

A G E N D A
for

REGULAR COUNCIL MEETING
March 25, 2024

COUNCIL CHAMBERS 7:00 PM

CALL TO ORDER

The Village of Masset acknowledges the un-ceded traditional territory of the Haida Nation on which this meeting is held.

ADOPTION OF AGENDA

COUNCIL MEETING MINUTES

March 11, 2024 Council Meeting Minutes

PETITIONS AND DELEGATES

1. **Ministry of Indigenous Relations and Reconciliation**

CORRESPONDENCE

C-1 Rural Economic Diversification and Infrastructure Program

C-2 Gwaii Animal Helpline

VERBAL REPORTS OF COUNCIL/CAO/CFO

NEW BUSINESS

NB-1 Village of Daajing Giids Economic Development Capacity Building Grant

NB-2 NCLGA City of Prince George Support Resolutions

NB-3 VIRL New Library Construction

NB-4 Letter of Support Haida Gwaii Hospital and Health Centre

NB-5 Village of Masset Water Quality Report 2023

PUBLIC QUESTION PERIOD

ADJOURNMENT

Village of Masset Regular Council Meeting of March 11, 2024

Minutes of the Regular Council Meeting held March 11, 2024 in the Council Chambers.

Present:	Mayor:	S. Disney
	Councillors:	J. Currie, T. Carty, B. Johnston, B. Pages
	CAO:	J. Humphries
	CFO:	J. Brown
	Intern:	A. Olee

CALL TO ORDER

The Village of Masset acknowledges the un-ceded traditional territory of the Haida Nation on which this meeting is held.

The meeting was called to order at 7:01 pm.

ADOPTION OF AGENDA

Moved by Councillor Pages, seconded by Councillor Currie to adopt the agenda as presented.

CARRIED

COUNCIL MEETING MINUTES

Council Meeting Minutes February 26, 2024

Moved by Councillor Carty, seconded by Councillor Pages that the February 26, 2024 Council meeting minutes be adopted as presented.

CARRIED

VERBAL REPORTS OF COUNCIL/CAO/CFO

Councillor Carty attended the Strategic Planning meeting and a Gwaii Trust board meeting.

Councillor Johnston attended the Strategic Planning meeting and a Gwaii Trust board meeting.

Councillor Pages attended the Strategic Planning meeting and a North Coast Regional District meeting.

Councillor Currie attended the Strategic Planning meeting and a MIEDS meeting.

CAO Humphries has been working on the Active Network Transport Plan. He attended a planning meeting with the fire chiefs and island emergency management, a meeting with EMBC Climate Control, and a meeting with Associated Engineering regarding the runway. He informed Council regarding an RBA announcement and the Sandspit Airport name change on March 27th, 2024 from 10:00 to 2:00.

Mayor Disney attended the Strategic Planning meeting, Protocol Table discussions, discussions with North Central Local Government Association regarding the upcoming meeting and discussions with BC Housing.

Moved by Councillor Carty, seconded by Councillor Johnston that the verbal reports be accepted as presented.

CARRIED

BYLAWS

Bylaw No. 667 A Bylaw to Establish a Parks and Recreation Committee

Councillors Carty and Currie offered to sit on the Parks and Recreation Committee as Council representatives and put an open call out for public representation.

Moved by Councillor Carty, seconded by Councillor Pages that Bylaw No. 667 be reconsidered and adopted.

CARRIED

NEW BUSINESS

NB-1 Environmental Assessment Office

Moved by Councillor Pages, seconded by Councillor Johnston that the report from the Environmental Assessment Office be received and filed.

CARRIED

NB-2 Northwest BC Resource Benefits Alliance (RBA)

Moved by Councillor Johnston, seconded by Councillor Currie that the report from Northwest British Columbia Resource Benefits Alliance be received and filed.

CARRIED

NB-3 Gwaii Storm Under 13 Donation Request

Moved by Councillor Pages, seconded by Councillor Johnston that the donation request from Gwaii Storm U13 be received.

CARRIED

Moved by Councillor Pages, seconded by Councillor Currie that staff be directed to develop a policy for donation requests and report back to Council.

CARRIED

NB-4 Urban Systems Bylaw Reform

Council reviewed the quote from Urban Systems to update the zoning bylaw and will focus on the housing needs report. Grant money must be used by December 31, 2024.

Moved by Councillor Carty, seconded by Councillor Pages that the quote from Urban Systems for \$137,000.00 be approved.

CARRIED

ADJOURNMENT

Moved by Councillor Johnston the meeting be adjourned at 7:51.

CARRIED

Recording Secretary

Mayor

Certified Correct, Administrator



Gwaii Animal Helpline Society



March 2024

On behalf of the Gwaii Animal Helpline I would like to thank the Village of Masset Council for the most generous donation of \$600.

The Gwaii Animal Helpline, a registered and completely volunteer organization, is dedicated to improving companion animal welfare which in turn contributes to quality of life in our islands' communities.



Funds are primarily used for the welfare of the animals that come into our care. This includes veterinary services, medication, food, supplies, and transport. In 2023 GAH had 58 companion animals in care.

As in the rest of the province, between rising costs and a growing number of people experiencing barriers to veterinary care, more animal guardians than ever are needing extra support to keep their beloved companion animals healthy without surrendering them to the already-overburdened shelter and rescue system.



To that end as well as help in the control of pet over-population GAH has provided, in the past year, financial assistance for the spaying and neutering of 34 cats and 19 dogs of low-income families as well as providing emergency veterinary financial support to 34 low-income pet guardians.

We are able to make a difference because of the support we receive from our communities – individual donors, and fundraising. In 2023 we became a participant in the HG Community Foundation established by Gwaii Trust to help local non-profits and charities improve their self-sufficiency and build stable revenue streams. We hope to build this fund over time. Gwaii Trust will match up to \$50,000.00 in donations made to the Fund in the first year. "



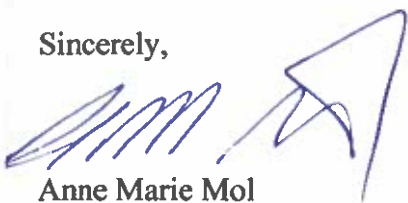
We are also grateful to some off island groups like Animals in Distress (has also sent pet food and supplies) and the BCSPCA (has provided funding for spay/neuter programs) which, at times, are able to take an animal for which we are unable to find an on-island home. Rehoming off-island is made possible by Pacific Coastal Airlines which provides transport at no cost.

For more information concerning Gwaii Animal Helpline:

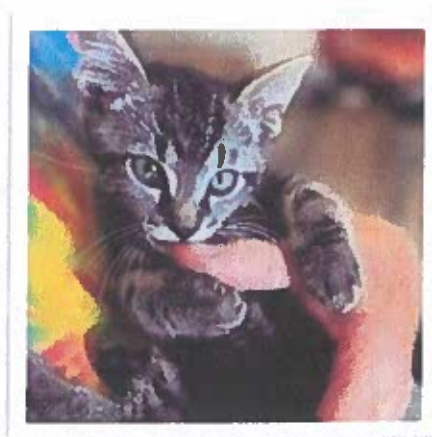
- website – gwaiianimalhelpline.com
- follow our Facebook page
- email – gwaiianimalhelpline@gmail.com
- contact Anne Marie at 250-626-5126

Thank you for helping us make a difference.
We are most grateful for your support.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Anne Marie Mol', with a large, stylized initial 'A' to the right.

Anne Marie Mol
(Board Director)





March 14, 2024

Application #: 2023100189
Village of Masset

Dear Joshua Humphries,

Re: Rural Economic Diversification and Infrastructure Program
Application #: 2023100189 - Masset Seaplane Terminal and Delkatla Spit Improvement Project

Thank you for your application for funding under the Rural Economic Diversification and Infrastructure Program (REDIP). We would like to advise that, after careful consideration, the above-noted project was not selected for funding.

REDIP received a large number of applications during the intake period and unfortunately the total funding requested significantly exceeded the Program's available funds. As a result, the Program was not able to provide funding to your project at this time.

This decision does not reflect on the importance of this project for your community, but rather the degree to which the program has been oversubscribed. We know that a lot of effort goes into developing a proposed project and we appreciate the time you took to prepare your application.

Program staff are available to review your application and provide further details regarding the funding decision. If you would like to book a virtual follow up meeting, please contact the Program Office by phone at 250-356-7950 or by email at ruraldevelopment@gov.bc.ca.

Upcoming intake periods for REDIP will be announced via the Program website at <http://www.gov.bc.ca/REDIP>, and we encourage you to consider submitting an application in the future. You can subscribe for email updates of the program on the REDIP website.

