essential role connectivity services play in the daily lives of Canadians, not only to stay in touch with loved ones, but to telecommute, access virtual health care services, and enable remote learning. While many Canadians and businesses have been able to adapt to the new reality we find ourselves in, there are still too many rural Canadians that are being left behind.

As you prepare to lay out the Government of Canada's priorities in the Speech from the Throne, we urge you to prioritize policies that **encourage private sector investment in connectivity for rural and remote communities**. The need for new or improved broadband connectivity in [MUNICIPALITY], and communities like ours, is urgent.

To deliver better connectivity to our communities – and all of rural Canada – we ask that the federal government encourage rural network investment and deployment by:

1. **Expediting the 3500 MHz and 3800 MHz spectrum auctions** so that this spectrum can be put to use for all Canadians, sooner;
2. Imposing meaningful deployment conditions across accelerated timelines to all spectrum holders. For example, a **“use it or lose it” spectrum policy** that requires greater rural deployment within five years of a license grant, where failure to build results in forfeiture of that license;
3. **Ending the use of spectrum set asides**, particularly for rural areas, as set-aside eligible telecoms companies do not have a track record of deploying in rural Canada, and that spectrum goes unused; and
4. Continuing to invest in rural connectivity programs by launching the Universal Broadband Fund, supporting the CRTC Broadband Fund, and identifying opportunities to match or **coordinate funding programs with the provinces**.

We can no longer afford delays to the roll out of wireless connectivity. We hope that you will include rural connectivity as a key priority in the Speech from the Throne. We ask that these commitments be reflected in new ministerial mandate letters, reflecting your government's commitment to **encourage private sector investment in connectivity for [INSERT NAME OF MUNICIPALITY]**, and all of rural Canada.

I look forward to hearing from you on how your government is going to prioritize rural connectivity to ensure equal access for all Canadians to reliable wireless services and high speed internet.

Sincerely,

[INSERT NAME]