Please note that JEDI Regional Economic Operations staff are also available to offer support for economic development in your community. The Regional Manager for your area is Cheryl Gilbert and their contact information is: 778-405-1715, Cheryl.Gilbert@gov.bc.ca.

Thank you for your interest in REDIP.

Best regards,

Matthew Scott-Moncrieff, Director
Rural Programs Branch
Ministry of Jobs, Economic Development and Innovation

**2024 Village of Daajing Giids Economic
Development Capacity Building Grant** 

Intake Period 
Nov 1, 2023 - Mar 31, 2024

 **Andrew Hudson**
[Logout](#)

APPLICATION PROCESS

- ✓ **Step 1. Applicant Information**
- ✓ **Step 2. Goals**
- ✓ **Step 3. Wages**
- ✓ **Step 4. Activities**
- ✓ **Step 5. Confirmation**
- ✓ **Step 6. Review & Submit**

⚠ PLEASE NOTE:

You must complete the entire step and proceed to the next step for all changes to be saved in the system. Please keep in mind that partially completed steps will be lost if you leave the page.

Step 6. Review & Submit



APPLICANT INFORMATION

Edit

Local Government Name

Village of Masset

Primary Contact Name

Joshua Humphries

Position / Title

Chief administrative officer

Email

cao@masset.ca

Phone Number

2506263995

GOALS

Edit

Provide an overview of the economic development goals your community is focused on this year.

The Village of Masset, together with the Village of Daajing Giids, the Village of Port Clements and the North Coast Regional District, incorporated the non-profit Misty Isles Economic Development Society (MIEDS) in 2008 to provide economic development services on Haida Gwaii.

In 2024, MIEDS' economic development goals include promoting small businesses and Haida Gwaii tourism through the Go Haida Gwaii website and social-media campaign, as well as



through the *Kaats'ii Hla/This Is Haida Gwaii* print magazine. MIEDS will also continue to recruit new artist and artisan vendors to the Shop Haida Gwaii e-commerce platform, and will continue to work towards the creation of a Haida Gwaii Community Forest. Subject to funding, MIEDS also plans to undertake a comprehensive review of its objectives and structure in 2024, as well as producing a new five-year strategic plan.

Along with these core activities, MIEDS will continue to provide grant-writing assistance to local non-profit groups and businesses. MIEDS will also collaborate on stand-alone projects as needed with its four founding local governments, the Gwaalagaa Naay Corporation in Skidegate, the Old Massett Economic Development Corporation, the Council of the Haida Nation, local visitor information centres, the Hecate Strait Employment Development Society, and the local business-development office of Haida Gwaii Community Futures.

On March 12, 2024, MIEDS hired a new executive director: Desiree Alexander. Given that MIEDS has been without an executive director since November 2023, it will take some time to develop the MIEDS budget for 2024. The 2024 budget is expected to be largely in line with the 2023 budget, attached below, with the exception of the MIEDS Comprehensive Review. The Village of Masset will send a copy of the 2024 MIEDS budget to NDIT as soon as it is available.

Strategic Plan Document

MIEDS Budget 2023.pdf

EMPLOYEE INFORMATION

Edit

Employee Name

Position / Title

Desiree Alexander

Executive director

Email

admin@mieds.ca

Phone Number

2505598050

EMPLOYEE WAGE INFORMATION

[Edit](#)

Annual Salary

\$60,000.00

**% Dedicated to Economic
Development**

100

Anticipated Hire Date

Mar 12, 2024

Will the employee be involved in leading or promoting any of Northern Development's programs in the community? If so, please describe how and which programs.

Yes, the MIEDS executive director, together with the MIEDS grant writer, promotes the NDIT's suite of Community Development programs to eligible non-profits, businesses, and local governments.

Job description document

Job description--MIEDS executive director .pdf

ACTIONABLE WAGE ITEMS

Edit

Action Item

Expected Outcome(s)

Go Haida Gwaii

MIEDS continues to promote tourism on Haida Gwaii through the recently upgraded Go Haida Gwaii website, social media channels, and the Kaats'ii Hla/This Is Haida Gwaii magazine.

Shop Haida Gwaii

MIEDS will continue to recruit new vendors and promote Shop Haida Gwaii, a new e-commerce platform for Haida Gwaii artists, artisans, and vendors of all kinds who are aiming to sell products and services off-island.

Haida Gwaii Community Forest

MIEDS will continue working toward a community forest agreement on Haida Gwaii.

ACTIVITY 1

Edit

Name of Activity



MIEDS Operational Expenses 2024

Activity Start Date

Jan 1, 2024

Activity Completion Date

Dec 31, 2024

Provide a description of the activity

MIEDS operational expenses include wages for the executive director, economic development manager, and Haida Gwaii Community Forest liaison. Other operational expenses include overhead costs, the Go Haida Gwaii tourism campaign, and the Shop Haida Gwaii e-commerce platform.

What are the expected outcomes of the activity?

Broadly speaking, the expected outcomes for 2024 are to promote tourism and small business on Haida Gwaii through the Go Haida Gwaii campaign, to increase off-island sales by local artists and artisans through the Shop Haida Gwaii platform, to seek agreement on a Haida Gwaii Community Forest, and to undertake a comprehensive review of MIEDS' objectives and structure.

Lead Contact Name

Joshua Humphries

Position / Title

Chief administrative officer

Email

cao@masset.ca

Phone Number

2506263995

Expense Item	Amount	Vendor
MIEDS operational expenses	\$50,000.00	Misty Isles Economic Development Society (MIEDS)

Quote

MIEDS Budget 2023.pdf

APPLICATION CONFIRMATION

[Edit](#)

- I have read and understand the Economic Development Capacity Building Application Guide including the eligible and ineligible costs.
- I confirm that the information in this application is accurate and complete, including attachments.
- I agree that once funding is approved, any change to the project proposal will require prior approval of Northern Development Initiative Trust (Northern Development).
- I understand that the information provided in this application may be accessible under the Freedom of Information (FOI) Act.
- I authorize Northern Development to make enquiries, collect and share information with such persons, firms, corporations, federal and provincial government agencies/departments and non-profit organizations, as Northern Development deems necessary for decision, administration, and monitoring purposes for this project.

- I agree that information provided in this application form may be shared with the appropriate regional advisory committee(s), board of directors, and consultants.
- I agree to submit reporting materials as required by Northern Development, and where required, financial accounting for evaluation of the activity funded by Northern Development.
- If approved for economic development capacity building funding, our organization agrees to submit a report by February 28 of the following year using Northern Development's reporting form and provide the required attachments. After May 31, no additional reporting documentation will be accepted.
- I understand that this application will not be approved until reporting on the prior year has been received and processed by Northern Development.

Name (organization signing authority)

Position / Title

Joshua Humphries

Chief administrative officer

⚠ PLEASE NOTE:

Once an application has been submitted to Northern Development, it cannot be edited or revised. Please contact us if you require any changes.

[Edit Application](#)

[Submit Application](#)



**Misty Isles Economic Development Society
Budget 2023**

	CERIP-RER		Destination BC		NDIT		Operating		Partner Contributions		TOTAL	
	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget
6240 Rent								6,000.00				6,000.00
6250 Printing and Copying							1,900.00					1,900.00
6260 Postage and Mail Expense							500.00					500.00
6270 Internet							581.40					581.40
6280 Telephone							1,191.84					1,191.84
6290 Travel							2,000.00					2,000.00
6300 Meals, food							1,000.00					1,000.00
6310 Utilities							0.00					0.00
Total Operating Expenses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25,673.24	0.00	0.00	0.00	25,673.24
7000 Program and Project Expenses												
7010 BC Outdoor Adventure Show						4,000.00						4,000.00
7020 BC Hydro Community Energy						3,000.00						3,000.00
7030 Photography						500.00						500.00
7040 Facebook Ads												0.00
7050 Go Haida Gwaii Website												0.00
7060 Visitor Exit Survey												0.00
7070 Hiking Brochure												0.00
7080 Haida Gwaii Video Projects						6,000.00						6,000.00
7090 Shipping, Freight, and Delivery						4,000.00						4,000.00
7110 This is Haida Gwaii Trip Planner						20,000.00						20,000.00
7120 See You Later/Opening Campaign												0.00
7130 Love Haida Gwaii Program						5,000.00						5,000.00
7140 Written Content												0.00
7150 Love HG Trade Show								500.00				500.00
7160 Local Foods Program												0.00
7170 Program Advertisements (GO Haida Gwaii, etc)												0.00
7180 Web-Development												0.00
7210 Millage												0.00
7220 Artists												0.00
7245 Live Marketing Events												0.00
Total 7000 Program and Project Expenses	0.00	0.00	0.00	42,500.00	0.00	0.00	0.00	500.00	0.00	0.00	0.00	43,000.00
Total Expenses	0.00	17,976.19	0.00	60,000.00	0.00	38,000.00	0.00	147,192.54	0.00	17,440.00	0.00	370,608.73
Retained Revenue	0.00	(17,976.19)	0.00	21,950.00	0.00	1,200.00	0.00	77,425.46	0.00	(1,280.00)	0.00	80,439.27

WE'RE HIRING!

MISTY ISLES ECONOMIC DEVELOPMENT SOCIETY EXECUTIVE DIRECTOR



WHAT IS MIEDS?

Established in 2008 on the unceded territory of the Haida Nation, the Misty Isles Economic Development Society (MIEDS) is a non-profit organization that provides leadership of **economic development initiatives of the Haida Gwaii region**. These projects and programs are undertaken jointly by the 5 communities of: Village of Masse, Village of Port Clements, Village of Daajing Giids, and Electoral Areas D & E North Coast Regional District.

WHAT WILL YOU BE DOING?

The Executive Director is directly accountable to the Board of Directors for overall executive management and effective service delivery; development and refinement of service programs; and control over fiscal management. The Board identifies the goals and direction for the organization and the Executive Director develops and implements strategies for achieving them.

REQUIRED BACKGROUND

A proven track record of successful performance at the executive management level: staff supervision, strategic planning and evaluation, budget development.

1. Demonstrated leadership skills in a business and/or economic development environment.
2. Demonstrated skills with fiscal management and reporting.
3. Demonstrated aptitude for creating a positive environment for clients and staff.
4. Experience with First Nations partnerships.
5. Demonstrated experience with the management of rural Development.
6. Demonstrated experience working with and developing a Board of Directors.
7. Facilitation of diverse projects.

PREFERRED BACKGROUND

Post-secondary education in business and management.

1. History of having led organizational growth and change.
2. Familiarity with and knowledge of issues and governance associated with economic and business development in the Haida Gwaii regional area.

WHAT WILL YOU GET OUT OF IT?

- A blended/hybrid work environment that supports you to balance your working hours in ways that are most productive for you.
- A fantastic rural lifestyle with outdoor adventures galore.
- The chance to make a big difference with a small but energetic team.
- A negotiable starting salary of \$65K
- Full benefits, technology and travel stipend

WHAT DO YOU DO NOW THAT YOU'VE READ THE AD?

Send your resume and cover letter to chantal@gohaidagwaii.ca. A Supplementary Package can be obtained by request, which includes a complete job description and details of the position benefits.



OFFICE OF CITY COUNCIL

1100 Patricia Blvd. | Prince George, BC, Canada V2L 3V9
p: 250.561.7600 | www.princegeorge.ca

NCLGA Member Communities
North Central British Columbia

13 March 2024

Good day to your local government,

RE: 2024 NCLGA Resolutions

To our fellow NCLGA members we write to share three items that the City of Prince George has submitted to the annual conference. This year, we have again resolved to look at items that are not only of interest to our region but that also impact those across the province.

We hope we can count on you to support these three items when the time comes and have included full text of each resolution with the background below for consideration.

The City of Prince George has already written to the relevant Ministers directly on each of these items. Still, if you would like to be involved in future advocacy, separate from the NCLGA process, please reach out and our staff will work to coordinate interest with any emerging opportunities.

Working together to:

- Enhance emergency response options for North Central BC.
- Expanding educational curriculum to fight hate.
- Develop a mechanism to ensure each of our communities receives appropriate revenues.

These are three items we feel are a benefit to us all. We look forward to discussing these resolutions, and meeting at the NCLGA AGM this May in Smithers!

Thank you for your time and consideration.

Respectfully,

Prince George City Council.

North Central Local Government Association - 2024 Resolution Submissions

Resolution #1: Host Community Reception Centre In the City of Prince George

WHEREAS the City of Prince George is proud, well positioned, and routinely provides host community support to the region as community's grapple with more frequent emergencies, and;

WHEREAS no dedicated facilities have been constructed in the region to appropriately manage this response, leading to frequent reception center relocations which add unnecessary strain on all involved;

THEREFORE, BE IT RESOLVED that the North Central Local Government Association requests the province fund a permanent Host Community Reception Centre in the City of Prince George for the North Central Local Government Area.

Background: The City of Prince George is proud to support our neighbors as a host community during emergencies. Activating the Prince George Emergency Operations Center (EOC) has become an almost annual task. The City set up some form of host community Emergency Social Services (ESS) reception centre in 2017, 2018, 2021, 2022 and 2023.

For the 2023 season the City's EOC was activated on May 5th and continued to provide host community services until October 3rd (139 days). Within that period the ESS Reception Centre was moved 8 times to accommodate other municipal activities, adding unnecessary strain and confusion to the emergency operation as well as additional staff resources.

These movements were necessitated as no dedicated space for an ESS reception centre exists within the city. As such, civic facilities are used as they are available and reconfigured as prescheduled activities take place.

The proposed solution to this challenge would be for the establishment of a purpose-built, seasonally activated, facility to function as a dedicated host community ESS reception centre. Locating that facility in Prince George, as the most central and well positioned host community in the region, is suggested. Document Number: 703364 2

Resolution #2: Mandatory Holocaust Education In BC's Elementary Schools

Whereas Statistics Canada reported that there were 750 police reported hate crimes targeting religious minorities during 2022, of which 502 or 66.9% were aimed at Jews, and

Whereas Ontario recently became the first province to introduce mandatory Holocaust education into the elementary school curriculum,

THEREFORE, BE IT RESOLVED NCLGA recognizes the dangers of Holocaust denial and distortion, which so often targets our young people, and urges the Ministry of Education and Child Care to introduce mandatory Holocaust education to elementary schools as of the 2024-25 academic year.

Background: School boards are a vital governing body in our system and this resolution is intended to support our partners in their area of jurisdiction. Work has begun to suggest that a similar motion be advanced through the appropriate bodies by school district leadership. Still, as local governments have a social responsibility, and keen interest in, helping to foster inclusive diverse and peaceful communities it is appropriate that the membership of NCLGA considers this motion to advocate for mandatory Holocaust education in BC's elementary schools.

This is necessary as:

- In its 2022 audit of antisemitic incidents, B'nai Brith, Canada's oldest Jewish advocacy organization, nationally active since 1875, noted there were 2769 such incidents across Canada during the year of which 242 were in British Columbia.
- Statistics Canada in its 2022 document released July 27, 2023 on police-reported crime in Canada indicated that there were 750 police reported hate crimes targeting religious minorities during 2022, of which 502 or 66.9% were aimed at Jews.
- Ontario recently became the first province to introduce mandatory Holocaust education into the elementary school curriculum. Jewish organizations are urging all provinces and territories to introduce mandatory Holocaust education in elementary school.
- In tasking the Ontario College of Teachers to create an age-appropriate curriculum to teach the Holocaust starting in Grade 6, Education Minister Stephen Lecce indicated that according to the first study of antisemitism and Holocaust knowledge conducted by Western University and Liberation75 in 2021, 42 per cent of students surveyed said they have unequivocally witnessed an antisemitic event. This same study also found that one in three students in Ontario thought the Holocaust was fabricated, exaggerated or are unsure if it actually happened.
- Research compiled in the United States suggests that jurisdictions which make Holocaust education compulsory not only witness a dramatic decline in antisemitic incidents but also see a sizeable reduction in hate aimed at Blacks and Asians. A further study issued in September 2023 indicates that where Holocaust studies begin earlier in school and are mandatory there is heightened warmth toward religious and racial minorities.
- As survivors pass away, it is more important than ever that our schools play a key role in preserving Holocaust remembrance thereby protecting children from widespread Holocaust denial and distortion often disseminated online.

Resolution submission #3: Taxation on School District Property

WHEREAS there does not readily appear to be a mechanism by which local governments can recuperate the equivalent of property tax for childcare centers operating on school property, a placement that is encouraged by provincial policy, and;

WHEREAS local governments need every opportunity to collect the appropriate revenue for providing our wide range of services considering inflationary pressures and the challenges posed by asset management;

THEREFORE, NCLGA advocates to the Minister of Education and Child Care that a mechanism by which local governments can recuperate the equivalent of property tax for childcare centers operating on school property be established.

Background: The City of Prince Geore is supportive of the province's efforts to increase the number of childcare spaces across the province. However, concurrently, we ask that there be thought given to a mechanism by which local governments can recoup the equivalent of property tax for childcare centers operating on school property. While these facilities are much needed, we note that the unique placement of these operations, specifically encouraged by provincial policy, moves a greater number of these businesses, outside of the municipal jurisdiction to levy taxes. This is challenging financially and as all local government strive to ensure equitable taxation to service providers across the community.



Village of Masset

wings . waves . wilderness www.massetbc.com
PO Box 68 (1686 Main Street) Masset, BC VoT 1Mo
Phone (250) 626-3995 Fax (250) 626-3968

March 25, 2024

Vancouver Island Regional Library
PO Box 3333, 6250 Hammond Bay
Nanaimo, BC
V9R 5N3

Subject: Delay in New Library Construction

To: Ben Hyman

On behalf of the Council, I'm writing to express our deep concern regarding the current state of the library building and the delay in building the new library. As a small Village, we understand the importance of a well-maintained and accessible library facility for our community's educational and cultural development.

With the current delay in the new construction, the old building continues to fall further into disrepair, particularly concerning the roof. The deteriorating condition raises serious concerns about the roof's potential failure, which could significantly damage the valuable contents of the building. As discussed in the past, the Village has no funding to restore the building to an acceptable level and asks that you formalize your plan with us on how you plan to transition to an alternate location while the new building is completed.

Our Village is committed to supporting the construction of the new library and providing the assistance required for its successful completion. We believe the new library, which we hope to see completed within the initially proposed timeline, will meet our residents' evolving needs and serve as a beacon of knowledge, learning, and community engagement.

Thank you for your attention to this matter. We trust that the library shares our commitment to the well-being and cultural development of our community and expedites the construction of the new library. Together, we can create a library facility that will enrich our residents' lives and contribute to our Village's overall growth and prosperity.

Yours sincerely,

Joshua Humphries
Chief Administrative Officer



SKIDEGATE BAND COUNCIL

BOX 1301, SKIDEGATE, B.C. V0T 1S1 PHONE (250) 559-4496 FAX (250) 559-8247

23 January 2024

Kerry Laidlaw, Hospital Site Manager
Haida Gwaii Hospital and Health Centre - Xaayda Gwaay Ngaaysdli Naay
3209 Oceanview Drive, Daajing Giids, BC
V0T 1S0

RE: Gwaii Trust Major Contributions – Letter of Support

Dear Kerry,

Please accept this letter of support of the Haida Gwaii Hospital and Health Centre - Xaayda Gwaay Ngaaysdli Naay in their application to the Gwaii Trust Major Contributions Grant for \$32,500.00 in matching funds for new medical equipment.

The Haida Gwaii Hospital and Health Centre - Xaayda Gwaay Ngaaysdli Naay is seeking a total of \$65,000.00 worth of replacement medical equipment from Northern Health. If approved, the \$32,500.00 from Gwaii Trust Major Contributions will be used to purchase a software upgrade and new hardware for the central patient monitoring system which is critical for patients but depended upon by staff. Having a great facility with great equipment to attract and retain health care workers and doctors is important.

We are in full support and wish you well in your application.

On behalf of the Skidegate Band Council,

William Yovanovich, Chief Councillor



Village of Masset Water Quality Report 2023

Annual Report

February 2024

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Introduction

The Village of Masset operates and maintains a water treatment and distribution system to supply potable water to the communities of Masset and Old Massett. The population served in Masset is 838, with about 450 service connections as of 2021. There are 520 residents in Old Massett and its subdivision of BlueJacket.¹ (Tlaa Gaa Aawtlaas) The Village of Old Massett has a separate water distribution system, run by its Capital Works Department.

This report outlines where the water comes from, how it is distributed, and how we ensure it is safe to drink. This information will provide those who want to further inform themselves about their drinking water the ability to do so.

Drinking water can be a complex issue. Much of the information provided in this report is technical in nature. Every effort has been made to provide a format that is easily understandable. The Village of Masset can be contacted at 250-626-3995, should there be any questions. This report, and subsequent year's reports, will be available at the Village of Masset Office upon request.

Contacts

Village of Masset Public Works Department: 250-626-3616

Sylvan Daugert – Superintendent

EOCP Level IV – Water Treatment, EOCP Level II – Water Distribution,
EOCP Level II – Wastewater Collection

Theodore Bedard – Maintenance II, Water Plant Operator

BCWWA Water Treatment I training, BCWWA Water Distribution I training,
BCWWA Wastewater Collection I training

Tyler Brown – Maintenance I, Water Plant Operator

Sam Brown – Maintenance I, Water Plant Operator

Village of Masset Administrative Office: 250-626-3995

Village of Masset Emergency After Hours Contact: 250-626-7425, 250-626-7496

Background

The Village of Masset operates and maintains a public water distribution system under the regulations of the Drinking Water Protection Act and the Regulations passed by the province in 2003, the Water Sustainability Act implemented in 2016 as well as adherence to the

¹ 2021 Statistics Canada Census.

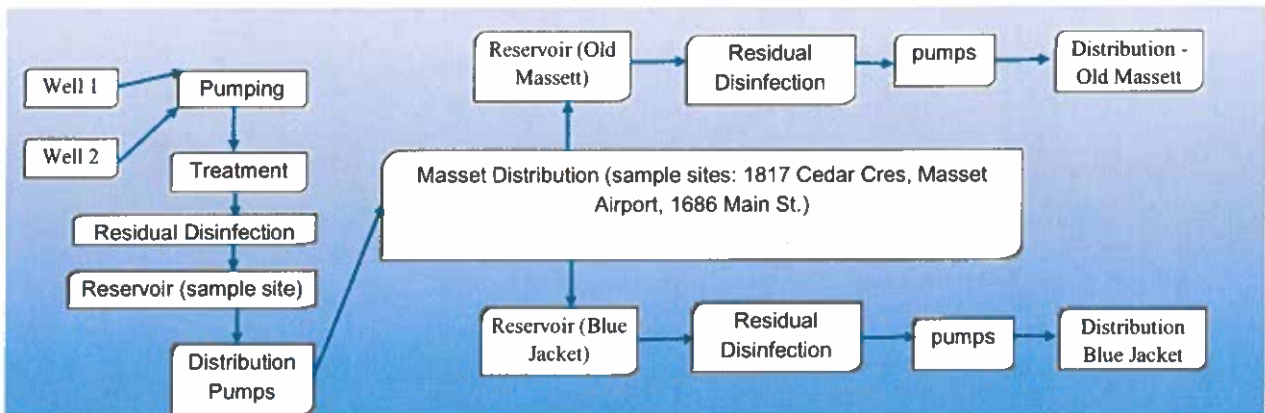
Guidelines for Canadian Drinking Water Quality. We operate under the supervision of Northern Health and their Drinking Water Office.

The Village of Masset's Water Treatment Plant is continually being optimized to ensure consistent and safe drinking water for residents of the two communities and to meet all regulations.

Water System Overview

The Village of Masset's water supply is via two wells located within the water plant property. As the two wells are within 10 meters of each other, and approximately the same depths, they utilize the same aquifer. The wells are classified as "deep wells" but are also considered to be "under the influence" of surface conditions because the aquifer is relatively shallow, without an impermeable layer above. The hydrostatic pressure of the water has the static water level of the two wells consistently about 4 meters below the surface. The draw-down depth of the water is less than 1 meter below that, with the greatest depth only during periods of the highest demand. Despite the "under the influence" designation, these levels seem to be relatively unaffected by surface conditions (precipitation levels) – such as the water advisory declared in the summer of 2016.

The Water Treatment Plant has a processing capacity of approximately 1600 m³/day or 1.6 MLD. (Million Litres per Day.) In 2023, approximately 210,000 m³ (210 million litres) of water was treated by the Water Plant, or an average of 575 m³ (575,000 litres) per day. This capacity is supplemented by a 1092 m³ reservoir at the Water Treatment Plant, and a separate reservoir at the Old Massett Water Distribution site with provisions for supplying Masset with water in the event of fire or emergency. From the reservoir at the Water Treatment Plant, water is distributed to the Water Distribution System, and Old Massett via electric distribution pumps. There is a diesel-powered fire pump that provides water during power outages, or during high demand periods, such as fires or water main breaks. The water lines in the distributions system primarily range in diameter from 100 mm to 200 mm (4" to 8"), and include two lines across the Delkatlah Slough, a line to Old Massett, and a separate line to the subdivision of Old Massett called "Blue Jacket" or "New Town." Proper name: "Tlaa Gaa Aawtlaas." There are a few very small lines in the range of 25 mm & 50 mm (1" & 2"). In 2023 Old Massett received approximately 69,500 m³ (69.5 million litres) of water, or an average of roughly 190 m³ (190,000 l) per day. The Blue Jacket Subdivision for Old Massett received an additional 6366 m³. Below is a simple schematic diagram of the Masset water system



Water System Overview – Water Treatment Plant

The Water Treatment Plant is a complex plant, with a Level III Water Treatment Classification. The Water Treatment Plant processes include Oxidation, Flocculation, Filtration, and Chlorine disinfection. The Oxidation is aided by “pre-chlorination,” which is injection of a small amount of Chlorine before any other treatment. This allows certain elements (especially Manganese) in the untreated water to react with treatment chemicals, which is undesirable in high concentrations in our drinking water. Residual disinfection is achieved by maintaining of a free chlorine residual throughout the distribution system. The Water Treatment Plant uses strong Oxidizing agents to react with the organics and metals in the raw water. The Water Treatment Plant is a “Package Plant” that forms a “sludge blanket” that acts to separate out approximately 90% of the sediment, organics and particulate before filtration. Chlorine is added for disinfection and residual disinfection. The remaining 10% of undesirable materials are filtered out with two dual-media filters. The filtered water is continuously monitored by online turbidimeters.

The water treatment plant pumped about 255,000 m³ out of our wells to produce the 210,000 m³ of treated water in 2023 – an efficiency of ~82%. This is up from the 2022 efficiency of 78% and will hopefully continue upwards after the water plant upgrade is fully completed. Also, these numbers are not perfectly accurate, as some data was lost during the switchover of computer systems during the water plant upgrade.

Maintaining the water reservoir level, operating pumps and managing the water plant is facilitated by a comprehensive software “SCADA” (Supervisory Control and Data Acquisition) program. If there is trouble in the treatment plant, the SCADA system will activate an alarm and dial out to Village staff until the alarm is acknowledged. In time of alarm, the lead operator can remotely dial in to the SCADA system, however, for most alarms, we find that an operator has to directly observe the water plant physically.

Water Treatment Plant Maintenance and Undertakings of 2023 and the Future

In the fall of 2018, we commissioned an engineering firm to do a comprehensive analysis of our water plant. While the plant was functioning correctly at that time, the firm identified several components of the plant that were aging and nearing “end of life.” This was reinforced by chemical pump failures in 2021. In the late spring of 2020, we finally secured a government grant to proceed with these repairs. Unfortunately, the Covid-19 Pandemic made us unable to commence this work until much later. We finally were able to begin the engineering in November of 2020, and put out the first stage of this project (Phase 1) for bid in November of 2021. Included in these “Phase 1” changes are replacement of major portions of the MCC (Master Control Centre), PLC (Programmable Logic Controller) & its HMI (Human Machine Interface) – these are all fancy acronyms for the controls of our water plant.

We started this work in late 2022 and had almost completed it at the end of 2023. The work that we and our contractors did on this included a complete replacement of the original Master Control Centre (MCC #1) to a new panel with 600 Volt controls, from the 480 Volt controls. With this, we also replaced all of our 480 Volt motors, which included the well pump motors and the distribution pump motors. Also, we replaced the Programmable Logic Controller (PLC) which is the computer brains for the water plant, and with that we replaced the programming for it. Also, a backup generator was installed, giving us backup power in case of a prolonged power outage. Still to be done at the end of 2023 was replacing corroded piping at the distribution header and finalizing the manuals for the water plant.

We also need to replace well pump #2, we have procured a replacement well pump, and are just getting it shipped up to Haida Gwaii for installation. The existing well pump #2 partially failed in the summer of 2023.

Routine maintenance for 2022 included draining & cleaning the clarifier & flocculation tanks 3 times as well as manually cleaning the input line and flash mixer twice. We performed some maintenance on the wells and well pumps.

Also in 2023, we completely upgraded our chlorine safety procedures. After an audit from WorkSafeBC, we reworked our safety procedures, ventilation and alarms for our chlorine system. This effort was actually cited in the Fall 2023 issue of the WorkSafe Magazine! (pages 13 & 14) <https://www.worksafebc.com/resources/newsletters/worksafe-magazine/worksafe-magazine-fall-2023?lang=en>

Water Plant Staffing

The Village is pleased that all full-time members of the Public Works staff are capable operators of the water plant. Education and training for water plant procedures continues on an on-going basis.

Monitoring Program

Monitoring of the Village of Masset's water consists of three main components: monitoring of the raw water quality, treated water monitoring, and distribution system treated water monitoring.

Water quality monitoring begins with the monitoring at the treatment plant. Operators observe and record daily measurements of chlorine residuals, temperatures, pH, and turbidity. Water flows are recorded several times per week to spot trends leading to adjustments in the treatment processes. Computer controls in the water plant continuously monitor turbidity and pH – if the water quality falls out of acceptable ranges, the treated water is automatically sent to waste, and alarms will be activated. Staff also subjectively observe the treatment processes daily.

Water samples are taken monthly and sent for testing at an independent lab for bacteriological testing. At the time of sampling, staff also independently test water samples for chlorine residual. These monthly samples are taken at 4 sites determined by the Northern Health Authority to be sufficiently representative of the Village of Masset's Water Distribution System – these sites are shown on a map in the appendix.

The raw water and treated water are sampled and sent to the same independent lab for mineral analysis, THM testing, and organic and inorganic parameters. These results are then compared to the Canadian Drinking Water Guidelines. Information about the parameters for Drinking Water may be found on the Health Canada website @ www.hs-sc.gc.ca. Health Canada has established Maximum Acceptable Concentrations (MAC) for some substances in the water. They have also established Aesthetic Objectives (AO) for elements of water quality that tend to affect its acceptance by users, including taste, odour, and appearance of the water. A table of Guidelines for Canadian Drinking Water Quality may be found at www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/2010-sum_guidelines_recom/index-eng.php

Water Quality Results

Over the course of 2023, 4 bacteriological samples per month were taken and tested. See [Appendix – Water Quality Results, Bacteriological Testing](#) (Several other samples were taken; however delays in transport resulted in the samples not being received in the lab in time, and required resampling.) We received one positive result on our bacteriological testing, of I4 B1 which indicates the presence of total coliform in the water. This was not replicated upon immediate re-testing. At this time, we do not know if it was a sampling error, or not. Under the direction of Northern Health, we have implemented a flushing program for the Airport and Industrial Park, to better maintain chlorine residuals.

Turbidity was always well under acceptable limits, except upon filter start-up. During filter start-up, or after backwashes, the filters release turbidity. This water is automatically sent to waste, ensuring that no turbid water enters our drinking water.

Village of Masset staff also sampled the water for metals, Total Organic Carbon (T.O.C.), hardness, and THM's (Trihalomethanes) multiple times in 2023. We received test results for 3 of those instances. See Appendix – Water Quality Results, Metals, THMs, Carbon. These results are THM levels at the airport sometimes rose above the MAC level required, although the “running average” remained within acceptable tolerances. We have expanded our THM testing, and continue to monitor these levels to see what effects these changes have had. We are also working with our engineering firm to optimize our chemical dosages to lower THM's.

For a more complete discussion of elements of water quality, please see the Appendix. Results of water testing may be found at www.healthspace.ca/nha

Water Distribution System

We had no major water main breaks in 2023. We did have a few service disruption, with line breaks, usually around the water meters and shut-offs of individual properties.

Emergency Response Plan

The Village of Masset has developed an Emergency Response Plan in case of significant events affecting water delivery. Copies are available in the Village Office.

Conclusion and Looking Forward

Water service failures to residences continue to demonstrate issues with the aging infrastructure of our water distribution system. We are pleased that we have largely replaced the water mains running under the major streets and under pavement for most of the town. Remaining are the water mains through the Circles in town, and the newer lines running through the Trumpeter Subdivision. We were greatly disappointed to not receive grant funding to cover these repairs yet. We hope that we can find sources of funding to continue our infrastructure rehabilitation plan for replacing water mains over the next few years. We plan on working with outside consultants to plan and target continued water main replacement in the future.

We are excited to have almost completed our water plant repair and upgrade last year, and expect it to be finished within the first few months of 2024. But, even as we finish that, we are aware that this has just exposed new issues for continued maintenance.

The Village of Masset has updated all its water and sewer maps in 2021, bringing them all into a cloud-based GIS system. We work with our engineering partners to try and maintain a water plant that is still performing well, but has parts that are aging, or becoming obsolete. While we are fortunate to have received funding to effect some major repairs on the water plant, we continue to have to perform major maintenance and repairs until these repairs are completed.

The Village continues to monitor THM levels to try and ensure continued levels within the desired range. Bacteriological testing, metals testing, hardness testing, and Carbon testing continues.

The Village of Masset is working with Old Massett Village Council to upgrade the distribution network and metering to the "Blue Jacket" subdivision.

An investment of time and energy had to be made in the training of our more junior public works staff in running the water plant. The Village of Masset needs to continuously invest in further training its workforce in water treatment for the foreseeable future.

The employees of the Village of Masset pride themselves on their strong work ethic and desire to excel. They believe that the continual operation of the water plant and distribution system, despite various challenges, demonstrates their effective work.

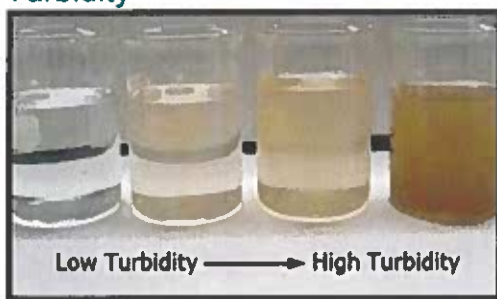
Appendices

Appendix – Water Testing Parameters

Coliforms

- No one sample should contain more than one Total Coliform per 100ml. There is to be zero E.Coli per 100ml.
- There should be no two consecutive positive samples from the same sample site location that show the presence of coliform indicators; and
- 90% of all samples must have zero Total Coliforms per 100ml sample

Turbidity



Measurements of turbidity are related to the cloudiness or optical properties of the water. Turbidity that is high means that there is more suspended particulate matter such as fine silts, sands, clays, organic and inorganic matter, microscopic organisms that are prevalent within the water column. Excessive turbidity lessens the effectiveness of disinfection - having excessively high turbidity allows for bacteria to become shielded. Units of measurement for turbidity are (NTU) Nephelometric Turbidity Unit. Upon the delivery and consumption of water, NTU should be <0.3NTU in at least 95% of the NTU measurements made or 95% of each calendar month. The NTU should never exceed 1.0 NTU at any time as these conditions can become detrimental to disinfection process achievements and allow for waterborne bacteria to become present in the water distribution system. The WTP process monitors turbidity 24/7 to ensure we are within compliance at all times.

THMs

An abbreviation of Trihalomethanes: THMs are disinfection by-products that form when chlorine is added to water that contains elevated levels of natural organic matter such as decaying leaves and vegetation. Disinfection is an essential component of public drinking water treatment. The health risks from disinfection by-products, including THMs, are much less than the risks from consuming water that has not been appropriately disinfected.² The

² http://www.ecc.gov.nl.ca/faq/thm_facts.html - from the Trihalomethanes Facts sheet, Newfoundland and Labrador website, Department of Environment and Climate Change.

current Canadian drinking water quality guideline for THMs is 100 parts per billion (ppb) or 0.100 mg/l (parts per million).

Chlorine

A Disinfecting Agent: Chlorine is a strong oxidizer which reacts with organics and organisms in water. Chlorine strength can be determined by testing for "Free Chlorine Residual" and "Total Chlorine Residual" in water. Total is primarily used to check the measurements of the Free Chlorine Residual, which is used for all testing criteria. The Village of Masset's Water Treatment Permit requires that it maintains a free chlorine residual of 0.20 parts per million (0.20mg/l) within the distribution system. Currently, we maintain a dosage of approximately 0.60 ~ 0.70 parts per million (ppm) leaving the plant to maintain a chlorine residual above .20 ppm throughout the distribution system. By comparison, the City of Vancouver doses to 1.50 ppm and re-doses back to 1.50 ppm throughout the distribution system when strength drops to 0.50 ppm.

Appendix – Map of Masset, Bacteriological Sample Sites and New Water Mains

Below is a map of Masset and its water mains, with newly installed water mains marked in blue, and the bacteriological sample sites marked in red.



Appendix – Water Quality Results, Bacteriological Testing

Masset Community Water System

Facility Location:

Facility Information:

Facility Type: 301-10000 Connections

Current Hazard Rating: **◆ Low**

Facility Sampling History:

<u>Location</u>	<u>Date</u>	<u>Total Coliform</u>	<u>Fecal Coliform</u>	<u>E. Coli</u>
1686 Main Street	11- Dec- 2023	L1		L1
1817 Cedar Crescent, 1817 Cedar Crescent	11- Dec- 2023	L1		L1
Masset Airport - Mechanical Room, 1900 Tow Hill Road	11- Dec- 2023	L1		L1
Masset Community WS - Treatment Plant (Treated), Burgess Street	11- Dec- 2023	L1		L1
Masset Airport - Mechanical Room, 1900 Tow Hill Road	14- Nov- 2023	L1		L1
Masset Airport - Mechanical Room, 1900 Tow Hill Road	14- Nov- 2023	L1		L1
1686 Main Street	6- Nov- 2023	L1		L1
1817 Cedar Crescent, 1817 Cedar Crescent	6- Nov- 2023	L1		L1
Masset Airport - Mechanical Room, 1900 Tow Hill Road	6- Nov- 2023	14 B1		L1
Masset Community WS - Treatment Plant (Treated), Burgess Street	6- Nov- 2023	L1		L1
1686 Main Street	4- Oct- 2023	L1		L1

1817 Cedar Crescent, 1817 Cedar Crescent	4- Oct- 2023	L1	L1
Masset Airport - Mechanical Room, 1900 Tow Hill Road	4- Oct- 2023	L1	L1
Masset Community WS - Treatment Plant (Treated), Burgess Street	4- Oct- 2023	L1	L1
1686 Main Street	6- Sep- 2023	L1	L1
1817 Cedar Crescent, 1817 Cedar Crescent	6- Sep- 2023	L1	L1
Masset Airport - Mechanical Room, 1900 Tow Hill Road	6- Sep- 2023	L1	L1
Masset Community WS - Treatment Plant (Treated), Burgess Street	6- Sep- 2023	L1	L1
1686 Main Street	2- Aug- 2023	L1	L1
1817 Cedar Crescent, 1817 Cedar Crescent	2- Aug- 2023	L1	L1
Masset Airport - Mechanical Room, 1900 Tow Hill Road	2- Aug- 2023	L1	L1
Masset Community WS - Treatment Plant (Treated), Burgess Street	2- Aug- 2023	L1	L1
1686 Main Street	5-Jul- 2023	L1	L1
1817 Cedar Crescent, 1817 Cedar Crescent	5-Jul- 2023	L1	L1
Masset Airport - Mechanical Room, 1900 Tow Hill Road	5-Jul- 2023	L1	L1
Masset Community WS - Treatment Plant (Treated), Burgess Street	5-Jul- 2023	L1	L1
1686 Main Street	7- Jun- 2023	L1	L1
1817 Cedar Crescent, 1817 Cedar Crescent	7- Jun- 2023	L1	L1

Masset Airport - Mechanical Room, 1900 Tow Hill Road	7- Jun- 2023	L1	L1
Masset Community WS - Treatment Plant (Treated), Burgess Street	7- Jun- 2023	L1	L1
1686 Main Street	1- May- 2023	L1	L1
1817 Cedar Crescent, 1817 Cedar Crescent	1- May- 2023	L1	L1
Masset Airport - Mechanical Room, 1900 Tow Hill Road	1- May- 2023	L1	L1
Masset Community WS - Treatment Plant (Treated), Burgess Street	1- May- 2023	L1	L1
1686 Main Street	4- Apr- 2023	L1	L1
1817 Cedar Crescent, 1817 Cedar Crescent	4- Apr- 2023	L1	L1
Masset Airport - Mechanical Room, 1900 Tow Hill Road	4- Apr- 2023	L1	L1
Masset Community WS - Treatment Plant (Treated), Burgess Street	4- Apr- 2023	L1	L1
2090 Northwest Drive, 2090 Northwest Drive	20- Mar- 2023	L1	L1
1686 Main Street	8- Mar- 2023	L1	L1
1817 Cedar Crescent, 1817 Cedar Crescent	8- Mar- 2023	L1	L1
Masset Airport - Mechanical Room, 1900 Tow Hill Road	8- Mar- 2023	L1	L1
Masset Community WS - Treatment Plant (Treated), Burgess Street	8- Mar- 2023	L1	L1
1686 Main Street	6- Feb- 2023	L1	L1

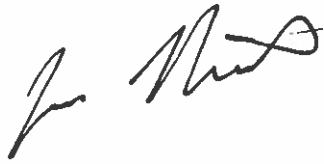
1817 Cedar Crescent, 1817 Cedar Crescent	6-Feb-2023	L1	L1
Masset Airport - Mechanical Room, 1900 Tow Hill Road	6-Feb-2023	L1	L1
Masset Community WS - Treatment Plant (Treated), Burgess Street	6-Feb-2023	L1	L1
Masset Airport - Mechanical Room, 1900 Tow Hill Road	11-Jan-2023	L1	L1
1686 Main Street	4-Jan-2023	L1 B5	L1
1817 Cedar Crescent, 1817 Cedar Crescent	4-Jan-2023	L1	L1
Masset Airport - Mechanical Room, 1900 Tow Hill Road	4-Jan-2023	1	L1
Masset Community WS - Treatment Plant (Treated), Burgess Street	4-Jan-2023	L1	L1
1686 Main Street	19-Dec-2022	L1	L1

Appendix - Water Quality Results, Metals, THMs, Carbon

Village of Masset Box 68 Masset, BC V0T 1M0 publicworks@masset.ca	Project: Village of Masset Project Number: - Project Manager: Public Works
Work Order: N23C083	
RECEIVED: 17-Mar-2023	REPORTED: 09-Jan-2024

All analyses were performed in accordance with standard procedures published by BC MoE, Health Canada, Environment Canada, the American Public Health Association, or the US EPA.

Northern Laboratories (2010) Ltd.



Jesse Newton

Laboratory Manager

LAB #	N23C083-01	N23C083-02	N23C083-03
SAMPLED DATE	16-Mar-23	16-Mar-23	16-Mar-23
SAMPLED TIME	09:00	09:00	09:00
SAMPLE ID	Raw	Treated	Masset Airport

MRL Units CDWG

General Parameters (Water)

Carbon, Total Organic	0.50 mg/L	-	11.7	7.07
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Calculated Parameters (Water)

Total Trihalomethanes	0.00400 mg/L	MAC = 0.1		0.0790
Hardness, Total (as CaCO ₃)	0.500 mg/L	-	187	187

Total Metals (Water)

Aluminum, total	0.0050 mg/L	OG < 0.1	0.0283	0.0820
Antimony, total	0.00020 mg/L	MAC = 0.006	<0.00020	<0.00020
Arsenic, total	0.00050 mg/L	MAC = 0.01	0.00139	<0.00050
Barium, total	0.0050 mg/L	MAC = 1	<0.0050	<0.0050
Beryllium, total	0.00010 mg/L	-	<0.00010	<0.00010
Bismuth, total	0.00010 mg/L	-	<0.00010	<0.00010
Boron, total	0.0500 mg/L	MAC = 5	<0.0500	<0.0500
Cadmium, total	0.000010 mg/L	MAC = 0.005	<0.000010	<0.000010
Calcium, total	0.20 mg/L	-	67.4	67.1
Chromium, total	0.00050 mg/L	MAC = 0.05	0.00091	<0.00050
Cobalt, total	0.00010 mg/L	-	<0.00010	<0.00010

Copper, total	0.00040 mg/L	AO = 1 MAC = 2	0.00242	0.00649	
Iron, total	0.010 mg/L	AO <= 0.3	6.89	0.244	
Lead, total	0.00020 mg/L	MAC = 0.005	0.00203	<0.00020	
Lithium, total	0.00010 mg/L	-	0.00599	0.00574	
Magnesium, total	0.010 mg/L	-	4.52	4.66	
Manganese, total	0.00020 mg/L	AO <= 0.02 MAC = 0.12	0.153	0.263	
Mercury, total	0.000010 mg/L	MAC = 0.001	<0.000010	<0.000010	
Molybdenum, total	0.00010 mg/L	-	0.00019	0.00017	
Nickel, total	0.00040 mg/L	-	<0.00040	<0.00040	
Phosphorus, total	0.050 mg/L	-	0.206	<0.050	
Potassium, total	0.10 mg/L	-	2.08	3.08	
Selenium, total	0.00050 mg/L	MAC = 0.05	<0.00050	<0.00050	
Silicon, total	1.0 mg/L	-	10.2	9.7	
Silver, total	0.000050 mg/L	-	<0.000050	<0.000050	
Sodium, total	0.10 mg/L	AO <= 200	16.8	16.5	
LAB #			N23C083-01	N23C083-02	N23C083-03
SAMPLED DATE			16-Mar-23	16-Mar-23	16-Mar-23
SAMPLED TIME			09:00	09:00	09:00
SAMPLE ID			Raw	Treated	Masset Airport
	MRL Units	CDWG			

Total Metals (continued)

Strontium, total	0.0010 mg/L	MAC = 7	0.366	0.364	
Sulfur, total	3.0 mg/L	-	<3.0	<3.0	
Tellurium, total	0.00050 mg/L	-	<0.00050	<0.00050	
Thallium, total	0.000020 mg/L	-	<0.000020	<0.000020	
Thorium, total	0.00010 mg/L	-	<0.00010	<0.00010	
Tin, total	0.00020 mg/L	-	<0.00020	<0.00020	
Titanium, total	0.0050 mg/L	-	0.0061	<0.0050	
Tungsten, total	0.0010 mg/L	-	<0.0010	<0.0010	
Uranium, total	0.000020 mg/L	MAC = 0.02	0.000048	0.000025	
Vanadium, total	0.0050 mg/L	-	0.0077	<0.0050	

Zinc, total	0.0040 mg/L	AO <= 5	<0.0040	<0.0040
Zirconium, total	0.00010mg/L	-	0.00125	0.00016

Volatile Organic Compounds (VOC) (Water)

Bromodichloromethane	0.0010mg/L	-		0.0159
Bromoform	0.0010mg/L	-		<0.0010
Chloroform	0.0010mg/L	-		0.0609
Dibromochloromethane	0.0010mg/L	-		0.0022
Toluene-d8	70-130 [surr]	-		78%
4-Bromofluorobenzene	70-130 [surr]	-		92%

Glossary of Terms

MRL Method Reporting Limit

< Less than the reported detection

limit (RDL) mg/L Milligrams per Litre

MAC Maximum Acceptable Concentration. Values above MAC are formatted with red text and solid outline.

AO Aesthetic Objective (not health related). Values above AO are formatted with a dashed outline.

OG Operational guideline (for treated water)

Standards / Guidelines Referenced

CDWG Canadian Drinking Water Quality Guidelines (2019)
https://www.canada.ca/content/dam/hc-sc/migration/hc-sc/ewh-semt/alt_formats/pdf/pubs/watereau/sum_guide-res_recom/sum_guide-res_recom-eng.pdf

Village of Masset
 Box 68
 Masset, BC V0T 1M0
 publicworks@masset.ca

Project: Village of Masset
 Project Number: -
 Project Manager: Public Works

Work Order: N231042

RECEIVED: 07-Sep-2023

REPORTED: 09-Jan-2024

All analyses were performed in accordance with standard procedures published by BC MoE, Health Canada, Environment Canada, the American Public Health Association, or the US EPA.

Northern Laboratories (2010) Ltd.



Jesse Newton
Laboratory Manager

LAB #	N231042-01	N231042-02	N231042-03
SAMPLED DATE	06-Sep-23	06-Sep-23	06-Sep-23
SAMPLED TIME	09:10	09:10	09:10
SAMPLE ID	Raw	Treated	Masset Airport
MRL Units	CDWG		

General Parameters (Water)

Carbon, Total Organic	0.50 mg/L	-	12.1	6.37
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Calculated Parameters (Water)

Total Trihalomethanes	0.00400 mg/L	MAC = 0.1		0.120
Hardness, Total (as CaCO3)	0.500 mg/L	-	192	191

Total Metals (Water)

Aluminum, total	0.0050 mg/L	OG < 0.1	0.0267	0.0451
Antimony, total	0.00020 mg/L	MAC = 0.006	<0.00020	<0.00020
Arsenic, total	0.00050 mg/L	MAC = 0.01	0.00200	<0.00050
Barium, total	0.0050 mg/L	MAC = 1	<0.0050	<0.0050
Beryllium, total	0.00010 mg/L	-	<0.00010	<0.00010
Bismuth, total	0.00010 mg/L	-	<0.00010	<0.00010
Boron, total	0.0500 mg/L	MAC = 5	<0.0500	<0.0500
Cadmium, total	0.000010 mg/L	MAC = 0.005	<0.000010	<0.000010
Calcium, total	0.20 mg/L	-	68.5	68.2
Chromium, total	0.00050 mg/L	MAC = 0.05	0.00090	<0.00050

Cobalt, total	0.00010 mg/L	-	<0.00010	<0.00010
Copper, total	0.00040 mg/L	AO = 1 MAC = 2	0.00279	0.0176
Iron, total	0.010 mg/L	AO ≤ 0.3	6.92	0.055
Lead, total	0.00020 mg/L	MAC = 0.005	0.00253	0.00041
Lithium, total	0.00010 mg/L	-	0.00561	0.00551
Magnesium, total	0.010 mg/L	-	5.02	5.05
Manganese, total	0.00020 mg/L	AO ≤ 0.02 MAC = 0.12	0.155	0.0136
Mercury, total	0.000010 mg/L	MAC = 0.001	<0.000010	<0.000010
Molybdenum, total	0.00010 mg/L	-	0.00021	0.00016
Nickel, total	0.00040 mg/L	-	<0.00040	0.00042
Phosphorus, total	0.050 mg/L	-	0.233	<0.050
Potassium, total	0.10 mg/L	-	2.30	3.25
Selenium, total	0.00050 mg/L	MAC = 0.05	<0.00050	<0.00050
Silicon, total	1.0 mg/L	-	11.2	10.2
Silver, total	0.000050 mg/L	-	<0.000050	<0.000050

LAB #	N23I042-01	N23I042-02	N23I042-03
SAMPLED DATE	06-Sep-23	06-Sep-23	06-Sep-23
SAMPLED TIME	09:10	09:10	09:10
SAMPLE ID	Raw	Treated	Masset Airport

MRL Units

CDWG

Total Metals (continued)

Sodium, total	0.10 mg/L	AO ≤ 200	17.6	17.9
Strontium, total	0.0010 mg/L	MAC = 7	0.374	0.369
Sulfur, total	3.0 mg/L	-	<3.0	<3.0
Tellurium, total	0.00050 mg/L	-	<0.00050	<0.00050
Thallium, total	0.000020 mg/L	-	<0.000020	<0.000020
Thorium, total	0.00010 mg/L	-	<0.00010	<0.00010
Tin, total	0.00020 mg/L	-	<0.00020	<0.00020
Titanium, total	0.0050 mg/L	-	0.0056	<0.0050
Tungsten, total	0.0010 mg/L	-	<0.0010	<0.0010
Uranium, total	0.000020 mg/L	MAC = 0.02	0.000054	0.000027
Vanadium, total	0.0050 mg/L	-	0.0074	<0.0050
Zinc, total	0.0040 mg/L	AO ≤ 5	<0.0040	0.0052

Zirconium, total	0.0010mg/L	-	0.00118	0.00014
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Volatile Organic Compounds (VOC) (Water)

Bromodichloromethane	0.0010mg/L	-		0.0192
Bromoform	0.0010mg/L	-		<0.0010
Chloroform	0.0010mg/L	-		0.0972
Dibromochloromethane	0.0010mg/L	-		0.0032
Toluene-d8	70-130 [surr]	-		84%
4-Bromofluorobenzene	70-130 [surr]	-		74%

Glossary of Terms

MRL Method Reporting Limit

< Less than the reported detection

limit (RDL) mg/L Milligrams per Litre

MAC Maximum Acceptable Concentration. Values above MAC are formatted with red text and solid outline.

AO Aesthetic Objective (not health related). Values above AO are formatted with a dashed outline.

OG Operational guideline (for treated water)

Standards / Guidelines Referenced

CDWG Canadian Drinking Water Quality Guidelines (2019)
https://www.canada.ca/content/dam/hc-sc/migration/hc-sc/ewh-semt/alt_formats/pdf/pubs/watereau/sum_guide-res_recom/sum_guide-res_recom-eng.pdf

Village of Masset
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 Masset, BC V0T 1M0
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Project: Village of Masset
 Project Number: -
 Project Manager: Public Works

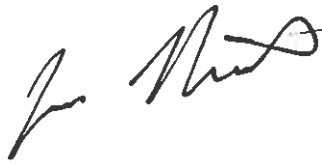
Work Order: N23L066

RECEIVED: 12-Dec-2023

REPORTED: 09-Jan-2024

All analyses were performed in accordance with standard procedures published by BC MoE, Health Canada, Environment Canada, the American Public Health Association, or the US EPA.

Northern Laboratories (2010) Ltd.



Jesse Newton

Laboratory Manager

LAB #	N23L066-01	N23L066-02	N23L066-03
SAMPLED DATE	11-Dec-23	11-Dec-23	11-Dec-23
SAMPLED TIME	11:00	11:00	11:00
SAMPLE ID	Masset Airport	Raw	Treated

MRL Units CDWG

General Parameters (Water)

Carbon, Total Organic	0.50 mg/L	-	11.2	5.60
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Calculated Parameters (Water)

Total Trihalomethanes	0.00400 mg/L	MAC = 0.1	0.112	
Hardness, Total (as CaCO ₃)	0.500 mg/L	-	209	189

Total Metals (Water)

Aluminum, total	0.0050 mg/L	OG < 0.1	0.0299	0.0355
Antimony, total	0.00020 mg/L	MAC = 0.006	<0.00020	<0.00020
Arsenic, total	0.00050 mg/L	MAC = 0.01	0.00210	<0.00050
Barium, total	0.0050 mg/L	MAC = 1	<0.0050	<0.0050
Beryllium, total	0.00010 mg/L	-	<0.00010	<0.00010
Bismuth, total	0.00010 mg/L	-	<0.00010	<0.00010
Boron, total	0.0500 mg/L	MAC = 5	<0.0500	<0.0500
Cadmium, total	0.000010 mg/L	MAC = 0.005	<0.000010	<0.000010
Calcium, total	0.20 mg/L	-	75.0	67.8
Chromium, total	0.00050 mg/L	MAC = 0.05	0.00087	<0.00050
Cobalt, total	0.00010 mg/L	-	<0.00010	<0.00010

Copper, total	0.00040 mg/L	AO = 1 MAC = 2	0.00157	0.0133	
Iron, total	0.010 mg/L	AO <= 0.3	7.20	0.047	
Lead, total	0.00020 mg/L	MAC = 0.005	0.00076	0.00034	
Lithium, total	0.00010 mg/L	-	0.00671	0.00546	
Magnesium, total	0.010 mg/L	-	5.21	4.79	
Manganese, total	0.00020 mg/L	AO <= 0.02 MAC = 0.12	0.158	0.0128	
Mercury, total	0.000010 mg/L	MAC = 0.001	<0.000010	<0.000010	
Molybdenum, total	0.00010 mg/L	-	0.00022	0.00021	
Nickel, total	0.00040 mg/L	-	<0.00040	<0.00040	
Phosphorus, total	0.050 mg/L	-	0.255	<0.050	
Potassium, total	0.10 mg/L	-	2.45	3.48	
Selenium, total	0.00050 mg/L	MAC = 0.05	<0.00050	<0.00050	
Silicon, total	1.0 mg/L	-	12.0	10.2	
Silver, total	0.000050 mg/L	-	<0.000050	<0.000050	
LAB #			N23L066-01	N23L066-02	N23L066-03
SAMPLED DATE			11-Dec-23	11-Dec-23	11-Dec-23
SAMPLED TIME			11:00	11:00	11:00
SAMPLE ID			Masset Airport	Raw	Treated
	MRL Units	CDWG			

Total Metals (continued)

Sodium, total	0.10 mg/L	AO <= 200	19.5	18.4
Strontium, total	0.0010 mg/L	MAC = 7	0.400	0.356
Sulfur, total	3.0 mg/L	-	<3.0	<3.0
Tellurium, total	0.00050 mg/L	-	<0.00050	<0.00050
Thallium, total	0.000020 mg/L	-	<0.000020	<0.000020
Thorium, total	0.00010 mg/L	-	<0.00010	<0.00010
Tin, total	0.00020 mg/L	-	<0.00020	<0.00020
Titanium, total	0.0050 mg/L	-	0.0060	<0.0050
Tungsten, total	0.0010 mg/L	-	<0.0010	<0.0010
Uranium, total	0.000020 mg/L	MAC = 0.02	0.000058	0.000034
Vanadium, total	0.0050 mg/L	-	0.0081	<0.0050
Zinc, total	0.0040 mg/L	AO <= 5	<0.0040	<0.0040

Zirconium, total	0.00010 mg/L	-	0.00123	0.00014
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Volatile Organic Compounds (VOC) (Water)

Bromodichloromethane	0.0010 mg/L	-	0.0180
Bromoform	0.0010 mg/L	-	<0.0010
Chloroform	0.0010 mg/L	-	0.0921
Dibromochloromethane	0.0010 mg/L	-	0.0022
Toluene-d8	70-130 [surr]	-	70%
4-Bromofluorobenzene	70-130 [surr]	-	53% [1]

Special Notes

- 1 = Surrogate recovery outside of control limits. Data accepted based on acceptable recovery of other surrogates.

Glossary of Terms

MRL Method Reporting Limit

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limit (RDL) mg/L Milligrams per Litre

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OG Operational guideline (for treated water)

Standards / Guidelines Referenced

CDWG Canadian Drinking Water Quality Guidelines (2019)
https://www.canada.ca/content/dam/hc-sc/migration/hc-sc/ewh-semt/alt_formats/pdf/pubs/watereau/sum_guide-res_recom/sum_guide-res_recom-eng.pdf

Appendix – Electrical Work for Water Plant Upgrade Project



Replacing old 480Volt – 3Phase MCC (left) with 600Volt – 3Phase MCC (right)

Wiring in the new PLC



replacing 480V distribution pump with 600V pump

